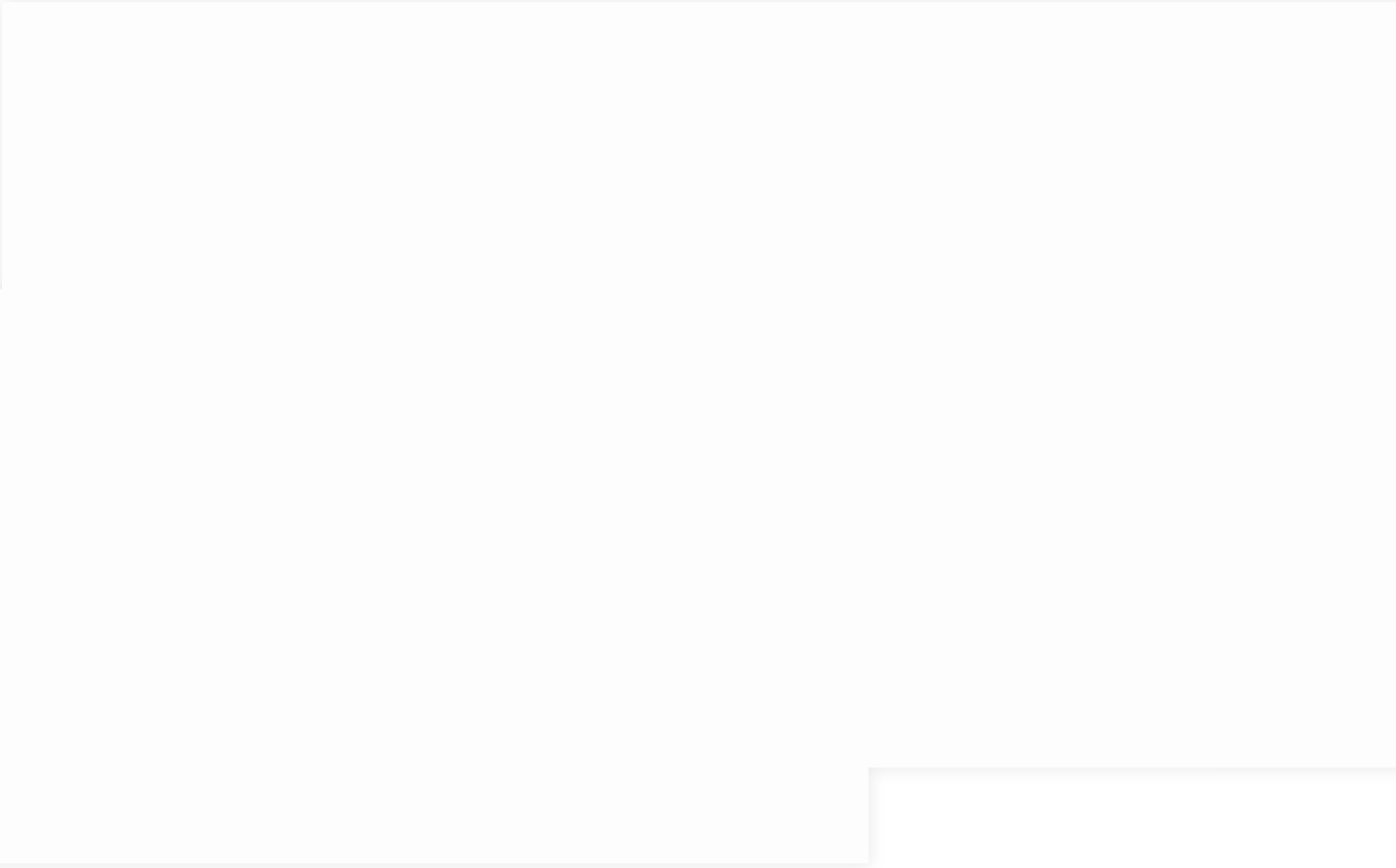


Annual Report 2019



Key metrics

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Credit Suisse (CHF million)					
Net revenues	22,484	20,920	20,900	7	0
Provision for credit losses	324	245	210	32	17
Total operating expenses	17,440	17,303	18,897	1	(8)
Income before taxes	4,720	3,372	1,793	40	88
Net income/(loss) attributable to shareholders	3,419	2,024	(983)	69	-
Cost/income ratio (%)	77.6	82.7	90.4	-	-
Effective tax rate (%)	27.4	40.4	152.9	-	-
Basic earnings/(loss) per share (CHF)	1.35	0.79	(0.41)	71	-
Diluted earnings/(loss) per share (CHF)	1.32	0.77	(0.41)	71	-
Return on equity (%)	7.7	4.7	(2.3)	-	-
Return on tangible equity (%)	8.7	5.4	(2.6)	-	-
Assets under management and net new assets (CHF billion)					
Assets under management	1,507.2	1,344.9	1,376.1	12.1	(2.3)
Net new assets	79.3	53.7	37.8	47.7	42.1
Balance sheet statistics (CHF million)					
Total assets	787,295	768,916	796,289	2	(3)
Net loans	296,779	287,581	279,149	3	3
Total shareholders' equity	43,644	43,922	41,902	(1)	5
Tangible shareholders' equity	38,690	38,937	36,937	(1)	5
Basel III regulatory capital and leverage statistics (%)					
CET1 ratio	12.7	12.6	13.5	-	-
Look-through CET1 ratio	12.7	12.6	12.8	-	-
Look-through CET1 leverage ratio	4.0	4.1	3.8	-	-
Look-through tier 1 leverage ratio	5.5	5.2	5.2	-	-
Share information					
Shares outstanding (million)	2,436.2	2,550.6	2,550.3	(4)	0
of which common shares issued	2,556.0	2,556.0	2,556.0	0	0
of which treasury shares	(119.8)	(5.4)	(5.7)	-	(5)
Book value per share (CHF)	17.91	17.22	16.43	4	5
Tangible book value per share (CHF)	15.88	15.27	14.48	4	5
Market capitalization (CHF million)	32,451	27,605	44,475	18	(38)
Dividend per share (CHF)	0.2776	0.2625	0.25	-	-
Number of employees (full-time equivalents)					
Number of employees	47,860	45,680	46,840	5	(2)

See relevant tables for additional information on these metrics.

Annual Report 2019

Credit Suisse Group AG

Credit Suisse – Annual Reporting Suite



Annual Report

The Annual Report is a detailed presentation of Credit Suisse Group's company structure, corporate governance, compensation practices and treasury and risk management framework, and it includes a review of Credit Suisse Group's operating and financial results accompanied by its annual financial statements.

[credit-suisse.com/ar](https://www.credit-suisse.com/ar)



Corporate Responsibility Report

The Corporate Responsibility Report describes how Credit Suisse Group assumes its various responsibilities in banking, in society, as an employer and towards the environment. The report is complemented by the publication "Corporate Responsibility – At a Glance".

[credit-suisse.com/crr](https://www.credit-suisse.com/crr)



Corporate Responsibility – At a Glance

The publication "Corporate Responsibility – At a Glance" provides an overview of the most important processes and activities that reflect our approach to corporate responsibility in banking, in society, as an employer and for the environment. In addition, it contains the cornerstones of our strategy and select figures for the 2019 financial year.

[credit-suisse.com/crr](https://www.credit-suisse.com/crr)

Credit Suisse Apps – Available in the App Store and Google Play Store



Credit Suisse Direct

With the Credit Suisse Direct app for smartphones and tablets you have all the advantages of mobile banking at your fingertips – anytime, anywhere. Whether you want to pay bills, transfer account, trade securities, check your credit card details or follow your safe-keeping account in real time or catch up on financial information.



Investor Relations and Media

allows investors, analysts, media and other interested parties to remain up to date with relevant online and offline financial information on Credit Suisse.

For the purposes of this report, unless the context otherwise requires, the terms "Credit Suisse Group", "Credit Suisse", the "Group", "we", "us" and "our" mean Credit Suisse Group AG and its consolidated subsidiaries. The business of Credit Suisse AG, the direct bank subsidiary of the Group, is substantially similar to the Group, and we use these terms to refer to both when the subject is the same or substantially similar. We use the term the "Bank" when we are referring only to Credit Suisse AG and its consolidated subsidiaries. Abbreviations and selected terms are explained in the List of abbreviations and the Glossary in the back of this report. Publications referenced in this report, whether via website links or otherwise, are not incorporated into this report. The English language version of this report is the controlling version. In various tables, use of "–" indicates not meaningful or not applicable.

- 4 Message from the Chairman
- 8 Interview with the Chairman and the Chief Executive Officer

257 VI – Consolidated financial statements – Credit Suisse Group

11 I – Information on the company

- 12 Credit Suisse at a glance
- 13 Strategy
- 18 Divisions
- 26 Regulation and supervision
- 43 Risk factors

405 VII – Parent company financial statements – Credit Suisse Group

Appendix

- A-2 Selected five-year information
- A-4 List of abbreviations
- A-6 Glossary
- A-10 Investor information
- A-12 Financial calendar and contacts

53 II – Operating and financial review

- 54 Operating environment
- 57 Credit Suisse
- 68 Swiss Universal Bank
- 75 International Wealth Management
- 82 Asia Pacific
- 89 Global Markets
- 92 Investment Banking & Capital Markets
- 95 Corporate Center
- 98 Assets under management
- 101 Critical accounting estimates

107 III – Treasury, Risk, Balance sheet and Off-balance sheet

- 108 Liquidity and funding management
- 116 Capital management
- 135 Risk management
- 174 Balance sheet and off-balance sheet

177 IV – Corporate Governance

223 V – Compensation

Message from the Chairman

In 2019, our first full financial year following the completion of our restructuring, we generated net income attributable to shareholders of CHF 3.4 billion, an increase of 69% compared to the previous year. Group net new assets totaled CHF 79.3 billion. This demonstrates the successful implementation of our strategy to be a leading wealth manager with strong investment banking capabilities.

Dear shareholders, clients and colleagues

While I am writing this message, the global economy is in a state of uncertainty about the further development of the COVID-19 coronavirus crisis. The spread of the pandemic is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to also affect our business performance. We are closely monitoring the spread of COVID-19 and the potential effects on our operations and business. However, we are very satisfied with how the teams have so far navigated the increased volatility.

A strategy that delivers

When we initiated the restructuring of Credit Suisse in 2015, our aim was to create a leading, resilient wealth manager with strong investment banking capabilities. Our performance in the 2019 financial year – the first full year following the completion of our restructuring – clearly demonstrates that we have achieved this. Following a difficult start to 2019 with muted client activity, market conditions became more favorable in the second and third quarters, and we were able to progressively improve revenue momentum, further increase the flexibility of our cost base, and seize emerging opportunities for growth. Having generated positive operating leverage throughout the year, in the strong fourth quarter we achieved our 13th consecutive quarter of year-on-year profit growth with income before taxes of CHF 1.2 billion.

In 2019, income before taxes totaled CHF 4.7 billion, an increase of 40% compared to the previous year. Net income attributable to shareholders was CHF 3.4 billion in 2019, up 69% compared to the previous year. The 2019 results included certain significant gains from the transfer of the InvestLab fund platform to All-funds Group of CHF 327 million and the revaluation of our equity investment in SIX Group AG of CHF 498 million. Even excluding these gains, our results were strong.

Wealth management shows positive momentum

The outlook for continued growth in wealth management remains attractive. According to the Credit Suisse Global Wealth Report 2019, the global pool of wealth grew once again between mid-2018 and mid-2019, increasing by 2.6%. While this may be a modest figure when viewed over a ten-year horizon, the differences in regional momentum are particularly important for our business. For example, last year China overtook the US in terms of its share of the top 10% of global wealth. In the last ten years,

China already significantly contributed to the doubling of global wealth. We believe it should therefore be possible to maintain the positive growth momentum in our Wealth Management-related businesses of Swiss Universal Bank, International Wealth Management and Wealth Management & Connected in Asia Pacific. In 2019, we attracted Group net new assets of CHF 79.3 billion, a record level since 2013, driving our assets under management to CHF 1.5 trillion. Wealth Management-related revenues grew to CHF 14.4 billion, an increase of 9% compared to CHF 13.3 billion in the previous year.

Divisional results

The Swiss Universal Bank (SUB) division recorded income before taxes of CHF 2.7 billion for the full year 2019, an increase of 27% compared to 2018. Net revenues rose 8% year on year. While the negative interest rate environment remained challenging, increased levels of client activity and higher recurring commissions and fees in the fourth quarter of 2019 had a positive impact on revenues, supported by a strong rebound in net interest income reflecting in part the initiated deposit pricing measures. Our disciplined approach on costs enabled us to further reduce total operating expenses by 3% in 2019, while continuing to invest in selected strategic hires, digitalization and marketing. Both Private Clients and Corporate & Institutional Clients generated higher revenues, contributing to this result. Private Clients attracted CHF 3.4 billion of net new assets in 2019, with assets under management increasing 10% year on year. Corporate & Institutional Clients gathered record net new assets of CHF 45.3 billion in 2019, reflecting continued strong contributions from our pension funds business.

The International Wealth Management (IWM) division continued its growth momentum in 2019, with income before taxes rising 25% year on year to CHF 2.1 billion. This reflects a 9% increase in net revenues and stable operating expenses. In Private Banking, income before taxes for 2019 totaled CHF 1.7 billion, up 25% year on year. Private Banking net revenues for 2019 rose 10% year on year. In Asset Management, income before taxes grew 27% to CHF 473 million in 2019, reflecting a 6% increase in net revenues and stable operating expenses year on year.

The Asia Pacific (APAC) division generated income before taxes of CHF 902 million in 2019, an increase of 36% year on year. Consequently, APAC delivered a return on regulatory capital of 16%. The generation of positive operating leverage, with

revenues up 6% and operating expenses down 2% year on year, was a key driver of income before taxes in 2019. Wealth Management & Connected reported income before taxes of CHF 888 million for 2019, up 29% year on year, with a return on regulatory capital of 23%. Markets reported income before taxes of CHF 14 million in 2019, an improvement on the loss before taxes of CHF 27 million in 2018.

The Global Markets (GM) division reported significantly higher income before taxes of CHF 956 million in 2019 compared to the previous year, delivering positive operating leverage. This resulted in a 7% return on regulatory capital. Net revenues of CHF 5.8 billion rose by 16% compared to the full year 2018, reflecting growth across the trading and financing businesses, partially offset by lower debt and equity underwriting activity. Total operating expenses in 2019 were stable year on year, while risk-weighted assets decreased 4%.

The Investment Banking & Capital Markets (IBCM) division reported a loss before taxes of CHF 162 million in 2019. Net revenues of CHF 1.7 billion for 2019 were down 23% year on year, reflecting fewer M&A completions as well as lower debt underwriting client activity. In a challenging market environment, activity was more subdued in areas of historical strength for IBCM, notably leverage finance and financial sponsors. Total operating expenses in 2019 were down 2% year on year.

Creating value for shareholders

In line with our intention to increase the ordinary dividend per share by at least 5% per annum, the Board of Directors will propose a cash distribution of CHF 0.2776 per share for the 2019 financial year to shareholders at the Annual General Meeting of April 30, 2020. Fifty percent of the distribution will be paid out of capital contribution reserves, free of Swiss withholding tax and not subject to income tax for Swiss resident individuals, and 50% will be paid out of retained earnings, net of 35% Swiss withholding tax. The distribution is structured in this way as a result of Swiss statutory provisions to implement the corporate tax reform, which entered into effect on January 1, 2020.

As part of the share buyback programs for 2019 and 2020, Credit Suisse Group AG bought back a total of 108.3 million shares between January 14, 2019, and March 13, 2020, bringing the volume of capital returned to shareholders to more than CHF 1.325 billion. The Board of Directors is now

proposing to shareholders that the share capital be reduced by CHF 4,330,560 from the current nominal value of CHF 102,240,468.80 to CHF 97,909,908.80, through the cancellation of 108.3 million registered treasury shares, each with a par value of CHF 0.04.

Stronger capital base and improved profitability

As a result of our strategic approach to cost management, we once again generated positive operating leverage in 2019. We will maintain our rigorous cost discipline with a view to further increasing positive operating leverage.

In 2019, we made further progress in our efforts to strengthen our capital base. Our common equity tier 1 (CET1) ratio increased to 12.7% from 12.6% at the end of 2018, and the Tier 1 leverage ratio was 5.5% at the end of 2019, up from 5.2% at the end of 2018. Our capital and leverage ratios already met our Swiss regulatory requirements that apply from 2020.

The Group's profitability increased further last year. The return on tangible equity* (RoTE) was 9%, up from 5% in 2018. Diluted earnings per share amounted to CHF 1.32, compared to CHF 0.77 in 2018, and the tangible book value per share* was CHF 15.88 at the end of 2019, compared to CHF 15.27 at the end of 2018.

Dialogue with regulators

In view of the macroeconomic environment of the last four years, our results show that we have a well-balanced and resilient new business model. The definition of a global resolution approach, compliance with capital requirements and the ongoing implementation of structural and operational improvements have been key elements in the implementation of our too-big-to-fail agenda. In the fourth quarter of 2019, Credit Suisse reported total assets of CHF 787.3 billion and a total loss-absorbing capacity (TLAC) of CHF 91.3 billion.

In terms of regulatory progress, in June 2019 the US Federal Reserve System (Fed), as part of its Comprehensive Capital Analysis Review, did not object to our US intermediate holding company's proposed capital plan, but did issue a conditional non-objection after identifying certain weaknesses in our capital adequacy planning process. The Fed required us to address these weaknesses by the deadline of October 2019 and, until then, restricted our US intermediate holding company's planned capital distributions to the amount it was authorized to pay under

its 2018 capital plan. On December 17, 2019, our US intermediate holding company authorized a cash dividend larger than that authorized and paid in 2018.

In February 2020, the Swiss Financial Market Supervisory Authority FINMA published a report in which it regarded our Swiss Emergency Plan for Credit Suisse (Schweiz) AG to be effective and, with respect to global resolvability, it concluded that we have already taken important preparatory steps and have thus made considerable progress.

Changes to the Board of Directors and Group Executive Board

Having served on the Board for 11 years, this year's Annual General Meeting (AGM) will be the last time that I stand for re-election as the Chairman of the Board of Directors. Consistent with the maximum standard term limit of 12 years introduced by me during my chairmanship, I have confirmed to the Board a long time ago that I will not stand for re-election at next year's AGM in 2021. The Governance and Nominations Committee is leading the succession process for my role, which is well underway and progressing according to plan.

The Board proposes Richard Meddings for election as a new non-executive Board member at the AGM on April 30, 2020. Richard Meddings, chairman of the UK bank TSB Bank plc, is a recognized financial expert with over 30 years of experience in the financial services sector spanning retail banking, wealth management and investment banking. He is a chartered accountant and his experience as a non-executive director includes chairing the audit and risk committees at listed companies, including Deutsche Bank AG and Legal & General Group Plc. Richard Meddings is expected to succeed John Tiner as Audit Committee Chair, subject to his election at the 2020 AGM and formal Board appointment. Of the current Board members, Alexander Gut will not stand for re-election at the AGM. The Board proposes that all other current members of the Board be re-elected to the Board.

In 2019 and early 2020, the Group announced a number of changes to the Executive Board. In February 2020 the Board of Directors appointed Thomas Gottstein as new Group CEO, after Tidjane Thiam stepped down from this role. Thomas Gottstein joined Credit Suisse in 1999 and was responsible for management roles in Investment Banking as well as in Private Banking. Since 2015 he has been responsible for our home market in his role as CEO of Swiss Universal Bank and member of the Group Executive Board.

As Thomas Gottstein's successor as CEO of Swiss Universal Bank and member of the Group Executive Board, the Board of Directors appointed André Helfenstein. He joined our bank in 2007 and has been responsible for our institutional clients business in Switzerland.

In November 2019, James L. Amine stepped down from the Group Executive Board and took over a newly created function related to our asset management strategy. The Board of Directors has appointed David Miller as CEO of IBCM and as a member of the Group Executive Board. He joined our bank in 2000, having previously served as Head of Credit and Global Credit Products as well as Co-Head of Global Markets Americas.

In October 2019, the Board of Directors appointed James B. Walker as Chief Operating Officer and a member of the Group Executive Board of Credit Suisse, succeeding Pierre-Olivier Bouée. James Walker joined Credit Suisse in 2009 and, prior to taking over the role of Group Chief Operating Officer, held a number of different functions in the bank's CFO function, including serving as Chief Financial Officer of our largest US subsidiaries and as Global Head of Product Control.

In July 2019, Philipp Wehle assumed responsibility as CEO of International Wealth Management (IWM), succeeding Iqbal Khan, who left Credit Suisse. Philipp Wehle joined Credit Suisse in 2005 and, as Head of International Wealth Management Finance since 2015, already played a key role for the division combining our strong revenue growth with strict cost and capital discipline.

As disclosed in our last Annual Report, Lara Warner was appointed as the new Group Chief Risk Officer, effective February 2019. We also announced that Lydie Hudson had been appointed as her successor in the role of Chief Compliance Officer (Chief Compliance and Regulatory Affairs Officer since an organizational change on March 5, 2020) and a member of the Group Executive Board and that Antoinette Poschung had been appointed Global Head of Human Resources and a member of the Group Executive Board.

Climate Change

Climate change was a continuous topic of discussion in the public arena in 2019. Based on the dialogue within our industry as well as with our clients, investors and other stakeholders, we defined a Group climate risk strategy program based on a three-pronged approach. First, we are preparing to work with our clients to support their transition to low-carbon and climate-resilient business models, and we are working to further integrate climate change into our risk management models. Second, we are focusing on delivering sustainable finance solutions that help our clients achieve their goals and contribute to the realization of the UN Sustainable Development Goals (SDGs). Third, we are working on further reducing the carbon footprint of our own operations. We have been operating on a greenhouse gas neutral basis since 2010 and have reduced our net greenhouse gas emissions by more than 70% since then. We also announced at our Investor Day 2019 that in line with a new policy, we would no longer provide any form of financing specifically related to the development of new coal-fired power plants in the future. This supplements our existing policy of no longer financing new greenfield thermal coal mines.

Outlook

Notwithstanding the COVID-19 pandemic and the resultant volatile market environment, profitability in the first quarter of 2020 has so far continued the strong year-on-year improvement trend as already noted in our 4Q19 Earnings Release.

As we confirmed in our pre-close trading update earlier in March, overall private banking revenues in our Wealth Management businesses are up compared to the same period last year, benefiting from higher transaction revenues. The teams across our Markets businesses have delivered significantly higher sales and trading revenues quarter to date. This is offsetting the negative impact of the market environment on the revenues earned from the execution of our primary capital markets pipeline, particularly in our investment banking and capital markets business.

Credit Suisse continues to benefit from past restructuring measures including the strengthening of our capital base since the beginning our restructuring in the third quarter of 2015, the rebalancing of our business towards wealth management and from the disciplined approach that we have applied to costs, resources and capital management. Together with the benefit of the cumulative growth in our stable deposit base and our lower exposures compared to previous periods in areas such as leveraged finance and the Oil & Gas sector, the resilience and preparedness of Credit Suisse for the impact of the spread of COVID-19 and the consequent market and economic volatility has substantially increased.

As a final point, I would like to thank our more than 47,000 employees around the world for their hard work and commitment throughout 2019. I am aware that as a result of inappropriate actions within our company, which were not consistent with the culture and conduct we want to promote within our bank, our employees were faced with the kind of questions from clients and other parties that would not normally be expected in a year in which the business performed so positively. However, our employees have remained professional at all times, staying focused on their goals and on meeting the needs of our clients. In doing so, they have made their own contribution to the success of the business in 2019. The Group's financial results are a testament to their loyalty, professionalism and determination to always do their very best for Credit Suisse, including in difficult periods. Without their efforts, we could not have realized our goals. The Board of Directors and I would therefore like to express our enormous gratitude to all our employees.

Best regards



Urs Rohner
Chairman of the Board of Directors

March 2020

Important Information

* Return on tangible equity and tangible book value per share are non-GAAP financial measures. Refer to II – Operating and financial review – Credit Suisse for information on how these measures and return on regulatory capital are calculated.

For further details on capital-related information, see "Capital Management-Regulatory Capital Framework" in III-Treasury, Risk, Balance sheet and Off-balance sheet.

References to Wealth Management mean SUB Private Clients, IWM Private Banking and APAC Private Banking within WM&C or their combined results. References to Markets businesses mean Global Markets and APAC Markets or their combined results.

We may not achieve all of the expected benefits of our strategic initiatives. Factors beyond our control, including but not limited to the market and economic conditions, changes in laws, rules or regulations and other challenges discussed in our public filings, could limit our ability to achieve some or all of the expected benefits of these initiatives.

This document contains forward-looking statements that involve inherent risks and uncertainties, and we might not be able to achieve the predictions, forecasts, projections and other outcomes we describe or imply in forward-looking statements. A number of important factors could cause results to differ materially from the plans, objectives, expectations, estimates and intentions we express in these forward-looking statements, including those we identify in "Risk factors" and in the "Cautionary statement regarding forward-looking information" in our Annual Report 2019 and other public filings and press releases. We do not intend to update these forward-looking statements.

Interview with the Chairman and the Chief Executive Officer

Credit Suisse went through a difficult period with the observation matter that was exposed in 2019. What changes has Credit Suisse made to restore trust and ensure this will not happen again?

Chairman: Credit Suisse performed well in the financial year 2019 – the first full 12-month period in which we were able to benefit from the restructuring that was carried out between 2016 and 2018. However, it is true that certain inappropriate actions at our bank attracted coverage in the final quarter of 2019 and early 2020. The actions had an increasingly negative impact on the perception of our bank and also prompted critical questions from clients. The resignation of CEO Tidjane Thiam and the appointment of Thomas Gottstein as the new Group CEO provides the opportunity to look ahead, knowing that safeguards have been put in place as part of our efforts to ensure that such incidents are not repeated. Thomas will work with the Board of Directors and the management team to restore the trust that has been lost. I am confident that they will achieve this.

What changes are you hoping Thomas Gottstein can deliver, given that Credit Suisse has already successfully completed its restructuring?

Chairman: Credit Suisse's strategy and business model were developed by the previous CEO together with the Board of Directors in 2015 and implemented over the next three years. We have now been operating under the new model for a little over a year – and delivering successful results. It wouldn't really make sense to start implementing significant changes to the strategy or our business model at this point in time. The Board of Directors and I will work with Thomas to further strengthen and expand the implementation of our strategy and work on culture and conduct.

You have said that you plan to pursue the strategy defined by your predecessor, while defining your own areas of focus. What types of changes do you envisage?

CEO: I have worked for Credit Suisse for almost 20 years. During that time, I have always found the culture of cooperation – both at Executive Board level and in the businesses – to be open and respectful but also self-critical. The perception of our culture and values has suffered in recent months, particularly in the public arena but also within the bank itself. I will therefore introduce measures to reinforce our culture and values, and continue our unwavering support of our clients' needs and ambitions.

Thomas Gottstein is the first Swiss CEO to be appointed since you became Chairman. Is this an advantage or is Credit Suisse now too Swiss-focused?

Chairman: The CEO must know the bank's corporate culture, its DNA, and be in a position to lead Credit Suisse successfully in an international context with a focus on our two strategically important areas of business – wealth management and investment banking. Thomas Gottstein fully meets both of these requirements based on his long and extensive experience in various functions at our bank, as well as his track record as CEO of the Swiss Universal Bank. During his tenure, the Swiss business increased its contribution to the Group income before taxes from CHF 1.7 billion for 2015 to CHF 2.7 billion for 2019.

What is your message to clients and investors outside Switzerland, especially in faster-growing regions such as the US and emerging markets?

Chairman: The public response to the inappropriate actions at our bank last year is also evidence that in Switzerland, we are viewed as more than a bank. This is our heritage and we want to preserve it since it is an important aspect that attracts clients, especially in wealth management. Outside of Switzerland our institution also has a heritage: for example our US entity, which has evolved from the former Credit Suisse First Boston, remains one of the top ten players in global investment banking, although our US

business is smaller in size than that of our American competitors in their domestic market. In the Asian market, our role is more that of a challenger but here again, we are successful. We have seen continued growth in our wealth management business in Asia. In investment banking in Southeast Asia, Credit Suisse ranked number one last year according to Dealogic – ahead of our US competitors.

How can you apply the success you achieved when leading the Swiss Universal Bank to the global business?

CEO: Although the Swiss Universal Bank is similar to Credit Suisse Group on a small scale, it is not possible to exactly replicate all of the success factors from the Swiss market in the other international markets and geographical regions where we operate. Each business represents part of the essence of how we define Swiss banking but they all have their own approach and their own way of interacting with their markets and clients. I think that the way we respond to regional needs and market conditions is one of our particular strengths. This strength comes from our wide-ranging experience, which teaches us that you can't just replicate success from one geography to another.

Where do you see opportunities in the years ahead, both in terms of economic regions and areas such as digitalization?

CEO: The successful restructuring of the bank and resolution of key legacy issues means that we have a strengthened ability to seize new opportunities in all markets. We have also identified additional opportunities in the countries where we already have a presence. Digitalization is one of the main opportunities ahead, but at the same time also a challenge – not just for us but for all financial services providers. However, we continue to leverage digitalisation to enhance client experience and improve operational efficiency.



Urs Rohner, Chairman of the Board of Directors (left) and Thomas Gottstein, Chief Executive Officer.

Banking has changed a lot since you became Chairman, with developments including negative interest rates, new regulations and advancing digitalization. How is this affecting Credit Suisse?

Chairman: That is simply the environment in which the European banking industry is operating. It presents us with strategic challenges because we have to show that we can achieve growth under these conditions. As a result of our restructuring, Credit Suisse should now be much more resilient, in terms of both our business model and capital position. Markets and economic conditions permitting, I am convinced that we have thus laid the foundations for future growth and the necessary operating

leverage where we need to adapt to new disruptions.

Each year it seems that new risks emerge – from Brexit to trade tensions and now the spread of the coronavirus. How do you position the bank to mitigate these risks?

CEO: The most important lesson learned from the financial crisis at the end of the last decade was the need to strengthen the resilience of banks. Here at Credit Suisse, this includes the Compliance and Risk Management functions, which have been significantly expanded in recent years, as well as the need for a solid capital position, which is an area that we have successfully addressed. Bottom line,

together with the management team, it is my task to ensure Credit Suisse is robust and stable to help our clients achieve their goals, particularly in times of volatile or distressed markets. Over the past weeks, given the spread of the coronavirus, we have established and implemented various response measures that ensure continuity of our business operations and protect the health and safety of our employees.

Credit Suisse has earned praise for its restructuring and posted strong profits last year, yet the share price remains disappointing and has suffered greatly. What can be done to change this?

CEO: Over the past weeks, the spread of the coronavirus and the resulting containment strategies implemented by governments around the world have caused disruption to global supply chains resulting in a period of increased volatility in financial markets. Along with the rest of the financial sector, these developments have impacted our share price. But we have a strong balance sheet, are well capitalized, apply a conservative approach to liquidity management and continue to have strong access to funding markets. Given all of these factors, we remain positioned to support and transact with our clients globally.

The number of banks in Switzerland has declined significantly in the last decade. Do you expect further consolidation in the industry, and how do you see Switzerland's future as a financial center?

Chairman: The consolidation in the industry was driven partly by the financial crisis and partly – or especially – by the change in practice around banking confidentiality in the cross-border wealth management business following the creation of a global governance structure for tax regimes by the Organisation for Economic Co-operation and Development (OECD) and major industrialized nations. These changes called into question a lot of things that we used to take for granted. I think that in the future, rather than involving mergers of entire companies, the consolidation in the industry will take the form of cooperation agreements where partners will jointly provide processes in a more efficient and cost-effective

manner. This will apply to those processes where there is no scope for us to distinguish ourselves from our competitors in the eyes of our clients. Switzerland's importance as a financial center should be preserved if it maintains its political, social and monetary stability. I have no doubt that it can continue to do so in the future.

Credit Suisse wants to achieve approximately 10% return on tangible equity but missed this ambition last year. Can you achieve it in 2020 and go even further?

CEO: We continue to believe in the strength of our franchise and our strategy and have measures in place to protect our return on tangible equity in a challenging market environment. However, in view of the withdrawal of the UK from the EU and the trade tensions between the US and China in recent years, and now with the coronavirus crisis, I have become very cautious about issuing forecasts.

How do you balance cost discipline with the need for investments to stimulate growth?

CEO: The past years have already shown that cost focus remains key, and that we need to manage our costs according to our income situation. At the same time, we continue to make targeted investments in our people and systems with the ambition of growing our businesses. It is a balancing act and it is clear that generating positive operating leverage remains our goal.

Banks including Credit Suisse have been criticized in connection with the issue of climate change. How much of a priority is this topic for you?

CEO: Climate change is a key challenge for the world today. As a global bank, we recognize our share of

responsibility and have launched a Group-wide climate risk strategy program to address this. We also recognize the role we can play in supporting our clients as they transition to a low-carbon and climate-resilient business on the one hand, and also continuously develop our own long-term financial solutions that focus on sustainable development on the other. Last year, we announced that we are ceasing to provide any form of financing specifically related to new coal-fired power plants. Additionally the carbon footprint of our own operations speaks for itself – where we have been greenhouse gas-neutral since 2010. Let me reemphasize: climate change is an important topic for Credit Suisse and our clients and it will remain so in the future.

Your term as Chairman will expire in 2021. What do you hope to achieve in your final year in office?

Chairman: Given the very significant challenges that lie ahead, I won't spend time in the next 12 months thinking about my personal legacy. In addition to the challenges in the context of markets, digitalization and the impact of climate change on our business, the list of topics is likely to get longer, not shorter. The rapid slump in global equity markets due to the coronavirus situation and the economic downturn resulting from it has reinforced my view that as Chairman of a bank like ours you must, above all, be able to react very quickly to changing conditions.

Which qualities will the Board look for in the next Chairman, and has the search for a successor already begun?

Chairman: Succession planning is one of the key tasks of the Board of Directors and this process is well underway and progressing according to plan.

I – Information on the company

Credit Suisse at a glance	12
Strategy	13
Divisions	18
Regulation and supervision	26
Risk factors	43

Credit Suisse at a glance

Credit Suisse

Our strategy builds on Credit Suisse's core strengths: its position as a leading global wealth manager, its specialist investment banking capabilities and its strong presence in our home market of Switzerland. We seek to follow a balanced approach with our wealth management activities, aiming to capitalize on both the large pool of wealth within mature markets as well as the significant growth in wealth in Asia Pacific and other emerging markets. Founded in 1856, we today have a global reach with operations in about 50 countries and 47,860 employees from over 150 different nations. Our broad footprint helps us to generate a more geographically balanced stream of revenues and net new assets and allows us to capture growth opportunities around the world. We serve our clients through three regionally focused divisions: Swiss Universal Bank, International Wealth Management and Asia Pacific. These regional businesses are supported by two other divisions specializing in investment banking capabilities: Global Markets and Investment Banking & Capital Markets. Our business divisions cooperate closely to provide holistic financial solutions, including innovative products and specially tailored advice.

Swiss Universal Bank

The Swiss Universal Bank division offers comprehensive advice and a wide range of financial solutions to private, corporate and institutional clients primarily domiciled in our home market of Switzerland, which offers attractive growth opportunities and where we can build on a strong market position across our key businesses. Our Private Clients business has a leading franchise in our Swiss home market and serves ultra-high-net-worth individual, high-net-worth individual, affluent and retail clients. Our Corporate & Institutional Clients business serves large corporate clients, small and medium-sized enterprises, institutional clients, external asset managers, financial institutions and commodity traders.

Asia Pacific

In the Asia Pacific division, our wealth management, financing and underwriting and advisory teams work closely together to deliver integrated advisory services and solutions to our target ultra-high-net-worth, entrepreneur and corporate clients. Our Wealth Management & Connected business combines our activities in wealth management with our financing, underwriting and advisory activities. Our Markets business, which provides a broad range of services through our equities and fixed income sales and trading businesses, also supports our wealth management activities and deals extensively with a broader range of global institutional clients.

Investment Banking & Capital Markets

The Investment Banking & Capital Markets division offers a broad range of investment banking services to corporations, financial institutions, financial sponsors and ultra-high-net-worth individuals and sovereign clients. Our range of products and services includes advisory services related to mergers and acquisitions, divestitures, takeover defense mandates, business restructurings and spin-offs. The division also engages in debt and equity underwriting of public securities offerings and private placements.

International Wealth Management

The International Wealth Management division through its Private Banking business offers comprehensive advisory services and tailored investment and financing solutions to wealthy private clients and external asset managers in Europe, the Middle East, Africa and Latin America, utilizing comprehensive access to the broad spectrum of Credit Suisse's global resources and capabilities as well as a wide range of proprietary and third-party products and services. Our Asset Management business offers investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals.

Global Markets

The Global Markets division offers a broad range of financial products and services to client-driven businesses and also supports Credit Suisse's global wealth management businesses and their clients. Our suite of products and services includes global securities sales, trading and execution, prime brokerage and comprehensive investment research. Our clients include financial institutions, corporations, governments, institutional investors, such as pension funds and hedge funds, and private individuals around the world.

Strategy

Credit Suisse strategy

Our strategy is to be a leading wealth manager with strong investment banking capabilities.

We believe wealth management is one of the most attractive segments in banking. Global wealth has grown significantly over the last ten years and is projected to continue to grow faster than GDP over the next several years, with both emerging markets and mature markets offering attractive growth opportunities. We seek to follow a balanced approach with our wealth management activities, aiming to capitalize on both the large pool of wealth within mature markets as well as the significant growth in wealth in Asia Pacific and other emerging markets.

In the wealth management sector, we expect that emerging markets will account for nearly 60% of the growth in global wealth in the coming years, with more than 60% of that additional wealth expected to be created in Asia Pacific. Wealth is highly concentrated in emerging markets, with wealth creation mostly tied to first and second generation entrepreneurs. We believe that positioning ourselves as the “Bank for Entrepreneurs” by leveraging our strengths in wealth management and investment banking will provide us with key competitive advantages to succeed in these markets as we provide clients with a range of services to protect and grow their wealth and offer an integrated approach across their private and corporate financial needs. We are scaling up our wealth management franchise in emerging markets by recruiting and retaining high-quality relationship managers while prudently managing our lending exposure, building on our strong investment and advisory offering and global investment banking capabilities. At the same time we are investing in our risk management and compliance functions.

Despite slower growth, mature markets are still expected to remain important and account for more than half of global wealth by 2023. We plan to capitalize on opportunities in markets such as Western Europe, with a focused approach to building scale given the highly competitive environment.

Switzerland, as our home market, provides compelling opportunities for Credit Suisse. Switzerland remains the country with the highest average wealth and highest density of affluent clients globally. Switzerland benefits from its highly developed and traditionally resilient economy, where many entrepreneurial small and medium-sized enterprises continue to drive strong export performance. We provide a full range of services to private, corporate and institutional clients with a specific focus on becoming the “Bank for Entrepreneurs” and plan to further expand our strong position with Swiss private, corporate and institutional clients as well as take advantage of opportunities arising from consolidation.

We have simplified and de-risked our Global Markets business model, reducing complexity and cost while continuing to support our core institutional, corporate and wealth management client base and maintaining strong positions in our core franchises. We have right-sized our operations and reduced risk in a focused way by exiting or downsizing selected businesses consistent with our

return on capital objectives and lower risk profile. We aim to further strengthen our International Trading Solutions (ITS) business, our product manufacturing and distribution platform relating to our Global Markets, Swiss Universal Bank and International Wealth Management divisions by increasing cross-divisional collaboration, and we have established Asia Pacific Trading Solutions (ATS) to bring this integrated approach to the Asia Pacific region.

In our Investment Banking & Capital Markets division, we have focused on rebalancing our product mix towards M&A advisory and equity underwriting while maintaining our leading leveraged finance franchise. Our objective is to align, and selectively invest in, our coverage and capital resources with the largest growth opportunities and where our franchise is well-positioned. We believe this will help us to strengthen our market position, contribute to a revenue mix that is more diversified and less volatile through the market cycle and achieve returns in excess of our cost of capital. We will continue to leverage Investment Banking & Capital Markets’ global connectivity with our other divisions and its platform to drive opportunities for the Group.

We intend to continue with a disciplined approach to cost management across the Group, focusing on continuous productivity improvements that can release resources for growth investments while maintaining a strong operating leverage.

The spread of COVID-19 is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to affect our financial performance, including credit loss estimates, trading revenues, net interest income and potential goodwill assessments. We are closely monitoring the spread of COVID-19 and the potential effects on our operations and business. In February 2020, in response to the COVID-19 outbreak in countries and regions in which the Group operates, the Executive Board invoked our formal crisis management process and put in place various response measures, in order to ensure continuity of our business operations and protect the health and safety of employees, including travel restrictions, a quarantine protocol, guidelines for client meetings and employee gatherings and certain changes to the daily operations of critical processes.

Resilient business model

At the end of 2018, we successfully completed our ambitious three-year restructuring plan. A key focus of our strategy has been to make the bank more resilient in challenging market conditions while preserving our ability to benefit when markets are more favorable.

We began 2019 in a challenging market environment, with muted client activity in the first quarter. As the environment became more constructive in the second and third quarters, we were able to progressively improve revenue momentum and adapted our cost base accordingly to capture growth opportunities, finishing the year with a strong fourth quarter. In this environment we demonstrated the resilience of our model and delivered a strong performance. We attracted CHF 79.3 billion of net new assets across the Group in 2019, an increase of 48% compared to 2018, driving our assets under management to a record level of CHF 1,507.2 billion at the end of 2019.

During our restructuring, we significantly lowered the break-even point of the Group and increased our cost flexibility. We maintained our discipline around cost in 2019 and delivered our 13th consecutive quarter of positive operating leverage.

As a result, we have significantly strengthened our profitability, with income before taxes of CHF 4,720 million in 2019, a 40% increase compared to 2018, and have driven return on tangible equity (RoTE) to 8.7% for 2019.

In 2019, we returned CHF 1.7 billion of capital to shareholders through dividends and the successful completion of our share buyback program.

Continue to execute with discipline to maintain our momentum in 2020

In 2020, we aim to maintain our momentum by executing with discipline.

Growing revenues in wealth management

Our integrated approach to wealth management is based on our understanding of our client's needs. Through our regionalized approach, we have enhanced our client proximity and can quickly react to changing client needs.

We are focused on increasing our assets under management. At the end of 2019 our assets under management for the Group stood at CHF 1,507.2 billion, an increase of CHF 293.1 billion compared to 2015. Over the last four years we have shown a strong track record of consistently higher annual net new assets with total net new assets of CHF 197.6 billion for the Group. Our balanced approach in Wealth Management has contributed to positive inflows in mature markets as well as strong inflows in emerging markets. Our focus on growing our entrepreneur and ultra-high-net-worth (UHNW) franchise has been successful with an annual Wealth Management net new asset growth rate of 5% driven by a 76% share of UHNW net new assets.

→ References to Wealth Management in connection with net new assets or assets under management measures mean the Private Clients business within Swiss Universal Bank, the Private Banking business within International Wealth Management and the Private Banking business within the Wealth Management & Connected business of Asia Pacific or their combined results.

We have increased the productivity of our relationship managers in all of our Wealth Management businesses. We have hired key senior relationship managers over the last four years and we will continue to hire senior talent when opportunities present themselves. We believe our platform and integrated approach is a highly attractive proposition for these relationship managers and their clients.

Through our ITS business, we offer our wealth management clients access to institutional quality solutions. As the business continues to mature, we are seeing a strengthening of the deal pipeline with a continuing and growing flow of transactions.

We are focused on growing our more stable and recurring revenue streams, across net interest income and recurring

commissions and fees, which accounted for the majority of our Wealth Management-related revenues as of the end of 2019. As we grow our assets under management, we are compounding growth in these more stable and recurring revenue streams.

→ References to our Wealth Management-related businesses mean our Swiss Universal Bank division, our International Wealth Management division and our Wealth Management & Connected business within our Asia Pacific division or their combined results.

In addition, we are focused on significant further regional growth opportunities in a number of sizeable economies where we are already active but currently have a relatively low market share in terms of assets under management.

Our approach and success has been recognized by the industry, and we were awarded "The World's Best Bank for Wealth Management" – *Euromoney Awards for Excellence 2019*.

Increasing profitability in our investment banking businesses

A strong investment banking business is key to our ability to offer our UHNW clients institutional quality solutions to grow and protect their wealth and global execution capabilities.

After successfully completing the right-sizing and de-risking of our Global Markets activities while investing in talent and preserving our key franchises in fixed income and equities at the end of 2018, we are focused on sustainably growing our revenues and increasing our returns in Global Markets.

In 2019, Global Markets delivered significant revenue growth, increasing revenues by 16% while maintaining cost discipline. Global Markets results in the US and EMEA outperformed peers' global results across both fixed income sales and trading and equity sales and trading and won franchise industry awards across our core businesses.

We continued to drive closer collaboration with wealth management and global connectivity through ITS. To replicate the success of ITS in Asia Pacific, we have established ATS.

Our advisory and underwriting businesses are core to our integrated approach. We have delivered three years of strong results since the announcement of our strategy in 2015 and we have maintained leading market positions in equity capital markets and leveraged finance. Our integrated approach to wealth management and investment banking has proven successful with a #1 ranked underwriting and advisory franchise in Asia Pacific (excluding Japan and China onshore) and Switzerland in 2019.

Maintaining cost discipline

During our three-year restructuring, we were able to significantly lower our break-even point through our strategic cost transformation program. We aim to maintain our lower break-even point through continued disciplined expense and investment management across our divisions and corporate functions as we drive further structural cost savings initiatives.

Optimizing our operating model

We continue to focus on our control functions as we believe this will be key to our success as we grow our businesses. Since 2015, we have significantly invested to strengthen our risk management and compliance functions. Our control efforts also include all of our other corporate functions and front office businesses. We are leveraging front-to-back technology advancements and are deploying tools across the bank to further strengthen our operating model.

Financial goals

At the Investor Day on December 11, 2019, we communicated our RoTE ambition of approximately 10% for 2020, or approximately 11% in a constructive market environment, and highlighted additional cost measures to protect our RoTE should markets be more challenging. We also stated our aim to achieve an RoTE of above 12% in the medium term. We reiterated our expectation for 2020 to distribute at least 50% of net income to shareholders through a combination of a share buyback similar to 2019 and a sustainable ordinary dividend, which dividend we expect to increase by at least 5% per annum. The Board of Directors approved an additional share buyback program of up to CHF 1.5 billion for 2020 and, prior to the spread of COVID-19, had expected to buy back at least CHF 1.0 billion of shares this year, subject to market and economic conditions. However, the extent to which COVID-19 impacts our business, including with respect to our financial goals and related expectations and ambitions is highly uncertain and the full impact cannot be predicted at this time. Having completed the initial share purchases under the 2020 program earlier this year, the Board of Directors will review its expectation for the balance of the program when there is greater certainty over the economic, financial and market outlook.

Our ambitions often include metrics that are non-GAAP financial measures and are unaudited. A reconciliation of these ambitions to the nearest GAAP measures is unavailable without unreasonable efforts. RoTE is based on tangible shareholders' equity, a non-GAAP financial measure also known as tangible book value, which is calculated by deducting goodwill and other intangible assets from total shareholders' equity as presented in our balance sheet, both of which are unavailable on a prospective basis. Such ambitions are calculated in a manner that is consistent with the accounting policies applied by us in preparing our financial statements.

Organizational structure

Our organizational structure consists of three regionally focused divisions: Swiss Universal Bank, International Wealth Management and Asia Pacific. These regional businesses are supported by two other divisions specialized in investment banking capabilities: Global Markets and Investment Banking & Capital Markets. Our organization is designed to drive stronger client focus and provide better alignment with regulatory requirements, with decentralization increasing the speed of decision-making, accountability and cost competitiveness across the Group.

Our operating businesses are supported by focused corporate functions at the Group Executive Board level, consisting of: Chief Financial Officer, Chief Operating Officer, Chief Risk Officer, Chief Compliance and Regulatory Affairs Officer, General Counsel and Global Head of Human Resources.

Evolution of legal entity structure

The execution of the program evolving the Group's legal entity structure to support the realization of our strategic objectives, increase the resilience of the Group and meet developing and future regulatory requirements has substantially concluded. The legal entity program was prepared in discussion with the Swiss Financial Market Supervisory Authority FINMA (FINMA), our primary regulator, and other regulators and addressed regulations in Switzerland, the US and the UK with respect to requirements for global recovery and resolution planning by systemically relevant banks, such as Credit Suisse, that will facilitate resolution of an institution in the event of a failure.

Products and services

Private banking offerings and wealth management solutions

We offer a wide range of private banking and wealth management solutions tailored for our clients in our Swiss Universal Bank, International Wealth Management and Asia Pacific divisions.

Client segment specific value propositions

Our wide range of wealth management solutions is tailored to specific client segments. Close collaboration with our investment banking businesses enables us to offer customized and innovative solutions to our clients, especially in the ultra-high-net-worth individuals (UHNWI) segment, and we have specialized teams offering bespoke and complex solutions predominantly for our sophisticated clients. This distinct value proposition of our integrated bank remains a key strength in our client offerings.

Structured advisory process

We apply a structured approach in our advisory process based on a thorough understanding of our clients' needs, personal circumstances, product knowledge, investment objectives and a comprehensive analysis of their financial situation to define individual client risk profiles. On this basis, we define an individual investment strategy in collaboration with our clients. This strategy is implemented to help ensure adherence to portfolio quality standards and compliance with suitability and appropriateness standards for all investment instruments. Responsible for the implementation are either the portfolio managers or our relationship managers working together with their advisory clients. Our UHNWI relationship managers are supported by dedicated portfolio managers.

Comprehensive investment services

We offer a comprehensive range of investment advice and discretionary asset management services based on the outcome of our structured advisory process and the global "House View" of our Credit Suisse Investment Committee. We base our advice and services on the analysis and recommendations of our research and investment strategy teams, which provide a wide range of investment expertise, including macroeconomic, equity, bond, commodity and foreign-exchange analysis, as well as research on the economy. Our investment advice covers a range of services, from portfolio consulting to advising on individual investments. We offer our clients portfolio and risk management solutions, including managed investment products. These are products actively managed and structured by our specialists or third parties, providing private investors with access to investment opportunities that otherwise would not be available to them. For clients with more complex requirements, we offer investment portfolio structuring and the implementation of individual strategies, including a wide range of structured products and alternative investments. Discretionary asset management services are available to clients who wish to delegate the responsibility for investment decisions to Credit Suisse. We are an industry leader in alternative investments and, in close collaboration with our asset management business and investment banking businesses, we offer innovative products with limited correlation to equities and bonds, such as hedge funds, private equity, commodities and real estate investments.

In addition, we offer solutions for a range of private and corporate wealth management needs, which include financial planning, succession planning and trust services.

Financing and lending

We offer a broad range of financing and lending solutions across all of our private client segments, including consumer credit and real estate mortgage lending, real asset lending relating to ship and aviation financing for UHNWI, standard and structured hedging and lombard lending solutions as well as collateral trading services.

Multi-shore platform

With global operations comprising 13 international booking centers in addition to our operations in Switzerland, we are able to offer our clients booking capabilities locally as well as through our international hubs. Our multi-shore offering is designed to serve clients who are focused on geographical risk diversification, have multiple domiciles, seek access to global execution services or are interested in a wider range of products than is available to them locally.

Corporate client and institutional client offerings

In accordance with our ambition to position ourselves as the "Bank for Entrepreneurs", we provide corporate and institutional clients, predominantly in Switzerland, with a broad range of financial solutions. To meet our clients' evolving needs, we deliver our offering through an integrated franchise and international presence. Based on this model, we are able to assist our clients in virtually every stage of their business life cycle to cover their

banking needs. For corporate clients, we provide a wide spectrum of banking products such as traditional and structured lending, payment services, foreign exchange, capital goods leasing and investment solutions. In addition, we apply our investment banking capabilities to supply customized services in the areas of M&A, syndications and structured finance. For corporations with specific needs for global finance and transaction banking, we provide services in commodity trade finance, trade finance, structured trade finance, export finance and factoring. For our Swiss institutional clients, including pension funds, insurance companies, public sector and UHNWI clients, we offer a wide range of fund solutions and fund-linked services, including fund management and administration, fund design and comprehensive global custody solutions. Our offering also includes ship and aviation finance and a competitive range of services and products for financial institutions such as securities, cash and treasury services.

Asset management offerings

Our traditional investment products provide strategies and comprehensive management across equities, fixed income, and multi-asset products in both fund formation and customized solutions. Stressing investment principles, such as risk management and asset allocation, we take an active and disciplined approach to investing. Alongside our actively managed offerings, we have a suite of passively managed solutions, which provide clients access to a wide variety of investment options for different asset classes in a cost-effective manner.

We also offer institutional and individual clients a range of alternative investment products, including credit investments, hedge fund strategies, real estate and commodities. We are also able to offer access to various asset classes and markets through strategic alliances and key joint ventures with external managers.

Investment banking financial solutions

Equity underwriting

Equity capital markets originates, syndicates and underwrites equity in initial public offerings (IPOs), common and convertible stock issues, acquisition financing and other equity issues.

Debt underwriting

Debt capital markets originates, syndicates and underwrites corporate and sovereign debt.

Advisory services

Advisory services advises clients on all aspects of M&A, corporate sales, restructurings, divestitures, spin-offs and takeover defense strategies.

Equities

Cash equities provides a comprehensive suite of offerings, including: (i) research, analytics and other content-driven products and services (ii) sales trading, responsible for managing the order flow between our clients and the marketplace and providing clients with trading ideas and capital commitments, identifying

trends and delivering the most effective trade execution; (iii) high touch and program trading, exchange-traded funds (ETFs) and advanced execution services (AES) platform under our global execution services group, which executes client orders and makes markets in listed and over-the-counter (OTC) cash securities, ETFs and programs, providing liquidity to the market through both capital commitments and risk management. AES is a sophisticated suite of algorithmic trading strategies, tools and analytics that facilitates global trading across equities, options, futures and foreign exchange. By employing algorithms to execute client orders and limit volatility, AES helps institutions and hedge funds reduce market impact. Credit Suisse provides access to over 100 trading destinations in over 40 countries and six continents.

Prime services offers hedge funds and institutional clients execution, financing, custody, clearing and risk advisory services across various asset classes through prime brokerage, synthetic financing and listed and OTC derivatives. In addition, we partner with the most established fund managers, fast-growing funds and select startups, blending traditional prime brokerage services with innovative financing solutions and comprehensive capital and consulting advisory services, to help funds build durable organizations across their lifecycle.

Equity derivatives provides a full range of equity-related and cross-asset products, including investment options, systematic strategies and financing solutions, as well as sophisticated hedging and risk management expertise and comprehensive execution capabilities to private banking clients, financial institutions, hedge funds, asset managers and corporations.

Convertibles: The convertibles team provides secondary trading and market making of convertible bonds as well as pricing and distribution of Credit Suisse-originated convertible issuances.

Fixed income

Global credit products is a leading, client-focused and accomplished credit franchise, providing expert coverage in credit trading, sales, financing and capital markets. Our strong history of credentials and long-standing record in leveraged finance reflect our unique ability to provide value-added products and solutions to both issuer and investor clients. Our capital markets businesses are responsible for structuring, underwriting and syndicating a full range of products for our issuer clients, including investment grade and leveraged loans, investment grade and high yield bonds and unit transactions. We are also a leading provider of committed acquisition financing, including leveraged loan, bridge finance and mezzanine finance and collateralized loan obligation formation. In sales and trading, we are a leading market maker in private and public debt across the credit spectrum, including leveraged loans as well as high yield and investment grade cash. We are also a market maker in the credit derivatives market, including the credit default swap index (CDX) suite, liquid single-name credit default swaps (CDS), sovereign CDS, credit default swaptions and iBoxx total return swaps. We offer clients a comprehensive range of financing options for credit products including, but

not limited to, repurchase agreements, short covering, total return swaps and portfolio lending.

Securitized products is a market leading franchise providing asset based liquidity and financing solutions and products to institutional and wealth management clients. We have experience in a broad range of asset categories including consumer, commercial, residential, commercial real estate, transportation and alternatives. Our finance business focuses on providing asset and portfolio advisory services and financing solutions (warehouse, bridge and acquisition) and originates, structures and executes capital markets transactions for our clients. Our trading platform provides market liquidity across a broad range of loans and securities, including residential mortgage-backed securities (RMBS), asset-backed securities (ABS) and commercial mortgage-backed securities (CMBS). CMBS and RMBS include government- and agency-backed as well as private-label loans. We have a seasoned and dedicated securitized product sales force that distributes our primary and secondary product offerings to our client base. We also offer residential mortgage servicing capabilities through our mortgage servicer Select Portfolio Services.

Macro products includes our global foreign exchange and rates businesses and investment grade capital markets team in Switzerland. Our rates business offers market-making capabilities in US cash and derivatives, European cleared swaps and select bilateral and structured solutions. Our investor products business manufactures credit rates, foreign exchange and commodity based structured products for institutional and private banking clients.

Emerging markets, financing and structured credit includes a range of financing products including cash flow lending, share-backed lending and secured financing transactions and onshore trading in Brazil, Mexico, Russia and Turkey. In addition, we offer financing solutions and tailored investment products for Latin American, Central and Eastern European, Middle Eastern and African financial institutions and corporate and sovereign clients.

Other

Other products and activities include lending and certain real estate investments. Lending includes senior bank debt in the form of syndicated loans and commitments to extend credit to investment grade and non-investment grade borrowers.

Research and HOLT

Our equity and fixed income businesses are enhanced by the research and HOLT functions. HOLT offers a framework for objectively assessing the performance of over 20,000 companies worldwide, with interactive tools and consulting services that clients use to make informed investment decisions.

Equity and fixed income research uses in-depth analytical frameworks, proprietary methodologies and data sources to analyze approximately 3,000 companies worldwide and provide macro-economic insights into this constantly changing environment.

Divisions

Swiss Universal Bank

Business profile

Within Swiss Universal Bank, we offer comprehensive advice and a broad range of financial solutions to private, corporate and institutional clients primarily domiciled in Switzerland. We serve our clients through the following six dedicated business areas in order to cater to our Swiss client base: Direct Banking, Wealth Management Clients and Premium Clients within the Private Clients business, and Corporate Banking, Investment Banking and Institutional Clients within the Corporate & Institutional Clients business.

Our **Private Clients** business has a leading client franchise in Switzerland, serving approximately 1.5 million clients, including UHNWI, high-net-worth individual (HNWI), affluent and retail clients. Our service offering is based on our structured advisory process, distinct client-segment-specific value propositions and coverage models as well as access to a broad range of comprehensive products and services. Our network includes 1,280 relationship managers in 146 branches, including 26 branches of the Bank's affiliate, Neue Aargauer Bank. Additionally, our clients benefit from the advice of more than 300 specialists in areas such as investing, wealth and real estate planning, and lending. Our consumer finance business BANK-now has 18 branches. Also, we offer our clients the world's leading credit card brands through Swisscard AECS GmbH, an equity method investment jointly owned with American Express.

Our **Corporate & Institutional Clients** business offers expert advice and high-quality services to a wide range of clients, serving the needs of over 100,000 corporations and institutions, including large corporate clients, small and medium-size enterprises (SMEs), institutional clients, external asset managers, financial institutions and commodity traders. This business also includes our Swiss investment banking business, serving corporate clients and financial institutions in connection with financing transactions in debt and equity capital markets and advising on M&A transactions. Our business includes 510 relationship managers who serve our clients out of 44 locations.

Key data – Swiss Universal Bank

	in / end of		
	2019	2018	2017
Key data			
Net revenues (CHF million)	6,020	5,564	5,396
Income before taxes (CHF million)	2,697	2,125	1,765
Assets under management (CHF billion)			
– Private Clients	217.6	198.0	208.3
– Corporate & Institutional Clients	436.4	348.7	354.7
Number of employees	12,350	11,950	12,600

Business environment

The Swiss private banking and wealth management industry remains very attractive and continues to have positive growth prospects. Switzerland has one of the highest millionaire densities worldwide and is expected to continue to have one of the highest average levels of wealth per adult. We remain well-positioned in the Swiss market with strong market shares across our client segments, although the rise of financial technology (Fintech) companies in Europe and Switzerland with aggressive market entry strategies might increase the competition in the retail segment going forward.

The corporate and institutional clients business continues to offer attractive opportunities, supported by the expected steady growth of the Swiss economy. We are a leading provider of banking services to corporate and institutional clients in Switzerland, utilizing our market-leading investment banking capabilities in Switzerland for local execution while leveraging Investment Banking & Capital Markets' international reach and Global Markets' placing power.

Structurally, the industry continues to undergo significant change. Regulatory requirements for investment advisory services continue to increase, including in the areas of suitability and appropriateness of advice, client information and documentation. This is expected to drive further consolidation of smaller banks due to the higher critical size necessary to fulfill business and regulatory requirements. We continue to believe that we are well-positioned to opportunistically take advantage of this potential market consolidation. We have made additional progress in adapting to the changing regulatory environment and are continuing to dedicate significant resources to ensure our business is compliant with regulatory standards. Furthermore, interest rates are expected to remain negative for a longer period of time. In 2019, we implemented mitigating actions and began charging negative interest rates on Swiss franc deposits above a certain threshold.

The spread of COVID-19 is expected to have negative effects on major economies globally and is likely to affect our business performance, including credit losses, in at least the first half of 2020 and going forward.

Business strategy

Switzerland, our home market, has always been and is expected to remain a key market for our Group and is core to our overall strategy. Within Swiss Universal Bank, we combine all the strengths and critical mass of our Swiss retail, wealth management, corporate, institutional and investment banking activities. The division is well-positioned to meet the needs of our clients, both individual and corporate, with a broad suite of customized products and services.

In order to further cement our standing as a leading Swiss bank, we continue to focus on the following four key priorities:

Bank for Switzerland

We are committed to our Swiss home market and to all our clients in Switzerland – we are a universal bank that serves private, corporate and institutional client segments. We intend to expand our market share and continue to be a responsible partner in Swiss society.

In 2019, we responded to changing client needs and the dynamic changes occurring in the banking industry by creating a new business area, Direct Banking. The aim of this new business area is to focus on retail and small commercial clients, who mainly use core banking products and services. We continue to see potential in developing the HNWI and the UHNWI business, which are both wealth market segments that are growing significantly and remain highly attractive. Our holistic offering and the collaboration across the division and across the bank are the bases for our efforts to capture further growth in both market segments. Our efforts and commitment to Switzerland remain a priority and we were recognized again as “Switzerland’s Best Bank” – *Euromoney Awards for Excellence 2019*.

Bank for Entrepreneurs

Entrepreneurship has always been important for Credit Suisse, and entrepreneurial thinking is one of our core principles. We have grown and will seek to continue to significantly grow our business with entrepreneurs and their companies across all businesses within Swiss Universal Bank, including by leveraging our international connectivity in investment banking and asset management. It is our ambition to be recognized as the “Bank for Entrepreneurs”.

We strengthened our focus on being recognized as the “Bank for Entrepreneurs” by launching joint client coverage for private and corporate clients in 2015. In this context, we increased the number of Entrepreneurs & Executives relationship managers and now cover the Swiss market with 22 locations. Furthermore, in 2019 we launched the Swiss Entrepreneurs Fund together with two other financial institutions. The goal is to provide up to CHF 500 million in growth capital to start-ups and SMEs located in Switzerland. Also in 2019, our broad range of expertise and capabilities enabled us to execute a large number of investment banking transactions and we were again recognized as “Switzerland’s Best Investment Bank” – *Euromoney Awards for Excellence 2019*.

Bank for the Digital World

We are transforming the way we serve and advise our clients in an increasingly digital society and economy. We expect new technologies and business models to emerge and must adapt our efforts to be successful. To this end, we are investing in digital capabilities with a focus on client engagement, self-service capabilities and frontline productivity. Digitalization, automation and data management will be key drivers to continuously improve our cost position and drive our competitiveness with the possibility to fundamentally change the way we work.

In 2019, we focused on strengthening our digital solutions and capabilities for private, corporate and institutional clients as well as relationship managers. We were one of the first banks

in Switzerland to provide a holistic mobile payment offering to our clients. We have continued to extend our digital onboarding solutions to SMEs and have enabled digital straight-through processing of compliance checks. We have joined forces with the Swiss software provider KLARA Business AG, allowing SMEs to receive services beyond traditional banking products and simplifying online credit requests. Integrated software solutions will gain importance, especially for corporate clients. Our Credit Suisse Direct Multibanking service, for example, is designed to enable our clients to manage their liquidity reliably and efficiently, taking both their Credit Suisse and other banking relationships into account. Moreover, we have completed the rollout of a new application for relationship managers to the UHNWI business, which should further increase the productivity and efficiency of our client-facing employees. Direct Banking clients will be able to benefit from digital products and services that are tailored to their needs and will have even swifter and easier access to our bank. Overall, we seek to optimally combine our extensive digital offering with personal advice for our clients.

Bank for the Next Generation

While we are always mindful of the needs of all clients, we particularly aim to support the next generation in Switzerland in achieving their ambitions. Supertrends such as an aging population are expected to fundamentally change our country in coming years and will open opportunities for us to make a difference to our clients across generations. Developing our own young talents in their careers with various programs will complement this process and is part of our long-term commitment to the next generation in Switzerland.

Our holistic offering for the various stages in the lives of our clients underpins our ambition to cater to all client needs. Examples include Viva Kids and the Credit Suisse Collective Foundation 1e. Viva Kids is a dedicated banking package for our younger clients that will help us to build the foundation for our future client base. Through the Credit Suisse Collective Foundation 1e, we provide companies and self-employed persons in Switzerland with the opportunity to structure their extra-mandatory retirement plans on an attractive, autonomous basis.

Awards and market share momentum

Credit Suisse received a number of key industry awards in 2019, including:

- “Switzerland’s Best Bank” – *Euromoney Awards for Excellence 2019*
- “The World’s Best Bank for Wealth Management” – *Euromoney Awards for Excellence 2019*
- “Switzerland’s Best Investment Bank” – *Euromoney Awards for Excellence 2019*
- “Switzerland M&A Financial Advisor of the Year” – *Mergermarket*
- “Best Private Bank for Entrepreneurs” – *The Banker 2019*
- “Best digital corporate bank” – *Institute of Financial Services Zug (IFZ) and e-foresight*

International Wealth Management

Business profile

In International Wealth Management, we cater to the needs of our private, corporate and institutional clients by offering expert advice and a broad range of financial solutions.

Our **Private Banking** business provides comprehensive advisory services and tailored investment and financing solutions to wealthy private clients and external asset managers in Europe, the Middle East, Africa and Latin America. We serve our clients through 1,150 relationship managers in 43 cities in 25 countries, utilizing comprehensive access to the broad spectrum of Credit Suisse's global resources and capabilities as well as a wide range of proprietary and third-party products and services.

Our **Asset Management** business offers investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals, along with our private banking businesses. Our asset management capabilities span across a diversified range of asset classes, with a focus on select traditional and alternative strategies.

Key data – International Wealth Management

	in / end of		
	2019	2018	2017
Key data			
Net revenues (CHF million)	5,887	5,414	5,111
Income before taxes (CHF million)	2,138	1,705	1,351
Assets under management (CHF billion)			
– Private Banking	370.0	357.5	366.9
– Asset Management	437.9	388.7	385.6
Number of employees	10,490	10,210	10,250

Business environment

The private banking industry continues to benefit from attractive growth prospects in the European and emerging markets covered by International Wealth Management, where private banking assets are expected to grow by approximately 6% annually through 2023. Regionally, private banking assets are expected to grow by approximately 6% in Russia and Central & Eastern Europe, by approximately 7% in the Middle East & Africa and by approximately 8% in Latin America. This growth is expected to be fueled by an increase in population, entrepreneurial wealth creation and technological advancements. Although wealth is expected to grow at a slower pace in Europe (by approximately 3% annually), this region continues to be of crucial importance, holding approximately 20% of the world's private banking assets. In addition, it is expected that demographic developments relating to an aging population, such as funding pressure in the public

pension systems and a transfer of wealth to the next generation, will present important opportunities in the European private banking markets.

The asset management industry continues to evolve and grow with positive support from increasing global wealth. At the same time, managers face a number of challenges, including regulatory complexities and revenue and margin compression. The continued rise of passive and low-fee products reflects ongoing fee sensitivity from investors. Although fees for alternative strategies have been more resilient, market trends have led to a need for more innovative products and solutions. In this environment, managers must demonstrate differentiating capabilities including not only strong investment performance, but also other value-add capabilities such as risk management and controls, compliance, client reporting, and data security.

Despite supportive long-term trends, the wealth and asset management environment faced continued uncertainties in 2019, including in connection with trade tensions between the US and China and the expected withdrawal of the UK from the European Union. Overall, however, both equity markets and fixed income markets had one of their strongest annual performances in the past decade.

With the spread of COVID-19 the outlook of our business is uncertain as the situation evolves. While there have been some short-term benefits from higher market volatility and client trading, the negative effects from distressed equity markets, lower interest rates, the foreign exchange environment and credit losses are likely to impact our results. Potentially lower assets under management, lower performance fees, a shift towards lower risk asset classes and lower transaction volumes would likely impact results in our Asset Management business.

Business strategy

Our private banking and asset management businesses are among the industry's leaders by size and reputation in our target markets and regions. International Wealth Management continues to contribute significantly to Credit Suisse's strategic and financial ambitions. The following strategic priorities guide our decisions:

Regional client proximity

Our focus on enhancing client proximity is intended to capture additional market share as we are strengthening and adapting our footprint with investments in our key hubs, while selectively investing in onshore locations in markets with attractive growth prospects. In late 2018, we further regionalized our coverage setup in Private Banking, increasing the number of regional coverage areas from 4 to 7. These measures are intended to ensure an even more agile and efficient organization with accelerated decision-making capabilities. We have also added solution experts and risk management and compliance specialists locally as part of our efforts to increase regional accountability and empowerment and amplify our ability to identify client needs

and business opportunities. Going forward, we intend to further increase our client proximity with dedicated measures to expand into currently underserved markets that show attractive long-term growth prospects, while remaining well diversified across mature and emerging markets.

Systematic solution delivery

We focus on systematically offering solutions and products that are tailored to our clients' needs, holistically advising them on their assets and liabilities. We believe that broadened collaboration and partnership across the firm provides the basis for creating a differentiated and needs-based value proposition and for gaining a larger share of our client's business. We systematically leverage our investment strategy and research capabilities, including the Credit Suisse House View, as part of our approach to further optimize the risk/return profiles of our clients' investment portfolios. Cross-divisional product innovation and an integrated solutions offering, utilizing ITS's capabilities within Global Markets, are key factors for our success. In addition, we are addressing our clients' sophisticated financing needs by broadening our lending services and leveraging additional resources. Finally, we are increasingly collaborating with Investment Banking & Capital Markets to offer investment banking services, especially to our UHNWI and entrepreneurial clients.

Digitally enabled approach

We are building up scale in our business, improving processes front-to-back and enhancing the utilization of digital capabilities. In that regard, we are making additional changes aimed at simplifying structures and are making important investments in the redesign of certain processes, technology and automation efforts aimed at shortening the time-to-market of products and solutions and reducing our relationship managers' administrative tasks. Technology also enhances consistency in our processes and in the way we operate, which should allow us to add scale with limited need for additional investments and consequently improve our cost efficiency. Furthermore, it also helps us to systematically embed risk management and compliance oversight into our processes, enhancing our ability to protect our franchise and reputation while facilitating sustainable growth.

Grow our Asset Management business

In our Asset Management business, we seek to grow our recurring management fees, especially in our wholly owned operating businesses, by scaling-up our existing strong franchises while focusing product launches on areas adjacent to core strengths, with an additional emphasis on differentiating alternative investment solutions. We seek to do this while maintaining a disciplined approach to cost management.

In addition, we are taking the important step of integrating environmental, social and governance (ESG) factors into our investment process. In the first phase, more than 30 actively management investment funds with more than CHF 20 billion of assets were repositioned to fulfill ESG criteria defined by the Credit Suisse Sustainable Investing Framework. It is our goal to expand this suite of ESG offerings to over CHF 100 billion of assets under management by the end of 2020.

We support these efforts through strong collaboration and connectivity with Credit Suisse's wealth management businesses globally, to better align our offering to client needs and shorten the delivery time for new investment opportunities.

Awards and market share momentum

Credit Suisse received a number of key industry awards in 2019, including:

- "Middle East's Best Bank for Wealth Management" – *Euro-money Awards for Excellence 2019*
- "Latin America's Best Bank for Wealth Management" – *Euro-money Awards for Excellence 2019*
- "Western Europe's Best Bank for Advisory" – *Euromoney Awards for Excellence 2019*
- "Best Private Bank in Russia" (seventh consecutive year) and "Best Private Bank in the Middle East" – *Global Private Banking Awards 2019 – PWM / The Banker*
- "Best Private Bank in the Middle East" – *Euromoney Private Banking and Wealth Management Survey 2019*
- "Collateralized Loan Obligation (CLO) Manager of the Year" – *Creditflux Manager Awards*

Asia Pacific

Business profile

In the Asia Pacific division, we manage an integrated business to deliver a broad range of advisory services and solutions that meet the private wealth and business needs of our clients. We report our financial performance along two businesses: Wealth Management & Connected, which reflects our activities in private banking, underwriting and advisory and financing; and Markets, which represents our equities and fixed income sales and trading businesses as well as activities that support our wealth management strategy.

Within **Wealth Management & Connected**, we focus on an advisory-led model to deliver holistic solutions to our clients, which primarily include UHNWI, entrepreneurs and corporate clients. Our Private Banking business offers a comprehensive suite of wealth management financial products and solutions. Our underwriting and advisory business provides advisory services related to debt and equity underwriting of public offerings and private placements as well as mergers and acquisitions. Our financing business provides tailored lending solutions. We collaborate closely with our Markets business and with the Group's other businesses to deliver the full breadth of Credit Suisse capabilities to our clients.

Within **Markets**, our equities and fixed income franchises provide a broad range of services, including sales and trading, prime brokerage and investment research to our clients, which include entrepreneurs, corporations, institutional investors, financial institutions and sovereigns. The business collaborates closely with Global Markets to meet the needs of global institutional clients and with the Group's wealth management businesses.

Key data – Asia Pacific

	in / end of		
	2019	2018	2017
Key data			
Net revenues (CHF million)	3,590	3,393	3,504
Income before taxes (CHF million)	902	664	729
Assets under management (CHF billion)			
– Private Banking	220.0	199.3	196.8
Number of employees	7,980	7,440	7,230

Business environment

The fundamentals underpinning long-term, entrepreneur-led wealth creation and growth in business activities for the Asia Pacific region remain positive. According to Credit Suisse Research Institute's Global Wealth Report 2019, in the 12 months to mid-2019, Asia Pacific (including China and India) represented the largest wealth contributor of all regions. With total household wealth growing more than 17-fold since 2000, China has the second largest household wealth behind the US. An increase in wealth held by UHNWI and HNWI is expected to

result in larger capital pools for investment and enhanced opportunities for entrepreneur-led activity, notwithstanding short-term market cyclicality and pressures.

Despite positive long-term dynamics, the banking environment in Asia Pacific remained challenging in 2019, with persisting trade and geopolitical tensions. However, the expectations around trade agreements and supportive central bank statements improved investor sentiment towards the end of the year, leading to higher activity levels among clients in the fourth quarter of 2019 compared to the same period in 2018.

In early 2020, the spread of COVID-19 and the resulting containment strategies implemented by governments around the world have caused disruption to global supply chains and the market has entered a period of increased volatility. As a result, our operating environment is expected to be significantly influenced by the global impact of the pandemic and by the reaction of investors and central banks, and is likely to impact our results.

Business strategy

Our business strategy remains steadfast, despite short-term market cyclicality and pressures, and is centered on the growth of our Private Banking franchise in large wealth and financial markets in Asia, as well as on our ambition to be "The Bank for Entrepreneurs in Asia Pacific". Our divisional model and integrated delivery are key differentiators that support our client-centric strategy to provide holistic advice, structured solutions and tailored investment and lending services to entrepreneur and wealth clients. Our consistent focus on maintaining a diversified regional footprint and leading market positions in private banking and investment banking has been critical to meeting our clients' needs, attracting strong talent and fostering a partnership culture that can deliver attractive returns and growth with disciplined risk management.

Despite challenging market conditions during 2019, our Wealth Management & Connected business demonstrated resilient performance, supported by continued net new asset generation, higher net revenues and a culture of collaboration. We established Asia Pacific Trading Solutions (ATS) in 2019, modelled on our ITS business, to provide opportunities to increase revenues by creating tailored solutions to meet the complex needs of our clients. Our diversified platform across a mix of clients, countries and products is essential to effectively and sustainably compete in a region as dynamic as Asia Pacific, with its variety of economic, business and client characteristics.

Looking ahead, our strategic focus is on deepening key client relationships, further growing client assets and recurring revenues, enhancing the benefits from ATS by increasing tailored wealth solutions and platform synergies, maintaining our leading market positions in private banking and investment banking and continuing to enhance our productivity, risk management and controls.

Significant transactions

We executed a number of noteworthy transactions in 2019, reflecting the diversity and strength of our franchise.

- In Greater China, we advised Alibaba Group Holding Ltd. on its Hong Kong listing, a term loan facility and the merger between its subsidiaries Rajax Holding HK Ltd. and Koubei Co. to form Alibaba Local Services Company with a concurrent private placement (consumer). We also advised on the US IPO of Luckin Coffee Inc. (food & beverage), three multi-tranche senior notes offerings for China Evergrande Group (real estate), an offshore financing facility for China Tian Lun Gas Holdings Limited (energy), a concurrent convertible bond and follow-on offering for Bilibili Inc. (technology) and a term loan for Anta Sports Products Limited (consumer).
- In South East Asia, we advised Temasek Holdings Private Limited on its dual-tranche Euro bond offering (sovereign), Lippo Karawaci Tbk PT on its comprehensive strategic transformation (real estate), Serba Dinamik Holdings Berhad on two sukuk bond offerings (energy), AllHome Corporation on its Philippines IPO (consumer), Siam Commercial Bank Public Company Limited on the sale of SCB Life Assurance Public Company Limited (financial services) and the formation of a 15-year life bancassurance partnership with FWD Group Financial Services Pte. Ltd. (financial services). We also advised Vingroup Joint Stock Company on a strategic investment by SK Group (conglomerate) as well as a strategic investment in its subsidiary VCM Services and Trading Development Joint Stock Company by a consortium led by GIC Private Limited (conglomerate), VP Bank AG on a term loan facility (financial services) and SriLankan Airlines Limited on a bond offering (transportation).

- Elsewhere, in Korea, we advised MBK Partners and Woori Financial Group Inc. on their 80% acquisition of Lotte Card Co., Ltd. (financial services) and Shinhan Financial Group Co., Ltd. on a bond offering (financial services); in Japan, we advised Panasonic Corp on the carve-out of its security systems business division to Polaris Capital Group Co., Ltd. (technology); in India, we advised Embassy Office Parks REIT on its domestic IPO (real estate) and Adani Green Energy Limited on a green bond offering (energy); in Australia, we advised Home Consortium Ltd. (real estate & consumer) on its IPO and Kathmandu Holdings Ltd. on its acquisition of Rip Curl Group Pty. Ltd. (consumer), in addition to an equity raise and the arrangement of senior secured debt facilities.

Awards and market share momentum

- “Asia’s Best Bank for Wealth Management” – *Euromoney Asia Awards for Excellence 2019*
- “Best Private Bank Asia Pacific” – *Asian Private Banker Awards for Distinction 2019*
- “Bank of the Year” – *IFR Asia Awards 2019*
- “High-Yield Bond House” – *IFR Asia Awards 2019*
- “Derivatives House of the Year, Asia ex-Japan” – *Asia Risk Awards 2019*
- “Quant House of the Year” – *Asia Risk Awards 2019*
- “Best House, Asian Equities” – *Structured Retail Products Asia Awards 2019*
- “Best House, US Equities” – *Structured Retail Products Asia Awards 2019*
- “#1 ranked in Investment Banking Revenues in Asia Pacific (international and ex-Japan)” – *Dealogic APAC Rankings IB Revenues – Full-year 2019*

Global Markets

Business profile

Global Markets provides a broad range of financial products and services to client-driven businesses and also supports the Group's private banking, Investment Banking & Capital Markets and Asia Pacific businesses and their clients. Our suite of products and services includes global securities sales, trading and execution, prime brokerage and comprehensive investment research. Our clients include financial institutions, corporations, governments, institutional investors, such as pension funds and hedge funds, and private individuals around the world. We deliver our global markets capabilities through regional and local teams based in both major developed and emerging market centers. Our integrated business model enables us to gain a deeper understanding of our clients and deliver creative, high-value, customized solutions based on expertise from across Credit Suisse.

Key data – Global Markets

	in / end of		
	2019	2018	2017
Key data			
Net revenues (CHF million)	5,752	4,980	5,551
Income before taxes (CHF million)	956	154	450
Number of employees	12,610	11,350	11,740

Business environment

In 2019, operating conditions were mixed across our businesses. During the year, we experienced lower levels of volatility despite continued macroeconomic and geopolitical uncertainties. Fixed income trading market conditions significantly improved compared to the prior year, reflecting increased investor demand for yield products in a low interest rate environment, particularly in our securitized products and credit trading businesses. Equity trading market conditions were characterized by lower levels of volatility, higher asset prices and reduced trading volumes. Underwriting activity across equity and debt declined compared to 2018, reflecting reduced industry-wide fee pools, particularly in the beginning of the year, which was negatively impacted by the US government shutdown.

Uncertainty due to the spread of COVID-19 has led to heightened quarter-to-date volatility, which has benefited trading businesses to date. However, if the current environment persists, including further widening of credit spreads and declines in equity indices, we expect an adverse impact on client sentiment and risk appetite which is likely to impact our results.

Business strategy

In the first year after restructuring, we significantly improved profitability and delivered positive operating leverage despite mixed market conditions by focusing on our core institutional, corporate and wealth management client base. Our diversified franchise delivered revenue growth across most products on lower costs and disciplined capital usage which drove significantly improved profitability and returns.

Our diversified credit businesses maintained leading market positions and we saw continued momentum in our reinvigorated equities franchise. In ITS, we continued to see the benefits from our investments in the platform as evidenced by an increase in ITS revenues compared to 2018. As the platform matures, we expect to grow revenues by increasing collaboration, deepening our structured products penetration and growing equity and financing products for our wealth management, corporate and institutional clients.

Looking ahead, the division continues to focus on further increasing cross-divisional collaboration to drive revenue growth with our core institutional, corporate and wealth management clients, increasing operating leverage with ongoing efficiencies, investing in technology and attracting top talent. In addition, we remain focused on defending our leading market positions across equities and fixed income products. With regard to costs, we will continue to focus on productivity cost savings, including increasing efficiencies from consolidating redundant platforms and eliminating duplication across functions. We believe that the combination of increased revenues and greater cost controls have the potential to help us support the overall Group return on tangible equity attributable to shareholders target of approximately 10% by year-end 2020.

Investment Banking & Capital Markets

Business profile

The Investment Banking & Capital Markets division offers a broad range of investment banking products and services which include advisory services related to M&A, divestitures, takeover defense strategies, business restructurings and spin-offs, as well as debt and equity underwriting of public offerings and private placements. We also offer derivative transactions related to these activities. Our clients include leading corporations, financial institutions, financial sponsors, UHNWI and sovereign clients.

We deliver our investment banking capabilities through regional and local teams based in both major developed and emerging market centers. Our integrated business model enables us to deliver high value, customized solutions that leverage the expertise offered across Credit Suisse and that help our clients unlock capital and value in order to achieve their strategic goals.

Key data – Investment Banking & Capital Markets

	in / end of		
	2019	2018	2017
Key data			
Net revenues (CHF million)	1,666	2,177	2,139
Income/(loss) before taxes (CHF million)	(162)	344	369
Number of employees	3,090	3,100	3,190

Business environment

2019 was a challenging year, characterized by volatile market conditions and macroeconomic uncertainty. Persistent geopolitical tensions and negotiations related to the UK withdrawal from the EU adversely impacted client activity, particularly in areas of relative competitive strength for Credit Suisse. Market activity declined across advisory and underwriting products, with the industry-wide fee pool down 6% compared to 2018. Underwriting activity decreased, with the industry-wide fee pool down 3%. Announced M&A volumes were stable compared to 2018.

In early 2020, the spread of COVID-19 caused financial markets to experience increased volatility, accompanied by a decline in equity indices and an increase in corporate borrowing costs. If these conditions persist or worsen, it is likely to result in lower investment banking client activity, adversely impacting our financial advisory and underwriting fees, together with our credit exposures.

Business strategy

Our strategy focuses on leveraging our global structuring and execution expertise to develop innovative financing and advisory

solutions for our clients. Our divisional strategy is designed to generate sustainable, profitable growth and deliver returns in excess of our cost of capital. Our key strategic priorities include: optimizing the client coverage model, growing the M&A advisory and equity underwriting businesses and using our global platform to meet our clients' needs for cross-border expertise in developed and emerging markets.

A key element of our strategy is generating stronger results in M&A advisory and equity underwriting, while maintaining our leading leveraged finance franchise. We expect that reinvigorating our efforts in these products will contribute to a revenue mix that is more diversified and less volatile through the market cycle.

We continue to optimize our client strategy in order to deliver efficient and effective client coverage. Our strategic objective is to align, and selectively invest in, our coverage and capital resources with the largest growth opportunities and where our franchise is well-positioned. We have made progress in the execution of our plans for investment in the technology and healthcare sectors, and also aim to leverage our strong sponsors franchise to capture growth in the private equity sector.

We will continue to leverage Investment Banking & Capital Markets' global connectivity with our other divisions and its platform to drive opportunities for the Group.

Significant transactions

We executed a number of noteworthy transactions in 2019, reflecting the diversity of our franchise.

- In M&A, we advised on a number of transformational transactions announced throughout the year, including Worldpay Inc.'s merger with Fidelity National Information Services, Inc. (technology services), The Charles Schwab Corporation's acquisition of TD Ameritrade Holding Corporation (financial institutions), DuPont de Nemours, Inc.'s Nutrition & Biosciences business's merger with International Flavors & Fragrances (chemicals), Eldorado Resorts, Inc.'s Acquisition of Caesars Entertainment Corp (real estate) and Nestle S.A.'s sale of the Skin Health (consumer) company to EQT Partners AB and Abu Dhabi Investment Authority (consumer).
- In equity capital markets, we executed IPOs and follows-ons for Virgin Galactic Holdings, Inc. (aerospace), Altice USA, Inc. (media), Alibaba Group Holding Limited (internet), Rattler Midstream LP (oil & gas) and Beyond Meat, Inc. (food & beverage).
- In debt capital markets, we arranged key financings for a diverse set of clients including Bristol-Myers Squibb Company (life sciences), Altria Group, Inc. (food & beverage), Eli Lilly And Company (life sciences), Union Pacific Corporation (transportation & logistics) and AbbVie Inc. (life sciences).
- In leveraged finance, we arranged financings for Zayo Group Holdings, Inc. (media & telecom), Clarios LLC (industrials), The Ultimate Software Group, Inc. (technology), TransDigm Group, Inc. (aerospace) and Froneri International plc (food & beverage).

Regulation and supervision

Overview

Our operations are regulated by authorities in each of the jurisdictions in which we have offices, branches and subsidiaries.

Central banks and other bank regulators, financial services agencies, securities agencies and exchanges and self-regulatory organizations are among the regulatory authorities that oversee our businesses. There is coordination among many of our regulators, in particular among our primary regulators in Switzerland, the US, the EU and the UK as well as in the Asia Pacific region.

The supervisory and regulatory regimes of the countries in which we operate determine to some degree our ability to expand into new markets, the services and products that we are able to offer in those markets and how we structure specific operations.

Governments and regulatory authorities around the world have responded to the challenging market conditions beginning in 2007 by proposing and enacting numerous reforms of the regulatory framework for financial services firms such as the Group. In particular, a number of reforms have been proposed and enacted by regulators, including our primary regulators, which could potentially have a material effect on our business. These regulatory developments could result in additional costs or limit or restrict the way we conduct our business. Although we expect regulatory-related costs and capital requirements for all major financial services firms (including the Group) to continue to be high, we cannot predict the likely impact of proposed regulations on our businesses or results. We believe, however, that overall we are well positioned for regulatory reform, as we have reduced risk and maintained strong capital, funding and liquidity.

→ Refer to "Risk factors" for further information on risks that may arise relating to regulation.

Recent regulatory developments and proposals

Some of the most significant regulations proposed or enacted during 2019 and early 2020 are discussed below.

Global initiatives

Certain regulatory developments and standards are being coordinated on a global basis and implemented under local law, such as those discussed below.

COVID-19 outbreak

Since December 2019, COVID-19 has spread rapidly across the world, and on March 3, 2020, it was characterized as a pandemic by the World Health Organization. Financial services regulators and authorities around the world are closely monitoring the evolution of the COVID-19 outbreak and its possible impact on the financial services sector. Various regulators and authorities, such as the European Central Bank (ECB), the UK Financial Conduct Authority (FCA), the Board of Governors of the Federal Reserve

System (Fed) and the New York State Department of Financial Services (DFS), have issued statements asking supervised entities to review their business continuity plans in light of ongoing developments and to address potential pandemic risk in their contingency strategies. In addition, some regulators have adopted or are considering certain measures to provide temporary relief to supervised entities in respect of certain regulatory requirements. These regulatory initiatives have accompanied a range of measures by national governments and central banks in a number of jurisdictions to support the economy and, in particular, incentivize lending to businesses and consumers. Such measures include interest-rate cuts and introducing or extending asset purchase schemes and liquidity and credit facilities for financial sector institutions. Authorities will be monitoring the spread of COVID-19 closely over the coming weeks and are expected to adapt their guidance to firms as the situation develops.

Switzerland

Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks, which include capital, liquidity, leverage and large exposure requirements and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency.

→ Refer to "Liquidity and funding management" and "Capital management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.

Supervision

On November 6, 2019, the final versions of the Financial Services Ordinance (FinSO) and the Financial Institutions Ordinance (FinIO), which are the implementing ordinances for the Financial Services Act (FinSA) and for the Financial Institutions Act (FinIA), respectively, were published. Subject to certain transitional periods, FinSA and FinIA as well as the implementing ordinances entered into effect on January 1, 2020. With the enactment of FinSA and FinSO a new statutory regime, governing the provision of financial services in Switzerland, including to Swiss clients from abroad on a cross-border basis, as well as the offering of financial instruments, and the admission to trading of financial instruments, was introduced in Switzerland. FinIA and FinIO govern the licensing requirements and provide for a differentiated supervisory regime for asset managers, trustees, managers of collective assets, fund management companies and investment firms.

Resolution regime

On February 25, 2020, FINMA published a report providing a detailed assessment of the recovery and resolution plans of the systemically important Swiss institutions. FINMA approved the recovery plans of all five systemically important Swiss banks. In addition, FINMA regarded the Swiss emergency plan submitted by Credit Suisse as effective. With respect to the global resolvability, FINMA concluded that Credit Suisse has already taken important preparatory steps and has thus made considerable progress.

Tax

On September 28, 2018, the Tax Proposal 17 or the Federal Act on Tax Reform and AHV Financing (TRAF) was adopted by the Swiss Parliament. In January 2019, the optional referendum was called, and on May 19, 2019 the Swiss public voted in favor of TRAF. Following the adoption by the Swiss public, the main provisions entered into force on January 1, 2020, with some provisions having already become effective on January 1, 2019, including certain provisions on step-up. As a result of the adoption of TRAF, several cantons have adopted cantonal laws implementing the applicable measures and cut the effective tax rates to as low as 12%. On November 13, 2019, the Federal Council approved three ordinances related to TRAF, namely the Ordinance on the Reduced Taxation of Profits from Patents and Similar Rights (Patent Box Ordinance), the Ordinance on the Tax Deduction on Legal Entities' Self-Financing and the amendment to the Ordinance on Lump-sum Tax Credits, which is now called the Ordinance on Credits for Foreign Withholding Tax. These cantonal laws and the three ordinances also entered into effect on January 1, 2020.

On June 26, 2019, the Swiss Federal Council announced that it will resume the reform of the Swiss withholding tax system applicable to interest payments, and on September 27, 2019, promulgated certain key parameters of the reform. The reform is expected, among other things, to replace the current debtor-based regime applicable to interest payments with a paying agent-based regime for Swiss withholding tax. This paying agent-based regime is expected to (i) subject all interest payments made by paying agents in Switzerland to individuals resident in Switzerland to Swiss withholding tax, including on bonds issued by issuers outside Switzerland, and (ii) exempt from Swiss withholding tax interest payments to all other persons, including to Swiss domiciled legal entities and foreign investors. A consultation draft is scheduled for the first quarter of 2020 and will subsequently be submitted for parliamentary consultation. For the moment, the actual implementation parameters and timing of the Swiss withholding tax reform are open.

On July 26, 2019, the Swiss Federal Supreme Court rendered a judgment allowing the Swiss Federal Tax Authority (FTA) to provide the French Direction Générale des Finances Publiques information on the identity of approximately 40,000 clients of UBS. In particular, the judgment states the admissibility of collective information requests based on a list of identification elements and notes the requirements in order to distinguish admissible collective information requests from inadmissible fishing expeditions. Further, the judgment deals with the application of principles of confidentiality and specialty, namely that information received in administrative assistance in tax matters may only be used in a fiscal context and that Switzerland, as a requested country, should trust any related assurances by the requesting country unless there are specific indications pointing to the contrary. Credit Suisse was not a party to the proceedings, and the judgment confirms the already existing practice of the FTA in administrative assistance in tax matters.

On September 20, 2019, Switzerland and the US ratified the 2009 protocol (Protocol) amending the double taxation agreement regarding income tax between Switzerland and the US (DTA). With the exchange of the ratification instruments, the amended DTA formally entered into force. The Protocol introduced a mechanism for the exchange of information upon request in tax matters between Switzerland and the US, which is in line with international standards, and allows the US to make group requests under the US Foreign Account Tax Compliance Act (FATCA) concerning non-consenting US accounts and non-consenting non-participating foreign financial institutions for periods from June 30, 2014. It is expected that exchange of information under this process will commence sometime in 2020. The Protocol further erases the differentiation between tax evasion and tax fraud in the context of administrative assistance to permit any exchanges of information as may be relevant to the administration or enforcement of the domestic laws concerning taxes. Among other things, the Protocol permits information requests concerning facts from September 23, 2009 onwards (date of signature of the Protocol).

Automatic exchange of information in tax matters

After the review by the Global Forum on Transparency and Exchange of Information for Tax Purposes (Global Forum) of the Swiss automatic exchange of information (AEOI) legal framework, the Federal Council adopted the dispatch on amending the Federal Act and the Ordinance on the International Automatic Exchange of Information in Tax Matters during its meeting on November 20, 2019. The proposal aims to implement the recommendations of the Global Forum, which, in particular, include duties of diligence, registration duties and document retention obligations for financial institutions. The Swiss Parliament will likely discuss the proposal for the first time in the 2020 spring session. It is not expected to come into force until the start of 2021 at the earliest.

BEPS Convention

On December 1, 2019, the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (BEPS Convention) entered into force. The BEPS Convention facilitates the adaption of existing double taxation agreements that are covered by the BEPS Convention to the tax treaty related recommendations from the OECD/G20 BEPS Project.

US

In July 2010, the US enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), which provides a broad framework for regulatory changes. Although rulemaking in respect of many of the provisions of the Dodd-Frank Act has already taken place, implementation will require further rulemaking by different regulators, including the US Department of the Treasury (US Treasury), the Fed, the US Securities and Exchange Commission (SEC), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Commodity Futures Trading Commission (CFTC) and

the Financial Stability Oversight Council (FSOC), and uncertainty remains about the details of implementation.

Sanctions

As a result of allegations concerning Russian acts related to Ukraine, Syria, cybersecurity and electoral interference, in 2018 and throughout 2019, the US Treasury's Office of Foreign Assets Control (OFAC) has designated a number of Russian government officials, business people and certain related companies as specially designated nationals (SDNs). Such designation blocks their assets and prohibits dealings within US jurisdiction by both the newly designated SDNs and entities owned 50% or more by one or more blocked persons. US law also authorizes the imposition of other restrictions against non-US entities that, among other activities, engage in significant transactions with or provide material support to such blocked persons. In August 2019, the US imposed additional sanctions on the Russian Federation under the Chemical and Biological Weapons Control and Warfare Elimination Act of 1991 (CBW Act). These CBW Act sanctions prohibit US financial institutions from participating directly in future primary issues of non-ruble denominated Russian sovereign debt and lending non-ruble denominated funds to the Russian Federation (but not from providing related services such as US dollar clearing to third parties). Further sanctions related to Russia or additional Russian persons or entities are possible, and the potential effects of related disruptions may include an adverse impact on our businesses.

Since 2017, the US has imposed, and in 2019 continued to expand, sanctions related to Venezuela that, among other restrictions, block the assets of and prohibit transactions with the Government of Venezuela and state-owned entities, as well as certain government officials, and prohibit further dealings with them within US jurisdiction. A number of general licenses provide exceptions to these prohibitions, most notably with respect to holdings of and certain dealings in pre-2017 debt of the Government of Venezuela and PdVSA, the state-owned oil company. Additionally, throughout 2019 OFAC designated additional persons and entities, including maritime shipping companies, for assisting the Government of Venezuela. Further sanctions related to Venezuela or Venezuelan entities are possible, and the potential effects of related disruptions may include an adverse impact on our businesses.

Banking regulation and supervision

On June 21, 2019, the Fed released the results of its Dodd-Frank Act stress tests, followed by the results of its annual Comprehensive Capital Analysis and Review (CCAR) on June 27, 2019. Our US intermediate holding company (IHC) was projected to maintain capital ratios above minimum regulatory requirements in the adverse and severely adverse supervisory stress scenarios. The Fed did not object to our US IHC's proposed capital plan, but did issue a conditional non-objection after identifying weaknesses in our capital adequacy planning process regarding the assumptions used to project stressed trading losses. The Fed required us to address these weaknesses and, until then, restricted our US IHC's planned capital distributions to the amount the US IHC

was authorized to pay under its 2018 capital plan. On December 17, 2019, our US IHC authorized a cash dividend larger than that authorized and paid in 2018. Our US IHC is expected to file its 2020 capital plan by April 6, 2020. If our US IHC receives a qualitative non-objection on its 2020 CCAR submission, it will no longer be subject to the public qualitative objection. The results of our 2020 CCAR submission will affect the amount of capital our US IHC is required to hold. On March 4, 2020, the Fed finalized its proposal to replace the current static capital conservation buffer with a dynamic firm-specific stress capital buffer based on the results of the firm's supervisory stress test under the severely adverse scenario and its planned common stock dividends (with a floor of 2.5%). The stress capital buffer will apply starting with the 2020 CCAR cycle.

On October 10, 2019, the Fed finalized rules to categorize the US operations of large foreign banking organizations (FBOs) based on size, complexity and risk for purposes of tailoring the application of the US enhanced prudential standards. The rules subject our US IHC for the first time to the US liquidity coverage ratio and will increase the stringency of the US single counterparty credit limits (SCCL) applicable to our US IHC. However, the rules will provide some relief for our US IHC from certain capital and stress testing requirements and provide us with the option to comply with other simplifications to capital requirements. Among other changes, the finalized rules remove the mid-cycle company-run Dodd Frank stress test (DFAST) requirement and require our US IHC to conduct its company-run DFAST once every two years, rather than annually. Our US IHC will continue to be subject to an annual internal stress test as part of the CCAR exercise. While we expect the rules to moderately reduce compliance costs related to stress testing, the rules will also require new and additional regulatory reporting and related internal systems and result in increased operational and compliance costs to meet newly applicable liquidity requirements and the revised SCCL. Compliance and regulatory reporting will be phased in through 2020 and into early 2021, with longer timeframes related to the newly applicable liquidity requirements and the revised SCCL. The enhanced prudential standards are highly complex and may be subject to further rulemaking, regulatory interpretation and guidance. We continue to evaluate the potential impact of the final rules on our operations.

In September and October 2019, the five federal agencies responsible for administration of the so called "Volcker Rule" finalized amendments to simplify and tailor the proprietary trading provisions of the Volcker Rule, including increased flexibility for foreign banking organizations to engage in trading outside the United States, a simplification of compliance program requirements, and a more flexible approach to underwriting, market-making, and risk-mitigating hedging activities, including with respect to covered fund interests. The revised rule became effective January 1, 2020, with compliance required by January 1, 2021. We remain in the most stringent category of compliance requirements, and in the short term the changes may result in increased operational and compliance costs as we adapt to the revised requirements. On January 30, 2020, the agencies

proposed further amendments to the Volcker Rule's funds provisions, which would, if adopted, provide important new exclusions from the covered fund definition and flexibility for banking entities to engage in funds activities. The Volcker Rule is highly complex and is expected to be subject to further rulemaking, regulatory interpretation and guidance, and its full impact will not be known with certainty for some time.

On January 30, 2020, the Fed finalized a rule to amend its regulations governing when one company will be deemed to control another, which define, among other things, the scope of entities deemed to be our affiliates and subsidiaries subject to regulation and supervision under US federal banking laws. The final rule will be effective on April 1, 2020. However, there may be further regulatory interpretation and guidance, and the full impact will not be known with certainty for some time.

Broker-dealer regulation and supervision

On June 5, 2019, the SEC adopted Regulation Best Interest (Regulation BI), requiring all broker-dealers, when recommending any securities transaction or investment strategy involving securities to a retail customer, to act in the customer's best interest and not place its own financial or other interests ahead of the customer's. Under Regulation BI, a broker-dealer will need to (1) adopt policies and procedures to comply with Regulation BI, including its underlying disclosure, care and conflict of interest obligations and (2) fully and fairly disclose all material facts relating to the scope and terms of its relationship with the retail customer and to conflicts of interest associated with the recommendation. The SEC simultaneously adopted the "Form CRS" disclosure requirement, obligating all broker-dealers to deliver a relationship summary to any retail customer at the initiation of the relationship. Both Regulation BI and Form CRS will enter into force June 30, 2020.

Derivative regulation and supervision

On June 5, 2019, the SEC finalized capital, margin and segregation requirements for security-based swap dealers. For the most part, we expect these requirements to apply to our non-bank derivatives dealer entities, Credit Suisse Capital LLC (CSC) and Credit Suisse Securities Europe Limited (CSSEL). We do not expect a significant impact to CSC because it is already subject to SEC capital requirements as an over-the-counter derivatives dealer registered with the SEC, the SEC's new margin requirements are aligned in key respects with CFTC margin requirements that already apply to CSC as a CFTC-registered swap dealer, and CSC should be eligible for exemption from certain SEC segregation requirements. CSSEL may, with further approval by the SEC, be able to satisfy SEC capital and margin requirements through substituted compliance with comparable UK requirements and may also be eligible for exemption from certain SEC segregation requirements. If, however, CSSEL is unable to rely on substituted compliance in connection with SEC capital and margin requirements, it will face conflicts between SEC and UK requirements that could prevent it from continuing to trade security-based swaps with US persons. These requirements, as well as other SEC rules applicable to security-based swap dealers, will take effect on November 1, 2021.

On September 19, 2019, the SEC adopted rules establishing recordkeeping and financial reporting requirements for security-based swap dealers. These rules are generally based on the SEC's parallel requirements for securities broker-dealers, although in certain instances they may be satisfied through compliance with comparable foreign rules. We expect these rules to apply to our US over the counter (OTC) derivatives dealer, CSC, and our UK derivatives dealer entities, CSSEL and Credit Suisse International (CSI). If CSSEL or CSI cannot rely on compliance with UK or EU rules, especially in relation to financial reporting requirements, then the costs of satisfying these requirements could require us to restructure the way we trade derivatives with US counterparties. These requirements, as well as other SEC rules applicable to security-based swap dealers, will take effect on November 1, 2021.

On December 18, 2019, the SEC adopted rule amendments and guidance addressing the cross-border application of certain security-based swap dealer requirements under the Dodd-Frank Act. The final rule, among other changes, creates a conditional exception from the requirement that security-based swaps between a non-US counterparty and a non-US security-based swap dealer that are arranged, negotiated or executed by US personnel acting for the non-US security-based swap dealer count towards the de minimis threshold above which the non-US security-based swap dealer must register with the SEC. The final rule also clarifies certain aspects of requirements that a non-US security-based swap dealer submit a certification and legal opinion regarding SEC access to books and records when it registers with the SEC, and it creates exceptions from background check requirements for certain non-US personnel of a security-based swap dealer. Although the final rule alleviates some issues that the security-based swap dealer requirements pose to non-US firms who conduct US security-based swap business, including Credit Suisse, our cross-border security-based swap business may be negatively impacted unless the SEC makes further changes to the requirements before they take effect. These requirements, as well as other SEC rules applicable to security-based swap dealers, will take effect on November 1, 2021.

On December 18, 2019, the CFTC proposed rules that would mostly codify the CFTC's current policy and no-action letters with respect to the cross-border application of certain swaps regulations, but with changes to certain definitions to align with the SEC, and that would expand the application of rules to swaps entered into by certain foreign subsidiaries of US parent companies. The proposed treatment of these foreign subsidiaries could, if adopted by the CFTC, make it more costly and burdensome for us to trade with the non-US operations of certain US clients.

On December 17, 2019, CFTC issued conditional no-action relief to address the expected phasing out of the London Interbank Offered Rate (LIBOR) in 2021 by clarifying that amendments to outstanding swaps to either introduce fallback provisions or to replace LIBOR or other interbank offered rates with a new risk-free rate will generally not cause the swap to lose its legacy status for purposes of certain obligations under the CFTC's rules. On November 7, 2019, the Fed also proposed to amend its

margin rules to preserve the legacy status of an uncleared swap after a swap dealer subject to those rules, such as CSI, replaces LIBOR or other discontinued rates. In the same proposal, the Prudential Regulators proposed an exemption from the initial margin requirements for uncleared swaps between affiliates, although affiliates would still be required to exchange variation margin.

Resolution regime

On October 10, 2019, the Fed and the FDIC finalized a rule to provide relief from the Dodd-Frank Act requirement that large FBOs file annual resolution plans describing the strategy for rapid and orderly resolution under the US Bankruptcy Code. Under the final rule, our combined US operations are permitted to file a resolution plan every three years, instead of annually, alternating between a full resolution plan and a less extensive targeted resolution plan that will focus on capital, liquidity and material changes from the previous full plan. We are required to submit a targeted resolution plan by July 1, 2021, with our next submission of a full plan by July 1, 2024. We will also respond to the feedback provided on our 2018 plan by July 1, 2020.

Tax

On December 2, 2019 the US Department of the Treasury issued final regulations for the US base erosion and anti-abuse tax (BEAT), which was introduced as part of tax reform legislation enacted at the end of 2017. BEAT can give rise to incremental US tax costs in cases where deductible payments made by US branches and subsidiaries to their non-US affiliates exceed specified thresholds and other conditions are met. It is not possible to predict with certainty whether we will incur BEAT costs in any particular year, because liability is determined based on the application of different tax rates to alternative measures of taxable income. However, on the basis of the final regulations, we consider it as more likely than not that our US branches and subsidiaries will remain subject to the BEAT tax regime for 2019, though certain interpretive uncertainties remain.

EU

The EU has also proposed and enacted a wide range of prudential, securities and governance regulations to address systemic risk and to further regulate financial institutions, products and markets. These proposals are at various stages of the EU pre-legislative, legislative rule-making and implementation processes, and their final form and cumulative impact remain uncertain.

Investment services regulation

On December 21, 2017, the European Commission recognized the equivalence of the Swiss legal and supervisory framework for trading venues with that of the EU for a temporary period of one year, which it later extended until June 30, 2019. The recognition allowed EU investment firms to meet the applicable share trading obligation pursuant to the Markets in Financial Instruments Regulation (MiFIR) on Swiss trading venues. As the European Commission did not extend the recognition beyond June 30, 2019, since July 1, 2019 EU investment firms are, in principle, prohibited from trading in certain equity securities of

companies domiciled in Switzerland on Swiss trading venues. On June 27, 2019, the Swiss Federal Department of Finance (FDF) announced that it will activate protective measures in Switzerland to ensure the functioning of Swiss trading venues. Since July 1, 2019, trading venues, including trading venues domiciled in the EU, require a recognition by FINMA if they offer or facilitate trading in certain equity securities of Swiss companies. With effect from July 1, 2019, the FDF placed the EU on a list of jurisdictions for which no such recognition will be granted, effectively prohibiting trading venues domiciled in the EU from offering or facilitating trading in certain equity securities of Swiss companies as of such date. As the UK formally left the EU on January 31, 2020, the FDF updated its list with effect from February 1, 2020 and included the UK in the list as a separate entry.

Derivatives regulation

On June 17, 2019, a broad range of amendments to the European Market Infrastructure Regulation (also known as "EMIR") (through the "EMIR Refit" Regulation) entered into force, including in relation to counterparty classification, clearing, margin and reporting requirements. In particular, the amendments include an obligation for clearing members and clients which provide clearing services to provide services under fair, reasonable, non-discriminatory and transparent commercial terms, which will apply from June 18, 2021.

Prudential regulation

On June 27, 2019, the amendments to the Capital Requirements Regulation (CRR) (through the amending Directive CRR II), the Capital Requirements Directive (CRD) (through the amending Directive CRD V) and the EU Bank Recovery and Resolution Directive (BRRD) (through the amending Regulation BRRD II) entered into force. These amendments implement, among others, the Financial Stability Board standards for Total Loss Absorbing Capacity (TLAC), together with various agreed reforms to the Basel III prudential framework (including the final Basel III leverage ratio and net stable funding ratio (NSFR) requirements), as well as related EU-specific reforms, such as a new requirement for non-EU banking groups with two or more institutions and at least EUR 40 billion of assets in the EU to establish an EU intermediate financial holding company that would be subject to consolidated prudential supervision in the EU. While the majority of the CRR II will only apply from June 28, 2021, certain requirements, such as the new TLAC requirements, applied immediately on entry into force. EU member states will be required to adopt national legislative measures necessary to comply with CRD V and BRRD II by December 28, 2020. The requirement for an intermediate holding company will be delayed until December 2023.

In addition, on December 25, 2019, the new Investment Firms Directive (IFD) and Investment Firms Regulation (IFR) also came into force. This new prudential regime, which will apply from June 26, 2021, has been tailored around the business models and risk profiles that are specific to investment firms. In particular, it deviates from the strict revised Markets in Financial Instruments Directive (MiFID II) services-based categorization, in favor of new risk-based quantitative indicators (known as "K-factors") that will be used to assess capital requirements and remuneration rules,

as well as certain internal governance, disclosure and reporting requirements, for most investment firms. However, larger investment firms will remain subject to the CRR/CRD prudential regime, including systemic “bank-like” firms with total assets exceeding EUR 30 billion in value that carry out the MiFID activities of dealing on own account or underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis, which will be classified as “credit institutions”. Existing firms that will be classified as credit institutions must submit an application for authorization to operate as a credit institution under CRR/CRD by December 27, 2020.

UK-EU relationship

On June 23, 2016, voters in the UK voted to leave the EU. Following extensive negotiations with the EU on the terms of its withdrawal, the UK ceased to be a member of the EU on January 31, 2020. Under the terms of the concluded withdrawal agreement, the UK will continue to be bound by EU laws, with full financial services passporting, for a transitional period ending on December 31, 2020, during which time the UK and EU will seek to negotiate an economic partnership governing their future relationship, including the granting of reciprocal equivalence determinations under their respective financial services legislation. It is unclear how and in what timeframe such negotiations will proceed and any number of outcomes are possible, including an extension to the transition period (although UK law currently rules out such an extension), the conclusion of one or more trade agreements or the failure to conclude any such agreement. UK law envisages that the body of EU law, as it stands at the end of the transition period, will largely be retained in UK law in the immediate term, with Her Majesty’s Treasury (HM Treasury) exercising certain statutory powers to remedy deficiencies in retained EU law relating to financial services, through statutory instruments. The statutory instruments are not intended to make policy changes, other than to reflect the UK’s new position outside the EU. HM Treasury has also delegated powers to the UK’s financial services regulators to address deficiencies in the regulators’ rulebooks arising as a result of the exit, and to the EU Binding Technical Standards that will become part of retained EU law. However, the intended fate of EU law that will apply only after the end of the transition period is not yet known.

Credit Suisse is working to address the implications of the consequences of these changes and to minimize disruption for our clients. Adverse changes to any of these arrangements, and even uncertainty over potential changes during any period of negotiation, could potentially impact our results in the UK or other markets we serve.

→ Refer to “Withdrawal of the UK from the EU” in II – Operating and financial review – Credit Suisse – Other Information and “Key risk developments” in III – Treasury, Risk Balance sheet and Off-balance sheet – Risk management for further information.

Regulatory framework

The principal regulatory structures that apply to our operations are discussed below.

Global initiatives

Total Loss-Absorbing Capacity

On January 1, 2019, the final Financial Stability Board’s (FSB) TLAC standard for global systemically important banks (G-SIBs) became effective, subject to a phase-in until January 1, 2022. The purpose of the standard is to enhance the ability of regulators to recapitalize a G-SIB at the point of non-viability in a manner that minimizes systemic disruption, preserves critical functions and limits the exposure of public sector funds. TLAC-eligible instruments include instruments that count towards satisfying minimum regulatory capital requirements, as well as long-term unsecured debt instruments that have remaining maturities of no less than one year, are subordinated by statute, corporate structure or contract to certain excluded liabilities, including deposits, are held by unaffiliated third parties and meet certain other requirements. Excluding any applicable regulatory capital buffers that are otherwise required, the minimum TLAC requirement was at least 16% of a G-SIB’s risk-weighted assets as of January 1, 2019, and will increase to at least 18% as of January 1, 2022. In addition, the minimum TLAC requirement was at least 6% of the Basel III leverage ratio denominator as of January 1, 2019, and must be at least 6.75% as of January 1, 2022. National regulators may implement or interpret the requirements more strictly within their own jurisdictions.

In Switzerland, the FSB’s TLAC standard was implemented on July 1, 2016 under the Capital Adequacy Ordinance.

→ Refer to “Liquidity and funding management” and “Capital management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.

In the US, the Fed has adopted a final rule that implements the FSB’s TLAC standard. The final rule requires, among other things, the US IHCs of non-US G-SIBs, such as Credit Suisse’s US IHC, to maintain minimum amounts of “internal” TLAC, a TLAC buffer and long-term debt satisfying certain eligibility criteria, commencing January 1, 2019. The entity designated as Credit Suisse’s US IHC is required to issue all TLAC debt instruments to a foreign parent entity (a non-US entity that controls the IHC) or another foreign affiliate that is wholly owned by its foreign parent. The final rules also impose limitations on the types of financial transactions in which the entity designated as Credit Suisse’s US IHC can engage.

In the UK, the Bank of England published its statement of policy on its approach to establishing the requirement under the BRRD for certain UK entities, including CSI and CSSEL, to maintain the minimum requirements for own funds and eligible liabilities (MREL) as well as its approach on setting internal MREL. Similar to the FSB’s TLAC standard, the MREL requirement obliges firms within the scope of the BRRD to maintain a minimum level of own funds and liabilities that can be bailed in. The statement of policy provides that internal MREL requirements for UK material subsidiaries of non-UK G-SIBs, such as Credit Suisse would be scaled between 75% and 90% of external MREL based on factors including the resolution strategy of the group and the

home country's approach to internal total loss-absorbing capacity calibration. Interim internal MREL requirements came into effect beginning January 1, 2019, and their full implementation will be phased in through January 1, 2022. In addition, the CRR II introduced a requirement, as of June 27, 2019, for material subsidiaries of non-EU G-SIBs, which are not resolution entities, to maintain internal MREL scaled at 90% of the external MREL requirement that would apply if the material subsidiary were a resolution entity. The Bank of England has stated that its statement of policy should be read in compliance with the new CRR II requirements. The Bank of England has also stated its commitment to review the calibration of MREL requirements and the final compliance date before the end of 2020, also in light of any intervening changes in the UK regulatory framework, as well as firms' experience in issuing liabilities to meet interim MRELS.

ISDA Resolution Stay Protocols

Credit Suisse voluntarily adhered to the ISDA 2015 Universal Resolution Stay Protocol (ISDA 2015 Universal Protocol) at the time of its launch in November 2015. By adhering to the ISDA 2015 Universal Protocol, parties agree to be bound by certain existing and forthcoming special resolution regimes to ensure that cross-border derivatives and securities financing transactions are subject to statutory stays on direct and affiliate-linked default rights in the event a bank counterparty enters into resolution, regardless of its governing law. These stays are intended to facilitate an orderly resolution of a troubled bank. The ISDA 2015 Universal Protocol also introduces similar stays and overrides on affiliate-linked default rights in the event that an affiliate of an adhering party becomes subject to proceedings under the US Bankruptcy Code, under which no such stays or overrides currently exist.

In order to expand the scope of parties and transactions covered by the ISDA 2015 Universal Protocol or similar contractual arrangements, the G20 committed to introducing regulations requiring large banking groups to include ISDA 2015 Universal Protocol-like provisions in certain financial contracts when facing counterparties under foreign laws.

In Switzerland, the Federal Ordinance on Banks and Savings Institutions (Banking Ordinance) and the Federal Ordinance of FINMA on the Insolvency of Banks and Securities Dealers (FINMA Banking Insolvency Ordinance) require Swiss banks, including Credit Suisse, to include a clause under which the counterparty recognizes FINMA's stay powers under the Federal Act on Banks and Savings Banks of November 8, 1934, as amended, in certain of their contracts and in certain contracts entered into by their subsidiaries or affiliates. The requirement to include such a clause applies to the financial contracts exhaustively listed under the FINMA Banking Insolvency Ordinance and that are not governed by Swiss law or that provide for jurisdiction outside of Switzerland.

In the UK, the Prudential Regulation Authority (PRA) published final rules requiring UK entities, including CSI and CSSEL, to ensure that their counterparties under a broad range of financial arrangements are subject to the stays on early termination rights

under the UK Banking Act that would be applicable upon their resolution.

ISDA has developed another protocol, the ISDA Resolution Stay Jurisdictional Modular Protocol, to facilitate market-wide compliance with these requirements by both dealers, such as Credit Suisse, and their counterparties.

In the US, the Fed, the FDIC and the OCC each issued final rules designed to improve the resolvability of US headquartered G-SIBs and the US operations of non-US G-SIBs, such as our US operations. These final rules require covered entities to modify certain qualified financial contracts to obtain agreement of counterparties that (1) their qualified financial contracts are subject to the stays on default rights under the Orderly Liquidation Authority and the Federal Deposit Insurance Act, which is similar to requirements introduced in other jurisdictions to which we are already subject, and (2) certain affiliate-linked default rights would be limited or overridden if an affiliate of the G-SIB entered proceedings under the US Bankruptcy Code or other insolvency or resolution regimes. ISDA has developed the ISDA 2018 US Resolution Stay Protocol (ISDA US Protocol) to facilitate compliance with the final rules. All of Credit Suisse's covered entities have adhered to the ISDA US Protocol to amend their qualified financial contracts with adhering counterparties to comply with the final rules.

Foreign Exchange

In 2017, public and private sector representatives from the foreign exchange committees of 16 international foreign exchange (FX) trading centers agreed to form a Global Foreign Exchange Committee and publish the FX Global Code, which sets out global principles of good practice, including ethics, governance, execution, information sharing, risk management and compliance, and confirmation and settlement processes. Credit Suisse signed the FX Global Code's Statement of Commitment on a global basis on May 21, 2018 and supports the adoption of the FX Global Code by FX market participants.

Switzerland

Banking regulation and supervision

Although Credit Suisse Group is not a bank according to the Bank Law and the Banking Ordinance, the Group is required, pursuant to the provisions on consolidated supervision of financial groups and conglomerates of the Bank Law, to comply with certain requirements for banks. Such requirements include capital adequacy, loss-absorbing capacity, solvency and risk concentration on a consolidated basis, and certain reporting obligations. Our banks in Switzerland are regulated by FINMA on a legal entity basis and, if applicable, on a consolidated basis.

Our banks in Switzerland operate under banking licenses granted by FINMA pursuant to the Bank Law and the Banking Ordinance. In addition, certain of these banks hold securities dealer licenses granted by FINMA pursuant to the Swiss Federal Act on Stock Exchanges and Securities Trading, which was in effect at the time the license was granted. As of January 1, 2020, the

applicable ongoing licensing requirements for securities dealers are set out under FinIA and FinIO.

FINMA is the sole bank supervisory authority in Switzerland and is independent, including from the Swiss National Bank (SNB). Under the Bank Law, FINMA is responsible for the supervision of the Swiss banking system. The SNB is responsible for implementing the government's monetary policy relating to banks and securities dealers and for ensuring the stability of the financial system. Under the "Too Big to Fail" legislation, the SNB is also responsible for determining which banks in Switzerland are systemically relevant banks and which functions are systemically relevant in Switzerland. The SNB has identified the Group on a consolidated basis as a systemically relevant bank for the purposes of Swiss law.

Our banks in Switzerland are subject to close and continuous prudential supervision and direct audits by FINMA. Under the Bank Law, our banks are subject to inspection and supervision by an independent regulatory auditing firm recognized by FINMA, which is appointed by the bank's board of directors and required to assess whether the bank is in compliance with laws and regulations, including the Bank Law, the Banking Ordinance and FINMA regulations.

Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks, which include capital, liquidity, leverage and large exposure requirements, and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency.

Our regulatory capital is calculated on the basis of accounting principles generally accepted in the US, with certain adjustments required by, or agreed with, FINMA.

→ Refer to "Liquidity and funding management" and "Capital management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for further information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.

Under Swiss banking law, banks and securities dealers are required to manage risk concentration within specific limits. Aggregated credit exposure to any single counterparty or a group of related counterparties must bear an adequate relationship to the bank's adjusted eligible capital (for systemically relevant banks like us, to their core tier 1 capital) taking into account counterparty risks and risk mitigation instruments.

Under the Bank Law and FinIA, Swiss banks and securities dealers are obligated to keep confidential the existence and all aspects of their relationships with customers. These customer confidentiality laws do not, however, provide protection with respect to criminal offenses such as insider trading, money laundering, terrorist financing activities, tax fraud or evasion or prevent the disclosure of information to courts and administrative authorities.

Swiss rules and regulations to combat money laundering and terrorist financing are comprehensive and require banks and other financial intermediaries to thoroughly verify and document customer identity before commencing business. In addition, these rules and regulations include obligations to maintain appropriate policies for dealings with politically exposed persons and procedures and controls to detect and prevent money laundering and terrorist financing activities, including reporting suspicious activities to authorities.

In addition, Switzerland has stringent anti-corruption and anti-bribery laws related to Swiss and foreign public officials as well as persons in the private sector.

Compensation design and its implementation and disclosure have been required to comply with standards promulgated by FINMA under its Circular on Remuneration Schemes, as updated from time to time.

Securities dealer and asset management regulation and supervision

Our securities dealer activities in Switzerland are conducted primarily through the Bank, under the supervision of FINMA, and are subject to regulation under FinIA and FinIO, which entered into effect on January 1, 2020 and regulate all aspects of the securities dealer business in Switzerland, including regulatory capital, risk concentration, sales and trading practices, record-keeping requirements and procedures and periodic reporting procedures.

Our asset management activities in Switzerland, which include the establishment and administration of mutual funds registered for public distribution, are conducted under the supervision of FINMA. Effective January 1, 2020, our activities as asset manager of collective assets are also governed by FinIA, subject to phase-in provisions.

In addition, on January 1, 2020, FinSA, as well as its implementing ordinance, FinSO, came into effect. FinSA regulates the provision of financial services in Switzerland, including to Swiss clients from abroad on a cross-border basis, as well as the offering of financial instruments, and the prospectus requirements for the admission to trading of financial instruments, in Switzerland.

Resolution regime

Following the financial crisis of 2007/2008, the Swiss legislator promulgated special rules for the stabilization and restructuring of systemically important financial institutions. Among other aspects, these rules require plans for recovery and resolution. Each systemically important bank is required to submit a recovery plan to FINMA once a year, in which it sets out how it would stabilize itself in a crisis without government intervention, also taking the requirements of foreign regulators into account; this plan requires FINMA's approval. In addition, each Swiss systemically important bank must submit an emergency plan, in which it details how it would ensure uninterrupted continuity of its systemically

important functions in Switzerland, particularly access to deposits and payments, in a crisis; FINMA must review this plan and evaluate whether it is ready to be implemented if necessary. Credit Suisse was required to submit an effective Swiss emergency plan to FINMA for review by the end of 2019, and on February 25, 2020, FINMA published a report noting that it regarded the Swiss emergency plan submitted by Credit Suisse as effective. A third element is the resolution plan, which FINMA produces for systemically important banks, indicating how the entire global group would be recapitalized, restructured and/or liquidated in a crisis; FINMA assesses the resolvability of an institution on the basis of whether the preparations are sufficient to successfully implement the plan if necessary. If internationally active Swiss systemically important banks increase their global resolvability, FINMA can grant rebates on the respective institution's gone concern capital requirements.

The FINMA Banking Insolvency Ordinance governs resolution (i.e., restructuring or liquidation) proceedings applicable to Swiss banks and securities dealers, such as Credit Suisse AG and Credit Suisse (Schweiz) AG, and Swiss-domiciled parent companies of financial groups, such as Credit Suisse Group AG, and certain other unregulated Swiss-domiciled companies belonging to financial groups. Instead of prescribing a particular resolution concept, the FINMA Banking Insolvency Ordinance provides FINMA with a significant amount of authority and discretion in the case of resolution, as well as various restructuring tools from which FINMA may choose.

FINMA may open resolution proceedings if there is an impending insolvency because there is justified concern that the relevant Swiss bank (or Swiss-domiciled parent companies of financial groups and certain other unregulated Swiss-domiciled companies belonging to financial groups) is over-indebted, has serious liquidity problems or no longer fulfills capital adequacy requirements. Resolution proceedings may only take the form of restructuring (rather than liquidation) proceedings if (i) the recovery of, or the continued provision of individual banking services by, the relevant bank appears likely and (ii) the creditors of the relevant bank are likely better off in restructuring proceedings than in liquidation proceedings. All realizable assets in the relevant entity's possession will be subject to such proceedings, regardless of where they are located.

If FINMA were to open restructuring proceedings with respect to Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG, it would have discretion to take decisive actions, including (i) transferring the assets of the banks or Credit Suisse Group AG, as applicable, or a portion thereof, together with its debt and other liabilities, or a portion thereof, and contracts, to another entity, (ii) staying (for a maximum of two working days) the termination of, and the exercise of rights to terminate netting rights, rights to enforce or dispose of certain types of collateral or rights to transfer claims, liabilities or certain collateral, under contracts to which the banks or Credit Suisse Group AG, as applicable, is a party, (iii) converting the debt of the banks or

Credit Suisse Group AG, as applicable, into equity (debt-to-equity swap), and/or (iv) partially or fully writing off the obligations of the banks or Credit Suisse Group AG, as applicable (haircut).

Prior to any debt-to equity swap or haircut, outstanding equity capital and debt instruments issued by Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG that are part of its regulatory capital (including outstanding high trigger capital instruments and low trigger capital instruments) must be converted or written off (as applicable) and cancelled. Any debt-to-equity swap, (but not any haircut) would have to follow the hierarchy of claims to the extent such debt is not excluded from such conversion by the FINMA Banking Insolvency Ordinance. Contingent liabilities of Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG such as guarantees could also be subjected to a debt-to-equity swap or a haircut, to the extent amounts are due and payable thereunder at any time during restructuring proceedings.

For systemically relevant institutions such as Credit Suisse AG, Credit Suisse (Schweiz) AG and Credit Suisse Group AG, creditors have no right to reject the restructuring plan approved by FINMA.

Supervision

The Federal Act on Financial Market Infrastructure and Market Conduct in Securities and Derivatives Trading (FMIA) governs the organization and operation of financial market infrastructures and the conduct of financial market participants in securities and derivatives trading. FMIA, along with the Financial Market Infrastructure Ordinance (FMIO) came into effect on January 1, 2016. However, financial market infrastructures and the operators of organized trading facilities were granted different transitional periods to comply with various new duties, including those associated with the publication of pre- and post-trade transparency information and with high-frequency trading. Under the FMIA, FINMA was designated to determine the timing of the introduction of a clearing obligation and to specify the categories of derivatives covered. Accordingly, on September 1, 2018, the revised Ordinance of the Swiss Financial Market Supervisory Authority on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FMIO-FINMA) entered into force, introducing a mandatory clearing obligation for standardized interest-rate and credit derivatives traded OTC and making effective, as of such date, the deadlines for the first clearing obligations laid down in the FMIO, i.e., six months, twelve months or eighteen months, depending on the categories of derivatives and the type of counterparty.

Tax

Administrative assistance in tax matters

The Multilateral Convention on Mutual Administrative Assistance in Tax Matters (MAC) entered into force and became applicable as of January 1, 2018. Under the MAC, Switzerland is required to exchange information in tax matters both spontaneously in certain cases as well as upon request. Furthermore, the revised Federal Act on International Administrative Assistance in Tax Matters

and the revised Federal Ordinance on International Administrative Assistance in Tax Matters (OIAA) entered into force January 1, 2017 which provide the procedural rules for international administrative assistance on tax matters based on either the MAC or under bilateral double taxation treaties of Switzerland. In exceptional cases, the Swiss legislation permits exchange of information before the taxpayer concerned is informed. Under the MAC (and as clarified in the OIAA), for tax periods from January 1, 2018 onwards, Switzerland began to automatically exchange information on advance tax rulings within the scope of the OECD/G20 BEPS Project to combat base erosion and profit shifting.

On November 1, 2019, the amendment of the Federal Act on International Administrative Assistance in Tax Matters entered into force. Administrative assistance in tax matters is now also permitted for deceased persons with their legal successors being a party to the procedure. It was originally envisaged to introduce a provision permitting administrative assistance for requests based on stolen data; however, the Swiss Parliament has declined this proposal and kept the current provision limiting administrative assistance in tax matters where a request violates good faith or is based on information received by actions qualifying as an offense under Swiss criminal law.

On December 1, 2017, the Multilateral Competent Authority Agreement on the Exchange of Country-by-Country Reports (CbCR) as well as the implementing Swiss federal legislation entered into force, which is the Federal Act on the International Automatic Exchange of Country by Country Reports of Multinationals and the Federal Ordinance on the International Automatic Exchange of Country by Country Reports of Multinationals. Under the CbCR and the implementing legislation, multinational groups of companies in Switzerland had to prepare country-by-country reports for the first time for the 2018 tax year. The reports will be exchanged by Switzerland starting in 2020. On a voluntary basis, multinational groups of companies were permitted to prepare and submit country-by-country reports for the 2016 and 2017 tax periods. Any such reports were exchanged for the first time in 2018.

Automatic exchange of information in tax matters

Switzerland has signed the multilateral competent authority agreement on the automatic exchange of financial account information (MCAA), and a number of bilateral AEOI agreements with other countries, most of them on the basis of the MCAA. Switzerland has also concluded a multilateral agreement with the EU on the international AEOI in tax matters (AEOI Agreement), which applies to all EU member states and also Gibraltar. Based on the AEOI Agreement, the bilateral AEOI agreements and the implementing laws of Switzerland, Switzerland collects and exchanges data in respect of financial assets held in, and income derived thereon and credited to, accounts or deposits with a paying agent in Switzerland for the benefit of residents of an EU member state or Gibraltar or a treaty state. An up-to-date list of the AEOI agreements of Switzerland in effect or signed and becoming effective can be found on the website of the State Secretariat for International Financial Matters SIF.

Withholding tax reforms

On January 1, 2017, the revised Withholding Tax Act entered into force. It extends the exemption of interest paid on contingent convertible bonds and write-down bonds of banks or group companies of finance groups which were approved by FINMA and issued between January 1, 2013 and December 31, 2016, to issuances between January 1, 2017 and December 31, 2021. It also exempts interest paid on TLAC instruments approved by FINMA for purposes of meeting regulatory requirements which have been or will be issued between January 1, 2017 and December 31, 2021, or have been issued prior to January 1, 2017 where the foreign issuer thereof will be substituted for a Swiss issuer between January 1, 2017 and December 31, 2021.

Federal Act on Tax Reform and AHV Financing (TRAF)

Under the new withholding tax law introduced under TRAF, effective as from January 1, 2020, companies listed on a Swiss stock exchange who are paying a dividend out of legal capital contribution reserves will be required to simultaneously pay a dividend out of taxable reserves of at least the same amount. Also, under these new rules, when a company listed on a Swiss stock exchange repurchases shares to cancel them, the company must charge at least fifty percent of the liquidation amount to capital contribution reserves, the liquidation amount being the amount equal to the repurchase price less the nominal amount. Prior to the new law, these companies were not limited in using the one or other type of reserves.

Swiss courts' practice on withholding tax refunds

The FTA and the Swiss courts continue to apply a strict beneficial ownership test for the application of any double taxation agreement based refund of Swiss withholding tax on dividend payments and the like. The focus is on the beneficial ownership of the securities and/or the dividends at the time of payment, which is assessed from a factual and economic point of view, without regard to the parties' intentions or motivation, and must be proven by the party requesting a refund in the form of detailed documentation at the request of the FTA. In the context of derivative transactions, it has become increasingly more difficult to obtain a refund of Swiss withholding tax as in most cases the FTA will not consider the recipient of a payment subject to withholding tax under a derivative transaction to be the beneficial owner of that payment for purposes of a refund of such withholding tax. However, the Swiss Supreme Court has recently held that this strict application of the beneficial ownership test, as well as the proof requirements, do not mean that a financial institution involved in a derivative transaction is not entitled to a refund; if beneficial ownership can be established, a refund will be granted.

Stamp tax reforms

On January 1, 2017, the revised Stamp Tax Act entered into force. The revision introduced an exemption from the 1% issuance stamp tax for equity securities in banks or group companies of a financial group issued in connection with the conversion of TLAC instruments into equity, in addition to the exemption for equity securities in banks issued from conversion capital.

Participation Exemption for “Too Big to Fail” Instruments

Current legislation requires systemically relevant banks to issue contingent convertible bonds, write-off bonds and bail-in bonds through their top holding company, which may then on-lend the funds to direct or indirect subsidiaries. The Federal Act on Calculation of the Participation Deduction for “Too Big to Fail” Instruments, which became effective as of January 1, 2019, permits such top holding companies (Konzernobergesellschaften) of systemically relevant banks to carve-out interest expenses on these “Too Big to Fail” Instruments for purposes of calculating their tax-exempt net participation income. To level the effect of the carve-out, the respective assets and liabilities positions are also eliminated in the calculation. This allows for a calculation of the participation exemption with a complete carve-out of “Too Big to Fail” Instruments to the extent the proceeds thereof are downstreamed.

US

Banking regulation and supervision

Our banking operations are subject to extensive federal and state regulation and supervision in the US. Our direct US offices are composed of our New York Branch and representative offices in California. Each of these offices is licensed with, and subject to examination and regulation by, the state banking authority in the state in which it is located.

Our New York Branch is licensed by the New York Superintendent of Financial Services (Superintendent), examined by the DFS, and subject to laws and regulations applicable to a foreign bank operating a New York branch. Under the New York Banking Law, our New York Branch must maintain eligible assets with banks in the state of New York. The amount of eligible assets required, which is expressed as a percentage of third-party liabilities, could increase if our New York Branch is no longer designated well rated by the Superintendent.

The New York Banking Law authorizes the Superintendent to seize our New York Branch and all of Credit Suisse AG's business and property in New York State (which includes property of our New York Branch, wherever it may be located, and all of Credit Suisse AG's property situated in New York State) under circumstances generally including violations of law, unsafe or unsound practices or insolvency. In liquidating or dealing with our New York Branch's business after taking possession, the Superintendent would only accept for payment the claims of depositors and other creditors (unaffiliated with us) that arose out of transactions with our New York Branch. After the claims of those creditors were paid out of the business and property of the Bank in New York, the Superintendent would turn over the remaining assets, if any, to us or our liquidator or receiver.

Under New York Banking Law and US federal banking laws, our New York Branch is generally subject to single borrower lending limits expressed as a percentage of the worldwide capital of the Bank. Under the Dodd-Frank Act, lending limits take into account credit exposure arising from derivative transactions, securities

borrowing and lending transactions and repurchase and reverse repurchase agreements with counterparties.

Our operations are also subject to reporting and examination requirements under US federal banking laws. Our US non-banking operations are subject to examination by the Fed in its capacity as our US umbrella supervisor. The New York Branch is also subject to examination by the Fed and is subject to federal banking law requirements and limitations on the acceptance and maintenance of deposits. The New York Branch is not a member of, and its deposits are not insured by, the FDIC, and it does not engage in retail deposit taking.

US federal banking laws provide that a state-licensed branch (such as the New York Branch) or agency of a foreign bank may not, as a general matter, engage as principal in any type of activity that is not permissible for a federally licensed branch or agency of a foreign bank unless the Fed has determined that such activity is consistent with sound banking practice. In addition, regulations which the Fed may adopt (including at the recommendation of the FSOC) could affect the nature of the activities which the Bank (including the New York Branch) may conduct, and may impose restrictions and limitations on the conduct of such activities.

The Fed may terminate the activities of a US branch or agency of a foreign bank if it finds that the foreign bank: (i) is not subject to comprehensive supervision in its home country; (ii) has violated the law or engaged in an unsafe or unsound banking practice in the US; or (iii) for a foreign bank that presents a risk to the stability of the US financial system, the home country of the foreign bank has not adopted, or made demonstrable progress toward adopting, an appropriate system of financial regulation to mitigate such risk.

Credit Suisse Group and the Bank became financial holding companies for purposes of US federal banking law in 2000 and, as a result, may engage in a broad range of non-banking activities in the US, including insurance, securities, private equity and other financial activities, in each case subject to regulatory requirements and limitations. Credit Suisse Group is still required to obtain the prior approval of the Fed (and potentially other US banking regulators) before acquiring, directly or indirectly, the ownership or control of more than 5% of any class of voting shares of (or otherwise controlling) any US bank, bank holding company or many other US depository institutions and their holding companies, and as a result of the Dodd-Frank Act, before making certain acquisitions involving large non-bank companies. The New York Branch is also restricted from engaging in certain tying arrangements involving products and services, and in certain transactions with certain of its affiliates. If Credit Suisse Group or the Bank ceases to be well-capitalized or well-managed under applicable Fed rules, or otherwise fails to meet any of the requirements for financial holding company status, it may be required to discontinue certain financial activities or terminate its New York Branch. Credit Suisse Group's ability to undertake acquisitions permitted for financial holding companies could also be adversely affected.

As mentioned above, Credit Suisse is also subject to the so-called “Volcker Rule”, which limits the ability of banking entities to sponsor or invest in certain private equity or hedge funds, broadly defined, and to engage in certain types of proprietary trading for their own account. These restrictions are subject to certain exclusions and exemptions, including with respect to underwriting, market-making, risk-mitigating hedging and certain asset and fund management activities, and with respect to certain transactions and investments occurring solely outside of the US. The Volcker Rule requires banking entities to establish an extensive array of compliance policies, procedures and quantitative metrics reporting designed to ensure and monitor compliance with restrictions under the Volcker Rule. It also requires an annual attestation either by the CEO of the top-tier FBO or the senior management officer in the US as to the implementation of a compliance program reasonably designed to achieve compliance with the Volcker Rule. The Volcker Rule’s implementing regulations became effective in April 2014 and Credit Suisse was generally required to come into compliance with the Volcker Rule by July 2015, with the exception of “legacy” investments in, and bank relationships with, certain private funds, that were in place prior to December 31, 2013, for which the Fed extended the compliance deadline to July 21, 2017. In April 2017, the Fed granted Credit Suisse an extended transition period to conform investments in certain illiquid funds under the Volcker Rule for an additional five years (i.e., until July 21, 2022). Credit Suisse has implemented a Volcker Rule compliance program reasonably designed to satisfy the requirements of the Volcker Rule. The Volcker Rule’s implementing regulations are highly complex and may be subject to further rulemaking, regulatory interpretation and guidance, and its full impact will not be known with certainty for some time.

Fed regulations implementing the Dodd-Frank Act required Credit Suisse to create a single US IHC to hold all of its US subsidiaries with limited exceptions by July 1, 2017. The IHC requirement does not apply to the New York Branch. Credit Suisse’s US IHC is subject to US risk-based capital and leverage requirements that are largely consistent with the Basel III framework published by the BCBS, though they diverge in several important respects due to the requirements of the Dodd-Frank Act, and is subject to capital planning and capital stress testing requirements under the Dodd-Frank Act and the Fed’s annual CCAR.

Credit Suisse’s US IHC is also subject to additional requirements under the Fed’s final TLAC framework for IHCs, described above. In addition, both Credit Suisse’s US IHC itself and the combined US operations of Credit Suisse (including Credit Suisse’s US IHC and the New York Branch) are subject to other prudential requirements, including with respect to liquidity risk management, separate liquidity buffers for each of Credit Suisse’s US IHC and the New York Branch and liquidity stress testing, and will be subject to the Fed’s applicable rules on liquidity coverage ratio (LCR), SCCL and, once finalized, net-stable funding ratio. The SCCL limits our aggregate net credit exposures to any single unaffiliated counterparty based on Tier 1 capital. Our combined US operations (including our US IHC and New York Branch) may qualify for a regime of substituted compliance with comparable home

country rules, but our US IHC is ineligible for the substituted compliance regime and remains subject to a separate SCCL requirement. Under proposals that remain under consideration, the combined US operations of Credit Suisse may become subject to an early remediation regime which could be triggered by risk-based capital, leverage, stress tests, liquidity, risk management and market indicators.

→ Refer to “Liquidity and funding management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for further information on Basel III LCR and NSFR.

A major focus of US policy and regulation relating to financial institutions has been to combat money laundering and terrorist financing and to enforce compliance with US economic sanctions. These laws and regulations impose obligations to maintain appropriate policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, verify the identity of customers and comply with economic sanctions. Any failure to maintain and implement adequate programs to combat money laundering and terrorist financing, and violations of such economic sanctions, laws and regulations, could have serious legal and reputational consequences. We take our obligations to prevent money laundering and terrorist financing in the US and globally and to comply with US economic sanctions very seriously, while appropriately respecting and protecting the confidentiality of clients. We have policies, procedures and training intended to ensure that our employees comply with “know your customer” regulations and understand when a client relationship or business should be evaluated as higher risk for us.

The Dodd-Frank Act requires issuers with listed securities to establish a claw-back policy to recoup erroneously awarded compensation in the event of an accounting restatement but no final rules have been adopted.

Broker-dealer and asset management regulation and supervision

Our US broker-dealers are subject to extensive regulation by US regulatory authorities. The SEC is the federal agency primarily responsible for the regulation of broker-dealers, investment advisers and investment companies. In addition, the US Treasury has the authority to promulgate rules relating to US Treasury and government agency securities, the Municipal Securities Rulemaking Board (MSRB) has the authority to promulgate rules relating to municipal securities, and the MSRB also promulgates regulations applicable to certain securities credit transactions. In addition, broker-dealers are subject to regulation by securities industry self-regulatory organizations, including the Financial Industry Regulatory Authority (FINRA), and by state securities authorities.

Our US broker-dealers are registered with the SEC and our primary US broker-dealer is registered in all 50 states, the District of Columbia, Puerto Rico and the US Virgin Islands. Our US registered entities are subject to extensive regulatory requirements that apply to all aspects of their business activity, including, where applicable: capital requirements; the use and safekeeping of customer funds and securities; the suitability of customer investments and best interest obligations for certain retail customers;

record-keeping and reporting requirements; employee-related matters; limitations on extensions of credit in securities transactions; prevention and detection of money laundering and terrorist financing; procedures relating to research analyst independence; procedures for the clearance and settlement of trades; and communications with the public.

Our US broker-dealers are also subject to the SEC's net capital rule, which requires broker-dealers to maintain a specified level of minimum net capital in relatively liquid form. Compliance with the net capital rule could limit operations that require intensive use of capital, such as underwriting and trading activities and the financing of customer account balances and also could restrict our ability to withdraw capital from our broker-dealers. Most of our US broker-dealers are also subject to additional net capital requirements of FINRA and, in some cases, other self-regulatory organizations.

Our securities and asset management businesses include legal entities registered and regulated as a broker-dealer and investment adviser by the SEC. The SEC-registered mutual funds that we advise are subject to the Investment Company Act of 1940. For pension fund customers, we are subject to the Employee Retirement Income Security Act of 1974 and similar state statutes.

The Dodd-Frank Act also requires broader regulation of hedge funds and private equity funds, as well as credit rating agencies.

Derivative regulation and supervision

The CFTC is the federal agency primarily responsible for the regulation of futures commission merchants, commodity pool operators, commodity trading advisors and introducing brokers, among other regulatory categories. With the effectiveness of the Dodd-Frank Act, CFTC oversight was expanded to include persons engaging in a relevant activity with respect to swaps, and registration categories were added for swap dealers and major swap participants. For derivatives activities, these CFTC registrants are subject to industry self-regulatory organizations, such as the National Futures Association (NFA), which has been designated by the CFTC as a registered futures association.

Each of CSI, CSSEL and CSC is registered with the CFTC as a swap dealer as a result of its applicable swap activities and is therefore subject to requirements relating to reporting, record-keeping, swap confirmation, swap portfolio reconciliation and compression, mandatory clearing, mandatory on-facility trading, swap trading relationship documentation, external business conduct, risk management, chief compliance officer duties and reports and internal controls. However, where permitted by comparability determinations by the CFTC or in reliance on no-action letters issued by the CFTC, non-US swap dealers, including CSI and CSSEL, can comply with certain requirements through substituted compliance with EU regulations. The CFTC has also granted no-action letters that have applied since the UK's withdrawal from the EU, which permit CSI and CSSEL to satisfy such requirements by complying with relevant UK regulations.

As registered swap dealers that are not banks, CSSEL and CSC are also subject to the CFTC's margin rules for uncleared swaps. As a non-US swap dealer, CSSEL is only subject to these rules in connection with its uncleared swaps with US persons, non-US persons guaranteed by US persons, and certain non-US swap dealer subsidiaries of US persons. As a registered swap dealer that is a foreign bank, CSI is subject to the margin rules for uncleared swaps and security-based swaps of the Fed, and CSI likewise is only subject to these rules in connection with its uncleared swaps and security-based swaps with US persons, non-US persons guaranteed by US persons, and certain non-US swap dealer subsidiaries of US persons. Both of these margin rules are following a phased implementation schedule. Since March 1, 2017, CSI, CSSEL and CSC have been required to comply with variation margin requirements with covered entities under these rules, requiring the exchange of daily mark-to-market margin with all such covered entities. Initial margin requirements began phasing in annually for different counterparties from September 1, 2016, with remaining phases relating to the application of initial margin requirements to market participants with group-wide notional derivatives exposure during the preceding March, April and May of at least USD 750 billion or at least USD 8 billion on September 1, 2019 or September 1, 2020, respectively, subject to a proposal to increase the September 1, 2020 threshold to USD 50 billion and introduce a new phase taking effect on September 1, 2021 for market participants who exceed the USD 8 billion threshold but fall below the USD 50 billion threshold. The broad expansion of initial margin requirements on September 1, 2020 or September 1, 2021 could have a significant adverse impact on our OTC derivatives business because of the large number of affected counterparties that might need to enter into new documentation and upgrade their systems in order to comply.

The Dodd-Frank Act also mandates that the CFTC adopt capital requirements for non-bank swap dealers (such as CSSEL and CSC), and the CFTC continues to consider proposed rules in this area. Under the CFTC's 2016 re-proposal of its capital rules, CSSEL and CSC could elect whether to satisfy capital requirements based on Fed rules implementing Basel capital requirements or SEC rules similar to the capital requirements currently applicable to US broker-dealers, but in each case they would be subject to an additional capital requirement based on 8% of the initial margin required for their derivatives positions. In December 2019, the CFTC re-opened the comment period for the 2016 re-proposal and made several new requests for comments, including asking commenters whether the CFTC should adjust the 8% multiplier to a lower multiplier. If the CFTC found UK capital requirements to be comparable, CSSEL could satisfy the CFTC's requirements through "substituted compliance" with the UK requirements. If the CFTC did not grant that comparability determination, however, CSSEL could face a significant competitive disadvantage relative to non-US competitors not subject to CFTC capital requirements due to the additional capital that may be required under the CFTC's rules as proposed and the burdens associated with satisfying duplicative capital regimes. In contrast, the Fed thus far has declined to apply additional capital requirements to swap dealers that are foreign banks, such as CSI.

As noted, the CFTC proposed rules with potential revisions to its framework for the cross-border application of swap dealer regulations. In the meantime, key aspects of that framework, such as the application of certain CFTC rules to swaps between non-US persons, remain subject to temporary no-action letters. Expiration of any of these letters without modifications to the CFTC's guidance or permitting substituted compliance with the UK rules could reduce the willingness of non-US counterparties to trade with CSI and CSSEL, which could negatively affect our swap trading revenue or necessitate changes to how we organize our swap business. We continue to monitor these developments and prepare contingency plans to comply with the final guidance or rules once effective.

One of our US broker-dealers, Credit Suisse Securities (USA) LLC, is also registered as a futures commission merchant and subject to the capital, segregation and other requirements of the CFTC and the NFA.

Our asset management businesses include legal entities registered and regulated as commodity pool operators and commodity trading advisors by the CFTC and the NFA and therefore are subject to disclosure, recordkeeping, reporting and other requirements of the CFTC and the NFA.

The Dodd-Frank Act mandates that the CFTC establish aggregate position limits for certain physical commodity futures contracts and economically equivalent swaps, and the CFTC recently proposed rules in this area. If the CFTC adopted its most recent proposal, these position limit rules would require us to develop a costly compliance infrastructure and could reduce our ability to participate in the commodity derivatives markets, both directly and on behalf of our clients.

In addition, the SEC has finalized rules implementing most of the key derivatives provisions of the Dodd-Frank Act, including security-based swap dealer registration, capital, margin, segregation, internal and external business conduct, recordkeeping and financial reporting, risk mitigation techniques, and transaction reporting rules. These rules are scheduled to take effect on November 1, 2021. While the SEC's rules have largely paralleled many of the CFTC's rules, significant differences between the final CFTC and SEC rules could materially increase the compliance costs associated with, and hinder the efficiency of, our equity and credit derivatives businesses with US persons. For example, significant differences between the cross-border application of SEC and CFTC rules could have such effects. In particular, SEC rules applying public transaction reporting and external business conduct requirements to security-based swaps between non-US persons that are arranged, negotiated or executed by US personnel could discourage non-US counterparties from entering into such transactions, unless the SEC permits substituted compliance with non-US reporting or business conduct requirements. Unlike the CFTC, the SEC has not yet finalized rules relating to mandatory clearing or mandatory on-facility trading.

FATCA

Pursuant to an agreement with the US Internal Revenue Service (IRS) entered into in compliance with FATCA, Credit Suisse is required to identify and provide the IRS with information on accounts held by US persons and certain US-owned foreign entities, as well as to withhold tax on payments made to foreign financial institutions (FFIs) that are not in compliance with FATCA and account holders who fail to provide sufficient information to classify an account as a US or non-US account. Switzerland and the United States have entered into a "Model 2" intergovernmental agreement to implement FATCA, pursuant to which US authorities may ask Swiss authorities for administrative assistance in connection with group requests where consent to provide information regarding potential US accounts is not provided to FFIs, such as Credit Suisse. The Swiss Federal Council announced on October 8, 2014 that it intends to negotiate a Model 1 intergovernmental agreement that would replace the existing agreement and that would instead require FFIs in Switzerland to report US accounts to the Swiss authorities, who would in turn report that information to the IRS. It is unclear when negotiations will continue for the Model 1 intergovernmental agreement and when any new regime would come into force. We are continuing to follow developments regarding FATCA closely and are coordinating with all relevant authorities.

Resolution regime

The Dodd-Frank Act also established an "Orderly Liquidation Authority", a regime for the orderly liquidation of systemically significant non-bank financial companies, which could potentially apply to certain of our US entities. The Secretary of the US Treasury may under certain circumstances appoint the FDIC as receiver for a failing financial company in order to prevent risks to US financial stability. The FDIC would then have the authority to charter a "bridge" company to which it can transfer assets and liabilities of the financial company, including swaps and other QFCs, in order to preserve the continuity of critical functions of the financial company. The FDIC has indicated that it prefers a single-point-of-entry strategy, although it retains the ability to resolve individual financial companies. On February 17, 2016, the FDIC and SEC proposed rules that would clarify the application of the Securities Investor Protection Act in a receivership for a systemically significant broker-dealer under the Dodd-Frank Act's Orderly Liquidation Authority.

In addition, the Dodd-Frank Act and related rules promulgated by the Fed and the FDIC require bank holding companies and companies treated as bank holding companies with total consolidated assets of USD 100 billion or more, such as us, and certain designated non-bank financial firms, to submit periodically to the Fed and the FDIC resolution plans describing the strategy for rapid and orderly resolution under the US Bankruptcy Code or other applicable insolvency regimes, though such plans may not rely on the Orderly Liquidation Authority. We must file a targeted plan addressing shortcomings identified in our 2018 plan by July 1, 2020 and a targeted plan focusing on capital, liquidity and material changes from the previous plan by July 1, 2021. The deadline for our next full plan is July 1, 2024.

Cybersecurity

Federal and state regulators, including the DFS, FINRA and the SEC, have increasingly focused on cybersecurity risks and responses for regulated entities. For example, the DFS cybersecurity regulation applies to any licensed person, including DFS-licensed branches of non-US banks, and requires each company to assess its specific risk profile periodically and design a program that addresses its risks in a robust fashion. Each covered entity must monitor its systems and networks and notify the superintendent of the DFS within 72 hours after it is determined that a material cybersecurity event has occurred. Similarly, FINRA has identified cybersecurity as a significant risk and will assess firms' programs to mitigate those risks. In addition, the SEC has issued expanded interpretative guidance that highlights requirements under US federal securities laws that public operating companies must pay particular attention to with respect to cybersecurity risks and incidents.

EU

Financial services regulation and supervision

Our EU banks, investment firms and fund managers are subject to extensive regulation by EU and national regulatory authorities, whose requirements are increasingly imposed under EU directives and regulations aimed at increasing integration and harmonization in the European market for financial services. While regulations have immediate and direct effect in EU member states, directives must be implemented through national legislation. As a result, the terms of implementation of directives are not always consistent from country to country. In response to the financial crisis and in order to strengthen European supervisory arrangements, the EU established the European Systemic Risk Board, which has macro-prudential oversight of the financial system. The EU has also established three supervisory authorities responsible for promoting greater harmonization and consistent application of EU legislation by national regulators: EBA, the European Securities and Markets Authority and the European Insurance and Occupational Pensions Authority.

The Basel III capital framework is implemented in the EU by the CRD V and the CRR II (jointly known as the CRD V package). The CRD V package comprises a single prudential rule book for banks and investment firms. CRR II contains, among other things, amendments to the previous CRR relating to, among other things, leverage ratio, market risk, counterparty credit risk and large exposures and implementing the FSB's TLAC standard. As mentioned, while the majority of the CRR II measures will apply beginning in 2021, certain requirements, such as the new TLAC requirements, applied immediately on entry into force on June 27, 2019. CRD V includes, among other things, corporate governance and remuneration requirements, including a cap on variable remuneration. From June 2021, most EU investment firms will switch to the new IFD and IFR prudential regime, with their related capital requirements, remuneration and other rules, whereas larger investment firms will remain subject to CRD V.

MiFID II and MiFIR have introduced a number of significant changes to the regulatory framework established by the Markets in Financial Instruments Directive (MiFID I), and the European Commission has adopted a number of delegated and implementing measures, which supplement their requirements. In particular, MiFID II and MiFIR have introduced enhanced organizational and business conduct standards that apply to investment firms, including a number of Credit Suisse EU entities advising clients within the European Economic Area. These provisions include standards for managing conflicts of interest, best execution and enhanced investor protection. MiFID II has also enforced specific safeguards for algorithmic and high-frequency trading and introduced a ban on the receipt of investment research by portfolio managers and providers of independent investment advice unless paid for by clients.

The Benchmarks Regulation (BMR) introduces new rules aimed at ensuring greater accuracy and integrity of benchmarks in financial instruments. The BMR sets out various requirements which will govern the activities of benchmark administrators and submitters. Certain requirements have applied to Credit Suisse in its capacity as a contributor to several critical benchmarks since June 30, 2016. The majority of the other provisions of the BMR have applied since January 1, 2018, although a two-year transition period permitting usage of the EU non-critical benchmark, not yet compliant with the BMR, by EU-supervised entities came to an end on December 31, 2019 and "critical" and third country benchmark providers have been given until December 31, 2021 to comply. A number of European Commission Delegated Regulations supplementing the BMR also entered into force in 2018. The regulations specify, among other things, the criteria for assessing whether certain events would result in significant and adverse impacts on matters including the market integrity and financial stability of one or more member states and the conditions to assess the impact resulting from the cessation of, or change to, existing benchmarks. CSI has been authorized as a benchmark administrator under the BMR by the FCA.

On January 4, 2017, the European Commission Delegated Regulation supplementing the European Market Infrastructure Regulation (EMIR) with regard to regulatory technical standards for risk mitigation techniques for OTC derivatives not cleared by a central counterparty entered into force. The delegated regulation imposes a requirement on financial counterparties and non-financial counterparties above the clearing threshold to collect initial margin and variation margin in respect of non-centrally cleared OTC derivative transactions. The requirements relating to initial margin and variation margin have applied since February 4, 2017 in relation to the largest market participants. Other market participants have become or in the future will become subject to the requirements relating to initial margin through a series of annual phase-in dates, starting September 1, 2017. Requirements relating to variation margin have applied to all financial and non-financial counterparties above the clearing threshold since March 1, 2017.

Resolution regime

The BRRD establishes a framework for the recovery and resolution of credit institutions and investment firms and applies to all Credit Suisse EU entities, including branches of the Bank. The BRRD introduces requirements for recovery and resolution plans, provides for bank resolution tools, including bail-in for failing banks, and establishes country-specific bank resolution financing arrangements. In addition, as part of their powers over banks in resolution, resolution authorities are empowered to replace a bank's senior management, transfer a bank's rights, assets and liabilities to another person, take a bank into public ownership, and close out and terminate a bank's financial contracts or derivatives contracts. Banks are required to produce recovery plans, describing proposed arrangements to permit them to restore their viability, while resolution authorities are empowered to produce resolution plans which describe how a bank may be resolved in an orderly manner, were it to fail.

Under the BRRD, the resolution authority can increase the capital of a failing or failed bank through bail-in: i.e., the write-down, reduction or cancellation of liabilities held by unsecured creditors, or their conversion to equity or other securities. All of a bank's liabilities are subject to bail-in, unless explicitly excluded by the BRRD because they are, for example, covered deposits, secured liabilities, or liabilities arising from holding client assets or client money.

The BRRD also requires banks to hold a certain amount of bail-inable loss-absorbing capacity at both individual and consolidated levels. This requirement is known as the MREL, and is conceptually similar to the TLAC framework.

In June 2019, amendments to BRRD (through BRRD II) entered into force. EU member states will be required to adopt national legislative measures necessary to comply with BRRD II by December 28, 2020. BRRD II contains amendments to the existing EU regime relating to MREL to align it with the TLAC standard and to introduce, among other things, changes to the contractual recognition of bail-in and a new moratorium power for competent authorities.

Data protection regulation

The General Data Protection Regulation (GDPR) is now fully applicable and applies to the processing of personal data in the context of our EU establishments as well as in relation to the processing of personal data of individuals in the EU by our non-EU establishments to the extent such non-EU establishments are offering products and/or services to EU customers or monitoring their behavior in the EU. The GDPR requires us to take various measures to ensure compliance with the regulation, including processing personal data in accordance with the data protection principles, maintaining records of data processing, ensuring

adequate security for personal data, complying with data breach notification requirements, and giving effect to data subjects' rights. Furthermore, in accordance with the GDPR, we have appointed a Data Protection Officer who is responsible for monitoring our compliance with the GDPR and providing advice in connection with the regulation. The GDPR grants broad enforcement powers to data protection authorities, including the potential to levy significant administrative fines for non-compliance.

In addition to the GDPR, other jurisdictions in which we operate have adopted or are proposing data privacy standards, for example the California Consumer Privacy Act of 2018 (CCPA) and the proposed revisions to the Swiss Federal Act on Data Protection, some of which are similar to the GDPR or contain their own requirements more robust than the GDPR. We collect and process large quantities of personal data in connection with our operations globally. As additional data privacy laws come into effect in the coming years, we anticipate an increase in our data privacy obligations.

Anti-money laundering regulation

The Fifth Money Laundering Directive (MLD5) entered into force on July 9, 2018 and EU member states were required to comply with the requirements of MLD5 by January 10, 2020. Among other things, MLD5 clarifies the requirements for enhanced due diligence measures and countermeasures relating to high-risk third countries and introduced a new obligation for EU member states to establish centralized mechanisms to identify holders and controllers of bank and payment accounts.

UK

Banking regulation and supervision

The principal statutory regulators of financial services activity in the UK are the PRA, a part of the Bank of England, which is responsible for the micro-prudential regulation of banks and larger investment firms, and the FCA, which regulates markets, the conduct of business of all financial firms, and the prudential regulation of firms not regulated by the PRA. In addition, the Financial Policy Committee of the Bank of England is responsible for macro-prudential regulation.

The UK is required to implement EU directives into national law until the end of the transitional period following its exit from the EU in January 2020. The regulatory regime for banks operating in the UK conforms to required EU standards, including compliance with capital adequacy standards, customer protection requirements, conduct of business rules and anti-money laundering rules. These standards, requirements and rules are similarly implemented, under the same directives, throughout the other member states of the EU in which we operate.

CSI, Credit Suisse (UK) Limited and Credit Suisse AG, London Branch are authorized to take deposits. We also have a number of entities authorized to conduct investment business and asset management activities. In deciding whether to grant authorization, the PRA must first determine whether a firm satisfies the threshold conditions for authorization, which include suitability and the requirement for the firm to be fit and proper. The PRA is also responsible for approval of certain models with respect to regulatory capital requirements of our UK subsidiaries.

Our London Branch is required to comply principally with Swiss home country regulation. However, as a response to the global financial crisis, the PRA made changes to its prudential supervision rules in its rulebook, applying a principle of “self-sufficiency”, such that CSI, CSSEL and Credit Suisse (UK) Limited are required to maintain adequate liquidity resources, under the day-to-day supervision of the entity’s senior management, held in a custodian account in the name of the entity, unencumbered and attributed to the entity balance sheet. In addition, the PRA requires CSI, CSSEL and Credit Suisse (UK) Limited to maintain a minimum capital ratio and to monitor and report large exposures in accordance with the CRR.

The PRA has implemented the requirements of CRD relating to staff remuneration and imposed a 1:1 cap on variable remuneration which can rise to 1:2 with explicit shareholder approval.

The UK Financial Services Act 2013 (Banking Reform Act), enacted in December 2013, establishes a more stringent regulatory regime for senior managers and specified risk takers in a bank or PRA authorized investment firm; it also makes reckless misconduct in the management of a bank a criminal offense. These rules impact our UK entities, such as CSI and CSSEL.

Broker-dealer and asset management regulation and supervision

Our London bank and broker-dealer subsidiaries are authorized under the Financial Services and Markets Act 2000 (FSMA) and are subject to regulation by the PRA and FCA. In addition, our asset management companies are authorized under the FSMA and are subject to regulation by the FCA. In deciding whether to authorize an investment firm in the UK, the PRA and FCA will consider the threshold conditions, which include suitability and the general requirement for a firm to be fit and proper. The PRA and FCA are responsible for regulating most aspects of an investment firm’s business, including its regulatory capital, sales and trading practices, use and safekeeping of customer funds and securities, record-keeping, margin practices and procedures, registration standards for individuals carrying on certain functions, anti-money laundering systems and periodic reporting and settlement procedures.

Resolution regime

The UK legislation related to the recovery and resolution of credit institutions such as Credit Suisse consists of the special resolution regime (SRR), the PRA recovery and resolution framework and the FCA recovery and resolution requirements, which implement the BRRD in the UK. The UK Banking Act and the related secondary legislation govern the application of the SRR, which grants the UK authorities powers to handle systemically important firms, such as banks, in case of highly likely failure. The UK resolution authority is the Bank of England which is empowered, among other things, to direct firms and their parent undertakings to address or remove barriers to resolvability, to enforce resolution actions and to carry out resolvability assessments of credit institutions. Separately, the PRA and the FCA have the power to require parent undertakings of firms subject to this regime to take actions such as the preparation and submission of group recovery plans or the facilitation of the use of resolution powers.

Risk factors

Our businesses are exposed to a variety of risks that could adversely affect our results of operations and financial condition, including, among others, those described below.

Liquidity risk

Liquidity, or ready access to funds, is essential to our business, particularly our investment banking businesses. We seek to maintain available liquidity to meet our obligations in a stressed liquidity environment.

→ Refer to "Liquidity and funding management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for information on our liquidity management.

Our liquidity could be impaired if we were unable to access the capital markets, sell our assets or if our liquidity costs increase

Our ability to borrow on a secured or unsecured basis and the cost of doing so can be affected by increases in interest rates or credit spreads, the availability of credit, regulatory requirements relating to liquidity or the market perceptions of risk relating to us, certain of our counterparties or the banking sector as a whole, including our perceived or actual creditworthiness. An inability to obtain financing in the unsecured long-term or short-term debt capital markets, or to access the secured lending markets, could have a substantial adverse effect on our liquidity. In challenging credit markets our funding costs may increase or we may be unable to raise funds to support or expand our businesses, adversely affecting our results of operations. Following the financial crisis in 2008 and 2009, our costs of liquidity have been significant and we expect to incur ongoing costs as a result of regulatory requirements for increased liquidity.

If we are unable to raise needed funds in the capital markets (including through offerings of equity, regulatory capital securities and other debt), we may need to liquidate unencumbered assets to meet our liabilities. In a time of reduced liquidity, we may be unable to sell some of our assets, or we may need to sell assets at depressed prices, which in either case could adversely affect our results of operations and financial condition.

Our businesses rely significantly on our deposit base for funding

Our businesses benefit from short-term funding sources, including primarily demand deposits, inter-bank loans, time deposits and cash bonds. Although deposits have been, over time, a stable source of funding, this may not continue. In that case, our liquidity position could be adversely affected and we might be unable to meet deposit withdrawals on demand or at their contractual maturity, to repay borrowings as they mature or to fund new loans, investments and businesses.

Changes in our ratings may adversely affect our business

Ratings are assigned by rating agencies. Rating agencies may lower, indicate their intention to lower or withdraw their ratings at

any time. The major rating agencies remain focused on the financial services industry, particularly regarding potential declines in profitability, asset price volatility, the impact from any potential easing or enhancement of regulatory requirements and challenges from increased costs related to compliance and litigation. Any downgrades in our ratings could increase our borrowing costs, limit our access to capital markets, increase our cost of capital and adversely affect the ability of our businesses to sell or market their products, engage in business transactions – particularly financing and derivatives transactions – and retain our clients.

Market and credit risks

The outbreak of COVID-19 may negatively affect our business, operations and financial performance

On March 3, 2020, COVID-19 was characterized as a pandemic by the World Health Organization. Since December 2019, COVID-19 has spread rapidly, with at least 150 countries and territories worldwide with confirmed cases of COVID-19, and a high concentration of cases in certain countries in which we conduct business.

The spread of COVID-19 and resulting tight government controls and travel bans implemented around the world have caused disruption to global supply chains and economic activity, and the market has entered a period of increased volatility. The spread of COVID-19 is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to affect our financial performance, including credit loss estimates, trading revenues, net interest income and potential goodwill assessments. The extent of the adverse impact of the pandemic on the global economy and markets will depend, in part, on the length and severity of the measures taken to limit the spread of the virus and, in part, on the size and effectiveness of the compensating measures taken by governments. We are closely monitoring the potential effects and impact on our operations, businesses and financial performance, including liquidity and capital usage, though the extent is difficult to fully predict at this time due to the rapid evolution of this uncertain situation.

We may incur significant losses on our trading and investment activities due to market fluctuations and volatility

Although we continue to strive to reduce our balance sheet and have made significant progress in implementing our strategy over the past few years, we also continue to maintain large trading and investment positions and hedges in the debt, currency and equity markets, and in private equity, hedge funds, real estate and other

assets. These positions could be adversely affected by volatility in financial and other markets, that is, the degree to which prices fluctuate over a particular period in a particular market, regardless of market levels. To the extent that we own assets, or have net long positions, in any of those markets, a downturn in those markets could result in losses from a decline in the value of our net long positions. Conversely, to the extent that we have sold assets that we do not own, or have net short positions, in any of those markets, an upturn in those markets could expose us to potentially significant losses as we attempt to cover our net short positions by acquiring assets in a rising market. Market fluctuations, downturns and volatility can adversely affect the fair value of our positions and our results of operations. Adverse market or economic conditions or trends have caused, and in the future may cause, a significant decline in our net revenues and profitability.

Our businesses and organization are subject to the risk of loss from adverse market conditions and unfavorable economic, monetary, political, legal, regulatory and other developments in the countries in which we operate

As a global financial services company, our businesses are materially affected by conditions in the financial markets, economic conditions generally, geopolitical events and other developments in Europe, the US, Asia and elsewhere around the world (even in countries in which we do not currently conduct business). The recovery from the economic crisis of 2008 and 2009 continues to be slow in several key developed markets. The European sovereign debt crisis as well as US debt levels and the federal budget process have not been permanently resolved. In addition, commodity price volatility and concerns about emerging markets have affected financial markets. Volatility increased in the beginning of 2020 and equity market indices declined amid concerns surrounding the spread of COVID-19. Our financial condition and results of operations could be materially adversely affected if these conditions do not improve, or if they stagnate or worsen. Further, various countries have experienced severe economic disruptions particular to that country or region, including extreme currency fluctuations, high inflation, or low or negative growth, among other negative conditions, which could have an adverse effect on our operations and investments.

Continued concern about weaknesses in the economic and fiscal condition of certain European economies, including the impact related to the refugee crisis and political uncertainty as well as in relation to the UK's withdrawal from the EU, could cause disruptions in market conditions in Europe and around the world and could further have an adverse impact on financial institutions (including us) which lent funds to or did business with or in those countries. We cannot accurately predict the impact of the UK leaving the EU on Credit Suisse or the outcome of the transitional period which is expected to end on December 31, 2020, and such impact may negatively affect our future results of operations and financial condition. Our legal entities that are organized or operate in the UK face limitations on providing services or otherwise conducting business in the EU following the end of the transitional period, which has required us to implement significant changes to our legal entity structure and locations in which we

conduct certain operations, which could result in higher operational, regulatory and compliance costs.

→ Refer to "UK-EU relationship" in Regulation and supervision – Recent regulatory developments and proposals – EU, "Withdrawal of the UK from the EU" in II – Operating and financial review – Credit Suisse – Other Information and "Key risk developments" in III – Treasury, Risk Balance sheet and Off-balance sheet – Risk management for further information.

While the execution of the program evolving the Group's legal entity structure to meet developing and future regulatory requirements has substantially concluded, there remain a number of uncertainties that may affect the feasibility, scope and timing of the intended results relating to the evolution of our legal entity structure. Significant legal and regulatory changes affecting us and our operations may require us to make further changes in our legal structure. The implementation of these changes has required, and may further require, significant time and resources and has increased, and may potentially further increase, operational, capital, funding and tax costs as well as our counterparties' credit risk.

The environment of political uncertainty in continental Europe may also affect our business. The popularity of nationalistic sentiments may result in significant shifts in national policy and a decelerated path to further European integration. Similar uncertainties exist regarding the impact of recent and proposed changes in US policies on trade, immigration and foreign relations. Growing global trade tensions, including between key trading partners such as China, the US and the EU, political uncertainty in areas such as Hong Kong and the spread of COVID-19 may be disruptive to global economic growth and may also negatively affect our business. Other developments such as climate change and related risks and concerns may cause a decrease in client activity, negatively impact the general operating environment, damage our reputation as a result of our or our clients' involvement in certain business activities associated with climate change or otherwise have an adverse effect on our business.

In the past, the low interest rate environment has adversely affected our net interest income and the value of our trading and non-trading fixed income portfolios, and resulted in a loss of customer deposits as well as an increase in the liabilities relating to our existing pension plans. Furthermore, interest rates are expected to remain low for a longer period of time. Future changes in interest rates, including increasing interest rates or changes in the current negative short-term interest rates in our home market, could adversely affect our businesses and results. Recent interest rate cuts by national governments and central banks in response to the COVID-19 outbreak, including in the US, could also adversely impact our net interest income, including in our International Wealth Management and Asia Pacific divisions due to their larger share of US dollar-denominated deposits. In addition, movements in equity markets have affected the value of our trading and non-trading equity portfolios, while the historical strength of the Swiss franc has adversely affected our revenues and net income and exposed us to currency exchange rate risk. Further, diverging monetary policies among the major economies in which we operate, in particular among the Fed, ECB and SNB, may adversely affect our results.

Such adverse market or economic conditions may negatively impact our investment banking and wealth management businesses and adversely affect net revenues we receive from commissions and spreads. These conditions may result in lower investment banking client activity, adversely impacting our financial advisory and underwriting fees. Such conditions may also adversely affect the types and volumes of securities trades that we execute for customers. Cautious investor behavior in response to adverse conditions could result in generally decreased client demand for our products, which could negatively impact our results of operations and opportunities for growth. Unfavorable market and economic conditions have affected our businesses in the past, including the low interest rate environment, continued cautious investor behavior and changes in market structure. These negative factors could be reflected, for example, in lower commissions and fees from our client-flow sales and trading and asset management activities, including commissions and fees that are based on the value of our clients' portfolios.

Our response to adverse market or economic conditions may differ from that of our competitors and an investment performance that is below that of competitors or asset management benchmarks could also result in a decline in assets under management and related fees making it harder to attract new clients. There could be a shift in client demand away from more complex products, which may result in significant client deleveraging, and our results of operations related to private banking and asset management activities could be adversely affected. Adverse market or economic conditions could exacerbate such effects.

In addition, several of our businesses engage in transactions with, or trade in obligations of, governmental entities, including supranational, national, state, provincial, municipal and local authorities. These activities can expose us to enhanced sovereign, credit-related, operational and reputational risks, which may also increase as a result of adverse market or economic conditions. Risks related to these transactions include the risks that a governmental entity may default on or restructure its obligations or may claim that actions taken by government officials were beyond the legal authority of those officials, which could adversely affect our financial condition and results of operations.

Adverse market or economic conditions could also affect our private equity investments since, if a private equity investment substantially declines in value, we may not receive any increased share of the income and gains from such investment (to which we are entitled in certain cases when the return on such investment exceeds certain threshold returns), may be obligated to return to investors previously received excess carried interest payments and may lose our pro rata share of the capital invested. In addition, it could become more difficult to dispose of the investment as even investments that are performing well may prove difficult to exit.

In addition to the macroeconomic factors discussed above, other events beyond our control, including terrorist attacks, cyber attacks, military conflicts, economic or political sanctions, disease pandemics, political unrest or natural disasters, could have a

material adverse effect on economic and market conditions, market volatility and financial activity, with a potential related effect on our businesses and results.

→ Refer to "Non-financial risk" in "III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management for further information.

Uncertainties regarding the possible discontinuation of benchmark rates may adversely affect our business, financial condition and results of operations and may require adjustments to our agreements with clients and other market participants, as well as to our systems and processes

In July 2017, the FCA, which regulates the London interbank offered rate (LIBOR), announced that the FCA will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021. As such, it appears highly likely that LIBOR will be discontinued after 2021. Credit Suisse has identified a significant number of its liabilities and assets linked to LIBOR and other benchmark rates across businesses that require transition to alternative reference rates. The discontinuation or future changes in the administration of benchmarks could result in adverse consequences to the return on, value of and market for securities and other instruments whose returns or contractual mechanics are linked to any such benchmark, including those issued and traded by the Group. For example, alternative reference rate-linked products may not provide a term structure, may calculate interest payments differently than benchmark-linked products, which could lead to greater uncertainty with respect to corresponding payment obligations, and would likely require a change in contractual terms of products currently indexed on terms other than overnight. The replacement of LIBOR or any other benchmark with an alternative reference rate could negatively impact the value of and return on existing securities and other contracts and result in mispricing and additional legal, financial, tax, operational, market, compliance, reputational, competitive or other risks to us, our clients and other market participants. For example, we may face a risk of litigation, disputes or other actions from clients, counterparties, customers, investors or others regarding the interpretation or enforcement of related provisions or if we fail to appropriately communicate the effect that the transition to alternative reference rates will have on existing and future products. In addition, any transition to alternative reference rates will require changes to our documentation, methodologies, processes, controls, systems and operations, which will also result in increased effort and cost. There may also be related risks that arise in connection with the transition. For example, our hedging strategy may be negatively impacted or market risk may increase in the event of different alternative reference rates applying to our assets compared to our liabilities.

→ Refer to "Replacement of interbank offered rates" in II – Operating and financial review – Credit Suisse – Other information for further information.

We may incur significant losses in the real estate sector

We finance and acquire principal positions in a number of real estate and real estate-related products, primarily for clients, and originate loans secured by commercial and residential properties. As of

December 31, 2019, our real estate loans as reported to the SNB totaled approximately CHF 148 billion. We also securitize and trade in commercial and residential real estate and real estate-related whole loans, mortgages and other real estate and commercial assets and products, including CMBS and RMBS. Our real estate-related businesses and risk exposures could be adversely affected by any downturn in real estate markets, other sectors and the economy as a whole. In particular, the risk of potential price corrections in the real estate market in certain areas of Switzerland could have a material adverse effect on our real estate-related businesses.

Holding large and concentrated positions may expose us to large losses

Concentrations of risk could increase losses, given that we have sizeable loans to, and securities holdings in, certain customers, industries or countries. Decreasing economic growth in any sector in which we make significant commitments, for example, through underwriting, lending or advisory services, could also negatively affect our net revenues.

We have significant risk concentration in the financial services industry as a result of the large volume of transactions we routinely conduct with broker-dealers, banks, funds and other financial institutions, and in the ordinary conduct of our business, we may be subject to risk concentration with a particular counterparty. In addition, we, and other financial institutions, may pose systemic risk in a financial or credit crisis, and may be vulnerable to market sentiment and confidence, particularly during periods of severe economic stress. We, like other financial institutions, continue to adapt our practices and operations in consultation with our regulators to better address an evolving understanding of our exposure to, and management of, systemic risk and risk concentration to financial institutions. Regulators continue to focus on these risks, and there are numerous new regulations and government proposals, and significant ongoing regulatory uncertainty, about how best to address them. There can be no assurance that the changes in our industry, operations, practices and regulation will be effective in managing these risks.

→ Refer to "Regulation and supervision" for further information.

Risk concentration may cause us to suffer losses even when economic and market conditions are generally favorable for others in our industry.

Our hedging strategies may not prevent losses

If any of the variety of instruments and strategies we use to hedge our exposure to various types of risk in our businesses is not effective, we may incur losses. We may be unable to purchase hedges or be only partially hedged, or our hedging strategies may not be fully effective in mitigating our risk exposure in all market environments or against all types of risk.

Market risk may increase the other risks that we face

In addition to the potentially adverse effects on our businesses described above, market risk could exacerbate the other risks that we face. For example, if we were to incur substantial trading losses, our need for liquidity could rise sharply while our access to liquidity

could be impaired. In conjunction with another market downturn, our customers and counterparties could also incur substantial losses of their own, thereby weakening their financial condition and increasing our credit and counterparty risk exposure to them.

We may suffer significant losses from our credit exposures

Our businesses are subject to the fundamental risk that borrowers and other counterparties will be unable to perform their obligations. Our credit exposures exist across a wide range of transactions that we engage in with a large number of clients and counterparties, including lending relationships, commitments and letters of credit, as well as derivative, currency exchange and other transactions. Our exposure to credit risk can be exacerbated by adverse economic or market trends, as well as increased volatility in relevant markets or instruments. For example, adverse economic effects arising from the COVID-19 outbreak, such as disruptions to economic activity and global supply chains, will likely negatively impact the creditworthiness of certain counterparties and result in increased credit losses for our businesses. In addition, disruptions in the liquidity or transparency of the financial markets may result in our inability to sell, syndicate or realize the value of our positions, thereby leading to increased concentrations. Any inability to reduce these positions may not only increase the market and credit risks associated with such positions, but also increase the level of risk-weighted assets on our balance sheet, thereby increasing our capital requirements, all of which could adversely affect our businesses.

→ Refer to "Credit risk" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management for information on management of credit risk.

Our regular review of the creditworthiness of clients and counterparties for credit losses does not depend on the accounting treatment of the asset or commitment. Changes in creditworthiness of loans and loan commitments that are fair valued are reflected in trading revenues.

Management's determination of the provision for loan losses is subject to significant judgment. Our banking businesses may need to increase their provisions for loan losses or may record losses in excess of the previously determined provisions if our original estimates of loss prove inadequate, which could have a material adverse effect on our results of operations. Credit Suisse adopted the "Measurement of Credit Losses on Financial Instruments" (ASU 2016-13) accounting standard and its subsequent amendments on January 1, 2020 and will incorporate forward-looking information and macroeconomic factors into its credit loss estimates applying the modified retrospective approach. Furthermore, the effects surrounding the outbreak of COVID-19 or other negative economic developments will likely have an adverse effect on the Group's credit loss estimates and goodwill assessments in the future, which could have a significant impact on our results of operations.

→ Refer to "Accounting developments" in II – Operating and financial review – Credit Suisse – Other information, "Credit risk" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management and "Note 1 – Summary of significant accounting policies", "Note 9 – Provision for credit losses" and "Note 19 – Loans, allowance for loan losses and credit quality" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Under certain circumstances, we may assume long-term credit risk, extend credit against illiquid collateral and price derivative instruments aggressively based on the credit risks that we take. As a result of these risks, our capital and liquidity requirements may continue to increase.

Defaults by one or more large financial institutions could adversely affect financial markets generally and us specifically

Concerns, rumors about or an actual default by one institution could lead to significant liquidity problems, losses or defaults by other institutions because the commercial soundness of many financial institutions may be closely related as a result of credit, trading, clearing or other relationships between institutions. This risk is sometimes referred to as systemic risk. Concerns about defaults by and failures of many financial institutions, including those in or with significant exposure to the eurozone, could lead to losses or defaults by financial institutions and financial intermediaries with which we interact on a daily basis, such as clearing agencies, clearing houses, banks, securities firms and exchanges. Our credit risk exposure will also increase if the collateral we hold cannot be realized or can only be liquidated at prices insufficient to cover the full amount of the exposure.

The information that we use to manage our credit risk may be inaccurate or incomplete

Although we regularly review our credit exposure to specific clients and counterparties and to specific industries, countries and regions that we believe may present credit concerns, default risk may arise from events or circumstances that are difficult to foresee or detect, such as fraud. We may also lack correct and complete information with respect to the credit or trading risks of a counterparty or risk associated with specific industries, countries and regions or misinterpret such information that is received or otherwise incorrectly assess a given risk situation. Additionally, there can be no assurance that measures instituted to manage such risk will be effective in all instances.

Strategy risk

We may not achieve all of the expected benefits of our strategic initiatives

At the end of 2018, we completed our three-year restructuring program, which was designed to implement a new strategic direction, structure and organization of the Group. Following the completion of our restructuring program, we have continued our efforts to achieve our strategic objectives, which are based on a number of key assumptions regarding the future economic environment, the economic growth of certain geographic regions, the regulatory landscape, our ability to meet certain financial goals, anticipated interest rates and central bank action, among other things. If any of these assumptions (including but not limited to our ability to meet certain financial goals) prove inaccurate in whole or in part, our ability to achieve some or all of the expected benefits of our strategy could be limited, including our ability to retain key employees, distribute net income to our shareholders

as planned through a sustainable ordinary dividend and share buyback program or achieve our other goals, such as those in relation to return on tangible equity or cost savings. In addition, the Group depends on dividends, distributions and other payments from its subsidiaries to fund external dividends payments and share buybacks. Factors beyond our control, including but not limited to market and economic conditions, changes in laws, rules or regulations, including the application of regulations issued by the US Internal Revenue Service related to BEAT, execution risk related to the implementation of our strategy and other challenges and risk factors discussed in this report, could limit our ability to achieve some or all of the expected benefits of this strategy. Capital payments from subsidiaries might be restricted as a result of regulatory, tax or other constraints. If we are unable to implement our strategy successfully in whole or in part or should the components of the strategy that are implemented fail to produce the expected benefits, our financial results and our share price may be materially and adversely affected.

→ Refer to "Strategy" for further information on our strategic direction.

Additionally, part of our strategy has involved a change in focus within certain areas of our business, which may have unanticipated negative effects in other areas of the business and may result in an adverse effect on our business as a whole.

The implementation of our strategy may increase our exposure to certain risks, including but not limited to credit risks, market risks, operational risks and regulatory risks. We also seek to achieve certain financial goals, for example in relation to return on tangible equity, which may or may not be successful. There is no guarantee that we will be able to achieve these goals in the form described or at all. Finally, changes to the organizational structure of our business, as well as changes in personnel and management, may lead to temporary instability of our operations.

In addition, acquisitions and other similar transactions we undertake subject us to certain risks. Even though we review the records of companies we plan to acquire, it is generally not feasible for us to review all such records in detail. Even an in-depth review of records may not reveal existing or potential problems or permit us to become familiar enough with a business to fully assess its capabilities and deficiencies. As a result, we may assume unanticipated liabilities (including legal and compliance issues), or an acquired business may not perform as well as expected. We also face the risk that we will not be able to integrate acquisitions into our existing operations effectively as a result of, among other things, differing procedures, business practices and technology systems, as well as difficulties in adapting an acquired company into our organizational structure. We face the risk that the returns on acquisitions will not support the expenditures or indebtedness incurred to acquire such businesses or the capital expenditures needed to develop such businesses. We also face the risk that unsuccessful acquisitions will ultimately result in our having to write down or write off any goodwill associated with such transactions. We continue to have a significant amount of goodwill relating to our acquisition of Donaldson, Lufkin & Jenrette Inc. and other transactions recorded on our balance sheet that could result in additional goodwill impairment charges.

We may also seek to engage in new joint ventures (within the Group and with external parties) and strategic alliances. Although we endeavor to identify appropriate partners, our joint venture efforts may prove unsuccessful or may not justify our investment and other commitments.

Country and currency exchange risk

Country risks may increase market and credit risks we face

Country, regional and political risks are components of market and credit risk. Financial markets and economic conditions generally have been and may in the future be materially affected by such risks. Economic or political pressures in a country or region, including those arising from local market disruptions, currency crises, monetary controls or other factors, may adversely affect the ability of clients or counterparties located in that country or region to obtain foreign currency or credit and, therefore, to perform their obligations to us, which in turn may have an adverse impact on our results of operations.

We may face significant losses in emerging markets

An element of our strategy is to increase our private banking businesses in emerging market countries. Our implementation of that strategy will necessarily increase our existing exposure to economic instability in those countries. We monitor these risks, seek diversity in the sectors in which we invest and emphasize client-driven business. Our efforts at limiting emerging market risk, however, may not always succeed. In addition, various emerging market countries have experienced and may continue to experience severe economic, financial and political disruptions or slower economic growth than in prior years. In addition, sanctions have been imposed on certain individuals and companies and further sanctions are possible. The possible effects of any such disruptions may include an adverse impact on our businesses and increased volatility in financial markets generally.

Currency fluctuations may adversely affect our results of operations

We are exposed to risk from fluctuations in exchange rates for currencies, particularly the US dollar. In particular, a substantial portion of our assets and liabilities are denominated in currencies other than the Swiss franc, which is the primary currency of our financial reporting. Our capital is also stated in Swiss francs, and we do not fully hedge our capital position against changes in currency exchange rates. The Swiss franc was strong against the US dollar and the euro in 2019.

As we incur a significant part of our expenses in Swiss francs while we generate a large proportion of our revenues in other currencies, our earnings are sensitive to changes in the exchange rates between the Swiss franc and other major currencies. Although we have implemented a number of measures designed to offset the impact of exchange rate fluctuations on our results of operations, the appreciation of the Swiss franc in particular and exchange rate volatility in general have had an adverse impact on

our results of operations and capital position in recent years and may have such an effect in the future.

Operational, risk management and estimation risks

We are exposed to a wide variety of operational risks, including cybersecurity and other information technology risks

Operational risk is the risk of financial loss arising from inadequate or failed internal processes, people or systems or from external events. In general, although we have business continuity plans, our businesses face a wide variety of operational risks, including technology risk that stems from dependencies on information technology, third-party suppliers and the telecommunications infrastructure as well as from the interconnectivity of multiple financial institutions with central agents, exchanges and clearing houses. As a global financial services company, we rely heavily on our financial, accounting and other data processing systems, which are varied and complex, and we may face additional technology risks due to the global nature of our operations. Our business depends on our ability to process a large volume of diverse and complex transactions, including derivatives transactions, which have increased in volume and complexity. We may rely on automation, robotic processing, machine learning and artificial intelligence for certain operations, and this reliance may increase in the future with corresponding advancements in technology, which could expose us to additional cybersecurity risks. We are exposed to operational risk arising from errors made in the execution, confirmation or settlement of transactions or from transactions not being properly recorded or accounted for. Cybersecurity and other information technology risks for financial institutions have significantly increased in recent years and we may face an increased risk of cyber attacks or heightened risks associated with a lesser degree of data and intellectual property protection in certain foreign jurisdictions in which we operate. Regulatory requirements in these areas have increased and are expected to increase further.

Information security, data confidentiality and integrity are of critical importance to our businesses, and there has been recent regulatory scrutiny on the ability of companies to safeguard personal information of individuals. Despite our wide array of security measures to protect the confidentiality, integrity and availability of our systems and information, it is not always possible to anticipate the evolving threat landscape and mitigate all risks to our systems and information. We could also be affected by risks to the systems and information of clients, vendors, service providers, counterparties and other third parties. In addition, we may introduce new products or services or change processes, resulting in new operational risk that we may not fully appreciate or identify.

These threats may derive from human error, fraud or malice, or may result from accidental technological failure. There may also be attempts to fraudulently induce employees, clients, third parties or other users of our systems to disclose sensitive information in order to gain access to our data or that of our clients.

We and other financial institutions have been subject to cyber attacks, information or security breaches and other forms of attacks. We expect to continue to be the target of such attacks in the future. In the event of a cyber attack, information or security breach or technology failure, we may experience operational issues, the infiltration of payment systems or the unauthorized release, gathering, monitoring, misuse, loss or destruction of confidential, proprietary and other information relating to Credit Suisse, our clients, vendors, service providers, counterparties or other third parties. Given our global footprint and the high volume of transactions we process, the large number of clients, partners and counterparties with which we do business, our growing use of digital, mobile and internet-based services, and the increasing frequency, sophistication and evolving nature of cyber attacks, a cyber attack, information or security breach or technology failure may occur without detection for an extended period of time. In addition, we expect that any investigation of a cyber attack, information or security breach or technology failure will be inherently unpredictable and it may take time before any investigation is complete. During such time, we may not know the extent of the harm or how best to remediate it and certain errors or actions may be repeated or compounded before they are discovered and rectified, all or any of which would further increase the costs and consequences of a cyber attack, information or security breach or technology failure.

If any of our systems do not operate properly or are compromised as a result of cyber attacks, information or security breaches, technology failures, unauthorized access, loss or destruction of data, unavailability of service, computer viruses or other events that could have an adverse security impact, we could be subject to litigation or suffer financial loss not covered by insurance, a disruption of our businesses, liability to our clients, damage to relationships with our vendors, regulatory intervention or reputational damage. Any such event could also require us to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures. We may also be required to expend resources to comply with new and increasingly expansive regulatory requirements related to cybersecurity.

We may suffer losses due to employee misconduct

Our businesses are exposed to risk from potential non-compliance with policies or regulations, employee misconduct or negligence and fraud, which could result in civil, regulatory or criminal investigations and charges, regulatory sanctions and serious reputational or financial harm. In recent years, a number of multinational financial institutions have suffered material losses due to, for example, the actions of traders performing unauthorized trades or other employee misconduct. It is not always possible to deter employee misconduct and the precautions we take to prevent and detect this activity may not always be effective.

Our risk management procedures and policies may not always be effective

We have risk management procedures and policies designed to manage our risk. These techniques and policies, however, may

not always be effective, particularly in highly volatile markets. We continue to adapt our risk management techniques, in particular value-at-risk and economic capital, which rely on historical data, to reflect changes in the financial and credit markets. No risk management procedures can anticipate every market development or event, and our risk management procedures and hedging strategies, and the judgments behind them, may not fully mitigate our risk exposure in all markets or against all types of risk.

→ Refer to "Risk management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for information on our risk management.

Our actual results may differ from our estimates and valuations

We make estimates and valuations that affect our reported results, including measuring the fair value of certain assets and liabilities, establishing provisions for contingencies and losses for loans, litigation and regulatory proceedings, accounting for goodwill and intangible asset impairments, evaluating our ability to realize deferred tax assets, valuing equity-based compensation awards, modeling our risk exposure and calculating expenses and liabilities associated with our pension plans. These estimates are based on judgment and available information, and our actual results may differ materially from these estimates.

→ Refer to "Critical accounting estimates" in II – Operating and financial review and "Note 1 – Summary of significant accounting policies" in VI – Consolidated financial statements – Credit Suisse Group for information on these estimates and valuations.

Our estimates and valuations rely on models and processes to predict economic conditions and market or other events that might affect the ability of counterparties to perform their obligations to us or impact the value of assets. To the extent our models and processes become less predictive due to unforeseen market conditions, illiquidity or volatility, our ability to make accurate estimates and valuations could be adversely affected.

Our accounting treatment of off-balance sheet entities may change

We enter into transactions with special purpose entities (SPEs) in our normal course of business, and certain SPEs with which we transact business are not consolidated and their assets and liabilities are off-balance sheet. We may have to exercise significant management judgment in applying relevant accounting consolidation standards, either initially or after the occurrence of certain events that may require us to reassess whether consolidation is required. Accounting standards relating to consolidation, and their interpretation, have changed and may continue to change. If we are required to consolidate an SPE, its assets and liabilities would be recorded on our consolidated balance sheets and we would recognize related gains and losses in our consolidated statements of operations, and this could have an adverse impact on our results of operations and capital and leverage ratios.

→ Refer to "Off-balance sheet" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Balance sheet and off-balance sheet for information on our transactions with and commitments to SPEs.

Legal and regulatory risks

Our exposure to legal liability is significant

We face significant legal risks in our businesses, and the volume and amount of damages claimed in litigation, regulatory proceedings and other adversarial proceedings against financial services firms continue to increase in many of the principal markets in which we operate.

We and our subsidiaries are subject to a number of material legal proceedings, regulatory actions and investigations, and an adverse result in one or more of these proceedings could have a material adverse effect on our operating results for any particular period, depending, in part, upon our results for such period.

→ Refer to "Note 39 – Litigation" in VI – Consolidated financial statements – Credit Suisse Group for information relating to these and other legal and regulatory proceedings involving our investment banking and other businesses.

It is inherently difficult to predict the outcome of many of the legal, regulatory and other adversarial proceedings involving our businesses, particularly those cases in which the matters are brought on behalf of various classes of claimants, seek damages of unspecified or indeterminate amounts or involve novel legal claims. Management is required to establish, increase or release reserves for losses that are probable and reasonably estimable in connection with these matters, all of which requires significant judgment.

→ Refer to "Critical accounting estimates" in II – Operating and financial review and "Note 1 – Summary of significant accounting policies" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Regulatory changes may adversely affect our business and ability to execute our strategic plans

In many areas of our business, we are subject to extensive regulation by governmental agencies, supervisory authorities and self-regulatory organizations in Switzerland, the EU, the UK, the US and other jurisdictions in which we operate. We expect to face increasingly extensive and complex regulation and regulatory scrutiny and possible enforcement. In recent years, costs related to our compliance with these requirements and the penalties and fines sought and imposed on the financial services industry by regulatory authorities have increased significantly. We expect such increased regulation and enforcement to continue to increase our costs, including, but not limited to, costs related to compliance, systems and operations, and to negatively affect our ability to conduct certain types of business. These increased costs and negative impacts on our business could adversely affect our profitability and competitive position. These regulations often serve to limit our activities, including through the application of increased or enhanced capital, leverage and liquidity requirements, the implementation of additional capital surcharges for risks related to operational, litigation, regulatory and similar matters, customer protection and market conduct regulations and direct or indirect restrictions on the businesses in which we may operate or invest. Such limitations can have a negative effect on our business and our ability to implement strategic initiatives. To the extent we are required to divest certain businesses, we could incur losses, as we may be forced to sell such businesses at a discount, which in certain instances could be substantial, as a result of both the constrained

timing of such sales and the possibility that other financial institutions are liquidating similar investments at the same time.

Since 2008, regulators and governments have focused on the reform of the financial services industry, including enhanced capital, leverage and liquidity requirements, changes in compensation practices (including tax levies) and measures to address systemic risk, including ring-fencing certain activities and operations within specific legal entities. These regulations and requirements could require us to reduce assets held in certain subsidiaries or inject capital or other funds into or otherwise change our operations or the structure of our subsidiaries and the Group. Differences in the details and implementation of such regulations may further negatively affect us, as certain requirements are currently not expected to apply equally to all of our competitors or to be implemented uniformly across jurisdictions.

Moreover, as a number of these requirements are currently being finalized, their regulatory impact may further increase in the future and their ultimate impact cannot be predicted at this time. For example, the Basel III reforms are still being finalized and implemented and/or phased in, as applicable. The additional requirements related to minimum regulatory capital, leverage ratios and liquidity measures imposed by Basel III, as implemented in Switzerland, together with more stringent requirements imposed by the Swiss legislation and their application by FINMA, and the related implementing ordinances and actions by our regulators, have contributed to our decision to reduce risk-weighted assets and the size of our balance sheet, and could potentially impact our access to capital markets and increase our funding costs. In addition, the ongoing implementation in the US of the Dodd-Frank Act, including the "Volcker Rule", derivatives regulation, and other regulatory developments, have imposed, and will continue to impose, new regulatory duties on certain of our operations. These requirements have contributed to our decision to exit certain businesses (including a number of our private equity businesses) and may lead us to exit other businesses. Recent CFTC, SEC and Fed rules and proposals have materially increased, or could in the future materially increase, the operating costs, including margin requirements, compliance, information technology and related costs, associated with our derivatives businesses with US persons, while at the same time making it more difficult for us to operate a derivatives business outside the US. Further, in 2014, the Fed adopted a final rule under the Dodd-Frank Act that introduced a new framework for regulation of the US operations of foreign banking organizations such as ours. Certain aspects of the framework are still to be implemented. Implementation is expected to continue to result in us incurring additional costs and to affect the way we conduct our business in the US, including through our US IHC. Further, current and possible future cross-border tax regulation with extraterritorial effect, such as FATCA, and other bilateral or multilateral tax treaties and agreements on the automatic exchange of information in tax matters, impose detailed reporting obligations and increased compliance and systems-related costs on our businesses. In addition, the US tax reform enacted on December 22, 2017 introduced substantial changes to the US tax system, including the lowering of the

corporate tax rate and the introduction of BEAT. Additionally, implementation of CRD V, IFD/IFR, MiFID II and MiFIR and their Swiss counterpart, the Federal Financial Services Act (FinSA), and other reforms may negatively affect our business activities. Whether or not the FinSA, together with supporting or implementing ordinances and regulations, will be deemed equivalent to MiFID II, currently remains uncertain. Swiss banks, including us, may accordingly be limited from participating in certain businesses regulated by MiFID II. Finally, we expect that TLAC requirements, which took effect on January 1, 2019 in Switzerland and the US, as well as in the UK, and are being finalized in many other jurisdictions, as well as new requirements and rules with respect to the internal total loss-absorbing capacity (ITLAC) of G-SIBs and their operating entities, may increase our cost of funding and restrict our ability to deploy capital and liquidity on a global basis as needed once the TLAC and ITLAC requirements are implemented across all relevant jurisdictions.

Our costs of monitoring and complying with frequent and complex changes to sanctions requirements have increased, and there is an increased risk that we will not identify prohibited activities in a timely manner.

→ Refer to "Sanctions" in Regulation and supervision – Recent regulatory developments and proposals – US for further information.

We expect the financial services industry and its members, including us, to continue to be affected by the significant uncertainty over the scope and content of regulatory reform in 2020 and beyond, in particular, uncertainty in relation to the future US regulatory agenda and potential changes in regulation following the UK withdrawal from the EU and the results of European and US national elections. Changes in laws, rules or regulations, or in their interpretation or enforcement, or the implementation of new laws, rules or regulations, may adversely affect our results of operations.

Despite our best efforts to comply with applicable regulations, a number of risks remain, particularly in areas where applicable regulations may be unclear or inconsistent across jurisdictions or where regulators or international bodies, organizations or unions revise their previous guidance or courts overturn previous rulings. Additionally, authorities in many jurisdictions have the power to bring administrative or judicial proceedings against us, which could result in, among other things, suspension or revocation of our licenses, cease and desist orders, fines, civil penalties, criminal penalties or other disciplinary action that could materially adversely affect our results of operations and seriously harm our reputation.

→ Refer to "Regulation and supervision" for a description of our regulatory regime and a summary of some of the significant regulatory and government reform proposals affecting the financial services industry as well as to "Liquidity and funding management" and "Capital management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.

Swiss resolution proceedings and resolution planning requirements may affect our shareholders and creditors

Pursuant to Swiss banking laws, FINMA has broad powers and discretion in the case of resolution proceedings with respect to a

Swiss bank, such as Credit Suisse AG or Credit Suisse (Schweiz) AG, and to a Swiss parent company of a financial group, such as Credit Suisse Group AG. These broad powers include the power to open restructuring proceedings with respect to Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG and, in connection therewith, cancel the outstanding equity of the entity subject to such proceedings, convert such entity's debt instruments and other liabilities into equity and/or cancel such debt instruments and other liabilities, in each case, in whole or in part, and stay (for a maximum of two business days) certain rights under contracts to which such entity is a party, as well as the power to order protective measures, including the deferment of payments, and institute liquidation proceedings with respect to Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG. The scope of such powers and discretion and the legal mechanisms that would be utilized are subject to development and interpretation.

We are currently subject to resolution planning requirements in Switzerland, the US and the UK and may face similar requirements in other jurisdictions. If a resolution plan is determined by the relevant authority to be inadequate, relevant regulations may allow the authority to place limitations on the scope or size of our business in that jurisdiction, require us to hold higher amounts of capital or liquidity, require us to divest assets or subsidiaries or to change our legal structure or business to remove the relevant impediments to resolution.

→ Refer to "Recent regulatory developments and proposals – Switzerland" and "Regulatory framework – Switzerland – Resolution regime" in Regulation and supervision for a description of the current resolution regime under Swiss banking laws as it applies to Credit Suisse AG, Credit Suisse (Schweiz) AG and Credit Suisse Group AG.

Any conversion of our convertible capital instruments would dilute the ownership interests of existing shareholders

Under Swiss regulatory capital rules, we are required to issue a significant amount of contingent capital instruments, certain of which would convert into common equity upon the occurrence of specified triggering events, including our CET1 ratio falling below prescribed thresholds (7% in the case of high-trigger instruments), or a determination by FINMA that conversion is necessary, or that we require extraordinary public sector capital support, to prevent us from becoming insolvent. As of December 31, 2019, we had 2,436.2 million common shares outstanding and we had issued in the aggregate an equivalent of CHF 1.5 billion in principal amount of such contingent convertible capital instruments, and we may issue more such contingent convertible capital instruments in the future. The conversion of some or all of our contingent convertible capital instruments due to the occurrence of any of such triggering events would result in the dilution of the ownership interests of our then existing shareholders, which dilution could be substantial. Additionally, any conversion, or the anticipation of the possibility of a conversion, could depress the market price of our ordinary shares.

→ Refer to "Contingent convertible capital instruments" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management – Capital instruments for further information on the triggering events related to our contingent convertible capital instruments.

Changes in monetary policy are beyond our control and difficult to predict

We are affected by the monetary policies adopted by the central banks and regulatory authorities of Switzerland, the US and other countries. The actions of the SNB and other central banking authorities directly impact our cost of funds for lending, capital raising and investment activities and may impact the value of financial instruments we hold and the competitive and operating environment for the financial services industry. Many central banks, including the Fed, have implemented significant changes to their monetary policy or have experienced significant changes in their management and may implement or experience further changes. We cannot predict whether these changes will have a material adverse effect on us or our operations. In addition, changes in monetary policy may affect the credit quality of our customers. Any changes in monetary policy are beyond our control and difficult to predict.

Legal restrictions on our clients may reduce the demand for our services

We may be materially affected not only by regulations applicable to us as a financial services company, but also by regulations and changes in enforcement practices applicable to our clients. Our business could be affected by, among other things, existing and proposed tax legislation, antitrust and competition policies, corporate governance initiatives and other governmental regulations and policies, and changes in the interpretation or enforcement of existing laws and rules that affect business and the financial markets. For example, focus on tax compliance and changes in enforcement practices could lead to further asset outflows from our private banking businesses.

Competition

We face intense competition

We face intense competition in all financial services markets and for the products and services we offer. Consolidation through mergers, acquisitions, alliances and cooperation, including as a result of financial distress, has increased competitive pressures. Competition is based on many factors, including the products and services offered, pricing, distribution systems, customer service, brand recognition, perceived financial strength and the willingness to use capital to serve client needs. Consolidation has created a number of firms that, like us, have the ability to offer a wide range of products, from loans and deposit taking to brokerage, investment banking and asset management services. Some of these firms may be able to offer a broader range of products than we do, or offer such products at more competitive prices. Current market conditions have resulted in significant changes in the competitive landscape in our industry as many institutions have merged, altered the scope of their business, declared bankruptcy, received government assistance or changed their regulatory status, which will affect how they conduct their business. In addition, current market conditions have had a fundamental impact on client demand for products and services. Some

new competitors in the financial technology sector have sought to target existing segments of our businesses that could be susceptible to disruption by innovative or less regulated business models. Emerging technology may also result in further competition in the markets in which we operate, for example, by allowing e-commerce firms or other companies to provide products and services similar to ours at a lower price or in a more competitive manner in terms of customer convenience. We can give no assurance that our results of operations will not be adversely affected.

Our competitive position could be harmed if our reputation is damaged

In the highly competitive environment arising from globalization and convergence in the financial services industry, a reputation for financial strength and integrity is critical to our performance, including our ability to attract and retain clients and employees. Our reputation could be harmed if our comprehensive procedures and controls fail, or appear to fail, to address conflicts of interest, prevent employee misconduct, produce materially accurate and complete financial and other information or prevent adverse legal or regulatory actions.

→ Refer to "Reputational risk" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management for further information.

We must recruit and retain highly skilled employees

Our performance is largely dependent on the talents and efforts of highly skilled individuals. Competition for qualified employees is intense. We have devoted considerable resources to recruiting, training and compensating employees. Our continued ability to compete effectively in our businesses depends on our ability to attract new employees and to retain and motivate our existing employees. The continued public focus on compensation practices in the financial services industry, and related regulatory changes, may have an adverse impact on our ability to attract and retain highly skilled employees. In particular, limits on the amount and form of executive compensation imposed by regulatory initiatives, including the Swiss Ordinance Against Excessive Compensation with respect to Listed Stock Corporations (Compensation Ordinance) in Switzerland and the CRD IV (as amended by CRD V) in the UK, could potentially have an adverse impact on our ability to retain certain of our most highly skilled employees and hire new qualified employees in certain businesses.

We face competition from new trading technologies

Our businesses face competitive challenges from new trading technologies, including trends towards direct access to automated and electronic markets, and the move to more automated trading platforms. Such technologies and trends may adversely affect our commission and trading revenues, exclude our businesses from certain transaction flows, reduce our participation in the trading markets and the associated access to market information and lead to the creation of new and stronger competitors. We have made, and may continue to be required to make, significant additional expenditures to develop and support new trading systems or otherwise invest in technology to maintain our competitive position.

II – Operating and financial review

Operating environment	54
Credit Suisse	57
Swiss Universal Bank	68
International Wealth Management	75
Asia Pacific	82
Global Markets	89
Investment Banking & Capital Markets	92
Corporate Center	95
Assets under management	98
Critical accounting estimates	101

Operating environment

Global economic growth weakened in 2019. Global equity markets ended the year significantly higher. Major government bond yields were generally lower, and the US dollar had a mixed performance against major currencies in 2019.

Economic environment

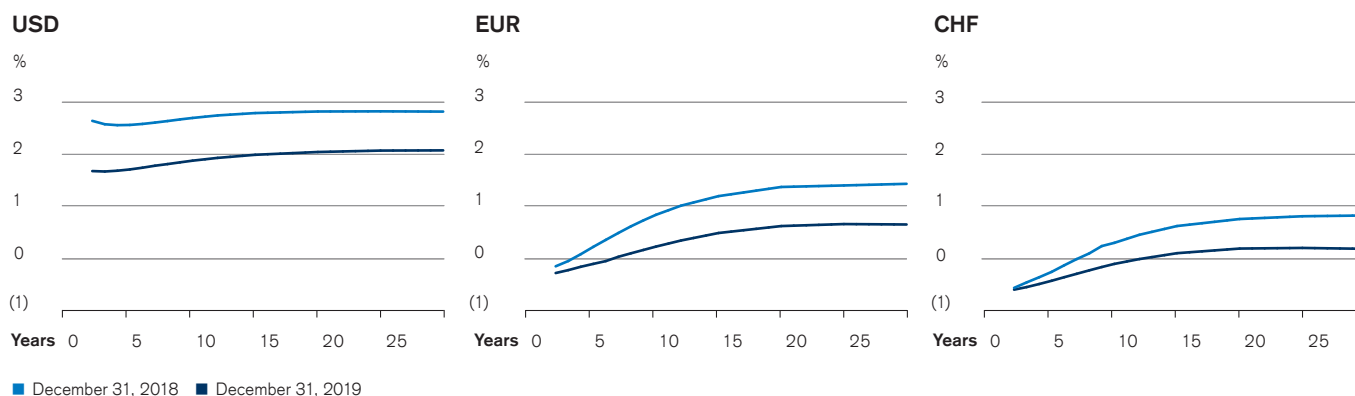
Global economic growth weakened in 2019 as ongoing trade uncertainty weighed on global manufacturing, trade and investment. Labor markets remained robust, with unemployment rates continuing to decrease in major developed economies. In the US, strong household consumption supported a solid rate of GDP growth and core inflation remained close to its 2% target. Growth slowed more sharply in the eurozone, as high exposure to weak external demand weighed on the manufacturing sector and core inflation remained subdued. Chinese economic data suggested an ongoing slowdown, despite policy stimulus throughout the year. Growth also slowed in a range of emerging economies.

Global monetary policy eased in 2019. The US Federal Reserve (Fed) lowered the target range for the federal funds rate three times, finishing the year at 1.50% to 1.75%. The European Central Bank (ECB) restarted asset purchases, introduced new long-term lending operations and cut the deposit rate to negative 0.5%. The Swiss National Bank kept policy rates unchanged. Elsewhere in developed markets, the Bank of Canada, the Bank of England and the Bank of Japan all left interest rates unchanged. In emerging markets, a range of central banks lowered interest rates, including in Mexico, South Korea, India and Brazil.

Global equities moved significantly higher in 2019, despite mounting economic growth concerns throughout the year amid elevated geopolitical uncertainty. Global equities appreciated 27%, driven by a sharp reversal of monetary policy conditions globally, especially by the Fed, which lowered interest rates and improved liquidity conditions. US and Swiss equities outperformed global equities, while Japanese and emerging markets underperformed. European equities were mostly in line with global equities (refer to the charts under “Equity markets”). Among sectors, information technology was the top performer with a 46% increase, followed by industrials and telecom services. The energy sector was the worst performer, followed by utilities, materials and real estate. Equity market volatility, as measured by the Chicago Board Options Exchange Market Volatility Index (VIX), trended lower in 2019, from the initially elevated levels at the beginning of the year. The Credit Suisse Hedge Fund Index increased 9% in 2019.

Yield curves

Yield curves remained at low levels in all major currencies.



Source: Datastream, Credit Suisse

Equity markets

Equity markets closed significantly higher in 2019. Bank stocks underperformed. Average volatility decreased compared to 2018.

Performance by region

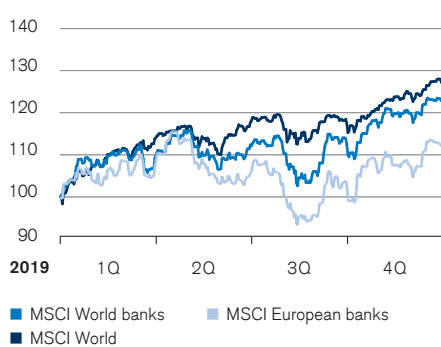
Index (December 31, 2018 = 100)



Source: Datastream, MSCI Barra, Credit Suisse

Performance world banks

Index (December 31, 2018 = 100)



Source: Datastream, MSCI Barra, Credit Suisse

Volatility

%



Source: Datastream, Credit Suisse

Credit spreads

Credit spreads tightened throughout the year.



Source: Bloomberg, Credit Suisse

In fixed income, bonds delivered strong returns as a result of accommodative central bank policies in both developed and emerging markets and weaker economic growth data. In US dollar rates, the spread between the 10-year and 3-month US treasury yields turned positive again in 4Q19. In euro and Swiss franc rates, the yield curve remained low across all maturities (refer to the charts under "Yield curves"). In credit, both global developed and emerging market corporate bonds showed strong positive returns, as did emerging market sovereign bonds (refer to the charts "Credit spreads").

Among major currencies, the US dollar advanced against most other major currencies especially during the first nine months of the year. The decline in the euro was driven by the continued

economic deterioration in the eurozone and political uncertainty in some member countries. The Swiss franc and the Japanese yen were strong against the US dollar and the euro. The British pound showed increased volatility throughout the year, mainly driven by political factors such as the uncertainty around the process of the UK withdrawal from the EU and UK elections but ended 2019 as one of the strongest performers against the US dollar. Emerging market currencies had a mixed performance. Against the US dollar, the Russian ruble was the strongest performer and the Argentine peso declined the most amid rising debt default fears, rampant inflation and domestic recession.

The Credit Suisse Commodity Benchmark ended the year with a strong finish and increased 19% overall. Energy markets, and crude oil in particular, recorded the strongest recovery during 2019 as temporary disruptions and additional oil supply cuts by OPEC helped reduce oversupply concerns. Precious metals also outperformed the benchmark amid low real interest rates globally, which spurred strong investor demand. Prices for industrial metals rose as well but not as much as other segments given that trade disputes and increased tariffs weighed on global manufacturing activity. Agricultural prices ended the year with little change.

Market volumes (growth in % year on year)

2019	Global	Europe
Equity trading volume ¹	(12)	(17)
Announced mergers and acquisitions ²	(2)	(23)
Completed mergers and acquisitions ²	(15)	(14)
Equity underwriting ²	(5)	(25)
Debt underwriting ²	17	4
Syndicated lending – investment grade ²	(10)	–

¹ London Stock Exchange, Borsa Italiana, Deutsche Börse and BME. Global also includes ICE and NASDAQ.

² Dealogic.

Sector environment

World bank stocks performed well overall despite underperforming against global equity markets in 2019. European bank stocks underperformed world bank stocks in particular in the third quarter of 2019. At the end of 2019, world bank stocks traded 23% higher compared to 2018 (refer to the charts under “Equity markets”).

In private banking, the industry has experienced a long-term fundamental growth trend fueled by economic growth and a generally supportive investment environment. Overall, both equity markets and fixed income markets had one of their strongest annual performances in decades despite challenges, including changes to monetary policy by central banks responding to a weaker economic outlook and worry over the threat from greater protectionism among the largest trade partners. In addition, the private banking sector continued to face pressure as it adapts to structural and regulatory changes while pursuing new opportunities and efficiencies arising from digital technology.

In investment banking, global and European equity trading volumes decreased compared to 2018. Announced and completed mergers & acquisitions (M&A) volumes decreased globally and in

Europe. Global and European equity underwriting volumes were lower compared to 2018. Debt underwriting increased globally and in Europe. US fixed income trading volumes increased, mainly driven by an increase in mortgage-backed securities and treasury volumes.

COVID-19

The rapid spread of COVID-19 inside China in February 2020 and across the world in March 2020 led to the introduction of tight government controls and travel bans, as well as the implementation of other measures which quickly closed down activity and increased economic disruption globally. Markets globally were negatively impacted, with the energy, travel and tourism and transportation sectors, as well as companies with close links to China's economy, being the worst affected so far. COVID-19 is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to affect the Group's financial performance, including credit loss estimates, trading revenues, net interest income and potential goodwill assessments. We are closely monitoring the spread of COVID-19 and the potential effects on our operations and business.

Credit Suisse

In 2019, we recorded net income attributable to shareholders of CHF 3,419 million. Return on equity and return on tangible equity were 7.7% and 8.7%, respectively. As of the end of 2019, our CET1 ratio was 12.7%.

Results

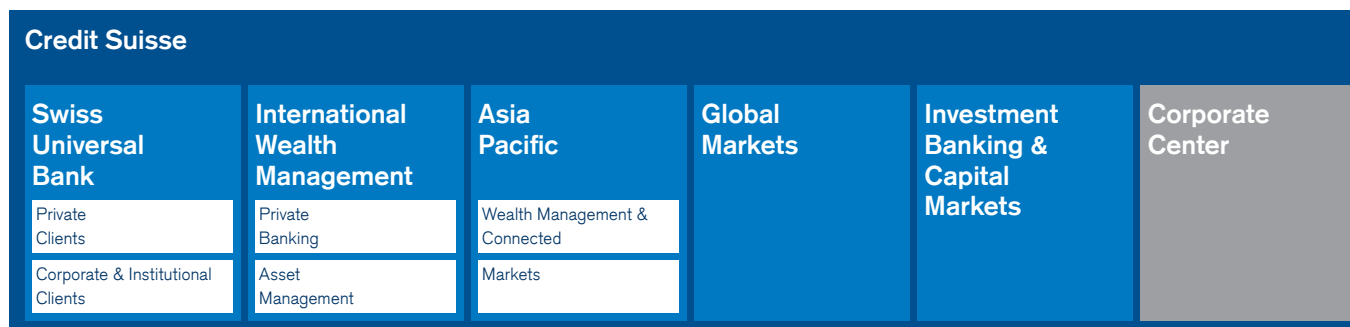
	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net interest income	7,017	7,009	6,557	0	7
Commissions and fees	11,158	11,890	11,817	(6)	1
Trading revenues ¹	1,739	624	1,317	179	(53)
Other revenues	2,570	1,397	1,209	84	16
Net revenues	22,484	20,920	20,900	7	0
Provision for credit losses					
	324	245	210	32	17
Compensation and benefits	10,036	9,620	10,367	4	(7)
General and administrative expenses	6,128	5,798	6,645	6	(13)
Commission expenses	1,276	1,259	1,430	1	(12)
Restructuring expenses	–	626	455	–	38
Total other operating expenses	7,404	7,683	8,530	(4)	(10)
Total operating expenses	17,440	17,303	18,897	1	(8)
Income before taxes	4,720	3,372	1,793	40	88
Income tax expense	1,295	1,361	2,741	(5)	(50)
Net income/(loss)	3,425	2,011	(948)	70	–
Net income/(loss) attributable to noncontrolling interests	6	(13)	35	–	–
Net income/(loss) attributable to shareholders	3,419	2,024	(983)	69	–
Statement of operations metrics (%)					
Return on regulatory capital	10.5	7.4	3.9	–	–
Cost/income ratio	77.6	82.7	90.4	–	–
Effective tax rate	27.4	40.4	152.9	–	–
Earnings per share (CHF)					
Basic earnings/(loss) per share	1.35	0.79	(0.41)	71	–
Diluted earnings/(loss) per share	1.32	0.77	(0.41)	71	–
Return on equity (%)					
Return on equity	7.7	4.7	(2.3)	–	–
Return on tangible equity ²	8.7	5.4	(2.6)	–	–
Book value per share (CHF)					
Book value per share	17.91	17.22	16.43	4	5
Tangible book value per share ²	15.88	15.27	14.48	4	5
Balance sheet statistics (CHF million)					
Total assets	787,295	768,916	796,289	2	(3)
Risk-weighted assets	290,463	284,582	271,680	2	5
Leverage exposure	909,994	881,386	916,525	3	(4)
Number of employees (full-time equivalents)					
Number of employees	47,860	45,680	46,840	5	(2)

¹ Represent revenues on a product basis which are not representative of business results within our business segments as segment results utilize financial instruments across various product types.

² Based on tangible shareholders' equity, a non-GAAP financial measure, which is calculated by deducting goodwill and other intangible assets from total shareholders' equity as presented in our balance sheet. Management believes that these metrics are meaningful as they are measures used and relied upon by industry analysts and investors to assess valuations and capital adequacy.

Credit Suisse reporting structure

Credit Suisse includes the results of our reporting segments and the Corporate Center.



Corporate reporting developments

Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center. Certain activities such as legacy funding costs, legacy litigation provisions and noncontrolling interests without significant economic interest, which were previously part of the Strategic Resolution Unit, have been moved into the Corporate Center and are not reflected in the Asset Resolution Unit. Historical data for the Strategic Resolution Unit prior to January 1, 2019 has not been restated.

Results summary

2019 results

In 2019, Credit Suisse reported net income attributable to shareholders of CHF 3,419 million compared to CHF 2,024 million in 2018. In 2019, Credit Suisse reported income before taxes of CHF 4,720 million compared to CHF 3,372 million in 2018. The 2019 results reflected a 7% increase in net revenues and stable total operating expenses. Total operating expenses in 2019 included net litigation provisions of CHF 623 million, mainly in connection with mortgage-related matters. The 2018 results reflected CHF 626 million of restructuring expenses.

2018 results

In 2018, Credit Suisse reported net income attributable to shareholders of CHF 2,024 million compared to a net loss attributable to shareholders of CHF 983 million in 2017. The 2017 results included income tax expenses of CHF 2,741 million, mainly reflecting the re-assessment of deferred tax assets with an associated tax charge of CHF 2.3 billion, primarily resulting from a reduction in the US federal corporate tax rate following the enactment of the Tax Cuts and Jobs Act in the US during the fourth quarter of 2017. In 2018, Credit Suisse reported income before taxes of CHF 3,372 million compared to CHF 1,793 million in 2017.

2019 results details

Net revenues

Compared to 2018, net revenues of CHF 22,484 million increased 7%, primarily reflecting higher net revenues in Global Markets, International Wealth Management and Swiss Universal Bank, partially offset by lower net revenues in Investment Banking & Capital Markets. The increase in net revenues in Global Markets was due to increases across fixed income and equity trading, with particular strength in its International Trading Solutions (ITS) franchise as Global Markets continued to focus on its institutional and wealth management clients. The increase in net revenues in International Wealth Management was mainly driven by higher other revenues including a SIX Group AG (SIX) equity investment revaluation gain (as described below), a gain related to the transfer of the Credit Suisse InvestLab AG (InvestLab) fund platform (as described below) and gains on the sale of real estate. The increase in net revenues in Swiss Universal Bank was mainly due to an increase in other revenues, primarily reflecting a SIX equity investment revaluation gain, gains on the sale of real estate, mainly reflected in Private Clients, and a gain related to the transfer of the InvestLab fund platform in Corporate & Institutional Clients. The decrease in net revenues in Investment Banking & Capital Markets was primarily driven by lower revenues from completed M&A transactions and a slowdown in leveraged finance activity across the market.

2019 included negative net revenues of CHF 431 million in the Corporate Center, which beginning in 2019 included the impact of the Asset Resolution Unit.

Provision for credit losses

In 2019, we recorded provision for credit losses of CHF 324 million, primarily reflecting provisions of CHF 110 million in Swiss Universal Bank, CHF 59 million in Investment Banking & Capital Markets, CHF 52 million in Global Markets, CHF 49 million in International Wealth Management and CHF 46 million in Asia Pacific.

Overview of Results

in / end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Corporate Center ¹	Strategic Resolution Unit ¹	Credit Suisse
2019 (CHF million)								
Net revenues	6,020	5,887	3,590	5,752	1,666	(431)	–	22,484
Provision for credit losses	110	49	46	52	59	8	–	324
Compensation and benefits	1,926	2,366	1,570	2,472	1,235	467	–	10,036
Total other operating expenses	1,287	1,334	1,072	2,272	534	905	–	7,404
of which general and administrative expenses	1,068	1,110	836	1,758	517	839	–	6,128
Total operating expenses	3,213	3,700	2,642	4,744	1,769	1,372	–	17,440
Income/(loss) before taxes	2,697	2,138	902	956	(162)	(1,811)	–	4,720
Return on regulatory capital	20.7	34.9	16.1	7.4	(4.5)	–	–	10.5
Cost/income ratio	53.4	62.9	73.6	82.5	106.2	–	–	77.6
Total assets	232,729	93,059	107,660	214,019	17,819	122,009	–	787,295
Goodwill	607	1,494	1,476	457	629	0	–	4,663
Risk-weighted assets	78,342	43,788	36,628	56,777	23,559	51,369	–	290,463
Leverage exposure	264,987	100,664	115,442	257,407	42,590	128,904	–	909,994
2018 (CHF million)								
Net revenues	5,564	5,414	3,393	4,980	2,177	100	(708)	20,920
Provision for credit losses	126	35	35	24	24	0	1	245
Compensation and benefits	1,887	2,303	1,503	2,296	1,249	128	254	9,620
Total other operating expenses	1,426	1,371	1,191	2,506	560	211	418	7,683
of which general and administrative expenses	1,097	1,029	887	1,773	467	160	385	5,798
of which restructuring expenses	101	115	61	242	84	2	21	626
Total operating expenses	3,313	3,674	2,694	4,802	1,809	339	672	17,303
Income/(loss) before taxes	2,125	1,705	664	154	344	(239)	(1,381)	3,372
Return on regulatory capital	16.8	30.7	12.0	1.2	10.9	–	–	7.4
Cost/income ratio	59.5	67.9	79.4	96.4	83.1	–	–	82.7
Total assets	224,301	91,835	99,809	211,530	16,156	104,411	20,874	768,916
Goodwill	615	1,544	1,506	463	638	0	0	4,766
Risk-weighted assets	76,475	40,116	37,156	59,016	24,190	29,703	17,926	284,582
Leverage exposure	255,480	98,556	106,375	245,664	40,485	105,247	29,579	881,386
2017 (CHF million)								
Net revenues	5,396	5,111	3,504	5,551	2,139	85	(886)	20,900
Provision for credit losses	75	27	15	31	30	0	32	210
Compensation and benefits	1,957	2,278	1,602	2,532	1,268	398	332	10,367
Total other operating expenses	1,599	1,455	1,158	2,538	472	423	885	8,530
of which general and administrative expenses	1,251	1,141	831	1,839	423	364	796	6,645
of which restructuring expenses	59	70	63	150	42	14	57	455
Total operating expenses	3,556	3,733	2,760	5,070	1,740	821	1,217	18,897
Income/(loss) before taxes	1,765	1,351	729	450	369	(736)	(2,135)	1,793
Return on regulatory capital	13.7	25.8	13.8	3.2	13.7	–	–	3.9
Cost/income ratio	65.9	73.0	78.8	91.3	81.3	–	–	90.4
Total assets	228,857	94,753	96,497	242,159	20,803	67,591	45,629	796,289
Goodwill	610	1,544	1,496	459	633	0	0	4,742
Risk-weighted assets	65,572	38,256	31,474	58,858	20,058	23,849	33,613	271,680
Leverage exposure	257,054	99,267	105,585	283,809	43,842	67,034	59,934	916,525

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

Total operating expenses

We reported total operating expenses of CHF 17,440 million in 2019, stable compared to 2018. Compensation and benefits increased 4%, mainly due to higher salaries and variable compensation, and general and administrative expenses increased 6%, primarily due to increased net litigation provisions of CHF 623 million, mainly in connection with mortgage-related matters recorded in the Corporate Center, increases in IT, machinery and equipment expenses and increased expenses related to real estate disposals. These increases were offset by restructuring expenses of CHF 626 million incurred in 2018.

Income tax expense

In 2019, we recorded income tax expense of CHF 1,295 million compared to CHF 1,361 million in 2018. The Credit Suisse effective tax rate was 27.4% in 2019, compared to 40.4% in 2018. The effective tax rate for 2019 mainly reflected the impact of the geographical mix of results, non-deductible funding costs, the US base erosion and anti-abuse tax (BEAT) impact and the annual re-assessment of deferred taxes, partially offset by lower taxed income. Overall, net deferred tax assets decreased CHF 629 million to CHF 3,876 million during 2019, mainly driven by earnings and the annual re-assessment of deferred taxes.

The US tax reform enacted in December 2017 introduced the BEAT tax regime, effective as of January 1, 2018. Based on the current analysis of the BEAT tax regime, after the issuance of the final regulations issued by the US Department of Treasury on December 2, 2019, Credit Suisse considers it as more likely than not that the Group will remain subject to this regime for 2019, though certain interpretive uncertainties remain. On the basis of the final regulations, the BEAT provision recorded for the tax year 2019 amounts to CHF 165 million. Therefore, BEAT had an impact on the 2019 effective tax rate for the Group of approximately 3.5 percentage points. The BEAT provision for the tax year 2018 remained unchanged.

In addition, the US tax reform introduced interest expense limitation provisions, which resulted in the deferral of interest expense deductions. As of December 31, 2019, a deferred tax valuation allowance of CHF 61 million has been recorded with regard to the deferral of interest expense, since Credit Suisse concluded that it is more likely than not that this deferred asset will not be utilized.

Prospectively, additional tax regulations of the US tax reform may also impact Credit Suisse.

→ Refer to "Note 28 – Tax" in VI – Consolidated financial statements – Credit Suisse Group for further information.

2018 results details

Net revenues

Compared to 2017, net revenues of CHF 20,920 million were stable, primarily reflecting higher net revenues in International

Wealth Management and Swiss Universal Bank and lower negative net revenues in the Strategic Resolution Unit, partially offset by lower net revenues in Global Markets and Asia Pacific. The increase in net revenues in International Wealth Management reflected higher revenues across all revenue categories. The increase in net revenues in Swiss Universal Bank was mainly due to higher recurring commissions and fees, an increase in other revenues, reflecting a gain on the sale of its investment in Euroclear and gains on the sale of real estate, and slightly higher net interest income. The decrease in negative net revenues in the Strategic Resolution Unit was primarily driven by lower overall funding costs and lower exit costs, partially offset by a reduction in fee-based revenues as a result of business exits and higher negative valuation adjustments. The decrease in net revenues in Global Markets primarily reflected lower results across fixed income trading and underwriting and reduced cash equities revenues due to less favorable market conditions, partially offset by increased ITS performance due to substantially higher equity derivatives revenues. The decrease in net revenues in Asia Pacific was driven by lower revenues in its Markets business across all revenue categories.

Provision for credit losses

In 2018, we recorded provision for credit losses of CHF 245 million, primarily reflecting provisions of CHF 126 million in Swiss Universal Bank, CHF 35 million in International Wealth Management and CHF 35 million in Asia Pacific.

Total operating expenses

We reported total operating expenses of CHF 17,303 million in 2018, a decrease of 8% compared to 2017, primarily due to a 7% decrease in compensation and benefits and a 13% decrease in general and administrative expenses. The decrease in compensation and benefits was mainly due to lower salaries and variable compensation. The decrease in general and administrative expenses was primarily due to lower professional services and lower litigation provisions.

Income tax expense

In 2018, we recorded income tax expense of CHF 1,361 million. The Credit Suisse effective tax rate was 40.4% in 2018, compared to 152.9% in 2017. The effective tax rate for 2018 mainly reflected the impact of the geographical mix of results, non-deductible funding costs and tax on own credit gains. Overall, net deferred tax assets decreased CHF 623 million to CHF 4,505 million during 2018, mainly driven by earnings.

Regulatory capital

As of the end of 2019, our Bank for International Settlements (BIS) common equity tier 1 (CET1) ratio was 12.7% and our risk-weighted assets were CHF 290.5 billion.

→ Refer to "Capital management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for further information.

Results by business activity

							2019
in	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Corporate Center ¹	Credit Suisse
Related to private banking (CHF million)							
Net revenues	3,270	4,268	1,797	–	–	–	9,335
of which net interest income	1,684	1,509	671	–	–	–	3,864
of which recurring	826	1,213	418	–	–	–	2,457
of which transaction-based	392	1,174	608	–	–	–	2,174
Provision for credit losses	46	48	2	–	–	–	96
Total operating expenses	1,849	2,555	1,082	–	–	–	5,486
Income before taxes	1,375	1,665	713	–	–	–	3,753
Related to corporate & institutional banking (CHF million)							
Net revenues	2,750	–	–	–	–	–	2,750
of which net interest income	1,200	–	–	–	–	–	1,200
of which recurring	663	–	–	–	–	–	663
of which transaction-based	688	–	–	–	–	–	688
Provision for credit losses	64	–	–	–	–	–	64
Total operating expenses	1,364	–	–	–	–	–	1,364
Income before taxes	1,322	–	–	–	–	–	1,322
Related to investment banking (CHF million)							
Net revenues	–	–	1,793	5,752	1,666	–	9,211
of which fixed income sales and trading	–	–	271	3,493	–	–	3,764
of which equity sales and trading	–	–	828	1,855	–	–	2,683
of which underwriting and advisory	–	–	694 ²	764	1,763	–	3,221
Provision for credit losses	–	–	44	52	59	–	155
Total operating expenses	–	–	1,560	4,744	1,769	–	8,073
Income/(loss) before taxes	–	–	189	956	(162)	–	983
Related to asset management (CHF million)							
Net revenues	–	1,619	–	–	–	–	1,619
Provision for credit losses	–	1	–	–	–	–	1
Total operating expenses	–	1,145	–	–	–	–	1,145
Income before taxes	–	473	–	–	–	–	473
Related to corporate center (CHF million)							
Net revenues	–	–	–	–	–	(431)	(431)
Provision for credit losses	–	–	–	–	–	8	8
Total operating expenses	–	–	–	–	–	1,372	1,372
Loss before taxes	–	–	–	–	–	(1,811)	(1,811)
Total (CHF million)							
Net revenues	6,020	5,887	3,590	5,752	1,666	(431)	22,484
Provision for credit losses	110	49	46	52	59	8	324
Total operating expenses	3,213	3,700	2,642	4,744	1,769	1,372	17,440
Income/(loss) before taxes	2,697	2,138	902	956	(162)	(1,811)	4,720

Certain transaction-based revenues in Swiss Universal Bank and certain fixed income and equity sales and trading revenues in Asia Pacific and Global Markets relate to the Group's global advisory and underwriting business. Refer to "Global advisory and underwriting revenues" in Investment Banking & Capital Markets for further information.

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

² Reflects certain financing revenues in Asia Pacific that are not included in the Group's global advisory and underwriting revenues.

Employees and other headcount

In 2019, as part of a review of headcount allocation keys, we recalibrated the divisional allocations for corporate function services, mainly relating to the wind-down of the Strategic Resolution Unit and changes in the utilization of corporate function services by the divisions. Prior period headcount allocations have not been restated.

As of December 31, 2019, we had 47,860 employees worldwide, of which 16,140 were in Switzerland and 31,720 were abroad.

The number of employees increased by 2,180 compared to the end of 2018. The increase primarily reflected the increases in Global Markets, Asia Pacific, Swiss Universal Bank and International Wealth Management, partially offset by a decrease in the Corporate Center. The number of outsourced roles, contractors and consultants decreased by 490 compared to the end of 2018.

Employees and other headcount

end of	2019	2018
Employees		
Swiss Universal Bank	12,350	11,950
International Wealth Management	10,490	10,210
Asia Pacific	7,980	7,440
Global Markets	12,610	11,350
Investment Banking & Capital Markets	3,090	3,100
Strategic Resolution Unit	–	1,320
Corporate Center	1,340	310
Total employees	47,860	45,680
of which Switzerland	16,140	15,840
of which all other regions	31,720	29,840
Other headcount		
Outsourced roles, contractors and consultants	13,320	13,810
Total employees and other headcount	61,180	59,490

Based on full-time equivalents.

Other information

Format of presentation

In managing our business, revenues are evaluated in the aggregate, including an assessment of trading gains and losses and the related interest income and expense from financing and hedging positions. For this reason, specific individual revenue categories in isolation may not be indicative of performance. Certain reclassifications have been made to prior periods to conform to the current presentation.

Accounting developments

As a normal part of our business, we are exposed to credit risk through our lending relationships, commitments and letters of credit as well as counterparty risk on derivatives, foreign exchange and other transactions. In June 2016, the Financial

Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-13, "Measurement of Credit Losses on Financial Instruments" (ASU 2016-13), creating Accounting Standards Codification (ASC) Topic 326 – Financial Instruments – Credit Losses, which requires the measurement of all expected credit losses for financial assets held at the reporting date over the remaining contractual life (considering the effect of prepayments) based on historical experience, current conditions and reasonable and supportable forecasts. The Group adopted ASU 2016-13 and its subsequent amendments on January 1, 2020 and will incorporate forward-looking information and macroeconomic factors into its credit loss estimates applying the modified retrospective approach, which resulted in a decrease in retained earnings of less than CHF 0.2 billion, with no significant impact on regulatory capital.

→ Refer to "Note 2 – Recently issued accounting standards" in VI – Consolidated financial statements – Credit Suisse Group for further information.

The spread of COVID-19 is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to affect our financial performance, including credit loss estimates, trading revenues, net interest income and potential goodwill assessments.

→ Refer to "Risk factors" in I – Information on the company for further information.

Return on regulatory capital

Credit Suisse measures firm-wide returns against total shareholders' equity and tangible shareholders' equity, a non-GAAP financial measure, also known as tangible book value. In addition, it also measures the efficiency of the firm and its divisions with regard to the usage of capital as determined by the minimum requirements set by regulators. This regulatory capital is calculated as the worst of 10% of risk-weighted assets and 3.5% of leverage exposure. Return on regulatory capital, a non-GAAP financial measure, is calculated using income/(loss) after tax and assumes a tax rate of 30% and capital allocated based on the worst of 10% of average risk-weighted assets and 3.5% of average leverage exposure. These percentages are used in the calculation in order to reflect the 2019 fully phased-in Swiss regulatory minimum requirements for Basel III CET1 capital and leverage ratios. For Global Markets and Investment Banking & Capital Markets, return on regulatory capital is based on US dollar denominated numbers. Adjusted return on regulatory capital is calculated using adjusted results, applying the same methodology used to calculate return on regulatory capital.

End of / in 2019 (CHF billion)

Shareholders' equity		43.6
Return on equity	7.7%	
Tangible shareholders' equity		38.7
Return on tangible equity	8.7%	4.9
Regulatory capital		31.9
Return on regulatory capital	10.5%	6.8

Dividend proposal

Our Board of Directors will propose to the shareholders at the Annual General Meeting on April 30, 2020 a cash distribution of CHF 0.2776 per share for the financial year 2019. Fifty percent of the distribution will be paid out of capital contribution reserves, free of Swiss withholding tax and will not be subject to income tax for Swiss resident individuals, and 50% will be paid out of retained earnings, net of 35% Swiss withholding tax.

Presentation currency

In February 2019, as part of the publication of our fourth quarter of 2018 results, the Group announced that it was considering changing its reporting currency from Swiss francs to US dollars. Following the completion of the review of this potential change, we announced in October 2019 that the Board of Directors decided that the Group will continue to report its financial results in Swiss francs.

As also announced in October 2019, the Board of Directors concluded it would be preferable to align capital usage, as far as possible, to the predominant currency in which relevant risks originate and therefore decided that the calculation of the Group's risk-weighted assets relating to operational risk should be in US dollars rather than Swiss francs. This change was approved by the Swiss Financial Market Supervisory Authority FINMA and was implemented in the fourth quarter of 2019, increasing the proportion of the Group's CET1 capital that is hedged into US dollars. In addition to better aligning the Group's capital usage to the underlying currency of its risks, this change resulted in an increase of CHF 61 million in the Group's net interest income in 2019.

Credit Suisse InvestLab AG

In September 2019, we completed the first closing of the transfer announced in June 2019, which combined our open architecture investment fund platform, InvestLab, with Allfunds Group. The transaction included the transfer of the InvestLab legal entity and its related employees and service agreements. Net revenues in 2019 included CHF 327 million from this first closing as reflected in the Swiss Universal Bank, International Wealth Management and Asia Pacific divisions. The subsequent transfer of the related distribution agreements is expected to be completed in the first quarter of 2020.

→ Refer to "Note 3 – Business developments, significant shareholders and subsequent events" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Equity investment in SIX Group AG

In December 2019, we completed a review of the accounting treatment of the shares that we hold in SIX Group AG and have elected fair value accounting under accounting principles generally accepted in the US (US GAAP) in respect of this equity

investment. This resulted in a gain before taxes of CHF 498 million, of which CHF 306 million and CHF 192 million were recognized in the divisional results of Swiss Universal Bank and International Wealth Management, respectively, in accordance with historical practice.

Replacement of interbank offered rates

A major structural change in global financial markets is in progress with respect to the replacement of interbank offered rate (IBOR) benchmarks. There is significant international and regulatory pressure to replace certain IBOR benchmarks with alternative reference rates (ARRs) by the end of 2021. There are significant risks associated with the transition, including financial, legal, operational and conduct risks and the risk of an untimely transition due to a lack of client or market readiness. However, we believe certain opportunities related to the transition also exist in the areas of product innovation and development, business growth and strategy and client communication and engagement.

Financial industry groups comprising public and private sector representatives across jurisdictions (including the National Working Group on Swiss Franc Reference Rates, the US Alternative Reference Rates Committee and the Euro Risk Free Rate Working Group) have identified recommended replacement benchmarks, established milestones for the transition and created forums for industry participants to provide feedback and discuss best practices. In addition, trade organizations, such as the International Swaps and Derivatives Association (ISDA), the Loan Market Association (LMA) and the Loan Syndications and Trading Association (LSTA), have begun to define contractual standards to allow new products to incorporate and reference the new ARR benchmarks.

Credit Suisse has a significant level of its liabilities and assets linked to IBOR indices across businesses that require transition to ARRs. For a majority of our exposure for contracts extending past 2021, we expect an orderly transition, based on market participant driven protocols. However, for certain clients, the transitioning of contracts will be more complex, particularly where there is no industry-wide protocol or similar mechanism, and related businesses will have a larger exposure to associated risks. In response, we have mobilized an IBOR transition program, co-sponsored by the Chief Financial Officer and the Chief Risk Officer at the Executive Board level, to coordinate transition readiness on a firm-wide basis. Our transition approach is organized across five key areas:

- Product Development & Industry Engagement;
- Risk Management & Mitigation;
- Operational Readiness & Resiliency;
- Legal Contract Assessment & Repapering; and
- Strategic Transition Planning & Communication.

We continue to partner with our clients and other market participants to support this transition. The businesses are developing detailed product and client roadmaps to prepare for the transition and Credit Suisse has developed specific employee training programs as well as other internal and external sources of information on the various challenges and opportunities that the replacement of IBOR benchmarks presents. In addition, our transition efforts include issuing debt linked to the Secured Overnight Financing Rate (SOFR), the alternative rate to the US dollar London Interbank Offered Rate selected by the US Alternative Reference Rates Committee, as well as rate resets based on Swiss Average Rate Overnight (SARON). We have also been actively involved in trading interest rate derivatives linked to recommended alternative reference rates in the major currencies.

Withdrawal of the UK from the EU

Following extensive negotiations with the EU on the terms of its withdrawal, the UK ceased to be a member of the EU on January 31, 2020. Under the terms of the withdrawal agreement, the UK will continue to be bound by EU laws for a transitional period, but it may be challenging to agree the details of new arrangements before this period ends on December 31, 2020.

Our UK investment banking entities, Credit Suisse International and Credit Suisse Securities Europe Limited, provide a comprehensive range of investment banking services to clients through both the London operations and a number of different branches across the European Union and, following the UK withdrawal, need to transfer, subject to certain exceptions, their EU clients and EU venue-facing businesses to entities in the EU. In order to provide continued services to EU clients and access to EU markets, we are leveraging our existing legal entity network and, where necessary, transferring our EU clients and EU venue-facing broker-dealer business to Group entities incorporated in Spain, Credit Suisse Securities Sociedad de Valores S.A., and Germany, Credit Suisse (Deutschland) AG. We are also transferring our EU client lending business activities, where required, to Credit Suisse (Deutschland) AG. Businesses in the UK entities' EU branches have been transferred to newly set up branches of Credit Suisse Securities Sociedad de Valores S.A.

Our UK wealth management entity, Credit Suisse (UK) Limited, provides a comprehensive range of wealth management services to clients through its London operations and, following the UK withdrawal, needs to cease the provision of such services to its EU clients. In order to provide continued services to such clients we are, where necessary, transferring them to other existing entities in our wealth management entity network in the EU.

There is a risk of a potentially disruptive end to the transition period. We are focused on ensuring operational readiness in our EU entities and completing the transition of impacted operations and client migration activities throughout 2020 before the end of the transition period.

Compensation and benefits

Compensation and benefits for a given year reflect the strength and breadth of the business results and staffing levels and include fixed components, such as salaries, benefits and the amortization of share-based and other deferred compensation from prior-year awards, and a discretionary variable component. The variable component reflects the performance-based variable compensation for the current year. The portion of the performance-based compensation for the current year deferred through share-based and other awards is expensed in future periods and is subject to vesting and other conditions.

Our shareholders' equity reflects the effect of share-based compensation. Share-based compensation expense (which is generally based on fair value at the time of grant) reduces equity; however, the recognition of the obligation to deliver the shares increases equity by a corresponding amount. Equity is generally unaffected by the granting and vesting of share-based awards and by the settlement of these awards through the issuance of shares from approved conditional capital. The Group may issue shares from conditional capital to meet its obligations to deliver share-based compensation awards. If Credit Suisse purchases shares from the market to meet its obligation to employees, these purchased treasury shares reduce equity by the amount of the purchase price.

- Refer to "Group compensation" in V – Compensation for further information.
- Refer to "Consolidated statements of changes in equity" and "Note 29 – Employee deferred compensation" in VI – Consolidated financial statements – Credit Suisse Group for further information.
- Refer to "Tax benefits associated with share-based compensation" in Note 28 – Tax in VI – Consolidated financial statements – Credit Suisse Group for further information.

Allocations and funding

Revenue sharing

Responsibility for each product is allocated to a specific segment, which records all related revenues and expenses. Revenue-sharing and service level agreements govern the compensation received by one segment for generating revenue or providing services on behalf of another. These agreements are negotiated periodically by the relevant segments on a product-by-product basis. The aim of revenue-sharing and service level agreements is to reflect the pricing structure of unrelated third-party transactions.

Cost allocation

Corporate services and business support, including in finance, operations, human resources, legal, compliance, risk management and IT, are provided by corporate functions, and the related costs are allocated to the segments and the Corporate Center based on their respective requirements and other relevant measures.

Funding

We centrally manage our funding activities. New securities for funding and capital purposes are issued primarily by the Bank.

- Refer to "Note 4 – Segment information" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Fair valuations

Fair value can be a relevant measurement for financial instruments when it aligns the accounting for these instruments with how we manage our business. The levels of the fair value hierarchy as defined by the relevant accounting guidance are not a measurement of economic risk, but rather an indication of the observability of prices or valuation inputs.

→ Refer to "Note 1 – Summary of significant accounting policies" and "Note 35 – Financial instruments" in VI – Consolidated financial statements – Credit Suisse Group for further information.

The fair value of the majority of the Group's financial instruments is based on quoted prices in active markets (level 1) or observable inputs (level 2). These instruments include government and agency securities, certain short-term borrowings, most investment grade corporate debt, certain high yield debt securities, exchange-traded and certain over-the-counter (OTC) derivative instruments and most listed equity securities.

In addition, the Group holds financial instruments for which no prices are available and for which have few or no observable inputs (level 3). For these instruments, the determination of fair value requires subjective assessment and judgment depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument. In such circumstances, valuation is determined based on management's own judgments about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). These instruments include certain OTC derivatives, including interest rate, foreign exchange, equity and credit derivatives, certain corporate equity-linked securities, mortgage-related securities, private equity investments, certain loans and credit products, including leveraged finance, certain syndicated loans and certain high yield bonds.

Models were used to value financial instruments for which no prices are available and which have little or no observable inputs (level 3). Models are developed internally and are reviewed by functions independent of the front office to ensure they are appropriate for current market conditions. The models require subjective assessment and varying degrees of judgment depending on liquidity, concentration, pricing assumptions and risks affecting the specific instrument. The models consider observable and unobservable parameters in calculating the value of these products, including certain indices relating to these products.

Consideration of these indices is more significant in periods of lower market activity.

As of the end of 2019, 39% and 25% of our total assets and total liabilities, respectively, were measured at fair value.

The majority of our level 3 assets are recorded in our investment banking businesses. Total assets at fair value recorded as level 3 instruments decreased CHF 0.1 billion to CHF 16.2 billion as of the end of 2019, primarily reflecting net settlements, mainly in loans and trading assets, and transfers out, mainly in trading assets, partially offset by transfer in, mainly in loans and loans held-for-sale. These decreases were partially offset by net realized/unrealized gains, mainly in trading assets.

As of the end of 2019, these assets comprised 2% of total assets and 5% of total assets measured at fair value, compared to 2% and 6%, respectively, as of the end of 2018.

We believe that the range of any valuation uncertainty, in the aggregate, would not be material to our financial condition; however, it may be material to our operating results for any particular period, depending, in part, upon the operating results for such period.

Reconciliation of adjusted results

Adjusted results referred to in this document are non-GAAP financial measures that exclude certain items included in our reported results. During the implementation of our strategy, it was important to measure the progress achieved by our underlying business performance. Management believes that adjusted results provide a useful presentation of our operating results for purposes of assessing our Group and divisional performance consistently over time, on a basis that excludes items that management does not consider representative of our underlying performance. Provided below is a reconciliation of our adjusted results to the most directly comparable US GAAP measures. The Group completed its three-year restructuring plan outlined in 2015 at the end of 2018. Any subsequent expenses incurred such as severance payments or charges in relation to the termination of real estate contracts initiated after 2018 are recorded as ordinary compensation or other expenses in our reported results and are no longer excluded from adjusted results.

Reconciliation of adjusted results

in	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Corporate Center ¹	Strategic Resolution Unit ¹	Credit Suisse
2019 (CHF million)								
Net revenues	6,020	5,887	3,590	5,752	1,666	(431)	–	22,484
Real estate (gains)/losses	(223)	(45)	0	(7)	0	24	–	(251)
(Gains)/losses on business sales	0	0	0	0	0	2	–	2
Net revenues adjusted	5,797	5,842	3,590	5,745	1,666	(405)	–	22,235
Provision for credit losses	110	49	46	52	59	8	–	324
Total operating expenses	3,213	3,700	2,642	4,744	1,769	1,372	–	17,440
Major litigation provisions	(3)	30	0	0	0	(416)	–	(389)
Expenses related to real estate disposals	(12)	(21)	0	(45)	(30)	0	–	(108)
Total operating expenses adjusted	3,198	3,709	2,642	4,699	1,739	956	–	16,943
Income/(loss) before taxes	2,697	2,138	902	956	(162)	(1,811)	–	4,720
Total adjustments	(208)	(54)	0	38	30	442	–	248
Adjusted income/(loss) before taxes	2,489	2,084	902	994	(132)	(1,369)	–	4,968
Adjusted return on regulatory capital (%)	19.1	34.0	16.1	7.7	(3.6)	–	–	11.0
2018 (CHF million)								
Net revenues	5,564	5,414	3,393	4,980	2,177	100	(708)	20,920
Real estate gains	(21)	(2)	0	0	0	(4)	(1)	(28)
(Gains)/losses on business sales	(37)	(55)	0	0	0	21	0	(71)
Net revenues adjusted	5,506	5,357	3,393	4,980	2,177	117	(709)	20,821
Provision for credit losses	126	35	35	24	24	0	1	245
Total operating expenses	3,313	3,674	2,694	4,802	1,809	339	672	17,303
Restructuring expenses	(101)	(115)	(61)	(242)	(84)	(2)	(21)	(626)
Major litigation provisions	(37)	0	(79)	(10)	(1)	0	(117)	(244)
Expenses related to business sales	0	(47)	0	0	0	0	(4)	(51)
Total operating expenses adjusted	3,175	3,512	2,554	4,550	1,724	337	530	16,382
Income/(loss) before taxes	2,125	1,705	664	154	344	(239)	(1,381)	3,372
Total adjustments	80	105	140	252	85	19	141	822
Adjusted income/(loss) before taxes	2,205	1,810	804	406	429	(220)	(1,240)	4,194
Adjusted return on regulatory capital (%)	17.4	32.6	14.5	3.1	13.6	–	–	9.2
2017 (CHF million)								
Net revenues	5,396	5,111	3,504	5,551	2,139	85	(886)	20,900
(Gains)/losses on business sales	0	28	0	0	0	23	(38)	13
Net revenues adjusted	5,396	5,139	3,504	5,551	2,139	108	(924)	20,913
Provision for credit losses	75	27	15	31	30	0	32	210
Total operating expenses	3,556	3,733	2,760	5,070	1,740	821	1,217	18,897
Restructuring expenses	(59)	(70)	(63)	(150)	(42)	(14)	(57)	(455)
Major litigation provisions	(49)	(48)	0	0	0	(127)	(269)	(493)
Expenses related to business sales	0	0	0	(8)	0	0	0	(8)
Total operating expenses adjusted	3,448	3,615	2,697	4,912	1,698	680	891	17,941
Income/(loss) before taxes	1,765	1,351	729	450	369	(736)	(2,135)	1,793
Total adjustments	108	146	63	158	42	164	288	969
Adjusted income/(loss) before taxes	1,873	1,497	792	608	411	(572)	(1,847)	2,762
Adjusted return on regulatory capital (%)	14.6	28.6	15.0	4.3	15.2	–	–	6.0

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

Group and Bank differences

The business of the Bank is substantially the same as the business of Credit Suisse Group, and substantially all of the Bank's operations are conducted through the Swiss Universal Bank, International Wealth Management, Asia Pacific, Global Markets, Investment Banking & Capital Markets and, until December 31, 2018, the Strategic Resolution Unit segments. Certain Corporate

Center activities of the Group, such as hedging activities relating to share-based compensation awards, are not applicable to the Bank. Certain other assets, liabilities and results of operations, primarily relating to Credit Suisse Services AG (our Swiss service company) and its subsidiary, are managed as part of the activities of the Group's segments. However, they are legally owned by the Group and are not part of the Bank's consolidated financial statements.

→ Refer to "Note 41 – Subsidiary guarantee information" in VI – Consolidated financial statements – Credit Suisse Group for further information on the Bank.

Comparison of consolidated statements of operations

in	Group			Bank		
	2019	2018	2017	2019	2018	2017
Statements of operations (CHF million)						
Net revenues	22,484	20,920	20,900	22,686	20,820	20,965
Provision for credit losses	324	245	210	324	245	210
Total operating expenses	17,440	17,303	18,897	17,969	17,719	19,202
Income before taxes	4,720	3,372	1,793	4,393	2,856	1,553
Income tax expense	1,295	1,361	2,741	1,298	1,134	2,781
Net income/(loss)	3,425	2,011	(948)	3,095	1,722	(1,228)
Net income/(loss) attributable to noncontrolling interests	6	(13)	35	14	(7)	27
Net income/(loss) attributable to shareholders	3,419	2,024	(983)	3,081	1,729	(1,255)

Comparison of consolidated balance sheets

end of	Group		Bank	
	2019	2018	2019	2018
Balance sheet statistics (CHF million)				
Total assets	787,295	768,916	790,459	772,069
Total liabilities	743,581	724,897	743,696	726,075

Dividends from the Bank to the Group

for the financial year	2019	2018	2017	2016	2015
Dividends (CHF million)					
Dividends	10 ¹	10	10	10	10

¹ The Bank's total share capital is fully paid and consisted of 4,399,680,200 registered shares as of December 31, 2019. Dividends are determined in accordance with Swiss law and the Bank's articles of incorporation. Proposal of the Board of Directors to the annual general meeting of the Bank.

Capitalization and indebtedness

end of	Group		Bank	
	2019	2018	2019	2018
Capitalization and indebtedness (CHF million)				
Due to banks	16,744	15,220	16,742	15,220
Customer deposits	383,783	363,925	384,950	365,263
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	27,533	24,623	27,641	24,623
Long-term debt	152,005	154,308	151,000	153,433
Other liabilities	163,516	166,821	163,363	167,536
Total liabilities	743,581	724,897	743,696	726,075
Total equity	43,714	44,019	46,763	45,994
Total capitalization and indebtedness	787,295	768,916	790,459	772,069

BIS capital metrics

end of	Group			Bank
	2019	2018	2019	2018
Capital and risk-weighted assets (CHF million)				
CET1 capital	36,774	35,824	41,933	38,915
Tier 1 capital	49,791	46,040	54,024	48,231
Total eligible capital	53,038	50,239	57,271	52,431
Risk-weighted assets	290,463	284,582	290,843	286,081
Capital ratios (%)				
CET1 ratio	12.7	12.6	14.4	13.6
Tier 1 ratio	17.1	16.2	18.6	16.9
Total capital ratio	18.3	17.7	19.7	18.3

Swiss Universal Bank

In 2019, we reported income before taxes of CHF 2,697 million and net revenues of CHF 6,020 million. Income before taxes increased 27% compared to 2018, mainly reflecting higher net revenues and slightly lower total operating expenses.

Results summary

2019 results

In 2019, income before taxes of CHF 2,697 million increased 27% compared to 2018. Net revenues of CHF 6,020 million increased 8% compared to 2018, mainly due to the increase in other revenues. Higher other revenues primarily reflected a SIX equity investment revaluation gain of CHF 306 million, gains on the sale of real estate of CHF 223 million, mainly reflected in Private Clients, and a gain of CHF 98 million related to the transfer of the InvestLab fund platform in Corporate & Institutional Clients. 2018 included a gain on the sale of our investment in Euroclear of CHF 37 million and gains on the sale of real estate of CHF 21 million. Slightly lower net interest income reflected lower treasury revenues and lower deposit margins on stable average deposit volumes, partially offset by stable loan margins on slightly higher

average loan volumes. Lower recurring commissions and fees were mainly driven by slightly lower security account and custody services fees, slightly lower fees from lending activities and decreased wealth structuring solution fees. Transaction-based revenues were stable, with lower fees from foreign exchange client business and lower revenues from our Swiss investment banking business, offset by higher equity participations income and higher revenues from ITS. Provision for credit losses was CHF 110 million in 2019 on a net loan portfolio of CHF 170.8 billion. Total operating expenses of CHF 3,213 million decreased slightly, primarily driven by restructuring expenses incurred in 2018 and slightly lower general and administrative expenses mainly reflecting lower litigation provisions, partially offset by slightly higher compensation and benefits mainly reflecting higher pension expenses.

Divisional results

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	6,020	5,564	5,396	8	3
Provision for credit losses	110	126	75	(13)	68
Compensation and benefits	1,926	1,887	1,957	2	(4)
General and administrative expenses	1,068	1,097	1,251	(3)	(12)
Commission expenses	219	228	289	(4)	(21)
Restructuring expenses	-	101	59	-	71
Total other operating expenses	1,287	1,426	1,599	(10)	(11)
Total operating expenses	3,213	3,313	3,556	(3)	(7)
Income before taxes	2,697	2,125	1,765	27	20
Statement of operations metrics (%)					
Return on regulatory capital	20.7	16.8	13.7	-	-
Cost/income ratio	53.4	59.5	65.9	-	-
Number of employees and relationship managers					
Number of employees (full-time equivalents)	12,350	11,950	12,600	3	(5)
Number of relationship managers	1,790	1,780	1,840	1	(3)

Divisional results (continued)

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Net revenues (CHF million)					
Private Clients	3,270	2,989	2,897	9	3
Corporate & Institutional Clients	2,750	2,575	2,499	7	3
Net revenues	6,020	5,564	5,396	8	3
Net revenue detail (CHF million)					
Net interest income	2,884	2,946	2,896	(2)	2
Recurring commissions and fees	1,489	1,515	1,446	(2)	5
Transaction-based revenues	1,080	1,096	1,107	(1)	(1)
Other revenues	567	7	(53)	–	–
Net revenues	6,020	5,564	5,396	8	3
Provision for credit losses (CHF million)					
New provisions	173	201	158	(14)	27
Releases of provisions	(63)	(75)	(83)	(16)	(10)
Provision for credit losses	110	126	75	(13)	68
Balance sheet statistics (CHF million)					
Total assets	232,729	224,301	228,857	4	(2)
Net loans	170,772	168,393	165,041	1	2
of which Private Clients	116,158	113,403	111,222	2	2
Risk-weighted assets	78,342	76,475	65,572	2	17
Leverage exposure	264,987	255,480	257,054	4	(1)

Net interest income includes a term spread credit on stable deposit funding and a term spread charge on loans. Recurring commissions and fees includes investment product management, discretionary mandate and other asset management-related fees, fees for general banking products and services and revenues from wealth structuring solutions. Transaction-based revenues arise primarily from brokerage fees, fees from foreign exchange client transactions, trading and sales income, equity participations income and other transaction-based income. Other revenues include fair value gains/(losses) on synthetic securitized loan portfolios and other gains and losses.

2018 results

In 2018, income before taxes of CHF 2,125 million increased 20% compared to 2017. Net revenues of CHF 5,564 million increased slightly compared to 2017, mainly due to higher recurring commissions and fees, the increase in other revenues, reflecting a gain on the sale of our investment in Euroclear of CHF 37 million and gains on the sale of real estate of CHF 21 million, and slightly higher net interest income. Higher recurring commissions and fees were mainly driven by higher wealth structuring solution fees, higher fees from lending activities and increased investment advisory fees. Slightly higher net interest income reflected higher deposit margins on slightly lower average deposit volumes and stable loan margins on stable average loan volumes. Transaction-based revenues were stable. Provision for credit losses was CHF 126 million in 2018 on a net loan portfolio of CHF 168.4 billion. Total operating expenses decreased 7%,

primarily driven by lower professional and contractor services fees, decreased allocated corporate function costs and lower salary expenses, partially offset by higher restructuring expenses, reflecting targeted headcount reductions and charges relating to reductions in office space.

Capital and leverage metrics

As of the end of 2019, we reported risk-weighted assets of CHF 78.3 billion, an increase of CHF 1.9 billion compared to the end of 2018, primarily driven by external model and parameter updates, mainly reflecting the phase-in of the Swiss mortgage multipliers, and movements in risk levels, partially offset by a foreign exchange impact. Leverage exposure of CHF 265.0 billion was CHF 9.5 billion higher compared to the end of 2018, driven by an increase in high-quality liquid assets (HQLA) and business growth.

Reconciliation of adjusted results

in	Private Clients			Corporate & Institutional Clients			Swiss Universal Bank		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Adjusted results (CHF million)									
Net revenues	3,270	2,989	2,897	2,750	2,575	2,499	6,020	5,564	5,396
Real estate gains	(221)	(21)	0	(2)	0	0	(223)	(21)	0
Gains on business sales	0	(19)	0	0	(18)	0	0	(37)	0
Adjusted net revenues	3,049	2,949	2,897	2,748	2,557	2,499	5,797	5,506	5,396
Provision for credit losses	46	30	42	64	96	33	110	126	75
Total operating expenses	1,849	1,899	2,054	1,364	1,414	1,502	3,213	3,313	3,556
Restructuring expenses	–	(66)	(53)	–	(35)	(6)	–	(101)	(59)
Major litigation provisions	0	0	(6)	(3)	(37)	(43)	(3)	(37)	(49)
Expenses related to real estate disposals	(8)	–	–	(4)	–	–	(12)	–	–
Adjusted total operating expenses	1,841	1,833	1,995	1,357	1,342	1,453	3,198	3,175	3,448
Income before taxes	1,375	1,060	801	1,322	1,065	964	2,697	2,125	1,765
Total adjustments	(213)	26	59	5	54	49	(208)	80	108
Adjusted income before taxes	1,162	1,086	860	1,327	1,119	1,013	2,489	2,205	1,873
Adjusted return on regulatory capital (%)	–	–	–	–	–	–	19.1	17.4	14.6

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

Private Clients

2019 results details

Income before taxes of CHF 1,375 million increased 30% compared to 2018, driven by higher net revenues and slightly lower total operating expenses.

Net revenues

In 2019, net revenues of CHF 3,270 million increased 9%, mainly reflecting higher other revenues due to gains on the sale of real estate of CHF 221 million and the SIX equity investment revaluation gain of CHF 149 million. Net interest income of CHF 1,684 million decreased slightly, with lower deposit margins on slightly higher average deposit volumes and lower treasury revenues, partially offset by stable loan margins on slightly higher average loan volumes. Recurring commissions and fees of CHF 826 million were stable, with lower wealth structuring solution fees, offset by higher fees from lending activities, slightly higher investment advisory fees and slightly higher investment product management fees. Transaction-based revenues of CHF 392 million were stable, with lower fees from foreign exchange client business offset by higher equity participations income.

Provision for credit losses

The Private Clients loan portfolio is substantially comprised of residential mortgages in Switzerland and loans collateralized by securities and, to a lesser extent, consumer finance loans.

In 2019, Private Clients recorded provision for credit losses of CHF 46 million compared to CHF 30 million in 2018. The provision was primarily related to our consumer finance business.

Total operating expenses

Compared to 2018, total operating expenses of CHF 1,849 million decreased slightly, mainly reflecting restructuring expenses incurred in 2018, partially offset by slightly higher compensation and benefits. General and administrative expenses of CHF 661 million were stable, primarily reflecting lower professional services fees, offset by higher occupancy expenses. Compensation and benefits of CHF 1,085 million increased slightly, primarily driven by higher pension expenses.

Margins

Our **gross margin** was 154 basis points in 2019, ten basis points higher compared to 2018, mainly reflecting gains on the sale of real estate and the SIX equity investment revaluation gain, partially offset by slightly higher average assets under management. → Refer to "Assets under management" for further information.

Our **net margin** was 65 basis points in 2019, 14 basis points higher compared to 2018, mainly reflecting higher net revenues and slightly lower total operating expenses, partially offset by slightly higher average assets under management.

Results – Private Clients

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	3,270	2,989	2,897	9	3
Provision for credit losses	46	30	42	53	(29)
Compensation and benefits	1,085	1,066	1,088	2	(2)
General and administrative expenses	661	663	772	0	(14)
Commission expenses	103	104	141	(1)	(26)
Restructuring expenses	–	66	53	–	25
Total other operating expenses	764	833	966	(8)	(14)
Total operating expenses	1,849	1,899	2,054	(3)	(8)
Income before taxes	1,375	1,060	801	30	32
Statement of operations metrics (%)					
Cost/income ratio	56.5	63.5	70.9	–	–
Net revenue detail (CHF million)					
Net interest income	1,684	1,717	1,670	(2)	3
Recurring commissions and fees	826	835	812	(1)	3
Transaction-based revenues	392	397	413	(1)	(4)
Other revenues	368	40	2	–	–
Net revenues	3,270	2,989	2,897	9	3
Margins on assets under management (bp)					
Gross margin ¹	154	144	143	–	–
Net margin ²	65	51	40	–	–
Number of relationship managers					
Number of relationship managers	1,280	1,260	1,300	2	(3)

¹ Net revenues divided by average assets under management.

² Income before taxes divided by average assets under management.

2018 results details

Income before taxes of CHF 1,060 million increased 32% compared to 2017, driven by lower total operating expenses and slightly higher net revenues.

Net revenues

In 2018, net revenues of CHF 2,989 million were slightly higher, reflecting slightly higher net interest income, the increase in other revenues, reflecting gains on the sale of real estate of CHF 21 million and a gain on the sale of our investment in Euroclear of CHF 19 million, and slightly higher recurring commissions and fees, partially offset by lower transaction-based revenues. Net interest income of CHF 1,717 million was slightly higher, with higher deposit margins on higher average deposit volumes and stable loan margins on slightly higher average loan volumes. Recurring commissions and fees of CHF 835 million were slightly higher, with higher wealth structuring solution fees, increased investment advisory fees and higher revenues from our investment in Swisscard, partially offset by slightly lower banking services fees. Transaction-based revenues of CHF 397 million decreased 4%, mainly due to a gain from the sale of an investment reflected in 2017 and lower brokerage fees, partially offset by higher revenues from ITS and slightly higher fees from foreign exchange client business.

Provision for credit losses

The Private Clients loan portfolio is substantially comprised of residential mortgages in Switzerland and loans collateralized by securities and, to a lesser extent, consumer finance loans.

In 2018, Private Clients recorded provision for credit losses of CHF 30 million compared to CHF 42 million in 2017. The provision was primarily related to our consumer finance business.

Total operating expenses

Compared to 2017, total operating expenses of CHF 1,899 million decreased 8%, reflecting lower general and administrative expenses, lower commission expenses and slightly lower compensation and benefits, partially offset by higher restructuring expenses. General and administrative expenses of CHF 663 million decreased 14% compared to 2017, driven by lower professional and contractor services fees, lower allocated corporate function costs, decreased occupancy expenses and lower advertising and marketing expenses. Compensation and benefits of CHF 1,066 million decreased slightly, with lower salary expenses, partially offset by higher deferred compensation expenses from prior-year awards.

Assets under management

As of the end of **2019**, assets under management of CHF 217.6 billion were CHF 19.6 billion higher compared to the end of 2018, mainly due to favorable market movements and net new assets. Net new assets of CHF 3.4 billion reflected positive contributions from all businesses.

As of the end of **2018**, assets under management of CHF 198.0 billion were CHF 10.3 billion lower compared to the end of 2017, mainly driven by unfavorable market movements, partially offset by net new assets of CHF 3.0 billion. Net new assets reflected positive contributions from all businesses.

Assets under management – Private Clients

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Assets under management (CHF billion)					
Assets under management	217.6	198.0	208.3	9.9	(4.9)
Average assets under management	212.8	207.7	202.2	2.5	2.7
Assets under management by currency (CHF billion)					
USD	36.0	28.9	30.5	24.6	(5.2)
EUR	20.2	20.1	22.9	0.5	(12.2)
CHF	151.9	140.0	145.0	8.5	(3.4)
Other	9.5	9.0	9.9	5.6	(9.1)
Assets under management	217.6	198.0	208.3	9.9	(4.9)
Growth in assets under management (CHF billion)					
Net new assets	3.4	3.0	4.7	–	–
Other effects	16.2	(13.3)	11.4	–	–
of which market movements	18.7	(10.6)	12.4	–	–
of which foreign exchange	(1.5)	(0.8)	0.8	–	–
of which other	(1.0)	(1.9)	(1.8)	–	–
Growth in assets under management	19.6	(10.3)	16.1	–	–
Growth in assets under management (%)					
Net new assets	1.7	1.4	2.4	–	–
Other effects	8.2	(6.3)	6.0	–	–
Growth in assets under management	9.9	(4.9)	8.4	–	–

Corporate & Institutional Clients

2019 results details

Income before taxes of CHF 1,322 million increased 24% compared to 2018, reflecting higher net revenues, lower total operating expenses and lower provision for credit losses.

Net revenues

Compared to 2018, net revenues of CHF 2,750 million increased 7%, driven by the SIX equity investment revaluation gain of CHF 157 million and the gain of CHF 98 million related to the transfer of the InvestLab fund platform, both reflected in other revenues. Net interest income of CHF 1,200 million decreased slightly, primarily reflecting lower treasury revenues, partially offset by stable loan margins on slightly higher average loan volumes. Recurring commissions and fees of CHF 663 million decreased slightly, driven by slightly lower fees from lending activities. Transaction-based revenues of CHF 688 million decreased slightly, mainly reflecting lower client activity and lower revenues from our Swiss investment banking business, partially offset by higher equity participations income and higher revenues from ITS.

Provision for credit losses

The Corporate & Institutional Clients loan portfolio has relatively low concentrations and is mainly secured by real estate, securities and other financial collateral.

In 2019, Corporate & Institutional Clients recorded provision for credit losses of CHF 64 million compared to CHF 96 million in 2018. The decrease reflected lower new provisions and higher releases of provision for credit losses.

Total operating expenses

Compared to 2018, total operating expenses of CHF 1,364 million decreased 4%, primarily reflecting restructuring expenses incurred in 2018 and lower general and administrative expenses, partially offset by slightly higher compensation and benefits. General and administrative expenses of CHF 407 million decreased 6%, primarily reflecting lower litigation provisions. Compensation and benefits of CHF 841 million increased slightly, driven by higher pension expenses and higher deferred compensation expenses from prior-year awards.

Results – Corporate & Institutional Clients

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	2,750	2,575	2,499	7	3
Provision for credit losses	64	96	33	(33)	191
Compensation and benefits	841	821	869	2	(6)
General and administrative expenses	407	434	479	(6)	(9)
Commission expenses	116	124	148	(6)	(16)
Restructuring expenses	–	35	6	–	483
Total other operating expenses	523	593	633	(12)	(6)
Total operating expenses	1,364	1,414	1,502	(4)	(6)
Income before taxes	1,322	1,065	964	24	10
Statement of operations metrics (%)					
Cost/income ratio	49.6	54.9	60.1	–	–
Net revenue detail (CHF million)					
Net interest income	1,200	1,229	1,226	(2)	0
Recurring commissions and fees	663	680	634	(3)	7
Transaction-based revenues	688	699	694	(2)	1
Other revenues	199	(33)	(55)	–	(40)
Net revenues	2,750	2,575	2,499	7	3
Number of relationship managers					
Number of relationship managers	510	520	540	(2)	(4)

2018 results details

Income before taxes of CHF 1,065 million increased 10% compared to 2017, reflecting lower total operating expenses and slightly higher net revenues, partially offset by higher provision for credit losses.

Net revenues

Compared to 2017, net revenues of CHF 2,575 million increased slightly, mainly driven by higher recurring commissions and fees and the increase in other revenues, reflecting a gain on the sale of our investment in Euroclear of CHF 18 million. Recurring commissions and fees of CHF 680 million increased 7%, mainly reflecting higher wealth structuring solution fees and higher fees from lending activities, partially offset by lower security account and custody services fees. Net interest income of CHF 1,229 million was stable, with higher deposit margins on lower average deposit volumes and stable loan margins on stable average loan volumes. Transaction-based revenues of CHF 699 million were stable, reflecting higher revenues from ITS and higher fees from foreign exchange client business, offset by lower brokerage fees.

Provision for credit losses

The Corporate & Institutional Clients loan portfolio has relatively low concentrations and is mainly secured by real estate, securities and other financial collateral.

In 2018, Corporate & Institutional Clients recorded provision for credit losses of CHF 96 million compared to CHF 33 million in 2017. The increase is mainly related to several individual cases and lower releases of provision for credit losses.

Total operating expenses

Compared to 2017, total operating expenses of CHF 1,414 million decreased 6%, primarily reflecting lower compensation and benefits and lower general and administrative expenses. Compensation and benefits of CHF 821 million decreased 6%, driven by lower allocated corporate function costs, slightly lower salary expenses, decreased discretionary compensation expenses and lower pension expenses. General and administrative expenses of CHF 434 million decreased 9%, mainly driven by lower occupancy expenses and slightly lower allocated corporate function costs.

Assets under management

As of the end of **2019**, assets under management of CHF 436.4 billion were CHF 87.7 billion higher compared to the end of 2018, mainly driven by net new assets and favorable market movements. Net new assets of CHF 45.3 billion reflected strong inflows from our pension business.

As of the end of **2018**, assets under management of CHF 348.7 billion were CHF 6.0 billion lower compared to the end of 2017, mainly driven by unfavorable market movements, partially offset by net new assets of CHF 8.6 billion. Net new assets primarily reflected positive contributions from our pension business.

International Wealth Management

In 2019, we reported income before taxes of CHF 2,138 million and net revenues of CHF 5,887 million. Income before taxes increased 25% compared to 2018, primarily reflecting higher net revenues.

Results summary

2019 results

In 2019, income before taxes of CHF 2,138 million increased 25% compared to 2018. Net revenues of CHF 5,887 million increased 9% compared to 2018, mainly driven by higher other revenues including a SIX equity investment revaluation gain of CHF 192 million, a gain of CHF 131 million related to the transfer of the InvestLab fund platform and gains on the sale of real estate of CHF 45 million. 2018 included a gain on the sale of our investment in Euroclear of CHF 37 million in Private Banking. Higher transaction- and performance-based revenues were partially offset by lower net interest income. Higher transaction- and

performance-based revenues mainly reflected gains on the sale of our remaining economic interest in a third-party manager relating to a private equity investment in Asset Management, higher client activity and higher performance fees in Private Banking. Lower net interest income mainly reflected lower treasury revenues. Recurring commissions and fees were stable with higher asset management fees offset by lower discretionary mandate management fees. Provision for credit losses was CHF 49 million on a net loan portfolio of CHF 53.8 billion. Total operating expenses of CHF 3,700 million were stable compared to 2018, with higher general and administrative expenses and slightly higher compensation and benefits offset by restructuring expenses incurred in 2018.

Divisional results

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	5,887	5,414	5,111	9	6
Provision for credit losses	49	35	27	40	30
Compensation and benefits	2,366	2,303	2,278	3	1
General and administrative expenses	1,110	1,029	1,141	8	(10)
Commission expenses	224	227	244	(1)	(7)
Restructuring expenses	-	115	70	-	64
Total other operating expenses	1,334	1,371	1,455	(3)	(6)
Total operating expenses	3,700	3,674	3,733	1	(2)
Income before taxes	2,138	1,705	1,351	25	26
Statement of operations metrics (%)					
Return on regulatory capital	34.9	30.7	25.8	-	-
Cost/income ratio	62.9	67.9	73.0	-	-
Number of employees (full-time equivalents)					
Number of employees	10,490	10,210	10,250	3	0

Divisional results (continued)

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Net revenues (CHF million)					
Private Banking	4,268	3,890	3,603	10	8
Asset Management	1,619	1,524	1,508	6	1
Net revenues	5,887	5,414	5,111	9	6
Net revenue detail (CHF million)					
Net interest income	1,509	1,568	1,449	(4)	8
Recurring commissions and fees	2,239	2,233	2,135	0	5
Transaction- and performance-based revenues	1,789	1,630	1,616	10	1
Other revenues	350	(17)	(89)	–	(81)
Net revenues	5,887	5,414	5,111	9	6
Provision for credit losses (CHF million)					
New provisions	62	56	49	11	14
Releases of provisions	(13)	(21)	(22)	(38)	(5)
Provision for credit losses	49	35	27	40	30
Balance sheet statistics (CHF million)					
Total assets	93,059	91,835	94,753	1	(3)
Net loans	53,794	51,695	50,474	4	2
of which Private Banking	53,771	51,684	50,429	4	2
Risk-weighted assets	43,788	40,116	38,256	9	5
Leverage exposure	100,664	98,556	99,267	2	(1)

2018 results

In 2018, income before taxes of CHF 1,705 million increased 26% compared to 2017. Net revenues of CHF 5,414 million increased 6% compared to 2017, reflecting higher revenues across all revenue categories. Higher net interest income reflected higher deposit margins and lower loan margins on higher average deposit and loan volumes. Higher recurring commissions and fees were mainly driven by higher asset management fees and higher fees from lending activities. Other revenues in 2018 reflected the gain on the sale of our investment in Euroclear and revenues from a business disposal in Asset Management. Other revenues in 2017 included an investment loss from Asset Management Finance LLC (AMF) and a loss from a business disposal relating to our systematic market making business. Transaction- and performance-based revenues increased CHF 14 million, mainly reflecting increased client activity, higher revenues from ITS and higher corporate advisory fees related to integrated solutions in Private Banking. This increase was offset by lower performance and placement revenues mainly from Asset

Management. Provision for credit losses was CHF 35 million on a net loan portfolio of CHF 51.7 billion. Total operating expenses decreased slightly compared to 2017, primarily driven by lower litigation provisions, slightly lower salary expenses and decreased professional and contractor services fees, partially offset by higher restructuring expenses, reflecting the results of our cost efficiency measures.

Capital and leverage metrics

As of the end of 2019, we reported risk-weighted assets of CHF 43.8 billion, an increase of CHF 3.7 billion compared to the end of 2018, driven by internal model and parameter updates, mainly reflecting higher operational risk as a result of updated allocation keys, by external model and parameter updates, mainly reflecting a mandated buffer related to the ship finance rating model, and by movements in risk levels. These increases were partially offset by a foreign exchange impact. Leverage exposure of CHF 100.7 billion was slightly higher compared to the end of 2018, mainly driven by business growth.

Reconciliation of adjusted results

in	Private Banking			Asset Management			International Wealth Management		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Adjusted results (CHF million)									
Net revenues	4,268	3,890	3,603	1,619	1,524	1,508	5,887	5,414	5,111
Real estate gains	(45)	(2)	0	0	0	0	(45)	(2)	0
(Gains)/losses on business sales	0	(37)	0	0	(18)	28	0	(55)	28
Adjusted net revenues	4,223	3,851	3,603	1,619	1,506	1,536	5,842	5,357	5,139
Provision for credit losses	48	35	27	1	0	0	49	35	27
Total operating expenses	2,555	2,522	2,552	1,145	1,152	1,181	3,700	3,674	3,733
Restructuring expenses	–	(89)	(44)	–	(26)	(26)	–	(115)	(70)
Major litigation provisions	30	0	(48)	0	0	0	30	0	(48)
Expenses related to real estate disposals	(17)	–	–	(4)	–	–	(21)	–	–
Expenses related to business sales	0	0	0	0	(47)	0	0	(47)	0
Adjusted total operating expenses	2,568	2,433	2,460	1,141	1,079	1,155	3,709	3,512	3,615
Income before taxes	1,665	1,333	1,024	473	372	327	2,138	1,705	1,351
Total adjustments	(58)	50	92	4	55	54	(54)	105	146
Adjusted income before taxes	1,607	1,383	1,116	477	427	381	2,084	1,810	1,497
Adjusted return on regulatory capital (%)	–	–	–	–	–	–	34.0	32.6	28.6

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

Private Banking

2019 results details

Income before taxes of CHF 1,665 million increased 25% compared to 2018, primarily reflecting higher net revenues.

Net revenues

Compared to 2018, net revenues of CHF 4,268 million were 10% higher, mainly driven by higher other revenues. Other revenues included the SIX equity investment revaluation gain of CHF 192 million, the gain of CHF 131 million related to the transfer of the InvestLab fund platform and the gains on the sale of real estate of CHF 45 million. 2018 included the gain on the sale of our investment in Euroclear of CHF 37 million. Transaction- and performance-based revenues of CHF 1,174 million increased 11%, mainly reflecting higher client activity, increased performance fees and higher corporate advisory fees related to integrated solutions. Net interest income of CHF 1,509 million decreased 4%, mainly reflecting lower treasury revenues. Recurring commissions and fees of CHF 1,213 million were stable, with lower discretionary mandate management fees, offset by higher banking services fees, increased fees from lending activities and higher investment advisory fees.

Provision for credit losses

The Private Banking loan portfolio primarily comprises lombard loans, mainly backed by listed securities, ship finance and real estate mortgages.

In 2019, Private Banking recorded provision for credit losses of CHF 48 million, compared to CHF 35 million in 2018, driven by various individual cases.

Total operating expenses

Compared to 2018, total operating expenses of CHF 2,555 million were stable, with higher compensation and benefits and higher general and administrative expenses, offset by restructuring expenses incurred in 2018. Compensation and benefits of CHF 1,682 million increased 5%, mainly reflecting higher deferred compensation expenses from prior-year awards, higher salary expenses and higher social security and pension expenses. General and administrative expenses of CHF 721 million increased 6%, primarily reflecting higher allocated corporate function costs.

Margins

Our **gross margin** was 117 basis points in 2019, eleven basis points higher compared to 2018, mainly reflecting the SIX equity investment revaluation gain, the gain related to the transfer of the InvestLab fund platform and higher transaction- and performance-based revenues on stable average assets under management.

→ Refer to "Assets under management" for further information.

Our **net margin** was 46 basis points in 2019, ten basis points higher compared to 2018, mainly reflecting higher net revenues on stable average assets under management.

Results – Private Banking

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	4,268	3,890	3,603	10	8
Provision for credit losses	48	35	27	37	30
Compensation and benefits	1,682	1,599	1,540	5	4
General and administrative expenses	721	680	782	6	(13)
Commission expenses	152	154	186	(1)	(17)
Restructuring expenses	–	89	44	–	102
Total other operating expenses	873	923	1,012	(5)	(9)
Total operating expenses	2,555	2,522	2,552	1	(1)
Income before taxes	1,665	1,333	1,024	25	30
Statement of operations metrics (%)					
Cost/income ratio	59.9	64.8	70.8	–	–
Net revenue detail (CHF million)					
Net interest income	1,509	1,568	1,449	(4)	8
Recurring commissions and fees	1,213	1,227	1,200	(1)	2
Transaction- and performance-based revenues	1,174	1,054	953	11	11
Other revenues	372	41	1	–	–
Net revenues	4,268	3,890	3,603	10	8
Margins on assets under management (bp)					
Gross margin ¹	117	106	105	–	–
Net margin ²	46	36	30	–	–
Number of relationship managers					
Number of relationship managers	1,150	1,110	1,130	4	(2)

Net interest income includes a term spread credit on stable deposit funding and a term spread charge on loans. Recurring commissions and fees includes investment product management, discretionary mandate and other asset management-related fees, fees for general banking products and services and revenues from wealth structuring solutions. Transaction- and performance-based revenues arise primarily from brokerage and product issuing fees, fees from foreign exchange client transactions, trading and sales income, equity participations income and other transaction- and performance-based income.

¹ Net revenues divided by average assets under management.

² Income before taxes divided by average assets under management.

2018 results details

Income before taxes of CHF 1,333 million increased 30% compared to 2017, primarily reflecting higher net revenues.

Net revenues

Compared to 2017, net revenues of CHF 3,890 million were 8% higher, reflecting higher revenues across all revenue categories. Net interest income of CHF 1,568 million increased 8%, reflecting higher deposit margins on higher average deposit volumes and lower loan margins on higher average loan volumes. Transaction- and performance-based revenues of CHF 1,054 million increased 11%, mainly reflecting higher client activity and higher revenues from ITS. Other revenues reflected the gain on the sale of our investment in Euroclear of CHF 37 million. Recurring commissions and fees of CHF 1,227 million increased slightly, mainly driven by higher fees from lending activities and higher investment product management fees, partially offset by lower discretionary mandate management fees.

Provision for credit losses

In 2018, Private Banking recorded provision for credit losses of CHF 35 million, compared to CHF 27 million in 2017, including a small number of cases related to emerging markets and ship finance.

Total operating expenses

Compared to 2017, total operating expenses of CHF 2,522 million were stable, with lower general and administrative expenses and decreased commission expenses, offset by higher compensation and benefits and higher restructuring expenses. General and administrative expenses of CHF 680 million decreased 13%, primarily reflecting lower litigation provisions and lower allocated corporate function costs. Compensation and benefits of CHF 1,599 million increased 4%, mainly reflecting higher allocated corporate function costs and higher deferred compensation expenses from prior-year awards, partially offset by lower salary expenses. Restructuring expenses increased CHF 45 million, reflecting the results of our cost efficiency measures.

Assets under management

As of the end of **2019**, assets under management of CHF 370.0 billion were CHF 12.5 billion higher compared to the end of 2018, driven by favorable market movements and net new assets, partially offset by structural effects and unfavorable foreign exchange-related movements. Net new assets of CHF 11.0 billion mainly reflected inflows from emerging markets.

As of the end of **2018**, assets under management of CHF 357.5 billion were CHF 9.4 billion lower compared to the end of 2017, reflecting unfavorable market and foreign exchange-related movements, partially offset by net new assets of CHF 14.2 billion. Net new assets mainly reflected inflows from emerging markets and Europe.

Assets under management – Private Banking

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Assets under management (CHF billion)					
Assets under management	370.0	357.5	366.9	3.5	(2.6)
Average assets under management	364.5	368.1	343.9	(1.0)	7.0
Assets under management by currency (CHF billion)					
USD	179.2	170.3	162.9	5.2	4.5
EUR	101.4	106.7	114.1	(5.0)	(6.5)
CHF	18.7	17.5	23.0	6.9	(23.9)
Other	70.7	63.0	66.9	12.2	(5.8)
Assets under management	370.0	357.5	366.9	3.5	(2.6)
Growth in assets under management (CHF billion)					
Net new assets	11.0	14.2	15.6	–	–
Other effects	1.5	(23.6)	28.1	–	–
of which market movements	31.1	(12.0)	24.3	–	–
of which foreign exchange	(8.2)	(7.8)	1.0	–	–
of which other	(21.4)	(3.8)	2.8	–	–
Growth in assets under management	12.5	(9.4)	43.7	–	–
Growth in assets under management (%)					
Net new assets	3.1	3.9	4.8	–	–
Other effects	0.4	(6.5)	8.7	–	–
Growth in assets under management	3.5	(2.6)	13.5	–	–

Asset Management

2019 results details

Income before taxes of CHF 473 million increased 27% compared to 2018, primarily reflecting higher net revenues.

In the fourth quarter of 2018, we completed a business disposal involving a spin-off relating to our securitized products fund, while retaining an economic interest in the new management company and the fund. Beginning in the first quarter of 2019, revenues from this interest are recognized as investment and partnership income rather than management fees and performance and placement revenues as previously reported. Prior periods have been reclassified to conform to the current presentation.

Net revenues

Compared to 2018, net revenues of CHF 1,619 million increased 6%, reflecting significantly higher performance and placement revenues and slightly higher management fees, partially offset by lower investment and partnership income. Performance and placement revenues of CHF 237 million increased significantly, reflecting higher placement fees, higher performance fees including the sale of a private equity investment of a fund and investment-related gains in 2019 compared to losses in 2018. Management fees of CHF 1,112 million increased slightly, mainly reflecting higher average assets under management. Investment and partnership income of CHF 270 million decreased 14% mainly as 2018 included revenues from a business disposal and due to lower revenues from a single manager hedge fund, partially offset by gains on the sale of our remaining economic

interest in a third-party manager relating to a private equity investment and higher revenues from our systematic market making business.

Total operating expenses

Compared to 2018, total operating expenses of CHF 1,145 million were stable, reflecting restructuring expenses incurred in 2018 and slightly lower compensation and benefits, offset by higher general and administrative expenses. Compensation and benefits of CHF 684 million decreased slightly, primarily reflecting lower salary expenses and deferred compensation expenses from prior-year awards, mainly related to the 2018 business disposal. General and administrative expenses of CHF 389 million increased 11%, primarily reflecting higher professional services fees and higher allocated corporate function costs.

2018 results details

Income before taxes of CHF 372 million increased 14% compared to 2017, primarily reflecting slightly lower total operating expenses.

In the first quarter of 2018, we completed the spin-off of a management company for a quantitative fund relating to our systematic

market making business while retaining an economic interest in the management company and the fund. Revenues from this interest are recognized as investment and partnership income rather than management fees and performance and placement revenues as previously reported. Prior periods have been reclassified to conform to the current presentation.

Net revenues

Compared to 2017, net revenues of CHF 1,524 million were stable, with higher management fees and investment and partnership income, partially offset by significantly lower performance and placement revenues. Management fees of CHF 1,076 million increased 10%, mainly reflecting higher average assets under management. Investment and partnership income of CHF 315 million increased 15%, mainly driven by a gain on the partial sale of an economic interest in a third-party manager relating to a private equity investment, revenues from the business disposal in 2018 and the investment loss of CHF 43 million from AMF in 2017. These increases were partially offset by the absence of revenues from the systematic market making business due to the spin-off. Performance and placement revenues of CHF 133 million decreased 47%, reflecting lower performance fees due to a strong investment performance of a fund in 2017, investment-related losses compared to gains in 2017 and lower placement fees.

Results – Asset Management

	2019	2018	in 2017	% change	
				19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	1,619	1,524	1,508	6	1
Provision for credit losses	1	0	0	–	–
Compensation and benefits	684	704	738	(3)	(5)
General and administrative expenses	389	349	359	11	(3)
Commission expenses	72	73	58	(1)	26
Restructuring expenses	–	26	26	–	–
Total operating expenses	461	448	443	3	1
Total operating expenses	1,145	1,152	1,181	(1)	(2)
Income before taxes	473	372	327	27	14
Statement of operations metrics (%)					
Cost/income ratio	70.7	75.6	78.3	–	–
Net revenue detail (CHF million)					
Management fees	1,112	1,076	981	3	10
Performance and placement revenues	237	133	252	78	(47)
Investment and partnership income	270	315	275	(14)	15
Net revenues	1,619	1,524	1,508	6	1
of which recurring commissions and fees	1,026	1,006	935	2	8
of which transaction- and performance-based revenues	615	576	663	7	(13)
of which other revenues	(22)	(58)	(90)	(62)	(36)

Management fees include fees on assets under management, asset administration revenues and transaction fees related to the acquisition and disposal of investments in the funds being managed. Performance revenues relate to the performance or return of the funds being managed and includes investment-related gains and losses from proprietary funds. Placement revenues arise from our third-party private equity fundraising activities and secondary private equity market advisory services. Investment and partnership income includes equity participation income from seed capital returns and from minority investments in third-party asset managers, income from strategic partnerships and distribution agreements, and other revenues.

Total operating expenses

Compared to 2017, total operating expenses of CHF 1,152 million decreased slightly, driven by lower compensation and benefits and slightly lower general and administrative expenses. Compensation and benefits of CHF 704 million decreased 5%, mainly reflecting lower discretionary compensation expenses and lower deferred compensation expenses from prior-year awards. General and administrative expenses of CHF 349 million decreased slightly, mainly reflecting lower allocated corporate function costs and lower professional services fees.

Assets under management

As of the end of **2019**, assets under management of CHF 437.9 billion were CHF 49.2 billion higher compared to the end of 2018, mainly reflecting favorable market movements and net new assets. Net new assets of CHF 21.5 billion mainly reflected inflows from traditional and alternative investments.

As of the end of **2018**, assets under management of CHF 388.7 billion were CHF 3.1 billion higher compared to the end of 2017, reflecting net new assets of CHF 22.2 billion, partially offset by unfavorable market and foreign exchange-related movements. Net new assets mainly reflected inflows from traditional and alternative investments.

Assets under management – Asset Management

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Assets under management (CHF billion)					
Traditional investments	262.8	218.9	217.6	20.1	0.6
Alternative investments	130.6	124.6	121.5	4.8	2.6
Investments and partnerships	44.5	45.2	46.5	(1.5)	(2.8)
Assets under management	437.9	388.7	385.6	12.7	0.8
Average assets under management	416.3	397.8	368.4	4.7	8.0
Assets under management by currency (CHF billion)					
USD	119.8	107.2	100.1	11.8	7.1
EUR	54.8	49.0	48.2	11.8	1.7
CHF	215.3	184.9	182.6	16.4	1.3
Other	48.0	47.6	54.7	0.8	(13.0)
Assets under management	437.9	388.7	385.6	12.7	0.8
Growth in assets under management (CHF billion)					
Net new assets ¹	21.5	22.2	20.3	–	–
Other effects	27.7	(19.1)	43.7	–	–
of which market movements	33.7	(9.1)	20.6	–	–
of which foreign exchange	(5.3)	(3.4)	(0.3)	–	–
of which other	(0.7)	(6.6)	23.4	–	–
Growth in assets under management	49.2	3.1	64.0	–	–
Growth in assets under management (%)					
Net new assets	5.5	5.8	6.3	–	–
Other effects	7.2	(5.0)	13.6	–	–
Growth in assets under management	12.7	0.8	19.9	–	–

¹ Includes outflows for private equity assets reflecting realizations at cost and unfunded commitments on which a fee is no longer earned.

Asia Pacific

In 2019, we reported income before taxes of CHF 902 million and net revenues of CHF 3,590 million. Income before taxes increased 36% compared to 2018, primarily reflecting higher net revenues.

Results summary

2019 results

In 2019, income before taxes of CHF 902 million increased 36% compared to 2018, mainly due to higher net revenues. Net revenues of CHF 3,590 million increased 6%, driven by higher revenues in our Wealth Management & Connected business. Wealth Management & Connected revenues increased 9%, mainly reflecting a gain of CHF 98 million related to the transfer of the InvestLab fund platform to Allfunds Group, higher transaction-based revenues and higher net interest income. Higher transaction-based revenues mainly reflected higher corporate advisory fees related to integrated solutions and higher client activity.

Higher net interest income mainly reflected higher treasury revenues. Markets revenues were stable, reflecting lower equity sales and trading revenues offset by higher fixed income sales and trading revenues. Compared to 2018, total operating expenses of CHF 2,642 million were slightly lower, primarily reflecting restructuring expenses incurred in 2018 and lower general and administrative expenses, largely offset by higher compensation and benefits. 2018 included litigation provisions related to the US Department of Justice and US Securities and Exchange Commission (SEC) investigations regarding our hiring practices in the Asia Pacific region between 2007 and 2013, which have now been resolved.

Divisional results

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	3,590	3,393	3,504	6	(3)
Provision for credit losses	46	35	15	31	133
Compensation and benefits	1,570	1,503	1,602	4	(6)
General and administrative expenses	836	887	831	(6)	7
Commission expenses	236	243	264	(3)	(8)
Restructuring expenses	–	61	63	–	(3)
Total other operating expenses	1,072	1,191	1,158	(10)	3
Total operating expenses	2,642	2,694	2,760	(2)	(2)
Income before taxes	902	664	729	36	(9)
Statement of operations metrics (%)					
Return on regulatory capital	16.1	12.0	13.8	–	–
Cost/income ratio	73.6	79.4	78.8	–	–
Number of employees (full-time equivalents)					
Number of employees	7,980	7,440	7,230	7	3

Divisional results (continued)

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Net revenues (CHF million)					
Wealth Management & Connected	2,491	2,290	2,322	9	(1)
Markets	1,099	1,103	1,182	–	(7)
Net revenues	3,590	3,393	3,504	6	(3)
Provision for credit losses (CHF million)					
New provisions	73	42	28	74	50
Releases of provisions	(27)	(7)	(13)	286	(46)
Provision for credit losses	46	35	15	31	133
Balance sheet statistics (CHF million)					
Total assets	107,660	99,809	96,497	8	3
Net loans	46,775	43,713	43,080	7	1
of which Private Banking	34,572	32,877	35,331	5	(7)
Risk-weighted assets	36,628	37,156	31,474	(1)	18
Leverage exposure	115,442	106,375	105,585	9	1

2018 results

In 2018, income before taxes of CHF 664 million decreased 9% compared to 2017 due to lower net revenues and higher provision for credit losses, partially offset by lower total operating expenses. In 2018, the US GAAP accounting standard pertaining to revenue recognition was adopted. As a result, both net revenues and operating expenses in Asia Pacific decreased CHF 27 million. Lower net revenues of CHF 3,393 million were driven by lower revenues in our Markets business across all revenue categories. Lower equity sales and trading revenues were primarily driven by weaker results in equity derivatives, reflecting reduced client activity and a difficult trading environment in the second half of 2018. Lower fixed income sales and trading revenues were primarily driven by a weaker performance in rates, partially offset by higher revenues in foreign exchange products, structured products and credit products. Wealth Management & Connected revenues were stable, mainly reflecting lower transaction-based revenues and lower advisory, underwriting and financing revenues, offset by higher recurring commissions and fees. Financing revenues in 2017 included a gain of CHF 64 million from a

pre-IPO financing and a positive net fair value impact of CHF 94 million from an impaired loan portfolio in recovery management. Compared to 2017, total operating expenses of CHF 2,694 million decreased slightly, primarily reflecting lower compensation and benefits and lower commission expenses, largely offset by higher general and administrative expenses, primarily driven by higher litigation provisions.

Capital and leverage metrics

As of the end of 2019, we reported risk-weighted assets of CHF 36.6 billion, a decrease of CHF 0.5 billion compared to the end of 2018, primarily reflecting a foreign exchange impact and lower business usage in Markets, partly offset by a regular update to the stressed window calibration and methodology changes. Leverage exposure was CHF 115.4 billion, an increase of CHF 9.1 billion compared to the end of 2018, mainly driven by higher business usage in Markets and higher lending activities in Wealth Management & Connected, partially offset by a foreign exchange impact.

Reconciliation of adjusted results

in	Wealth Management & Connected			Markets			Asia Pacific		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Adjusted results (CHF million)									
Net revenues	2,491	2,290	2,322	1,099	1,103	1,182	3,590	3,393	3,504
Provision for credit losses	57	25	15	(11)	10	–	46	35	15
Total operating expenses	1,546	1,574	1,508	1,096	1,120	1,252	2,642	2,694	2,760
Restructuring expenses	–	(27)	(21)	–	(34)	(42)	–	(61)	(63)
Major litigation provisions	0	(79)	0	0	0	0	0	(79)	0
Adjusted total operating expenses	1,546	1,468	1,487	1,096	1,086	1,210	2,642	2,554	2,697
Income/(loss) before taxes	888	691	799	14	(27)	(70)	902	664	729
Total adjustments	0	106	21	0	34	42	0	140	63
Adjusted income/(loss) before taxes	888	797	820	14	7	(28)	902	804	792
Adjusted return on regulatory capital (%)	–	–	–	–	–	–	16.1	14.5	15.0

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

Wealth Management & Connected

2019 results details

Income before taxes of CHF 888 million increased 29% compared to 2018, reflecting higher net revenues and slightly lower total operating expenses, partially offset by higher provision for credit losses.

Net revenues

Net revenues of CHF 2,491 million increased 9% compared to 2018, reflecting higher Private Banking revenues which included a gain of CHF 98 million related to the transfer of the InvestLab fund platform in the third quarter of 2019, higher transaction-based revenues, higher net interest income and slightly higher advisory, underwriting and financing revenues. Transaction-based revenues increased 8% to CHF 608 million, mainly due to higher corporate advisory fees related to integrated solutions and higher client activity. Net interest income increased 7% to CHF 671 million, mainly reflecting higher treasury revenues, partially offset by lower loan margins on lower average loan volumes. Advisory, underwriting and financing revenues increased slightly to CHF 694 million, primarily due to higher financing revenues and higher debt underwriting revenues, largely offset by lower fees from M&A transactions and lower equity underwriting revenues. Recurring commissions and fees were stable, mainly reflecting lower fees from lending activities, offset by higher investment product management fees, discretionary mandate management fees and investment advisory fees.

Provision for credit losses

The Wealth Management & Connected loan portfolio primarily comprises Private Banking lombard loans, mainly backed by listed securities, and secured and unsecured loans to corporates.

In 2019, Wealth Management & Connected recorded a provision for credit losses of CHF 57 million relating to several individual cases, including provisions relating to an Indian infrastructure development company and an Indonesian healthcare company, compared to a provision for credit losses of CHF 25 million in 2018.

Total operating expenses

Total operating expenses of CHF 1,546 million decreased slightly compared to 2018, mainly reflecting lower general and administrative expenses and restructuring expenses incurred in 2018, largely offset by higher compensation and benefits. General and administrative expenses decreased 10% to CHF 452 million, mainly due to litigation provisions incurred in 2018, partially offset by higher allocated corporate function costs in 2019. Compensation and benefits increased 5% to CHF 1,036 million, primarily reflecting higher allocated corporate function costs, deferred compensation expenses from prior-year awards and salary expenses.

Margins

Margin calculations are aligned with the performance metrics of our Private Banking business and its related assets under management within the Wealth Management & Connected business.

Our **gross margin** was 84 basis points in 2019, four basis points higher compared to 2018, mainly reflecting the gain related to the transfer of the InvestLab fund platform in the third quarter of 2019, higher transaction-based revenues and higher net interest

income, partially offset by a 6.8% increase in average assets under management.

→ Refer to "Assets under management" for further information.

Our **net margin** was 33 basis points in 2019, six basis points higher compared to 2018, mainly reflecting higher net revenues, partially offset by the increase in average assets under management.

Results – Wealth Management & Connected

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	2,491	2,290	2,322	9	(1)
Provision for credit losses	57	25	15	128	67
Compensation and benefits	1,036	988	1,002	5	(1)
General and administrative expenses	452	500	421	(10)	19
Commission expenses	58	59	64	(2)	(8)
Restructuring expenses	–	27	21	–	29
Total other operating expenses	510	586	506	(13)	16
Total operating expenses	1,546	1,574	1,508	(2)	4
Income before taxes	888	691	799	29	(14)
Statement of operations metrics (%)					
Cost/income ratio	62.1	68.7	64.9	–	–
Net revenue detail (CHF million)					
Private Banking	1,797	1,612	1,607	11	0
of which net interest income	671	628	620	7	1
of which recurring commissions and fees	418	420	381	0	10
of which transaction-based revenues	608	563	606	8	(7)
of which other revenues	100	1	0	–	–
Advisory, underwriting and financing	694	678	715	2	(5)
Net revenues	2,491	2,290	2,322	9	(1)
Private Banking margins on assets under management (bp)					
Gross margin ¹	84	80	88	–	–
Net margin ²	33	27	30	–	–
Number of relationship managers					
Number of relationship managers	600	580	590	3	(2)

Net interest income includes a term spread credit on stable deposit funding and a term spread charge on loans. Recurring commissions and fees includes investment product management, discretionary mandate and other asset management-related fees, fees for general banking products and services and revenues from wealth structuring solutions. Transaction-based revenues arise primarily from brokerage and product issuing fees, fees from foreign exchange client transactions, trading and sales income, equity participations income and other transaction-based income.

¹ Net revenues divided by average assets under management.

² Income before taxes divided by average assets under management.

2018 results details

Income before taxes of CHF 691 million decreased 14% compared to 2017, reflecting higher total operating expenses, lower net revenues and higher provision for credit losses.

Net revenues

Net revenues of CHF 2,290 million were stable compared to 2017, reflecting higher Private Banking revenues, offset by lower advisory, underwriting and financing revenues. Recurring commissions and fees increased 10% to CHF 420 million, primarily reflecting higher investment product management fees, fees from lending activities, discretionary mandate management fees and investment advisory fees. Net interest income was stable. Transaction-based revenues decreased 7% to CHF 563 million, mainly due to lower brokerage and product issuing fees. Advisory, underwriting and financing revenues decreased 5% to CHF 678 million, primarily due to lower financing revenues and debt underwriting revenues, partially offset by higher fees from M&A transactions and equity underwriting revenues. Financing revenues in 2018 included a negative net fair value impact of CHF 10 million from an impaired loan portfolio in recovery management compared to 2017, which included a gain of CHF 64 million from a pre-IPO financing and a positive net fair value impact of CHF 94 million from an impaired loan portfolio in recovery management.

Provision for credit losses

The Wealth Management & Connected loan portfolio primarily comprises Private Banking lombard loans, mainly backed by listed securities, and secured and unsecured loans to corporates.

In 2018, Wealth Management & Connected recorded a provision for credit losses of CHF 25 million relating to several individual cases, compared to a provision for credit losses of CHF 15 million in 2017.

Total operating expenses

Total operating expenses of CHF 1,574 million increased 4% compared to 2017, mainly reflecting higher general and administrative expenses. General and administrative expenses increased 19% to CHF 500 million, mainly due to higher litigation provisions. Litigation provisions recorded in 2018 primarily related to the US Department of Justice and SEC investigations regarding our hiring practices in the Asia Pacific region between 2007 and 2013, which have now been resolved. Compensation and benefits were stable, primarily reflecting lower discretionary compensation expenses, offset by higher deferred compensation expenses from prior-year awards.

Assets under management

As of the end of **2019**, assets under management of CHF 220.0 billion were CHF 20.7 billion higher compared to the end of 2018, mainly reflecting favorable market movements and net new assets, partially offset by unfavorable foreign exchange-related movements. Net new assets of CHF 8.7 billion reflected inflows across most of our markets.

As of the end of **2018**, assets under management of CHF 199.3 billion were CHF 2.5 billion higher compared to the end of 2017, mainly reflecting net new assets of CHF 14.4 billion, partially offset by unfavorable market movements. Net new assets reflected inflows across most of our markets.

Assets under management – Private Banking

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Assets under management (CHF billion)					
Assets under management	220.0	199.3	196.8	10.4	1.3
Average assets under management	215.2	201.5	182.3	6.8	10.5
Assets under management by currency (CHF billion)					
USD	122.7	104.0	98.2	18.0	5.9
EUR	7.0	5.8	6.7	20.7	(13.4)
CHF	1.8	1.8	2.5	–	(28.0)
Other	88.5	87.7	89.4	0.9	(1.9)
Assets under management	220.0	199.3	196.8	10.4	1.3
Growth in assets under management (CHF billion)					
Net new assets	8.7	14.4	16.9	–	–
Other effects	12.0	(11.9)	13.0	–	–
of which market movements	17.0	(12.7)	16.8	–	–
of which foreign exchange	(3.2)	(0.5)	(3.9)	–	–
of which other	(1.8)	1.3	0.1	–	–
Growth in assets under management	20.7	2.5	29.9	–	–
Growth in assets under management (%)					
Net new assets	4.4	7.3	10.1	–	–
Other effects	6.0	(6.0)	7.8	–	–
Growth in assets under management	10.4	1.3	17.9	–	–

Following a review in 2019 of the classification of assets under management relating to certain client relationships in our Asia Pacific division, the Group has derecognized an aggregate CHF 4.3 billion of assets under management and related net new assets as of the end of 2019. Prior periods have been reclassified to conform to the current presentation. Changes to the terms of these client relationships may result in the recognition of assets under management in the future.

Markets

2019 results details

Income before taxes of CHF 14 million in 2019 compared to a loss before taxes of CHF 27 million in 2018. The related increase of CHF 41 million mainly reflected lower total operating expenses and lower provision for credit losses.

Net revenues

Net revenues of CHF 1,099 million were stable compared to 2018, due to lower equity sales and trading revenues offset by higher fixed income sales and trading revenues. Equity sales and trading revenues decreased 4% to CHF 828 million, which reflected lower revenues from equity derivatives, cash equities and prime services. Fixed income sales and trading revenues increased 11% to CHF 271 million, mainly due to higher revenues from credit products, structured products and foreign exchange products, partially offset by lower revenues from emerging markets rates products.

Provision for credit losses

In 2019, Markets recorded a release of provision for credit losses of CHF 11 million compared to a provision for credit losses of CHF 10 million in 2018, both related to single cases.

Total operating expenses

Total operating expenses of CHF 1,096 million decreased slightly compared to 2018, mainly reflecting restructuring expenses incurred in 2018, largely offset by higher compensation and benefits in 2019. Compensation and benefits increased 4% to CHF 534 million, mainly due to higher allocated corporate function costs and salary expenses, partially offset by lower discretionary compensation expenses. General and administrative expenses were stable, mainly due to lower allocated corporate function costs offset by a provision release in 2018.

Results – Markets

	in			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	1,099	1,103	1,182	–	(7)
Provision for credit losses	(11)	10	–	–	–
Compensation and benefits	534	515	600	4	(14)
General and administrative expenses	384	387	410	(1)	(6)
Commission expenses	178	184	200	(3)	(8)
Restructuring expenses	–	34	42	–	(19)
Total other operating expenses	562	605	652	(7)	(7)
Total operating expenses	1,096	1,120	1,252	(2)	(11)
Income/(loss) before taxes	14	(27)	(70)	–	(61)
Statement of operations metrics (%)					
Cost/income ratio	99.7	101.5	105.9	–	–
Net revenue detail (CHF million)					
Equity sales and trading	828	859	920	(4)	(7)
Fixed income sales and trading	271	244	262	11	(7)
Net revenues	1,099	1,103	1,182	0	(7)

2018 results details

Loss before taxes of CHF 27 million in 2018 compared to a loss before taxes of CHF 70 million in 2017. The related decrease of CHF 43 million reflected lower total operating expenses, partially offset by lower net revenues and higher provision for credit losses.

Net revenues

Net revenues of CHF 1,103 million decreased 7% compared to 2017, primarily reflecting the difficult trading environment in the second half of 2018. Equity sales and trading revenues decreased 7% to CHF 859 million, mainly due to lower revenues from equity derivatives, reflecting decreased client activity and the difficult trading environment. Fixed income sales and trading revenues decreased 7% to CHF 244 million, mainly due to lower revenues from rates, reflecting the unfavorable trading environment, partially offset by higher revenues from foreign exchange products, due to a stronger trading performance, and increased client activity in structured products and credit products.

Provision for credit losses

In 2018, Markets recorded a provision for credit losses of CHF 10 million related to a single case. No provision for credit losses was recorded in 2017.

Total operating expenses

Total operating expenses of CHF 1,120 million decreased 11% compared to 2017, reflecting lower compensation and benefits, general and administrative expenses, commission expenses and restructuring expenses. Compensation and benefits decreased 14% to CHF 515 million, mainly due to lower discretionary compensation expenses, allocated corporate function costs, deferred compensation expenses from prior-year awards and salary expenses. General and administrative expenses decreased 6% to CHF 387 million, mainly due to lower professional services fees and a provision release.

Global Markets

In 2019, we reported income before taxes of CHF 956 million and net revenues of CHF 5,752 million, reflecting positive operating leverage and significantly improved profitability.

Results summary

2019 results

In 2019, we reported income before taxes of CHF 956 million and net revenues of CHF 5,752 million. We delivered positive operating leverage, as a 16% increase in net revenues and stable total operating expenses resulted in a significant improvement in profitability compared to 2018. Revenue increased across fixed income and equity trading, with particular strength in our ITS franchise as we continued to focus on our institutional and wealth management clients. Fixed income sales and trading revenues

increased 32%, driven by broad-based growth across all businesses, reflecting improved operating conditions. Equity sales and trading revenues increased 9%, reflecting higher prime services and equity derivatives revenues, partially offset by lower cash equities revenues due to significantly lower trading volumes across regions. Underwriting revenues decreased 27%, reflecting lower industry-wide debt and equity issuance activity. Total operating expenses of CHF 4,744 million were stable compared to 2018, as higher compensation and benefits were offset by restructuring expenses incurred in 2018.

Divisional results

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	5,752	4,980	5,551	16	(10)
Provision for credit losses	52	24	31	117	(23)
Compensation and benefits	2,472	2,296	2,532	8	(9)
General and administrative expenses	1,758	1,773	1,839	(1)	(4)
Commission expenses	514	491	549	5	(11)
Restructuring expenses	–	242	150	–	61
Total other operating expenses	2,272	2,506	2,538	(9)	(1)
Total operating expenses	4,744	4,802	5,070	(1)	(5)
Income before taxes	956	154	450	–	(66)
Statement of operations metrics (%)					
Return on regulatory capital	7.4	1.2	3.2	–	–
Cost/income ratio	82.5	96.4	91.3	–	–
Balance sheet statistics (CHF million, except where indicated)					
Total assets	214,019	211,530	242,159	1	(13)
Risk-weighted assets	56,777	59,016	58,858	(4)	0
Risk-weighted assets (USD)	58,589	59,836	60,237	(2)	(1)
Leverage exposure	257,407	245,664	283,809	5	(13)
Leverage exposure (USD)	265,621	249,076	290,461	7	(14)
Number of employees (full-time equivalents)					
Number of employees	12,610	11,350	11,740	11	(3)

Divisional results (continued)

	in			% change	
	2019	2018	2017	19 / 18	18 / 17
Net revenue detail (CHF million)					
Fixed income sales and trading	3,493	2,649	2,922	32	(9)
Equity sales and trading	1,855	1,709	1,750	9	(2)
Underwriting	764	1,047	1,115	(27)	(6)
Other	(360)	(425)	(236)	(15)	80
Net revenues	5,752	4,980	5,551	16	(10)

Reconciliation of adjusted results

in	Global Markets		
	2019	2018	2017
Adjusted results (CHF million)			
Net revenues	5,752	4,980	5,551
Real estate gains	(7)	0	0
Adjusted net revenues	5,745	4,980	5,551
Provision for credit losses	52	24	31
Total operating expenses	4,744	4,802	5,070
Restructuring expenses	–	(242)	(150)
Major litigation provisions	0	(10)	0
Expenses related to real estate disposals	(45)	–	–
Expenses related to business sales	0	0	(8)
Adjusted total operating expenses	4,699	4,550	4,912
Income before taxes	956	154	450
Total adjustments	38	252	158
Adjusted income before taxes	994	406	608
Adjusted return on regulatory capital (%)	7.7	3.1	4.3

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

2018 results

In 2018, we reported income before taxes of CHF 154 million. Net revenues of CHF 4,980 million decreased 10% compared to 2017, primarily reflecting lower results across fixed income trading and underwriting and reduced cash equities revenues due to less favorable market conditions, partially offset by increased ITS performance due to substantially higher equity derivatives revenues. Fixed income sales and trading revenues decreased 9%, primarily driven by substantially lower revenues in our credit franchise, reflecting challenging operating conditions. Underwriting revenues decreased 6%, reflecting lower debt issuance activity due to higher market volatility. Equity sales and trading revenues decreased 2%, reflecting lower cash equities and prime services revenues, partially offset by substantially higher equity derivatives revenues. Total operating expenses of CHF 4,802 million decreased 5% compared to 2017, reflecting lower compensation and benefits, general and administrative expenses and commission expenses, partially offset by higher restructuring expenses.

Capital and leverage metrics

As of the end of 2019, we reported risk-weighted assets of USD 58.6 billion, a decrease of USD 1.2 billion compared to 2018, primarily reflecting updated operational risk allocation keys. Leverage exposure was USD 265.6 billion, an increase of USD 16.5 billion compared to 2018, reflecting higher business activity.

2019 results details

Fixed income sales and trading

Fixed income sales and trading revenues of CHF 3,493 million increased 32% compared to 2018, reflecting higher revenue growth across all businesses due to improved operating conditions. Global credit products revenues increased significantly, driven by higher leveraged finance trading activity across regions, and higher investment grade trading activity, due to our investments in the franchise. Securitized products revenues increased, despite a significant gain in 2018 from the sale of an investment acquired in the normal course of business. Securitized products results reflected higher client activity across agency trading and our asset finance business, partially offset by reduced non-agency trading revenues. Emerging markets revenues increased, reflecting higher financing and trading activity across regions. In addition, macro products revenues increased, reflecting improved rates trading activity, partially offset by lower foreign exchange revenues.

Equity sales and trading

Equity sales and trading revenues of CHF 1,855 million increased 9% compared to 2018, reflecting higher prime services and equity derivatives revenues, partially offset by lower cash equities revenues. Prime services revenues increased, reflecting higher

client financing activity and improved commissions in listed derivatives. Equity derivatives revenues increased, primarily driven by higher client activity in structured equity derivatives, partially offset by reduced flow derivatives revenues. These increases were partially offset by lower cash equities revenues due to lower trading volumes across regions.

Underwriting

Underwriting revenues of CHF 764 million decreased 27% compared to 2018, reflecting lower industry-wide issuance activity. Debt underwriting revenues decreased, primarily due to lower leveraged finance revenues. In addition, equity underwriting revenues decreased, reflecting lower equity issuance activity.

Provision for credit losses

Global Markets recorded provision for credit losses of CHF 52 million in 2019 compared to CHF 24 million in 2018. The increase in provision for credit losses was mainly driven by our corporate lending portfolio due to a loss on the sale of non-core loans and adverse developments on a single lending counterparty.

Total operating expenses

Compared to 2018, total operating expenses of CHF 4,744 million were stable, as higher compensation and benefits were offset by restructuring expenses incurred in 2018. Compensation and benefits increased 8%, reflecting higher salary expenses and deferred compensation expenses from prior-year awards. General and administrative expenses were stable, as lower allocated corporate function costs were offset by increased professional services fees and CHF 45 million of expenses related to real estate disposals.

2018 results details

Revenues reflected a change in the intra-divisional funding cost allocation methodology between fixed income sales and trading and equity sales and trading in the fourth quarter of 2018 due to ongoing work on the implementation of the net stable funding ratio framework. In the first quarter of 2018, the US GAAP accounting standard pertaining to revenue recognition was adopted. As a result, both net revenues and operating expenses in Global Markets increased CHF 32 million in 2018.

Fixed income sales and trading

Fixed income sales and trading revenues of CHF 2,649 million decreased 9% compared to 2017, primarily driven by substantially lower revenues in our credit franchise, reflecting challenging operating conditions. Securitized products revenues decreased significantly compared to a strong 2017, reflecting lower client

activity across agency and non-agency trading, partially offset by continued momentum in our asset finance business and a significant gain from the sale of an investment. Global credit products revenues decreased, primarily due to lower leveraged finance revenues, reflecting high levels of volatility and widening US high yield spreads in the second half of the year. Emerging markets revenues decreased, reflecting a substantial decline in Brazil trading due to significantly lower client activity and rationalization of the business, partially offset by higher structured credit revenues across regions. In addition, macro products revenues decreased, reflecting the adverse impact of rationalizing the business partially offset by higher foreign exchange results.

Equity sales and trading

Equity sales and trading revenues of CHF 1,709 million decreased 2% compared to 2017, primarily reflecting lower cash equities and prime services revenues, partially offset by substantially higher equity derivatives revenues. Cash equities revenues decreased, reflecting lower trading activity. In addition, prime services revenues declined primarily reflecting lower prime brokerage in line with market indices and reduced client financing revenues, partially offset by higher commissions in listed derivatives. This was partially offset by significantly increased equity derivatives revenues, albeit compared to a subdued 2017, reflecting higher volatility and benefits from continued investments in the business.

Underwriting

Underwriting revenues of CHF 1,047 million decreased 6% compared to 2017, reflecting lower debt issuance activity due to higher market volatility. Debt underwriting revenues decreased, primarily due to lower leveraged finance and investment grade revenues. This was partially offset by higher equity underwriting revenues.

Provision for credit losses

Global Markets recorded provision for credit losses of CHF 24 million in 2018 compared to CHF 31 million in 2017.

Total operating expenses

Compared to 2017, total operating expenses of CHF 4,802 million decreased 5%, reflecting lower compensation and benefits, reduced general and administrative expenses and lower commissions expenses, partially offset by higher restructuring expenses. Compensation and benefits decreased 9%, reflecting lower deferred compensation expenses from prior-year awards, reduced discretionary compensation and lower salary expenses. General and administrative expenses decreased, reflecting lower professional services fees and lower allocated corporate function costs. In addition, we incurred restructuring expenses of CHF 242 million, reflecting the results of our cost efficiency measures.

Investment Banking & Capital Markets

In 2019, we reported a loss before taxes of CHF 162 million and net revenues of CHF 1,666 million. Net revenues decreased 23% compared to 2018, reflecting reduced client activity due to challenging market conditions.

Results summary

2019 results

In 2019, we reported a loss before taxes of CHF 162 million. The operating environment in 2019 was challenging, characterized by heightened volatility and geopolitical uncertainty, impacting investor confidence and client activity, resulting in lower revenues across our businesses. Net revenues of CHF 1,666 million decreased 23% compared to 2018, primarily driven by lower revenues from completed M&A transactions and a slowdown in leveraged finance activity across the market. Advisory and other fees of CHF 661 million decreased 30%, mainly reflecting lower

revenues from completed M&A transactions. Debt underwriting revenues of CHF 788 million decreased 16%, primarily driven by lower leveraged finance and derivatives financing revenues. Equity underwriting revenues of CHF 314 million were stable, as higher revenues from follow-on activity were offset by lower revenues from IPO issuance activity and rights offerings. Provision for credit losses increased to CHF 59 million compared to CHF 24 million in 2018. Total operating expenses of CHF 1,769 million decreased 2%, primarily due to the restructuring costs incurred in 2018, partially offset by higher general and administrative expenses in 2019.

Divisional results

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Net revenues	1,666	2,177	2,139	(23)	2
Provision for credit losses	59	24	30	146	(20)
Compensation and benefits	1,235	1,249	1,268	(1)	(1)
General and administrative expenses	517	467	423	11	10
Commission expenses	17	9	7	89	29
Restructuring expenses	-	84	42	-	100
Total other operating expenses	534	560	472	(5)	19
Total operating expenses	1,769	1,809	1,740	(2)	4
Income/(loss) before taxes	(162)	344	369	-	(7)
Statement of operations metrics (%)					
Return on regulatory capital	(4.5)	10.9	13.7	-	-
Cost/income ratio	106.2	83.1	81.3	-	-
Balance sheet statistics (CHF million, except where indicated)					
Total assets	17,819	16,156	20,803	10	(22)
Risk-weighted assets	23,559	24,190	20,058	(3)	21
Risk-weighted assets (USD)	24,311	24,526	20,528	(1)	19
Leverage exposure	42,590	40,485	43,842	5	(8)
Leverage exposure (USD)	43,949	41,047	44,870	7	(9)
Number of employees (full-time equivalents)					
Number of employees	3,090	3,100	3,190	-	(3)

Divisional results (continued)

	in			% change	
	2019	2018	2017	19 / 18	18 / 17
Net revenue detail (CHF million)					
Advisory and other fees	661	950	770	(30)	23
Debt underwriting	788	934	1,030	(16)	(9)
Equity underwriting	314	314	386	–	(19)
Other	(97)	(21)	(47)	362	(55)
Net revenues	1,666	2,177	2,139	(23)	2

Reconciliation of adjusted results

in	Investment Banking & Capital Markets		
	2019	2018	2017
Adjusted results (CHF million)			
Net revenues	1,666	2,177	2,139
Provision for credit losses	59	24	30
Total operating expenses	1,769	1,809	1,740
Restructuring expenses	–	(84)	(42)
Major litigation provisions	0	(1)	0
Expenses related to real estate disposals	(30)	–	–
Adjusted total operating expenses	1,739	1,724	1,698
Income/(loss) before taxes	(162)	344	369
Total adjustments	30	85	42
Adjusted income/(loss) before taxes	(132)	429	411
Adjusted return on regulatory capital (%)	(3.6)	13.6	15.2

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

2018 results

In 2018, we reported income before taxes of CHF 344 million. Net revenues of CHF 2,177 million increased 2% compared to 2017, due to higher revenues from advisory and other fees, partially offset by lower debt and equity underwriting revenues. Advisory and other fees of CHF 950 million increased 23%, mainly reflecting higher revenues from completed M&A transactions. Debt underwriting revenues of CHF 934 million decreased 9%, driven by lower leveraged finance and debt capital market revenues, partially offset by higher derivatives financing revenues. Equity underwriting revenues of CHF 314 million decreased 19%, driven by decreased follow-on activity, including a loss on a single block trade, and lower rights offerings, partially offset by higher revenues from equity derivatives and initial public offering (IPO) issuances. Total operating expenses of CHF 1,809 million increased 4%, primarily due to higher general and administrative expenses and restructuring expenses.

Capital and leverage metrics

As of the end of 2019, risk-weighted assets were USD 24.3 billion, stable compared to the end of 2018, as a decrease in the corporate loan portfolio was offset by the impact of methodology changes. We reported leverage exposure of USD 43.9 billion, an increase of USD 2.9 billion compared to the end of 2018, primarily driven by an increase in underwriting commitments.

2019 results details

Advisory and other fees

In 2019, revenues from advisory and other fees of CHF 661 million decreased 30% compared to 2018, primarily driven by lower revenues from completed M&A transactions.

Debt underwriting

In 2019, debt underwriting revenues of CHF 788 million decreased 16% compared to 2018, primarily driven by lower leveraged finance and derivatives financing revenues.

Equity underwriting

In 2019, equity underwriting revenues of CHF 314 million were stable as higher revenues from follow-on activity were offset by lower revenues from IPO issuance activity and rights offerings.

Provision for credit losses

In 2019, Investment Banking & Capital Markets recorded provision for credit losses of CHF 59 million, compared to CHF 24 million in 2018. The increase in provision for credit losses was mainly driven by our corporate lending portfolio due to adverse developments on a single lending counterparty and a loss on the sale of non-core loans.

Total operating expenses

Total operating expenses of CHF 1,769 million decreased 2% compared to 2018, primarily due to the restructuring costs incurred in 2018, partially offset by higher general and administrative expenses. General and administrative expenses increased 11%, including CHF 30 million of expenses related to real estate disposals. Compensation and benefits were stable, as lower discretionary compensation expenses were offset by higher deferred compensation expenses from prior year awards and severance expenses. 2019 included severance expenses of CHF 29 million.

2018 results details

In the first quarter of 2018, the US GAAP accounting standard pertaining to revenue recognition was adopted. As a result, both net revenues and operating expenses in Investment Banking & Capital Markets increased CHF 59 million in 2018.

Advisory and other fees

In 2018, revenues from advisory and other fees of CHF 950 million increased 23% compared to 2017, primarily driven by higher revenues from completed M&A transactions across the Americas and EMEA regions, with share of wallet gains in EMEA. Share of wallet refers to our share of the industry-wide fee pool for the respective products.

Debt underwriting

In 2018, debt underwriting revenues of CHF 934 million decreased 9% compared to 2017, primarily driven by lower leveraged finance activity and lower revenues from debt capital markets, partially offset by increased derivatives financing revenues.

Equity underwriting

In 2018, equity underwriting revenues of CHF 314 million decreased 19% compared to 2017, reflecting a decrease in the overall industry-wide fee pool. Performance was impacted by lower revenues from follow-on activity, including the loss on a single block trade, and rights offerings, partially offset by higher revenues from equity derivatives and IPO issuances.

Provision for credit losses

In 2018, Investment Banking & Capital Markets recorded a provision for credit losses of CHF 24 million, driven by adverse developments on non-fair valued loans in our corporate lending portfolio, partially offset by a release of provisions relating to two counterparties.

Total operating expenses

Total operating expenses of CHF 1,809 million increased 4% compared to 2017, primarily due to higher general and administrative expenses and restructuring expenses. General and administrative expenses increased 10%, mainly driven by higher costs due to the adoption of the new revenue recognition accounting standard. During 2018 we incurred restructuring expenses of CHF 84 million, compared to CHF 42 million incurred in 2017, reflecting targeted headcount reductions.

Global advisory and underwriting revenues

The Group's global advisory and underwriting business operates across multiple business divisions that work in close collaboration with each other to generate these revenues. In order to reflect the global performance and capabilities of this business and for enhanced comparability versus its peers, the following table aggregates total advisory and underwriting revenues for the Group into a single metric in US dollar terms before cross-divisional revenue sharing agreements.

	in			% change	
	2019	2018	2017	19 / 18	18 / 17
Global advisory and underwriting revenues (USD million)					
Advisory and other fees	816	1,163	935	(30)	24
Debt underwriting	1,842	2,050	2,292	(10)	(11)
Equity underwriting	771	830	906	(7)	(8)
Global advisory and underwriting revenues	3,429	4,043	4,133	(15)	(2)

Corporate Center

In 2019, we reported a loss before taxes of CHF 1,811 million compared to a loss of CHF 239 million in 2018.

Corporate Center composition

Corporate Center includes parent company operations such as Group financing, expenses for projects sponsored by the Group, including costs associated with the evolution of our legal entity structure to meet developing and future regulatory requirements, and certain other expenses and revenues that have not been allocated to the segments. Corporate Center further includes consolidation and elimination adjustments required to eliminate intercompany revenues and expenses.

Treasury results include the impact of volatility in the valuations of certain central funding transactions such as structured notes issuances and swap transactions. Treasury results also include additional interest charges from transfer pricing to align funding costs to assets held in the Corporate Center and, since 2019, legacy funding costs previously reported in the Strategic Resolution Unit.

Beginning in 2019 the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately presented within our Corporate Center disclosures, including related asset funding costs. Certain

activities not linked to the underlying portfolio, such as legacy funding costs, legacy litigation provisions, a specific client compliance function and noncontrolling interests without significant economic interest, which were previously part of the Strategic Resolution Unit, are recorded in the Corporate Center and are not reflected in the Asset Resolution Unit. Prior periods have not been restated. Information about the Strategic Resolution Unit can be found in our previous Annual Reports.

→ Refer to credit-suisse.com/annualreporting for prior year annual reports.

Other revenues primarily include required elimination adjustments associated with trading in own shares, treasury commissions charged to divisions, the cost of certain hedging transactions executed in connection with the Group's risk-weighted assets and valuation hedging impacts from long-dated legacy deferred compensation and retirement programs mainly relating to former employees.

Compensation and benefits include fair value adjustments on certain deferred compensation plans not allocated to the segments, certain deferred compensation retention awards intended to support the restructuring of the Group and fair value adjustments on certain other long-dated legacy deferred compensation and retirement programs mainly relating to former employees.

Corporate Center results

	in / end of			% change	
	2019	2018	2017	19 / 18	18 / 17
Statements of operations (CHF million)					
Treasury results	(511)	13	56	–	(77)
Asset Resolution Unit	(147)	–	–	–	–
Other	227	87	29	161	200
Net revenues	(431)	100	85	–	18
Provision for credit losses	8	0	0	–	–
Compensation and benefits	467	128	398	265	(68)
General and administrative expenses	839	160	364	424	(56)
Commission expenses	66	49	45	35	9
Restructuring expenses	–	2	14	–	(86)
Total other operating expenses	905	211	423	329	(50)
Total operating expenses	1,372	339	821	305	(59)
Income/(loss) before taxes	(1,811)	(239)	(736)	–	(68)
of which Asset Resolution Unit	(385)	–	–	–	–
Balance sheet statistics (CHF million)					
Total assets	122,009	104,411	67,591	17	54
Risk-weighted assets	51,369	29,703	23,849	73	25
Leverage exposure	128,904	105,247	67,034	22	57

Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

Results summary

2019 results

In 2019, we reported a loss before taxes of CHF 1,811 million compared to a loss of CHF 239 million in 2018. We reported negative net revenues of CHF 431 million in 2019, driven by negative treasury results and negative net revenues related to the Asset Resolution Unit, partially offset by other revenues. Total operating expenses of CHF 1,372 million increased 305% compared to 2018, primarily reflecting higher general and administrative expenses, driven by increased litigation provisions of CHF 465 million, mainly in connection with mortgage-related matters, and higher compensation and benefits.

2018 results

In 2018, we reported a loss before taxes of CHF 239 million compared to a loss of CHF 736 million in 2017. We reported net revenues of CHF 100 million in 2018, driven by other revenues and positive treasury results. Total operating expenses of CHF 339 million decreased 59% compared to 2017, mainly driven by lower compensation and benefits and lower general and administrative expenses.

Capital and leverage metrics

As of the end of 2019, we reported risk-weighted assets of CHF 51.4 billion, reflecting an increase of CHF 21.7 billion compared to the end of 2018. Leverage exposure was CHF 128.9 billion as of the end of 2019, reflecting an increase of CHF 23.7 billion compared to the end of 2018. The increases in risk-weighted assets and leverage exposure mainly reflected the transfer of the residual portfolio from the Strategic Resolution Unit.

→ Refer to "Regulatory capital" in Credit Suisse for further information.

2019 Results details

Net revenues

In 2019, we reported negative net revenues of CHF 431 million compared to net revenues of CHF 100 million in 2018.

Negative treasury results of CHF 511 million in 2019 reflected losses of CHF 460 million with respect to structured notes volatility, primarily related to interest rate movements, and negative revenues of CHF 265 million relating to funding activities, excluding Asset Resolution Unit-related asset funding costs. Negative revenues and losses were partially offset by gains of CHF 109 million relating to fair value option volatility on own debt and gains of CHF 100 million relating to hedging volatility.

In the Asset Resolution Unit, we reported negative net revenues of CHF 147 million in 2019.

Other revenues of CHF 227 million increased CHF 140 million compared to 2018, mainly reflecting a positive valuation impact from long-dated legacy deferred compensation and retirement programs, the impact from the gross recognition of sublease rental income under the new accounting standard for leases and a positive impact from a specific client compliance function.

Provision for credit losses

In 2019, we recorded provision for credit losses of CHF 8 million compared to provision for credit losses of zero in 2018. Provision for credit losses in 2019 was primarily related to the Asset Resolution Unit.

Total operating expenses

Total operating expenses of CHF 1,372 million increased 305% compared to 2018, primarily reflecting increases in general and administrative expenses and compensation and benefits. General and administrative expenses of CHF 839 million increased 424%, primarily reflecting increased litigation provisions of CHF 465 million, mainly in connection with mortgage-related matters previously recorded in the Strategic Resolution Unit, general and administrative expenses related to the Asset Resolution Unit and the impact from the gross recognition of sublease rental income under the new accounting standard for leases. Compensation and benefits of CHF 467 million increased 265%, primarily reflecting compensation and benefits related to the Asset Resolution Unit, higher deferred compensation expenses from prior-year awards and higher expenses for long-dated legacy deferred compensation and retirement programs.

2018 Results details

Net revenues

Net revenues of CHF 100 million increased CHF 15 million compared to 2017.

Treasury results of CHF 13 million in 2018 mainly reflected gains of CHF 200 million with respect to structured notes volatility, of which CHF 165 million related to valuation model enhancements, gains of CHF 123 million relating to hedging volatility and gains of CHF 61 million relating to fair value option volatility on own debt, partially offset by negative revenues of CHF 362 million relating to funding activities.

Other revenues of CHF 87 million increased CHF 58 million compared to 2017, mainly reflecting reduced costs relating to hedging transactions executed in connection with the Group's risk-weighted assets and the elimination of losses from trading in own shares compared to gains in 2017, partially offset by a negative valuation impact from long-dated legacy deferred compensation and retirement programs and a loss relating to the final liquidation of our subsidiary in Johannesburg.

Total operating expenses

Total operating expenses of CHF 339 million decreased 59% compared to 2017, primarily reflecting decreases in compensation and benefits and general and administrative expenses. Compensation and benefits of CHF 128 million decreased 68%, primarily reflecting lower deferred compensation expenses from prior-year awards and lower retention award expenses. General and administrative expenses of CHF 160 million decreased 56%, mainly

due to the absence of the impact from the settlement with the Department of Financial Services (DFS) in 2017 relating to certain areas of our foreign exchange trading business and reduced expenses relating to the continuing evolution of our legal entity structure. In 2018, we recorded expenses of CHF 159 million, compared to CHF 240 million in 2017, with respect to the evolution of our legal entity structure.

Expense allocation to divisions

	in			% change	
	2019	2018	2017	19 / 18	18 / 17
Expense allocation to divisions (CHF million)					
Compensation and benefits	3,011	2,748	3,076	10	(11)
General and administrative expenses	2,676	2,212	2,573	21	(14)
Commission expenses	66	49	45	35	9
Restructuring expenses	–	372	158	–	135
Total other operating expenses	2,742	2,633	2,776	4	(5)
Total operating expenses before allocations to divisions	5,753	5,381	5,852	7	(8)
Net allocation to divisions	4,381	5,042	5,031	(13)	0
of which Swiss Universal Bank	989	1,056	1,078	(6)	(2)
of which International Wealth Management	832	876	864	(5)	1
of which Asia Pacific	719	780	777	(8)	0
of which Global Markets	1,488	1,708	1,645	(13)	4
of which Investment Banking & Capital Markets	353	358	346	(1)	3
of which Strategic Resolution Unit ¹	–	264	321	(100)	(18)
Total operating expenses	1,372	339	821	305	(59)

Corporate services and business support, including in finance, operations, human resources, legal, compliance, risk management and IT, are provided by corporate functions, and the related costs are allocated to the segments and the Corporate Center based on their requirements and other relevant measures.

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group.

Asset Resolution Unit

	in / end of
	2019
Statements of operations (CHF million)	
Revenues from portfolio assets	65
Asset funding costs	(212)
Net revenues	(147)
Provision for credit losses	
Compensation and benefits	131
General and administrative expenses	94
Commission expenses	8
Total other operating expenses	102
Total operating expenses	233
Income/(loss) before taxes	(385)
Balance sheet statistics (CHF million, except where indicated)	
Total assets	17,357
Risk-weighted assets (USD)	10,453 ¹
Leverage exposure (USD)	25,557

¹ Risk-weighted assets excluding operational risk were USD 8,745 million as of the end of 2019.

Assets under management

As of the end of 2019, assets under management were CHF 1,507.2 billion, 12.1% higher compared to the end of 2018, with net new assets of CHF 79.3 billion.

Assets under management

Assets under management comprise assets that are placed with us for investment purposes and include discretionary and advisory counterparty assets.

Discretionary assets are assets for which the client fully transfers the discretionary power to a Credit Suisse entity with a management mandate. Discretionary assets are reported in the business in which the advice is provided as well as in the business in which the investment decisions take place. Assets managed by the Asset Management business of International Wealth Management for other businesses are reported in each applicable business and eliminated at the Group level.

Advisory assets include assets placed with us where the client is provided access to investment advice but retains discretion over investment decisions.

Assets under management and net new assets include assets managed by consolidated entities, joint ventures and strategic participations. Assets from joint ventures and participations are counted in proportion to our share in the respective entity.

Assets under management and client assets

	2019	2018	end of 2017	19 / 18	% change 18 / 17
Assets under management (CHF billion)					
Swiss Universal Bank – Private Clients	217.6	198.0	208.3	9.9	(4.9)
Swiss Universal Bank – Corporate & Institutional Clients	436.4	348.7	354.7	25.2	(1.7)
International Wealth Management – Private Banking	370.0	357.5	366.9	3.5	(2.6)
International Wealth Management – Asset Management	437.9	388.7	385.6	12.7	0.8
Asia Pacific – Private Banking ¹	220.0	199.3	196.8	10.4	1.3
Strategic Resolution Unit ²	–	0.5	5.0	–	(90.0)
Assets managed across businesses ³	(174.7)	(147.8)	(141.2)	18.2	4.7
Assets under management	1,507.2	1,344.9	1,376.1	12.1	(2.3)
of which discretionary assets	489.7	442.9	452.5	10.6	(2.1)
of which advisory assets	1,017.5	902.0	923.6	12.8	(2.3)
Client assets (CHF billion)⁴					
Swiss Universal Bank – Private Clients	260.4	231.2	241.0	12.6	(4.1)
Swiss Universal Bank – Corporate & Institutional Clients	534.4	454.5	463.8	17.6	(2.0)
International Wealth Management – Private Banking	474.0	430.5	466.0	10.1	(7.6)
International Wealth Management – Asset Management	437.9	388.7	385.6	12.7	0.8
Asia Pacific – Private Banking ¹	275.0	243.0	255.5	13.2	(4.9)
Strategic Resolution Unit ²	–	2.4	8.5	–	(71.8)
Assets managed across businesses ³	(174.7)	(147.7)	(141.2)	18.3	4.6
Client assets	1,807.0	1,602.6	1,679.2	12.8	(4.6)

¹ Following a review in 2019 of the classification of assets under management relating to certain client relationships in our Asia Pacific division, the Group has derecognized an aggregate CHF 4.3 billion of assets under management and related net new assets as of the end of 2019. Prior periods have been reclassified to conform to the current presentation. Changes to the terms of these client relationships may result in the recognition of assets under management in the future.

² Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual assets under management were either transferred to other divisions or no longer qualify as assets under management.

³ Represents assets managed by Asset Management within International Wealth Management for the other businesses.

⁴ Client assets is a broader measure than assets under management as it includes transactional accounts and assets under custody (assets held solely for transaction-related or safekeeping/custody purposes) and assets of corporate clients and public institutions used primarily for cash management or transaction-related purposes.

Net new assets

Net new assets include individual cash payments, delivery of securities and cash flows resulting from loan increases or repayments.

Interest and dividend income credited to clients and commissions, interest and fees charged for banking services as well as changes in assets under management due to currency and market volatility are not taken into account when calculating net new assets. Any such changes are not directly related to the Group's success in acquiring assets under management. Similarly structural effects mainly relate to asset inflows and outflows due to acquisition or divestiture, exit from businesses or markets or exits due to new regulatory requirements and are not taken into account when calculating net new assets. The Group reviews relevant policies regarding client assets on a regular basis. Following such reviews, with effect from January 1, 2019, the Group updated its assets under management policy primarily to introduce more specific criteria to evaluate whether client assets qualify as assets under management. The introduction of this updated policy resulted in a reclassification of CHF 18.8 billion of assets under management to assets under custody which has been reflected as a structural effect in 2019.

Results summary

2019 results

As of the end of 2019, assets under management were CHF 1,507.2 billion, an increase of CHF 162.3 billion compared to the end of 2018. The increase was driven by favorable market movements and net new assets of CHF 79.3 billion, partially offset by structural effects and unfavorable foreign exchange-related movements.

Net new assets of CHF 79.3 billion mainly reflected inflows across the following businesses. Net new assets of CHF 45.3 billion in the Corporate & Institutional Clients business of Swiss Universal Bank reflected strong inflows from the pension business. Net new assets of CHF 21.5 billion in the Asset Management business of International Wealth Management mainly reflected inflows from traditional and alternative investments. Net new assets of CHF 11.0 billion in the Private Banking business of International Wealth Management mainly reflected inflows from emerging markets. Net new assets of CHF 8.7 billion in the Private Banking business of Asia Pacific reflected inflows across most of the markets in this region.

2018 results

As of the end of 2018, assets under management were CHF 1,344.9 billion, a decrease of CHF 31.2 billion compared to the end of 2017. The decrease was driven by unfavorable market movements, structural effects and foreign exchange-related movements, partially offset by net new assets of CHF 53.7 billion.

Net new assets of CHF 53.7 billion mainly reflected inflows across the following businesses. Net new assets of CHF 22.2 billion in the Asset Management business of International Wealth Management mainly reflected inflows from traditional and alternative investments. Net new assets of CHF 14.4 billion in the Private Banking business of Asia Pacific reflected inflows across most of the markets in this region. Net new assets of CHF 14.2 billion in the Private Banking business of International Wealth Management mainly reflected inflows from emerging markets and Europe. Net new assets of CHF 8.6 billion in the Corporate & Institutional Clients business of Swiss Universal Bank primarily reflected positive contributions from the pension business.

→ Refer to "Swiss Universal Bank", "International Wealth Management" and "Asia Pacific" and "Note 38 – Assets under management" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Growth in assets under management

in	2019	2018	2017
Growth in assets under management (CHF billion)			
Net new assets	79.3	53.7	37.8
of which Swiss Universal Bank – Private Clients	3.4	3.0	4.7
of which Swiss Universal Bank – Corporate & Institutional Clients	45.3	8.6	(13.9)
of which International Wealth Management – Private Banking	11.0	14.2	15.6
of which International Wealth Management – Asset Management ¹	21.5	22.2	20.3
of which Asia Pacific – Private Banking ²	8.7	14.4	16.9
of which Strategic Resolution Unit ³	–	(0.3)	(2.5)
of which assets managed across businesses ⁴	(10.6)	(8.4)	(3.3)
Other effects	83.0	(84.9)	87.2
of which Swiss Universal Bank – Private Clients	16.2	(13.3)	11.4
of which Swiss Universal Bank – Corporate & Institutional Clients	42.4	(14.6)	29.3
of which International Wealth Management – Private Banking	1.5	(23.6)	28.1
of which International Wealth Management – Asset Management	27.7	(19.1)	43.7
of which Asia Pacific – Private Banking ²	12.0	(11.9)	13.0
of which Strategic Resolution Unit ³	(0.5)	(4.2)	(6.2)
of which assets managed across businesses ⁴	(16.3)	1.8	(32.1)
Growth in assets under management	162.3	(31.2)	125.0
of which Swiss Universal Bank – Private Clients	19.6	(10.3)	16.1
of which Swiss Universal Bank – Corporate & Institutional Clients	87.7	(6.0)	15.4
of which International Wealth Management – Private Banking	12.5	(9.4)	43.7
of which International Wealth Management – Asset Management ¹	49.2	3.1	64.0
of which Asia Pacific – Private Banking ²	20.7	2.5	29.9
of which Strategic Resolution Unit ³	(0.5)	(4.5)	(8.7)
of which assets managed across businesses ⁴	(26.9)	(6.6)	(35.4)
Growth in assets under management (%)			
Net new assets	5.9	3.9	3.0
of which Swiss Universal Bank – Private Clients	1.7	1.4	2.4
of which Swiss Universal Bank – Corporate & Institutional Clients	13.0	2.4	(4.1)
of which International Wealth Management – Private Banking	3.1	3.9	4.8
of which International Wealth Management – Asset Management ¹	5.5	5.8	6.3
of which Asia Pacific – Private Banking ²	4.4	7.3	10.1
of which Strategic Resolution Unit ³	–	(6.0)	(18.2)
of which assets managed across businesses ⁴	7.2	5.9	3.1
Other effects	6.2	(6.2)	7.0
of which Swiss Universal Bank – Private Clients	8.2	(6.3)	6.0
of which Swiss Universal Bank – Corporate & Institutional Clients	12.2	(4.1)	8.6
of which International Wealth Management – Private Banking	0.4	(6.5)	8.7
of which International Wealth Management – Asset Management	7.2	(5.0)	13.6
of which Asia Pacific – Private Banking ²	6.0	(6.0)	7.8
of which Strategic Resolution Unit ³	(100.0)	(84.0)	(45.3)
of which assets managed across businesses ⁴	11.0	(1.2)	30.4
Growth in assets under management	12.1	(2.3)	10.0
of which Swiss Universal Bank – Private Clients	9.9	(4.9)	8.4
of which Swiss Universal Bank – Corporate & Institutional Clients	25.2	(1.7)	4.5
of which International Wealth Management – Private Banking	3.5	(2.6)	13.5
of which International Wealth Management – Asset Management ¹	12.7	0.8	19.9
of which Asia Pacific – Private Banking ²	10.4	1.3	17.9
of which Strategic Resolution Unit ³	(100.0)	(90.0)	(63.5)
of which assets managed across businesses ⁴	18.2	4.7	33.5

¹ Includes outflows for private equity assets reflecting realizations at cost and unfunded commitments on which a fee is no longer earned.

² Following a review in 2019 of the classification of assets under management relating to certain client relationships in our Asia Pacific division, the Group has derecognized an aggregate CHF 4.3 billion of assets under management and related net new assets as of the end of 2019. Prior periods have been reclassified to conform to the current presentation. Changes to the terms of these client relationships may result in the recognition of assets under management in the future.

³ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual assets under management were either transferred to other divisions or no longer qualify as assets under management.

⁴ Represents assets managed by Asset Management within International Wealth Management for the other businesses.

Critical accounting estimates

In order to prepare the consolidated financial statements in accordance with US GAAP, management is required to make certain accounting estimates to ascertain the value of assets and liabilities. These estimates are based upon judgment and the information available at the time, and actual results may differ materially from these estimates. Management believes that the estimates and assumptions used in the preparation of the consolidated financial statements are prudent, reasonable and consistently applied.

We believe that the critical accounting estimates discussed below involve the most complex judgments and assessments.

→ Refer to "Note 1 – Summary of significant accounting policies" and "Note 2 – Recently issued accounting standards" in VI – Consolidated financial statements – Credit Suisse Group for further information on significant accounting policies and new accounting pronouncements. For financial information relating to the Bank, refer to the corresponding notes in the consolidated financial statements of the Bank.

Fair value

A significant portion of our financial instruments is carried at fair value. The fair value of the majority of these financial instruments is based on quoted prices in active markets or observable inputs.

In addition, we hold financial instruments for which no prices are available and which have few or no observable inputs. For these instruments, the determination of fair value requires subjective assessment and judgment, depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument. In such circumstances, valuation is determined based on management's own judgments about the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk. These instruments include certain OTC derivatives including interest rate, foreign exchange, equity and credit derivatives, certain corporate equity-linked securities, mortgage-related securities, private equity investments and certain loans and credit products, including leveraged finance, certain syndicated loans, certain high yield bonds and life finance instruments.

We have availed ourselves of the simplification in accounting offered under the fair value option. This has been accomplished generally by electing the fair value option, both at initial adoption and for subsequent transactions, on items impacted by the hedge accounting requirements of US GAAP. For instruments for which hedge accounting could not be achieved but for which we are economically hedged, we have generally elected the fair value option. Where we manage an activity on a fair value basis but previously have been unable to achieve fair value accounting, we have generally utilized the fair value option to align our financial accounting to our risk management reporting.

Control processes are applied to ensure that the fair values of the financial instruments reported in the consolidated financial statements, including those derived from pricing models, are appropriate and determined on a reasonable basis.

→ Refer to "Note 35 – Financial instruments" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Variable interest entities

As a normal part of our business, we engage in various transactions which include entities that are considered variable interest entities (VIEs). VIEs are special purpose entities that typically lack sufficient equity to finance their activities without additional subordinated financial support or are structured such that the holders of the voting rights do not substantively participate in the gains and losses of the entity. Such entities are required to be assessed for consolidation, compelling the primary beneficiary to consolidate the VIE. The primary beneficiary is the party that has the power to direct the activities that most significantly affect the economics of the VIE and has the right to receive benefits or the obligation to absorb losses of the entity that could be potentially significant to the VIE. We consolidate all VIEs for which we are the primary beneficiary. Application of the accounting requirements for consolidation of VIEs, including ongoing re-assessment of VIEs for possible consolidation, may require the exercise of significant judgment.

→ Refer to "Note 1 – Summary of significant accounting policies" and "Note 34 – Transfers of financial assets and variable interest entities" in VI – Consolidated financial statements – Credit Suisse Group for further information on VIEs.

Contingencies and loss provisions

A contingency is an existing condition that involves a degree of uncertainty that will ultimately be resolved upon the occurrence or non-occurrence of future events.

Litigation contingencies

We are involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of our businesses. Some of these proceedings have been brought on behalf of various classes of claimants and seek damages of material and/or indeterminate amounts. We accrue loss contingency litigation provisions and take a charge to income in connection with certain proceedings when losses, additional losses or ranges of loss are probable and reasonably estimable. We also accrue litigation provisions for the estimated fees and expenses of external lawyers and other service providers in relation to such proceedings, including in cases for which we have not accrued a loss contingency provision. We accrue these fee and expense litigation provisions and take a charge to income in connection therewith when such fees and expenses are probable and reasonably estimable. We review our legal proceedings each quarter to determine the adequacy of our litigation provisions and may increase or release provisions based on management's judgment and the advice of counsel. The establishment of additional provisions or releases of litigation provisions may be necessary in the future as developments in such proceedings warrant.

It is inherently difficult to determine whether a loss is probable or even reasonably possible or to estimate the amount of any loss or loss range for many of our legal proceedings. Estimates, by their nature, are based on judgment and currently available information and involve a variety of factors, including, but not limited to, the type and nature of the proceeding, the progress of the matter, the advice of counsel, our defenses and our experience in similar matters, as well as our assessment of matters, including settlements, involving other defendants in similar or related cases or proceedings. Factual and legal determinations, many of which are complex, must be made before a loss, additional losses or ranges of loss can be reasonably estimated for any proceeding. We do not believe that we can estimate an aggregate range of reasonably possible losses for certain of our proceedings because of their complexity, the novelty of some of the claims, the early stage of the proceedings, the limited amount of discovery that has occurred and/or other factors. Most matters pending against us seek damages of an indeterminate amount. While certain matters specify the damages claimed, such claimed amount may not represent our reasonably possible losses.

→ Refer to "Note 39 – Litigation" in VI – Consolidated financial statements – Credit Suisse Group for further information on legal proceedings.

Allowance and provision for credit losses

As a normal part of our business, we are exposed to credit risk through our lending relationships, commitments and letters of credit as well as counterparty risk on derivatives, foreign exchange and other transactions. Credit risk is the risk of financial loss arising as a result of a borrower or counterparty failing to meet its financial obligations or as a result of deterioration in the credit quality of the borrower or counterparty. In the event of a default, a bank generally incurs a loss equal to the amount owed by the debtor, less any recoveries resulting from foreclosure, liquidation of collateral, the restructuring of the debtor company or other recovery proceeds from the debtor. The allowance for loan losses is considered a reasonable estimate of credit losses existing as of the end of the reporting period and is composed of the following components: probable credit losses inherent in the portfolio and those losses specifically identified.

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments" (ASU 2016-13), creating ASC Topic 326 – Financial Instruments – Credit Losses. ASU 2016-13 is intended to improve financial reporting by requiring timelier recording of credit losses on financial assets measured at amortized cost basis including, but not limited to loans, net investments in leases and off-balance sheet credit exposures. ASU 2016-13 eliminates the probable initial recognition threshold under the current incurred loss methodology for recognizing credit losses. Instead, ASU 2016-13 requires the measurement of all expected credit losses for financial assets held at the reporting date over the remaining contractual life (considering the effect of prepayments) based on historical experience, current conditions and reasonable and supportable forecasts. The Group will incorporate forward-looking information and macroeconomic factors into its credit loss estimates. ASU 2016-13 requires enhanced

disclosures to help investors and other financial statement users to better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization's portfolio. The Group adopted ASU 2016-13 and its subsequent amendments on January 1, 2020, applying the modified retrospective approach, which resulted in a decrease in retained earnings of less than CHF 0.2 billion, with no significant impact on regulatory capital.

The spread of COVID-19 is expected to have a significant impact on the global economy and is likely to affect the Group's business performance, including credit loss estimates, in at least the first half of 2020 and going forward.

→ Refer to "Note 1 – Summary of significant accounting policies", "Note 2 – Recently issued accounting standards" and "Note 19 – Loans, allowance for loan losses and credit quality" in VI – Consolidated financial statements – Credit Suisse Group for further information on allowance for loan losses.

Inherent loan loss allowance

The inherent loan loss allowance is for loans not specifically identified as impaired and that, on a portfolio basis, are considered to contain probable inherent loss. The estimate of this component of the allowance for the consumer loans portfolio involves applying historical and current default probabilities, historical recovery experience and related current assumptions to homogenous loans based on internal risk rating and product type. To estimate this component of the allowance for the corporate & institutional loans portfolio, the Group segregates loans by risk, industry or country rating. The methodology for determining the inherent loan loss allowance for loan portfolios in our investment banking businesses uses rating-specific default probabilities, which incorporate not only historic third-party data but also data implied from current quoted credit spreads.

Many factors are evaluated in estimating probable credit losses inherent in existing exposures. These factors include: the volatility of default probabilities; rating changes; the magnitude of the potential loss; internal risk ratings; geographic, industry and other economic factors; and imprecision in the methodologies and models used to estimate credit risk. Overall credit risk indicators are also considered, such as trends in internal risk-rated exposures, classified exposures, cash-basis loans, recent loss experience and forecasted write-offs, as well as industry and geographic concentrations and current developments within those segments or locations. Our current business strategy and credit process, including credit approvals and limits, underwriting criteria and workout procedures, are also important factors.

Significant judgment is exercised in the evaluation of these factors. For example, estimating the amount of potential loss requires an assessment of the period of the underlying data. Data that does not capture a complete credit cycle may compromise the accuracy of loss estimates. Determining which external data relating to default probabilities should be used and when it should be used also requires judgment. The use of market indices and ratings that do not sufficiently correlate to our specific exposure characteristics could also affect the accuracy of loss estimates.

Evaluating the impact of uncertainties regarding macroeconomic and political conditions, currency devaluations on cross-border exposures, changes in underwriting criteria, unexpected correlations among exposures and other factors all require significant judgment. Changes in our estimates of probable loan losses inherent in the portfolio could have an impact on the provision and result in a change in the allowance.

Specific loan loss allowances

We make provisions for specific loan losses on impaired loans based on regular and detailed analysis of each loan in the portfolio. This analysis includes an estimate of the realizable value of any collateral, the costs associated with obtaining repayment and realization of any such collateral, the counterparty's overall financial condition, resources and payment record, the extent of our other commitments to the same counterparty and prospects for support from any financially responsible guarantors.

The methodology for calculating specific allowances involves judgments at many levels. First, it involves the early identification of deteriorating credit. Extensive judgment is required in order to properly evaluate the various indicators of the financial condition of a counterparty and likelihood of repayment. The failure to identify certain indicators or give them proper weight could lead to a different conclusion about the credit risk. The assessment of credit risk is subject to inherent limitations with respect to the completeness and accuracy of relevant information (for example, relating to the counterparty, collateral or guarantee) that is available at the time of the assessment. Significant judgment is exercised in determining the amount of the allowance. Whenever possible, independent, verifiable data or our own historical loss experience is used in models for estimating loan losses. However, a significant degree of uncertainty remains when applying such valuation techniques. Under our loan policy, the classification of loan status also has a significant impact on the subsequent accounting for interest accruals.

→ Refer to "Risk Management" in III – Treasury, Risk, Balance sheet and Off-balance sheet and "Note 19 – Loans, allowance for loan losses and credit quality" in VI – Consolidated financial statements – Credit Suisse Group for loan portfolio disclosures, valuation adjustment disclosures and certain other information relevant to the evaluation of credit risk and credit risk management.

Goodwill impairment

Under US GAAP, goodwill is not amortized, but is reviewed for potential impairment on an annual basis as of December 31 and at any other time that events or circumstances indicate that the carrying value of goodwill may not be recoverable.

For the purpose of testing goodwill for impairment, each reporting unit is assessed individually. A reporting unit is an operating segment or one level below an operating segment, also referred to as a component. A component of an operating segment is deemed to be a reporting unit if the component constitutes a business for which discrete financial information is available and management regularly reviews the operating results of that component.

The Group's reporting units are defined as follows: Swiss Universal Bank – Private Clients, Swiss Universal Bank – Corporate & Institutional Clients, International Wealth Management – Private Banking, International Wealth Management – Asset Management, Asia Pacific – Wealth Management & Connected, Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets.

In accordance with US GAAP, the Group continually assesses whether or not there has been a triggering event requiring a review of goodwill.

Under ASU 2011-08, "Testing Goodwill for Impairment", a qualitative assessment is permitted to evaluate whether a reporting unit's fair value is less than its carrying value. If on the basis of the qualitative assessment it is more likely than not that the reporting unit's fair value is higher than its carrying value, no quantitative goodwill impairment test is required. If on the basis of the qualitative assessment it is more likely than not that the reporting unit's fair value is lower than its carrying value, a quantitative goodwill impairment test must be performed, by calculating the fair value of the reporting unit and comparing that amount to its carrying value. If the fair value of a reporting unit exceeds its carrying value, there is no goodwill impairment. If the carrying value exceeds the fair value, there is a goodwill impairment. The goodwill impairment is calculated as the difference between the carrying value and the fair value of the reporting unit up to a maximum of the goodwill amount recorded in that reporting unit.

The qualitative assessment is intended to be a simplification of the annual impairment test and can be bypassed for any reporting unit and any period to proceed directly to performing the quantitative goodwill impairment test. When bypassing the qualitative assessment in any period in accordance with the current practice of the Group, the preparation of a qualitative assessment can be resumed in any subsequent period.

Circumstances that could trigger an initial qualitative assessment of the goodwill impairment test include, but are not limited to: (i) macroeconomic conditions such as a deterioration in general economic conditions or other developments in equity and credit markets; (ii) industry and market considerations such as a deterioration in the environment in which the entity operates, an increased competitive environment, a decline in market-dependent multiples or metrics (considered in both absolute terms and relative to peers), and regulatory or political developments; (iii) other relevant entity-specific events such as changes in management, key personnel or strategy; (iv) a more-likely-than-not expectation of selling or disposing of all, or a portion, of a reporting unit; (v) results of testing for recoverability of a significant asset group within a reporting unit; (vi) recognition of a goodwill impairment in the financial statements of a subsidiary that is a component of a reporting unit; and (vii) a sustained decrease in share price (considered in both absolute terms and relative to peers).

The carrying value of each reporting unit for the purpose of the goodwill impairment test is determined by considering the

reporting units' risk-weighted assets usage, leverage ratio exposure, deferred tax assets, goodwill and intangible assets. The residual value between the total of these elements and the Group's shareholders' equity is allocated to the reporting units on a pro-rata basis. As of December 31, 2019, this residual value was a debit of CHF 844 million.

In estimating the fair value of its reporting units, the Group applied a combination of the market approach and the income approach. Under the market approach, consideration was given to price to projected earnings multiples or price to book value multiples for similarly traded companies and prices paid in recent transactions that have occurred in its industry or in related industries. Under the income approach, a discount rate was applied that reflects the risk and uncertainty related to the reporting unit's projected cash flows, which were determined from the Group's financial plan.

In determining the estimated fair value, the Group relied upon its latest five-year strategic business plan, which included significant management assumptions and estimates based on its view of current and future economic conditions and regulatory changes, and as approved by the Board of Directors.

Estimates of the Group's future earnings potential, and that of the reporting units, involve considerable judgment, including management's view on future changes in market cycles, the regulatory environment and the anticipated result of the implementation of business strategies, competitive factors and assumptions concerning the retention of key employees. Adverse changes in the estimates and assumptions used to determine the fair value of the Group's reporting units may result in a goodwill impairment in the future.

A goodwill impairment is defined as the amount by which a reporting unit's carrying value exceeds its fair value. An impairment loss shall be recognized in an amount equal to the excess, limited to the total amount of goodwill allocated to the reporting unit.

The Group determined in the first and second quarters of 2019 that goodwill triggering events occurred for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units. Based on its goodwill impairment analyses performed as of March 31, 2019 and June 30, 2019, the Group concluded that the estimated fair value for all of the reporting units with goodwill exceeded their related carrying values and no impairments were necessary as of March 31, 2019 and June 30, 2019.

Based on its goodwill impairment analysis performed as of December 31, 2019, the Group concluded that there was no impairment necessary for the Investment Banking & Capital Markets and Asia Pacific – Markets reporting units as the estimated fair value of these reporting units exceeded their carrying values by 9% and 8%, respectively. The goodwill allocated to these reporting units has become more sensitive to an impairment as the valuation of these reporting units is highly correlated with client trading and investing activity.

The Group concluded that the estimated fair value for all of its other reporting units with goodwill substantially exceeded their related carrying values and that no impairment was necessary as of December 31, 2019.

The spread of COVID-19 is expected to have a significant impact on the global economy and is likely to affect the Group's business performance, including goodwill assessments, in at least the first half of 2020 and going forward.

The Group engaged the services of an independent valuation specialist to assist in the valuation of the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units as of December 31, 2019. The valuations were performed using a combination of the market approach and income approach.

The results of the impairment evaluation of each reporting unit's goodwill would be significantly impacted by adverse changes in the underlying parameters used in the valuation process. If actual outcomes adversely differ by a significant margin from our best estimates of the key economic assumptions and associated cash flows applied in the valuation of the reporting unit, we could potentially incur material impairment charges in the future.

→ Refer to "Note 20 – Goodwill" in VI – Consolidated financial statements – Credit Suisse Group for further information on goodwill.

Taxes

Uncertainty of income tax positions

We follow the income tax guidance under US GAAP, which sets out a consistent framework to determine the appropriate level of tax reserves to maintain for uncertain income tax positions.

Significant judgment is required in determining whether it is more likely than not that an income tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position.

Further judgment is required to determine the amount of benefit eligible for recognition in the consolidated financial statements.

→ Refer to "Note 28 – Tax" in VI – Consolidated financial statements – Credit Suisse Group for further information on income tax positions.

Deferred tax valuation allowances

Deferred tax assets and liabilities are recognized for the estimated future tax effects of operating loss carry-forwards and temporary differences between the carrying values of existing assets and liabilities and their respective tax bases at the dates of the consolidated balance sheets.

The realization of deferred tax assets on temporary differences is dependent upon the generation of taxable income during the periods in which those temporary differences become deductible. The realization of deferred tax assets on net operating losses is dependent upon the generation of taxable income during the periods prior to their expiration, if applicable. Management regularly

evaluates whether deferred tax assets will be realized. If management considers it more likely than not that all or a portion of a deferred tax asset will not be realized, a corresponding valuation allowance is established. In evaluating whether deferred tax assets will be realized, management considers both positive and negative evidence, including projected future taxable income, the reversal of deferred tax liabilities, which can be scheduled, and tax planning strategies.

This evaluation requires significant management judgment, primarily with respect to projected taxable income. Future taxable income can never be predicted with certainty. It is derived from budgets and strategic business plans but is dependent on numerous factors, some of which are beyond management's control. Substantial variance of actual results from estimated future taxable profits, or changes in our estimate of future taxable profits and potential restructurings, could lead to changes in deferred tax assets being realizable, or considered realizable, and would require a corresponding adjustment to the valuation allowance.

As part of its normal practice, management has conducted a detailed evaluation of its expected future results and has also considered stress scenarios. This evaluation has indicated the expected future results that are likely to be earned in jurisdictions where the Group has significant gross deferred tax assets, such as Switzerland, the UK and the US. Management then compared those expected future results with the applicable law governing utilization of deferred tax assets. Swiss tax law allows for a seven-year carry-forward period for net operating losses. UK tax law allows for an unlimited carry-forward period for net operating losses, and even though there are restrictions on the use of tax losses carried forward, these are not expected to have a material impact on the recoverability of the net deferred tax assets. US tax law allows for a 20-year carry-forward period for net operating losses arising prior to 2017 with no expiry limitations for net operating losses arising in subsequent years.

→ Refer to "Note 28 – Tax" in VI – Consolidated financial statements – Credit Suisse Group for further information on deferred tax assets.

Pension plans

The Group

The Group covers pension requirements, in both Swiss and non-Swiss locations, through various defined benefit pension plans and defined contribution pension plans.

Our funding policy with respect to these pension plans is consistent with local government and tax requirements.

The calculation of the expense and liability associated with the defined benefit pension plans requires an extensive use of assumptions, which include the discount rate, expected return on plan assets and rate of future compensation increases. Management determines these assumptions based upon currently available market and industry data and historical experience of the plans. Management also consults with an independent actuarial

firm to assist in selecting appropriate assumptions and valuing its related liabilities. Management regularly reviews the actuarial assumptions used to value and measure the defined benefit obligation on a periodic basis as required by US GAAP. The actuarial assumptions that we use may differ materially from actual results due to changing market and economic conditions and specific experience of the plans (such as investment management over or underperformance, higher or lower withdrawal rates and longer or shorter life spans of the participants). Any such differences could have a significant impact on the amount of pension expense recorded in future years.

The funded status of our defined benefit pension and other post-retirement defined benefit plans is recorded in the consolidated balance sheets. The impacts from re-measuring the funded status (reflected in actuarial gains or losses) and from amending the plan (reflected in prior service cost or credits) are recognized in equity as a component of accumulated other comprehensive income/(loss) (AOCI).

The projected benefit obligation (PBO) of our total defined benefit pension plans included CHF 551 million and CHF 928 million related to our assumption for future salary increases as of December 31, 2019 and 2018. The accumulated benefit obligation (ABO) is defined as the PBO less the amount related to estimated future salary increases. The difference between the fair value of plan assets and the ABO was an overfunding of CHF 3,148 million for 2019, compared to CHF 2,374 million for 2018.

We are required to estimate the expected long-term rate of return on plan assets, which is then used to compute benefit costs recorded in the consolidated statements of operations. Estimating future returns on plan assets is particularly subjective, as the estimate requires an assessment of possible future market returns based on the plan asset mix. In calculating pension expense and in determining the expected long-term rate of return, we use the market-related value of assets. The assumptions used to determine the benefit obligation as of the measurement date are also used to calculate the net periodic benefit costs for the 12-month period following this date.

The expected weighted-average long-term rate of return used to determine the expected return on plan assets as a component of the net periodic benefit costs in 2019 and 2018 was 2.40% and 3.00%, respectively, for the Swiss plans and 3.00% and 3.22%, respectively, for the international plans. In 2019, if the expected long-term rate of return had been increased/decreased one percentage point, net pension expense for the Swiss plans would have decreased/increased CHF 164 million and net pension expense for the international plans would have decreased/increased CHF 35 million.

The discount rates used in determining the benefit obligation and the pension expense are based on yield curves, constructed from high-quality corporate bonds currently available and observable in the market and are expected to be available during the period

to maturity of the pension benefits. In countries where there is no deep market in high-quality corporate bonds with longer durations, the best available market information, including governmental bond yields and risk premiums, is used to construct the yield curve. Credit Suisse uses the spot rate approach for determining the benefit obligation and for service and interest cost components of the pension expense for future years. Under the spot rate approach, individual spot rates along the yield curve are applied to each expected future benefit payment, whereas under the previous methodology a single weighted-average discount rate derived from the yield curve was applied.

For the Swiss plan, the weighted average discount rate for the PBO decreased 0.58 percentage points, from 1.03% as of December 31, 2018 to 0.45% as of December 31, 2019, mainly due to a decrease in Swiss bond market rates. The average discount rate for the PBO for the international plans decreased 0.92 percentage points, from 3.30% as of December 31, 2018 to 2.38% as of December 31, 2019, mainly due to a decrease in bond market rates. For the year ended December 31, 2019, a one percentage point decline in the discount rates for the Swiss plans would have resulted in an increase in the PBO of CHF 2,155 million and an increase in pension expense of CHF 57 million, and a one percentage point increase in discount rates would have resulted in a decrease in the PBO of CHF 1,490 million and a decrease in the pension expense of CHF 48 million. A one percentage point decline in discount rates for the international plans as of December 31, 2019 would have resulted in an increase in the PBO of CHF 710 million and an increase in pension expense of CHF 33 million, and a one percentage point increase in discount rates would have resulted in a decrease in the PBO of CHF 542 million and a decrease in the pension expense of CHF 12 million.

Actuarial losses and prior service cost are amortized over the average remaining service period of active employees expected to receive benefits under the plan, which, as of December 31, 2019, was approximately 10 years for the Swiss plans and 3 to 20 years for the international plans. The pre-tax expense associated with the amortization of net actuarial losses and prior service cost for defined benefit pension plans for the years ended December 31, 2019, 2018 and 2017 was CHF 158 million, CHF 227 million and CHF 269 million, respectively. The impact from deviations between our actuarial assumptions and the actual developments of such parameters observed for our pension plans further impacts the amount of net actuarial losses or gains recognized in equity, resulting in a higher or lower amount of amortization expense in periods after 2020.

→ Refer to "Note 31 – Pension and other post-retirement benefits" in VI – Consolidated financial statements – Credit Suisse Group for further information.

The Bank

The Bank covers pension requirements for its employees in Switzerland through participation in a defined benefit pension plan sponsored by the Group (Group plan). Various legal entities within

the Group participate in the Group plan, which is set up as an independent trust domiciled in Zurich. The Group accounts for the Group plan as a single-employer defined benefit pension plan and uses the projected unit credit actuarial method to determine the net periodic pension expense, PBO, ABO and the related amounts recognized in the consolidated balance sheets. The funded status of the Group plan is recorded in the consolidated balance sheets. The actuarial gains and losses and prior service costs or credits are recognized in equity as a component of AOCI.

The Bank accounts for the Group plan on a defined contribution basis whereby it only recognizes the amounts required to be contributed to the Group plan during the period as net periodic pension expense and only recognizes a liability for any contributions due and unpaid. No other expense or balance sheet amounts related to the Group plan are recognized by the Bank.

The Bank covers pension requirements for its employees in international locations through participation in various pension plans, which are accounted for as single-employer defined benefit pension plans or defined contribution pension plans.

In 2019 and 2018, the weighted-average expected long-term rate of return used to calculate the expected return on plan assets as a component of the net periodic benefit costs for the international single-employer defined benefit pension plans was 3.00% and 3.22%, respectively. In 2019, if the expected long-term rate of return had been increased/decreased one percentage point, net pension expense would have decreased/increased CHF 35 million.

The discount rate used in determining the benefit obligation is based either on high-quality corporate bond rates or government bond rates plus a premium in order to approximate high-quality corporate bond rates. The average discount rate for the PBO for the international plans decreased 0.92 percentage points, from 3.30% as of December 31, 2018 to 2.38% as of December 31, 2019. A one percentage point decline in the discount rate for the international single-employer plans as of December 31, 2019 would have resulted in an increase in PBO of CHF 710 million and an increase in pension expense of CHF 33 million, and a one percentage point increase in discount rates would have resulted in a decrease in PBO of CHF 542 million and a decrease in pension expense of CHF 12 million.

Actuarial losses and prior service cost related to the international single-employer defined benefit pension plans are amortized over the average remaining service period of active employees expected to receive benefits under the plan. The pre-tax expense associated with the amortization of recognized net actuarial losses and prior service cost for the years ended December 31, 2019, 2018 and 2017 was CHF 20 million, CHF 47 million and CHF 60 million, respectively.

→ Refer to "Note 30 – Pension and other post-retirement benefits" in VIII – Consolidated financial statements – Credit Suisse (Bank) for further information.

III – Treasury, Risk, Balance sheet and Off-balance sheet

Liquidity and funding management	108
Capital management	116
Risk management	135
Balance sheet and off-balance sheet	174

Liquidity and funding management

During 2019, we maintained a strong liquidity and funding position. The majority of our unsecured funding was generated from core customer deposits and long-term debt.

Liquidity management

In response to regulatory reform, since 2015 we have primarily focused our issuance strategy on offering long-term debt securities at the Group level for funding and capital purposes. Prior to that, securities for funding and capital purposes were primarily issued by the Bank, our principal operating subsidiary and a US registrant, and recently we have begun to issue short duration securities at the Bank level for funding diversification. Our primary source of liquidity is funding through consolidated entities. Proceeds from issuances are lent to operating subsidiaries and affiliates on both a senior and subordinated basis, as needed; the latter typically to meet going and gone concern capital requirements and the former as desired by management to support business initiatives and liquidity needs.

Our liquidity and funding strategy is approved by the Capital Allocation & Risk Management Committee (CARMC) and overseen by the Board of Directors (Board). The implementation and execution of the liquidity and funding strategy is managed within the division of the Chief Financial Officer (CFO) by Treasury and our global liquidity group. The global liquidity group was established in 2018 to centralize control of liability and collateral management with the aim of optimizing our liquidity sourcing, funding costs and high-quality liquid assets (HQLA) portfolio on behalf of Treasury. Treasury ensures adherence to our funding policy and the global liquidity group is focused on the efficient coordination of the short-term unsecured and secured funding desks. This approach enhances our ability to manage potential liquidity and funding risks and to promptly adjust our liquidity and funding levels to meet stress situations. Our liquidity and funding profile is regularly reported to CARMC and the Board, who define our risk tolerance, including liquidity risk, and set parameters for the balance sheet and funding usage of our businesses. The Board is responsible for defining our overall risk tolerance in the form of a risk appetite statement.

Our liquidity and funding profile reflects our strategy and risk appetite and is driven by business activity levels and the overall operating environment. We have adapted our liquidity and funding profile to reflect lessons learned from the financial crisis, the subsequent changes in our business strategy and regulatory developments. We have been an active participant in regulatory and industry forums to promote best practice standards on quantitative and qualitative liquidity management. Our internal liquidity risk management framework is subject to review and monitoring by the Swiss Financial Market Supervisory Authority FINMA (FINMA), other regulators and rating agencies.

Regulatory framework

BIS liquidity framework

The Basel Committee on Banking Supervision (BCBS) established the Basel III international framework for liquidity risk measurement, standards and monitoring. The Basel III framework includes a liquidity coverage ratio (LCR) and a net stable funding ratio (NSFR). Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements).

The LCR addresses liquidity risk over a 30-day period. The LCR aims to ensure that banks have unencumbered HQLA available to meet short-term liquidity needs under a severe stress scenario. The LCR is comprised of two components, the value of HQLA in stressed conditions and the total net cash outflows calculated according to specified scenario parameters. Under the BCBS framework, the minimum required ratio of liquid assets over net cash outflows is 100%.

The NSFR establishes criteria for a minimum amount of stable funding based on the liquidity of a bank's on- and off-balance sheet activities over a one-year horizon. The NSFR is a complementary measure to the LCR and is structured to ensure that illiquid assets are funded with an appropriate amount of stable long-term funds. The NSFR is defined as the ratio of available stable funding over the amount of required stable funding and, once implemented by national regulators, should always be at least 100%.

Swiss liquidity requirements

The Swiss Federal Council adopted a liquidity ordinance (Liquidity Ordinance) that implements Basel III liquidity requirements into Swiss law. Under the Liquidity Ordinance, systemically relevant banks like Credit Suisse are subject to a minimum LCR requirement of 100% at all times and the associated disclosure requirements.

→ Refer to [credit-suisse.com/regulatorydisclosures](https://www.credit-suisse.com/regulatorydisclosures) for additional information.

FINMA requires us to report the NSFR to FINMA on a monthly basis during an observation period that began in 2012. The reporting instructions are generally aligned with the final BCBS NSFR requirements. Although originally planned for January 1, 2018, the Federal Council decided to postpone the introduction of the NSFR as a minimum standard in Switzerland and in November 2019, adopted a timetable that contemplates bringing the NSFR rules into force by mid-2021.

Our liquidity principles and our liquidity risk management framework as agreed with FINMA are in line with the Basel III liquidity framework.

Liquidity risk management

Our approach to liquidity risk management

Our liquidity and funding policy is designed to ensure that funding is available to meet all obligations in times of stress, whether caused by market events or issues specific to Credit Suisse.

We achieve this through a conservative asset/liability management strategy aimed at maintaining long-term funding, including stable deposits, in excess of illiquid assets. To address short-term liquidity stress, we maintain a liquidity pool, described below, that covers unexpected outflows in the event of severe market and idiosyncratic stress. Our liquidity risk parameters reflect various liquidity stress assumptions that we believe are conservative. We manage our liquidity profile at a sufficient level such that, in the event we are unable to access unsecured funding, we expect to have sufficient liquidity to sustain operations for a period of time in excess of our minimum limit. This includes potential currency mismatches, which are not deemed to be a major risk but are monitored and subject to limits, particularly in the significant currencies of euro, Japanese yen, pound sterling, Swiss franc and US dollar.

Although compliance with a minimum NSFR is not yet required, we began using the NSFR in 2012 as one of our primary tools, in parallel with the internal liquidity barometer, and in 2014 the LCR, to monitor our structural liquidity position and plan funding.

We use our internal liquidity barometer to manage liquidity to internal targets and as a basis to model both Credit Suisse-specific and market-wide stress scenarios and their impact on liquidity and funding. Our internal barometer framework supports the management of our funding structure. It allows us to manage the time horizon over which the stressed market value of unencumbered assets (including cash) exceeds the aggregate value of contractual outflows of unsecured liabilities plus a conservative forecast of anticipated contingent commitments. This internal barometer framework enables us to manage liquidity to a desired profile under a Credit Suisse-specific or market-wide stress that permits us to continue business activities for a period of time (also known as a liquidity horizon) without changing business plans. Under this framework, we also have short-term targets based on additional stress scenarios to ensure uninterrupted liquidity for short time frames. At the beginning of 2017, we introduced a new version of our internal liquidity barometer, which includes enhanced functionalities to manage entity-specific liquidity under newly defined and more conservative stress scenarios for redefined short and long-term time horizons.

In the second quarter of 2014, we began allocating the majority of the balance sheet usage related to our Treasury-managed HQLA portfolio to the business divisions to allow for a more efficient management of their business activities from an overall

Group perspective with respect to LCR and Swiss leverage requirements.

Our overall liquidity management framework allows us to run stress analyses on our balance sheet and off-balance sheet positions, which include, but are not limited to, the following:

- A multiple-notch downgrade in the Bank's long-term debt credit ratings, which would require additional funding as a result of certain contingent off-balance sheet obligations;
- Significant withdrawals from private banking client deposits;
- Potential cash outflows associated with the prime brokerage business;
- Over-collateralization of available secured funding;
- Limited availability of capital markets, certificates of deposit and commercial paper;
- Other money market access will be significantly reduced;
- A reduction in funding value of unencumbered assets;
- The inaccessibility of assets held by subsidiaries due to regulatory, operational and other constraints;
- The possibility of providing non-contractual liquidity support in times of market stress, including purchasing our unsecured debt;
- Monitoring the concentration in sources of wholesale funding and thus encourage funding diversification;
- Monitoring the composition and analysis of the unencumbered assets;
- Restricted availability of foreign currency swap markets; and
- Other scenarios as deemed necessary from time to time.

Governance

Funding, liquidity, capital and our foreign exchange exposures in the banking book are managed centrally by Treasury. Oversight of these activities is provided by CARMC, a committee that includes the chief executive officers (CEOs) of the Group and the divisions, the CFO, the Chief Risk Officer (CRO), the Chief Compliance and Regulatory Affairs Officer and the Treasurer.

It is CARMC's responsibility to review the capital position, balance sheet development, current and prospective funding, interest rate risk and foreign exchange exposure and to define and monitor adherence to internal risk limits. CARMC regularly reviews the methodology and assumptions of our liquidity risk management framework and determines the liquidity horizon to be maintained.

All liquidity stress tests are coordinated and overseen by the CRO to ensure a consistent and coordinated approach across all risk disciplines.

Contingency funding planning

In the event of a liquidity crisis, our Contingency Funding Plan provides for specific actions to be taken depending on the nature of the crisis. Our plan is designed to address ever-increasing liquidity and funding stresses and has pre-defined escalation levels aimed at maximizing the likelihood that we can take certain measures to address liquidity or funding shortfalls. In order to identify a deteriorating liquidity situation, we monitor a set

of regulatory and economic liquidity metrics while also seeking the views of our subject matter experts as well as senior management, who retain at all times the authority to take remedial actions promptly. In all cases, the plan's primary objectives are to strengthen liquidity (immediate), reduce funding needs (medium term) and assess recovery options (longer term).

Liquidity metrics

Liquidity pool

Treasury manages a sizeable portfolio of HQLA comprised of cash held at central banks and securities. A portion of the liquidity pool is generated through reverse repurchase agreements with top-rated counterparties. We are mindful of potential credit risk and therefore focus our liquidity holdings strategy on cash held at central banks and highly rated government bonds and on short-term reverse repurchase agreements. These government bonds are eligible as collateral for liquidity facilities with various central banks including the Swiss National Bank (SNB), the US Federal Reserve (Fed), the European Central Bank (ECB) and the Bank of England. Our direct exposure on these bonds is limited to highly liquid, top-rated sovereign entities or fully guaranteed agencies of sovereign entities. The liquidity pool may be used to meet the liquidity requirements of our operating companies. All securities, including those obtained from reverse repurchase agreements, are subject to a stress level haircut in our barometer to reflect the risk that emergency funding may not be available at market value in a stress scenario.

We centrally manage this liquidity pool and hold it at our main operating entities. Holding securities in these entities ensures that we can make liquidity and funding available to local entities in need without delay.

As of December 31, 2019, our liquidity pool managed by Treasury and the global liquidity group had an HQLA value of CHF 164.9 billion. The liquidity pool consisted of CHF 82.2 billion of cash held at major central banks, primarily the SNB, the ECB and the Fed, and CHF 82.6 billion market value of securities issued by governments and government agencies, primarily from the US, UK and France.

In addition to the above-mentioned liquidity pool, there is also a portfolio of unencumbered liquid assets managed by the businesses, primarily in the Global Markets and Asia Pacific divisions, in cooperation with the global liquidity group. These assets generally include high-grade bonds and highly liquid equity securities that form part of major indices. In coordination with the businesses and the global liquidity group, Treasury can access these assets to generate liquidity if required. As of December 31, 2019, this portfolio of liquid assets had a market value of CHF 32.6 billion, consisting of CHF 12.2 billion of high-grade bonds and CHF 20.4 billion of highly liquid equity securities. Under our internal model, an average stress-level haircut of 14% is applied to these assets. The haircuts applied to this portfolio reflect our assessment of overall market risk at the time of measurement, potential monetization capacity taking into account increased haircuts, market volatility and the quality of the relevant securities.

Liquidity pool – Group

end of					2019	2018
	Swiss franc	US dollar	Euro	Other currencies	Total	Total
Liquid assets (CHF million)						
Cash held at central banks	59,503	9,130	11,499	2,077	82,209	85,494
Securities	8,159	47,546	8,434	18,502	82,641	74,360
Liquid assets¹	67,662	56,676	19,933	20,579	164,850	159,854

¹ Reflects a pre-cancellation view.

Liquidity Coverage Ratio

Our calculation methodology for the LCR is prescribed by FINMA and uses a three-month average that is measured using daily calculations during the quarter. The FINMA calculation of HQLA takes into account a cancellation mechanism (post-cancellation view) and is therefore not directly comparable to the assets presented in the financial statements that could potentially be monetized under a severe stress scenario. The cancellation mechanism effectively excludes the impact of certain secured financing transactions from available HQLA and simultaneously adjusts the level of net cash outflows calculated. Application of the cancellation mechanism adjusts both the numerator and denominator of the LCR calculation, meaning that the impact is mostly neutral on the LCR itself.

Our HQLA measurement methodology excludes potentially eligible HQLA available for use by entities of the Group in certain jurisdictions that may not be readily accessible for use by the Group as a whole. These HQLA eligible amounts may be restricted for reasons such as local regulatory requirements, including large exposure requirements, or other binding constraints that could limit the transferability to other Group entities in other jurisdictions.

On this basis, the level of our LCR was 198% as of the end of 2019, an increase from 184% as of the end of 2018, representing an average HQLA of CHF 165 billion and average net cash outflows of CHF 83 billion. The ratio reflects a conservative liquidity position, including ensuring that the Group's branches and subsidiaries meet applicable local liquidity requirements.

The increase in the LCR compared to 2018 was driven by lower net cash outflows and a higher level of HQLA. The decrease in net cash outflows was primarily a result of lower net cash outflows associated with secured funding and lending activities as well as lower cash outflows from additional requirements primarily related to derivative exposures and other collateral requirements. These decreases in net cash outflows were partially offset by higher outflows from unsecured wholesale funding related to unsecured debt and non-operational deposits. The higher level

of HQLA reflected an increase in the amount of securities held during the period, partially offset by a decrease in the amount of cash held at central banks.

In connection with the economic disruptions associated with the COVID-19 outbreak we have seen some drawdowns of credit facilities extended to our corporate clients that we expect to further increase in the coming weeks and that will reduce the high LCR of 198%.

Liquidity coverage ratio – Group

end of	Unweighted value ¹	2019 Weighted value ²	2018 Weighted value ²
High-quality liquid assets (CHF million)			
High-quality liquid assets³	–	164,503	161,231
Cash outflows			
Retail deposits and deposits from small business customers	162,941	20,519	20,765
Unsecured wholesale funding	216,540	92,801	89,065
Secured wholesale funding	–	49,456	54,879
Additional requirements	184,726	33,761	36,921
Other contractual funding obligations	58,909	58,909	65,526
Other contingent funding obligations	228,798	5,792	5,391
Total cash outflows	–	261,238	272,547
Cash inflows			
Secured lending	127,097	84,353	85,678
Inflows from fully performing exposures	69,239	32,567	31,785
Other cash inflows	61,063	61,063	67,273
Total cash inflows	257,399	177,983	184,736
Liquidity coverage ratio			
High-quality liquid assets (CHF million)	–	164,503	161,231
Net cash outflows (CHF million)	–	83,255	87,811
Liquidity coverage ratio (%)	–	198	184

Calculated using a three-month average, which is calculated on a daily basis.

¹ Calculated as outstanding balances maturing or callable within 30 days.

² Calculated after the application of haircuts for high-quality liquid assets or inflow and outflow rates.

³ Consists of cash and eligible securities as prescribed by FINMA and reflects a post-cancellation view.

Funding management

Treasury is responsible for the development, execution and regular updating of our funding plan. The plan reflects projected business growth, development of the balance sheet, future funding needs and maturity profiles as well as the effects of changing market and regulatory conditions.

Interest expense on long-term debt is monitored and managed relative to certain indices, such as the London Interbank Offered Rate (LIBOR) and Overnight Index Swap rate (OIS), that are

relevant to the financial services industry. This approach to term funding best reflects the sensitivity of both our liabilities and our assets to changes in interest rates. A major structural change in global financial markets is in progress with respect to the replacement of interbank offered rate (IBOR) benchmarks. There is significant international and regulatory pressure to replace certain IBOR benchmarks with alternative reference rates (ARRs) by the end of 2021. In response, we have mobilized an IBOR transition program to coordinate transition readiness on a firm-wide basis and are closely following the impact of this transition on our approach to funding management.

We continually manage the impact of funding spreads through careful management of our liability mix and opportunistic issuance of debt. The effect of funding spreads on interest expense depends on many factors, including market conditions, product type and the absolute level of the indices on which our funding is based.

We diversify our long-term funding sources by issuing structured notes, which are debt securities on which the return is linked to commodities, stocks, indices or currencies or other assets. We generally hedge structured notes with positions in the underlying assets or derivatives.

We also use other collateralized financings, including repurchase agreements and securities lending agreements. The level of our repurchase agreements fluctuates, reflecting market opportunities, client needs for highly liquid collateral, such as US treasuries and agency securities, and the impact of balance sheet and risk-weighted asset limits. In addition, matched book trades, under which securities are purchased under agreements to resell and are simultaneously sold under agreements to repurchase with comparable maturities, earn spreads, are relatively risk free and are generally related to client activity.

Funding sources

We fund our balance sheet primarily through core customer deposits, long-term debt, including structured notes, and shareholders' equity. We monitor the funding sources, including their concentrations against certain limits, according to their counterparty, currency, tenor, geography and maturity, and whether they are secured or unsecured. A substantial portion of our balance sheet is match funded and requires no unsecured funding. Match funded balance sheet items consist of assets and liabilities with close to equal liquidity durations and values so that the liquidity and funding generated or required by the positions are substantially equivalent.

Cash and due from banks and reverse repurchase agreements are highly liquid. A significant part of our assets, principally unencumbered trading assets that support the securities business, is comprised of securities inventories and collateralized receivables that fluctuate and are generally liquid. These liquid assets are available to settle short-term liabilities.

Loans, which comprise the largest component of our illiquid assets, are funded by our core customer deposits, with an excess coverage of 9% as of the end of 2019, compared to 18% as of the end of 2018, reflecting a small increase in loans and a decrease in deposits. We fund other illiquid assets, including real estate, private equity and other long-term investments as well as the haircut for the illiquid portion of securities, with long-term debt and equity, in which we try to maintain a substantial funding buffer.

Balance sheet funding structure

as of December 31, 2019 (CHF billion)

Assets			Liabilities and Equity	
Reverse repurchase agreements	46	Match funded	68	Repurchase agreements
Encumbered trading assets	47		25	Short positions
Funding-neutral assets ¹	61		61	Funding-neutral liabilities ¹
			9	Other short-term liabilities ²
Cash & due from banks	102		76	Due to banks
			28	Short-term borrowings
Unencumbered liquid assets ³	126			time 92
				demand 127
				savings 64
				fiduciary 41
Loans ⁴	296	109% coverage	324	Deposits ⁵
			152	Long-term debt
Other illiquid assets	109		44	Total equity
Assets	787		787	Liabilities and Equity

¹ Primarily includes brokerage receivables/payables, positive/negative replacement values and cash collateral.

² Primarily includes excess of funding neutral liabilities (brokerage payables) over corresponding assets.

³ Primarily includes unencumbered trading assets, unencumbered investment securities and excess reverse repurchase agreements, after haircuts.

⁴ Excludes loans with banks.

⁵ Excludes due to banks and certificates of deposit.

Our core customer deposits totaled CHF 324 billion as of the end of 2019, a decrease compared to CHF 341 billion as of the end of 2018, reflecting a decrease in the customer deposit base in the private banking and corporate & institutional banking businesses in 2019. Core customer deposits are from clients with whom we have a broad and long-standing relationship. Core customer deposits exclude deposits from banks and certificates of deposit. We place a priority on maintaining and growing customer deposits, as they have proven to be a stable and resilient source of funding even in difficult market conditions. Our core customer deposit funding is supplemented by the issuance of long-term debt.

→ Refer to the chart "Balance sheet funding structure" and "Balance sheet" in Balance sheet and off-balance sheet for further information.

Funds transfer pricing

We maintain an internal funds transfer pricing system based on market rates. Our funds transfer pricing system is designed to allocate to our businesses all funding costs in a way that incentivizes their efficient use of funding. Our funds transfer pricing system is an essential tool that allocates to the businesses the short-term and long-term costs of funding their balance sheet usages and off-balance sheet contingencies. The funds transfer pricing framework ensures full funding costs allocation under normal business conditions, but it is of even greater importance in a stressed capital markets environment where raising funds is more challenging and expensive. Under this framework, our businesses are also credited to the extent they provide long-term stable funding.

Contractual maturity of assets and liabilities

The following table provides contractual maturities of the assets and liabilities specified as of the end of 2019. The contractual maturities are an important source of information for liquidity risk management. However, liquidity risk is also managed based on an expected maturity that considers counterparty behavior and in addition takes into account certain off-balance sheet items such as derivatives. Liquidity risk management performs extensive analyses of counterparty behavioral assumptions under various stress scenarios.

→ Refer to "Contractual obligations and other commercial commitments" in Balance sheet and off-balance sheet and "Note 32 – Guarantees and commitments" in VI – Consolidated financial statements – Credit Suisse Group for further information on contractual maturities of guarantees and commitments.

Contractual maturity of assets and liabilities

end of 2019	On demand	Less than 1 month	Between 1 to 3 months	Between 3 to 12 months	Between 1 to 5 years	Greater than 5 years	Total
Assets (CHF million)							
Cash and due from banks	96,635	993	1,069	38	0	3,144	101,879
Interest-bearing deposits with banks	0	202	161	361	11	6	741
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	29,053	43,554	15,172	14,736	4,465	17	106,997
Securities received as collateral, at fair value	39,954	131	134	0	0	0	40,219
Trading assets, at fair value	153,797	0	0	0	0	0	153,797
Investment securities	0	0	0	168	2	836	1,006
Other investments	0	17	14	0	0	5,635	5,666
Net loans	9,559	54,361	32,204	52,655	99,586	48,414	296,779
Goodwill	0	0	0	0	0	4,663	4,663
Other intangible assets	0	0	0	0	0	291	291
Brokerage receivables	35,648	0	0	0	0	0	35,648
Other assets	13,356	1,724	4,691	1,703	5,000	13,135	39,609
Total assets	378,002	100,982	53,445	69,661	109,064	76,141	787,295
Liabilities							
Due to banks	6,147	3,104	4,740	2,743	10	0	16,744
Customer deposits	232,277	39,737	52,967	57,388	712	702	383,783
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	10,984	13,063	3,392	7	38	49	27,533
Obligation to return securities received as collateral, at fair value	39,954	131	134	0	0	0	40,219
Trading liabilities, at fair value	38,186	0	0	0	0	0	38,186
Short-term borrowings	0	4,668	8,756	14,961	0	0	28,385
Long-term debt	0	2,151	3,912	17,833	70,580	57,529	152,005
Brokerage payables	25,683	0	0	0	0	0	25,683
Other liabilities	19,107	6,645	133	745	2,188	2,225	31,043
Total liabilities	372,338	69,499	74,034	93,677	73,528	60,505	743,581

Interest rate management

Interest rate risk inherent in banking book activities, such as lending and deposit-taking, is managed through the use of replication portfolios. We develop and maintain the models needed to determine the interest rate risks of products that do not have a defined maturity, such as demand and savings accounts. For this purpose, a replicating methodology is applied to maximize the stability and sustainability of spread revenues at the divisions. Furthermore, we manage the interest exposure of the Group's equity to targets agreed with senior management.

Debt issuances and redemptions

Our long-term debt includes senior, senior bail-in and subordinated debt issued in US-registered offerings and medium-term note programs, euro medium-term note programs, stand-alone offerings, structured note programs, covered bond programs, Australian dollar domestic medium-term note programs and a Samurai shelf registration statement in Japan. As a global bank, we have access to multiple markets worldwide and our major funding centers are New York, London, Zurich and Tokyo.

We use a wide range of products and currencies to ensure that our funding is efficient and well diversified across markets and investor types. Substantially all of our unsecured senior debt is issued without financial covenants, such as adverse changes in our credit ratings, cash flows, results of operations or financial ratios, which could trigger an increase in our cost of financing or accelerate the maturity of the debt. Our covered bond funding is in the form of mortgage-backed loans funded by domestic covered bonds issued through Pfandbriefbank Schweizerischer Hypothekarinstitute, one of two institutions established by a 1930 act of the Swiss Parliament to centralize the issuance of covered bonds, or historically from our own international covered bond program.

The following table provides information on long-term debt issuances, maturities and redemptions in 2019, excluding structured notes.

Debt issuances and redemptions

in 2019	Senior	Senior bail-in	Sub-ordinated	Long-term debt
Long-term debt (CHF billion, notional value)				
Issuances	2.9	6.6	3.1	12.6
of which unsecured	2.0	6.6	3.1	11.7
of which secured ¹	0.9	0.0	0.0	0.9
Maturities / Redemptions	17.1	0.9	0.2	18.2
of which unsecured	14.2	0.9	0.2	15.3
of which secured ¹	2.9	0.0	0.0	2.9

Excludes structured notes.

¹ Includes covered bonds.

As of the end of 2019, we had outstanding long-term debt of CHF 152.0 billion, which included senior and subordinated instruments. We had CHF 49.4 billion and CHF 15.1 billion of structured notes and covered bonds outstanding, respectively, as of the end of 2019 compared to CHF 48.1 billion and CHF 17.2 billion, respectively, as of the end of 2018.

Short-term borrowings increased 29% to CHF 28.4 billion as of the end of 2019 compared to CHF 21.9 billion in 2018, mainly related to issuances of commercial paper (CP).

→ Refer to "Issuances and redemptions" in Capital management for further information on capital issuances, including low-trigger and high-trigger capital instruments.

Credit ratings

Our access to the debt capital markets and our borrowing costs depend significantly on our credit ratings. Rating agencies take many factors into consideration in determining a company's rating, including, among others, earnings performance, business mix, market position, ownership, financial strategy, level of capital, risk management policies and practices, management team and the broader outlook for the financial services industry more generally. The rating agencies may raise, lower or withdraw their ratings, or publicly announce an intention to raise or lower their ratings, at any time.

Although retail and private bank deposits are generally less sensitive to changes in a bank's credit ratings, the cost and availability of other sources of unsecured external funding is generally a function of credit ratings. Credit ratings are especially important to us when competing in certain markets and when seeking to engage in longer-term transactions, including over-the-counter (OTC) derivative instruments.

A downgrade in credit ratings could reduce our access to capital markets, increase our borrowing costs, require us to post additional collateral or allow counterparties to terminate transactions under certain of our trading and collateralized financing and derivative contracts. This, in turn, could reduce our liquidity and negatively impact our operating results and financial position. Our internal liquidity barometer takes into consideration contingent events associated with a two-notch downgrade in our credit ratings. The maximum impact of a simultaneous one, two or three-notch downgrade by all three major rating agencies in the Bank's long-term debt ratings would result in additional collateral requirements or assumed termination payments under certain derivative instruments of CHF 0.1 billion, CHF 0.2 billion and CHF 0.9 billion, respectively, as of December 31, 2019, and would not be material to our liquidity and funding planning. If the downgrade does not involve all three rating agencies, the impact may be smaller.

Potential cash outflows on these derivative contracts associated with a downgrade of our long-term debt credit ratings, such as the requirement to post additional collateral to the counterparty, the loss of re-hypothecation rights on any collateral received and impacts arising from additional termination events, are monitored and taken into account in the calculation of our liquidity requirements. There are additional derivative related risks that do not relate to the downgrade of our long-term debt credit ratings and which may impact our liquidity position, including risks relating to holdings of derivatives collateral or potential movements in the valuation of derivatives positions. The potential outflows resulting across all derivative product types are monitored as part of the LCR scenario parameters and the internal liquidity reporting.

→ Refer to "Investor information" in the Appendix for further information on Group and Bank credit ratings.

Cash flows from operating, investing and financing activities

As a global financial institution, our cash flows are complex and interrelated and bear little relation to our net earnings and net assets. Consequently, we believe that traditional cash flow analysis is less meaningful in evaluating our liquidity position than the liquidity and funding policies described above. Cash flow analysis may, however, be helpful in highlighting certain macro trends in our business.

For the year ended December 31, 2019, net cash used in **operating activities** of continuing operations was CHF 18.4 billion, primarily reflecting a decrease in net trading assets and liabilities and a decrease in other liabilities, partially offset by an increase in valuation adjustments relating to long-term debt. Our operating assets and liabilities vary significantly in the normal course of business due to the amount and timing of cash flows. Management believes cash flows from operations, available cash balances and short-term and long-term borrowings will be sufficient to fund our operating liquidity needs.

Our **investing activities** primarily include originating loans to be held to maturity, other receivables and the investment securities portfolio. For the year ended December 31, 2019, net cash used in investing activities from continuing operations was CHF 1.3 billion, primarily due to an increase in loans, partially offset by a decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions and by the proceeds from sales of loans.

Our **financing activities** primarily include the issuance of debt and receipt of customer deposits. We pay annual dividends on our common shares. In 2019, net cash provided by financing activities of continuing operations was CHF 22.2 billion, mainly reflecting the issuance of long-term debt, the increase in due to banks and customer deposits, the sale of treasury shares, the increase in short-term borrowings and the increase in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions, partially offset by the repayment of long-term debt and the repurchase of treasury shares.

Capital management

As of the end of 2019, our BIS CET1 ratio was 12.7% and our BIS tier 1 leverage ratio was 5.5%.

Capital strategy

Credit Suisse considers a strong and efficient capital position to be a priority. Through our capital strategy, our goal is to strengthen our capital position and optimize the use of risk-weighted assets (RWA), particularly in light of emerging regulatory capital requirements.

The overall capital needs of Credit Suisse reflect management's regulatory and credit rating objectives as well as our underlying risks. Our framework considers the capital needed to absorb losses, both realized and unrealized, while remaining a strongly capitalized institution. Multi-year projections and capital plans are prepared for the Group and its major subsidiaries and reviewed throughout the year with their regulators. These plans are subject to various stress tests, reflecting both macroeconomic and specific risk scenarios. Capital contingency plans are developed in connection with these stress tests to ensure that possible mitigating actions are consistent with both the amount of capital at risk and the market conditions for accessing additional capital.

Regulatory framework

Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements), which include capital, liquidity, leverage and large exposure requirements and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency.

The Basel framework describes a range of options for determining capital requirements in order to provide banks and supervisors the ability to select approaches that are most appropriate for their operations and their financial market infrastructure. In general, Credit Suisse has adopted the most advanced approaches, which align with the way that risk is internally managed and provide the greatest risk sensitivity.

References to phase-in and look-through included herein refer to Basel III capital requirements and Swiss Requirements. Phase-in reflects that, for the years 2013 – 2022, there is a phase-out of

certain capital instruments. Look-through assumes the phase-out of those capital instruments. Our capital metrics fluctuate during any reporting period in the ordinary course of business.

BIS Requirements

The BCBS, the standard setting committee within the Bank for International Settlements (BIS), issued the Basel III framework, with higher minimum capital requirements and conservation and countercyclical buffers, revised risk-based capital measures, a leverage ratio and liquidity standards. The framework was designed to strengthen the resilience of the banking sector and requires banks to hold more capital, mainly in the form of common equity. The new capital standards became fully effective on January 1, 2019 for those countries that have adopted Basel III.

Under Basel III, the minimum common equity tier 1 (CET1) requirement is 4.5% of RWA. In addition, a 2.5% CET1 capital conservation buffer is required to absorb losses in periods of financial and economic stress.

A progressive buffer between 1% and 2.5% (with a possible additional 1% surcharge) of CET1, depending on a bank's systemic importance, is an additional capital requirement for global systemically important banks (G-SIBs). The Financial Stability Board (FSB) identified Credit Suisse as a G-SIB and advised that a progressive buffer of 1% be applied to Credit Suisse beginning in January 2019.

CET1 capital is subject to certain regulatory deductions and other adjustments to common equity, including the deduction of deferred tax assets for tax-loss carry-forwards, goodwill and other intangible assets.

In addition to the CET1 requirements, there is also a requirement for 1.5% of additional tier 1 capital and 2% of tier 2 capital. These requirements may also be met with CET1 capital. To qualify as additional tier 1 under Basel III, capital instruments must provide for principal loss absorption through a conversion into common equity or a write-down of principal feature. The trigger for such conversion or write-down must include a CET1 ratio of at least 5.125% as well as a trigger at the point of non-viability.

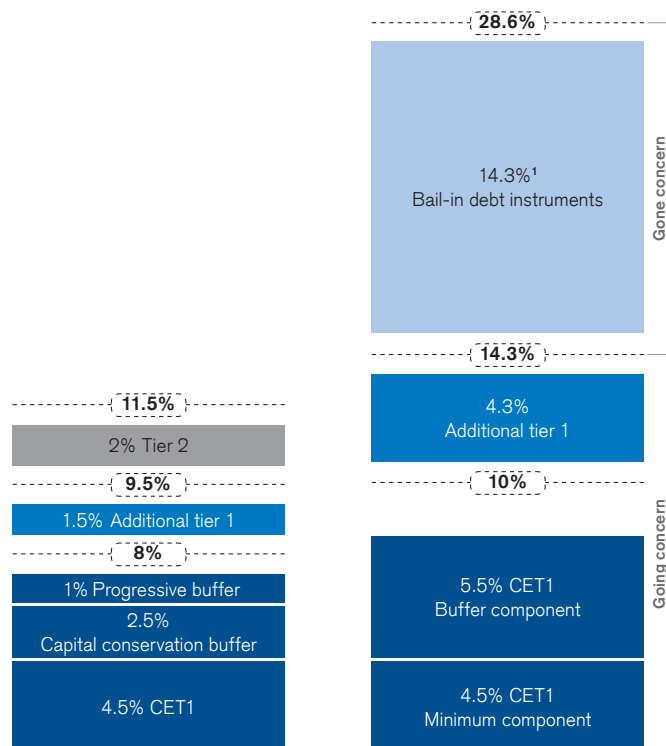
Capital frameworks for Credit Suisse

BIS Requirements

Countercyclical buffer up to 2.5% CET1

Swiss Requirements

Countercyclical buffer up to 2.5% CET1



¹ Does not include any rebates for resolvability and for certain tier 2 low-trigger instruments recognized in gone concern capital.

Basel III further provides for a countercyclical buffer that could require banks to hold up to 2.5% of CET1. This requirement is imposed by national regulators where credit growth is deemed to be excessive and leading to the build-up of system-wide risk.

Capital instruments that do not meet the strict criteria for inclusion in CET1 are excluded. Capital instruments that would no longer qualify as tier 1 or tier 2 capital will be phased out over a 10-year horizon through 2022. In addition, instruments with an incentive to redeem prior to their stated maturity, if any, are phased out at their effective maturity date, which is generally the date of the first step-up coupon.

As of January 1, 2018, banks are required to maintain a tier 1 leverage ratio of 3%.

Swiss Requirements

The legislation implementing the Basel III framework in Switzerland in respect of capital requirements for systemically relevant banks, including Credit Suisse, goes beyond the Basel III minimum standards for systemically relevant banks.

Under the Capital Adequacy Ordinance, Swiss banks classified as systemically important banks operating internationally, such as Credit Suisse, are subject to two different minimum requirements for loss-absorbing capacity: such banks must hold sufficient capital that absorbs losses to ensure continuity of service (going concern requirement), and they must issue sufficient debt instruments to fund an orderly resolution without recourse to public resources (gone concern requirement).

Going concern capital and gone concern capital together form our total loss-absorbing capacity (TLAC). The going concern and gone concern requirements are generally aligned with the FSB's total loss-absorbing capacity standard.

Both the going concern and the gone concern requirements were subject to phase-in, with gradually increasing requirements as well as grandfathering provisions for certain outstanding instruments, and became fully effective on January 1, 2020.

Additionally, there are FINMA decrees that apply to Credit Suisse as a systemically important bank operating internationally, including capital adequacy requirements as well as liquidity and risk diversification requirements.

Banks that do not maintain the minimum requirements may be limited in their ability to pay dividends and make discretionary bonus payments and other earnings distributions.

Going concern requirement

The going concern requirement applicable in 2020 for a G-SIB consists of (i) a base requirement of 12.86% of RWA and 4.5% of leverage exposure; and (ii) a surcharge, which reflects the G-SIB's systemic importance. For Credit Suisse, this translates into a going concern requirement in 2020 of 14.3% of RWA, of which the minimum CET1 component is 10%, with the remainder to be met with a maximum of 4.3% additional tier 1 capital, which includes high-trigger capital instruments that would be converted into common equity or written down if the CET1 ratio falls below 7%. Under the going concern requirement, the Swiss leverage ratio must be 5%, of which the minimum CET1 component is 3.5%, with the remainder to be met with a maximum of 1.5% additional tier 1 capital, which includes high-trigger capital instruments.

Gone concern requirement

The gone concern requirement of a G-SIB is equal to its total going concern requirement, which in 2020 consists of a base requirement of 12.86% of RWA and 4.5% of leverage exposure, plus any surcharges applicable to the relevant G-SIB. The gone concern requirement does not include any countercyclical buffers. Credit Suisse is subject to a gone concern requirement in 2020 of 14.3% of RWA and a 5% Swiss leverage ratio and is subject to potential capital rebates for resolvability and for certain tier 2 low-trigger instruments recognized as gone concern capital.

The gone concern requirement should primarily be fulfilled with bail-in instruments that are designed to absorb losses after the write-down or conversion into equity of regulatory capital of a G-SIB in a

restructuring scenario, but before the write-down or conversion into equity of other senior obligations of the G-SIB. Bail-in instruments do not feature capital triggers that may lead to a write-down and/or a conversion into equity outside of restructuring, but only begin to bear losses once the G-SIB is formally in restructuring proceedings and FINMA orders capital measures (i.e., a write-down and/or a conversion into equity) in the restructuring plan.

Bail-in instruments must fulfill certain criteria in order to qualify under the gone concern requirement, including FINMA approval. In addition to bail-in instruments, the gone concern requirement may further be fulfilled with other capital instruments, including CET1, additional tier 1 capital instruments or tier 2 capital instruments.

Grandfathering provisions

The Capital Adequacy Ordinance provides for a number of grandfathering provisions with regard to the qualification of previously issued additional tier 1 capital instruments and tier 2 capital instruments:

- Additional tier 1 capital instruments with a low trigger qualify as going concern capital until their first call date. Additional tier 1 capital instruments that no longer qualify as going concern capital pursuant to this provision qualify as gone concern capital;
- Tier 2 capital instruments with a high trigger qualified as going concern capital until the earlier of (i) their maturity date or first call date; and (ii) December 31, 2019. Tier 2 capital instruments that no longer qualify as going concern capital pursuant to this provision qualify as gone concern capital until one year before their final maturity; and
- Tier 2 capital instruments with a low trigger also qualified as going concern capital until the earlier of (i) their maturity date or first call date; and (ii) December 31, 2019. Tier 2 capital instruments that no longer qualify as going concern capital pursuant to this provision qualify as gone concern capital until one year before their final maturity.

FINMA decrees

The SNB designated the Group as a financial group of systemic importance under applicable Swiss law. FINMA requires the Group to fully comply with the special requirements for systemically important banks operating internationally, which include capital adequacy requirements and also specify liquidity and risk diversification requirements.

In December 2013, FINMA issued a decree (2013 FINMA Decree), specifying capital adequacy requirements for the Bank on a stand-alone basis (Bank parent company), and for the Bank and the Group, each on a consolidated basis, as systemically relevant institutions.

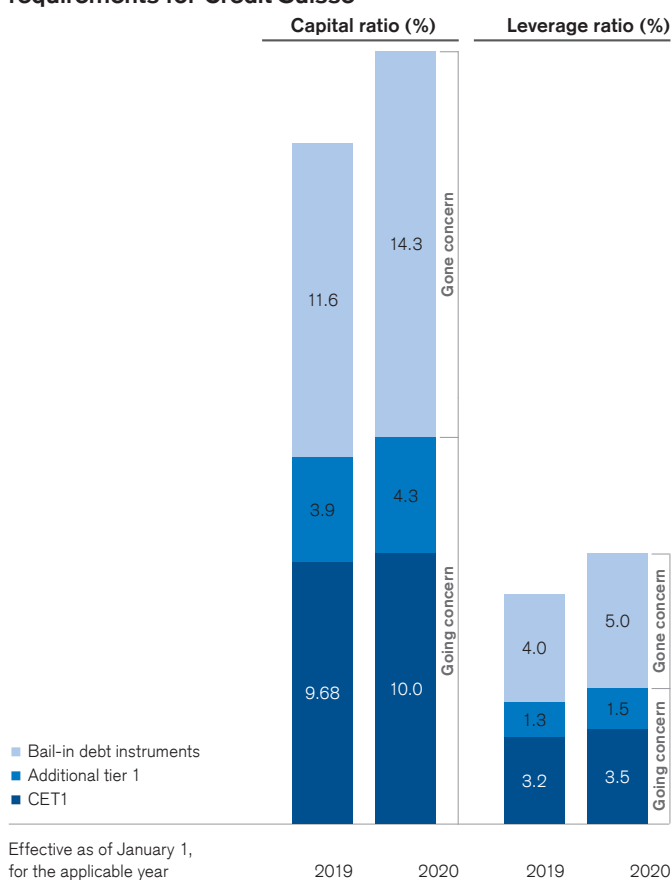
In October 2017, FINMA issued an additional decree with respect to the regulatory capital requirements of the Bank parent company (2017 FINMA Decree), specifying the treatment of investments in subsidiaries for capital adequacy purposes. This decree partially replaced certain aspects of the 2013 FINMA Decree, but all other aspects of that decree remain in force. The changes aim to create a capital adequacy framework for the Bank parent company that is more comparable to relevant international frameworks and does not rely on exemptions from, or corrections of, the basic framework applicable to all Swiss banks. The changes only apply to the going concern capital requirements for the Bank parent company, which amounted to 14.3% of RWA, of which the minimum CET1 component was 10%, with the remainder to be met with a maximum of 4.3% additional tier 1 capital, which includes high-trigger capital instruments. Additional effects from counter-cyclical buffers impact the CET1 minimum requirement. Under the going concern requirement, the Swiss leverage ratio must be 5%, of which the minimum CET1 component is 3.5%, with the remainder to be met with a maximum of 1.5% additional tier 1 capital, which includes high-trigger capital instruments. Unlike the Group requirements, the capital and leverage requirements for the Bank parent company are not subject to a transition period.

The 2017 FINMA Decree requires the Bank parent company to risk-weight both direct and indirect investments in subsidiaries, with the initial risk-weight set at 200%. Beginning in 2019, these risk-weights have gradually begun to increase over 10 years to 250% for participations in subsidiaries in Switzerland and to 400% for participations in subsidiaries abroad. In 2019, participations in subsidiaries in Switzerland were risk-weighted at 205% and participations in subsidiaries abroad at 220%.

The 2017 FINMA Decree also applies an adjustment (referred to as a regulatory filter) to any impact on CET1 capital arising from the accounting change under applicable Swiss banking rules for the Bank parent company's investments in subsidiaries from the current portfolio valuation method to the individual valuation method, which was implemented as of December 31, 2019. In contrast to the accounting treatment, the regulatory filter allows Credit Suisse to measure the regulatory capital position as if the Bank parent company had maintained the portfolio valuation method. As a result, the methodology valuation losses under the individual valuation method are reversed and the Bank parent company's CET1 capital as well as the Bank parent company's participation values, which are subject to risk weighting, will be higher, since the regulatory filter allows the reversal of the methodology valuation losses under the individual valuation method, in comparison to the portfolio valuation method applied for regulatory capital.

→ Refer to [credit-suisse.com/regulatorydisclosures](https://www.credit-suisse.com/regulatorydisclosures) for the Bank parent company's regulatory disclosures.

Swiss capital and leverage phase-in requirements for Credit Suisse



Effective as of January 1, for the applicable year

Capital components (%)

CET1 – minimum	4.9	4.5	1.7	1.5
Additional tier 1 – maximum	3.1	3.5	1.3	1.5
Minimum component	8.0	8.0	3.0	3.0
CET1 – minimum	4.78	5.5	1.5	2.0
Additional tier 1 – maximum	0.8	0.8	0.0	0.0
Buffer component	5.58	6.3	1.5	2.0
Going concern	13.58	14.3	4.5	5.0
of which base requirement	12.86	12.86	4.5	4.5
of which surcharge	0.72	1.44	0.0	0.5
Gone concern	11.6	14.3	4.0	5.0
of which base requirement	10.52	12.86	3.625	4.5
of which surcharge	1.08	1.44	0.375	0.5
Total loss-absorbing capacity	25.18	28.6	8.5	10.0

Does not include the effects of the countercyclical buffers and any rebates for resolvability and for certain tier 2 low-trigger instruments recognized in gone concern capital. As of the end of 2019, the Swiss countercyclical buffer for the Group and the Bank was CHF 541 million, which is equivalent to 0.2% of CET1 capital, and the required extended countercyclical buffer was insignificant. As of the end of 2019, the rebate for resolvability relating to the Group and the Bank's capital ratios was 1.856%, resulting in a gone concern requirement of 9.744%, and 0.64% relating to the leverage ratios, resulting in a gone concern leverage requirement of 3.36%.

Other requirements

Requirements in Switzerland include an extended countercyclical buffer, which is based on the BIS countercyclical buffer that could require banks to hold up to 2.5% of RWA in the form of CET1 capital. The extended countercyclical buffer relates to a requirement that can be imposed by national regulators when credit growth is deemed to be excessive and leading to the build-up of system-wide risk.

The Swiss Federal Council has not activated the BIS countercyclical buffer for Switzerland but instead requires banks to hold CET1 capital in the amount of 2% of their RWA pertaining to mortgage loans that finance residential property in Switzerland (Swiss countercyclical buffer).

FINMA requirements include capital charges for mortgages that finance owner-occupied residential property in Switzerland (mortgage multiplier) that were phased in through January 1, 2019. The mortgage multiplier applies for purposes of both BIS and FINMA requirements.

Other regulatory disclosures

In connection with the implementation of Basel III, certain regulatory disclosures for the Group and certain of its subsidiaries are required. The Group's Pillar 3 disclosure, regulatory disclosures, additional information on capital instruments, including the main features and terms and conditions of regulatory capital instruments and total loss-absorbing capacity-eligible instruments that form part of the eligible capital base and total loss-absorbing capacity resources, G-SIB financial indicators, reconciliation requirements, leverage ratios and certain liquidity disclosures as well as regulatory disclosures for subsidiaries can be found on our website.

→ Refer to [credit-suisse.com/regulatorydisclosures](https://www.credit-suisse.com/regulatorydisclosures) for additional information.

Regulatory developments

In January 2019, the BCBS released revisions to the minimum capital requirements for market risk, which included changes to the internal models approach and the standardized approach. The revisions also included amendments to the definition of the boundary between the trading book and the banking book. The revised standard will become effective in January 2022.

In June 2019, the BCBS released a revised framework regarding the treatment of client-cleared derivatives for purposes of

the leverage ratio and a revision of the leverage ratio disclosure requirements as part of the Pillar 3 framework. The revision regarding the treatment of client-cleared derivatives aims to align the leverage ratio measurement of client-cleared derivatives with the standardized approach to measuring counterparty credit risk exposures as applied for risk-based capital requirements. Additionally, the revised leverage ratio disclosure requirements set out additional obligations for banks to disclose their leverage ratios based on quarter-end and on daily average values of securities financing transactions. Both revisions will be applicable to the version of the leverage ratio standard that will enter into effect on January 1, 2022.

In August 2019, FINMA recognized the revised self-regulation by the Swiss Bankers Association in the area of mortgage lending for investment properties as a binding minimum standard under the Capital Adequacy Ordinance. The revised self-regulation became effective on January 1, 2020 and requires borrowers to provide a minimum down payment of at least 25% of the applicable loan-to-value ratio, instead of the previously required 10%, and to repay a portion of the mortgage equivalent to two-thirds of the loan-to-value ratio within a maximum of 10 years instead of the previous maximum of 15 years. The amended rules only apply to new loan originations (including loan increases), and not to existing loans as of December 31, 2019 or to the existing standards relating to owner-occupied residential property.

In November 2019, the Swiss Federal Council revised the Capital Adequacy Ordinance. The updated standard became effective in January 2020 and includes the following elements:

- The revised Capital Adequacy Ordinance introduced a new gone concern requirement for the Bank parent company, which complements the existing going concern requirement under the TLAC regime. The gone concern requirement needs to be fulfilled primarily with bail-in debt instruments that are designed to absorb losses in a restructuring scenario. These bail-in debt instruments are issued internally by the Bank parent company to the Group.
- There is a change in the minimum gone concern capital requirement for Credit Suisse (Schweiz) AG. The gone concern capital requirement amounts to 62% of the going concern capital requirement.
- There are certain other changes relating to the gone concern capital requirement, including changes in the criteria for defining eligibility for bail-in debt instruments relating to the amount recognized during the two years prior to maturity, increased thresholds for the surcharge requirement based on leverage exposure to reflect gross domestic product.
- There is a revised treatment for holding bail-in debt instruments that are issued by third-party banks.

Effective January 1, 2020, certain revisions to the capital requirements of credit risk became effective. The revisions relate to equity investments in funds and central counterparty positions and a new standardized approach for counterparty credit risk (SA-CCR) for derivatives.

In January 2020, FINMA and Credit Suisse agreed that a substantial part of the net exposure of Credit Suisse AG (Bank parent) toward Credit Suisse Group AG (Group parent) originating from unsecured loans shall be covered by an additional gone concern capacity at the Bank parent. The Group parent, in support of its single point-of-entry bail-in strategy, is obliged to make the additional funds available. These additional funds constitute eligible gone concern capacity. However, to the extent that the aforementioned net exposure of the Bank parent is covered by such funds, they do not qualify for the gone concern capital ratio calculation at the Bank parent or the Group parent level.

Capital instruments

Contingent convertible capital instruments

We have issued high-trigger and low-trigger capital instruments to meet our capital requirements. Our high-trigger instruments either mandatorily convert into our ordinary shares or their principal amount is written down to zero upon the occurrence of certain specified triggering events. These events include our CET1 ratio falling below 7% (or any lower applicable minimum threshold), or a determination by FINMA that conversion is necessary, or that we require public sector capital support, to prevent us from becoming insolvent, bankrupt or unable to pay a material amount of our debts, or other similar circumstances. Conversion can only be prevented if FINMA, at our request, is satisfied that certain conditions exist and conversion is not required. High-trigger instruments are designed to absorb losses before our other capital instruments, including the low-trigger capital instruments. The features of low-trigger capital instruments are described below. Contingent Capital Awards would not convert into common equity, but would be written down to zero upon a trigger event.

Higher Trigger Capital Amount

The capital ratio write-down triggers for certain of our outstanding capital instruments take into account the fact that other outstanding capital instruments that contain relatively higher capital ratios as part of their trigger feature are expected to convert into equity or be written down prior to the write-down of such capital instruments. The amount of additional capital that is expected to be contributed by such conversion into equity or write-down is referred to as the Higher Trigger Capital Amount.

The following tier 1 capital notes (collectively, Tier 1 Capital Notes), which have a trigger amount of 5.125% and qualify as low trigger capital instruments, were outstanding as of December 31, 2019:

- USD 2.5 billion 6.25% tier 1 capital notes; and
- USD 2.25 billion 7.5% tier 1 capital notes.

The following tier 2 capital notes (collectively, Tier 2 Capital Notes), which have a trigger amount of 5% and qualify as low trigger capital instruments, were outstanding as of December 31, 2019:

- USD 2.5 billion 6.5% tier 2 capital notes; and
- EUR 1.25 billion 5.75% tier 2 capital notes.

Issuances

	Currency	Par value at issuance (million)	Coupon rate (%)	Description	Year of maturity
Issuances – callable bail-in instruments					
First quarter of 2019	USD	120	–	Zero coupon accreting senior notes	2049
	USD	120	–	Zero coupon accreting senior notes	2049
	USD	100	–	Zero coupon accreting senior notes	2049
	USD	1,050	floored floating rate	Senior notes	2024
Second quarter of 2019	USD	100	floored floating rate	Senior notes	2023
	USD	130	–	Zero coupon accreting senior notes	2049
	EUR	100	1.59 ¹	Senior notes	2030
	EUR	1,000 ²	1.0	Senior notes	2027
	USD	130	–	Zero coupon accreting senior notes	2049
Third quarter of 2019	EUR	500 ²	1.0	Senior notes	2027
	EUR	1,000	0.65	Senior notes	2029
	USD	2,000	2.593	Senior notes	2025
First quarter of 2020	EUR	1,250	0.65	Senior notes	2028
	USD	280	–	Zero coupon accreting senior notes	2060
Issuances – high-trigger capital instruments					
Second quarter of 2019	SGD	750	5.625	Perpetual tier 1 contingent capital notes	–
Third quarter of 2019	USD	1,750	6.375	Perpetual tier 1 contingent capital notes	–
	CHF	525	3.0	Perpetual tier 1 contingent capital notes	–
First quarter of 2020	USD	1,000	5.1	Perpetual tier 1 contingent capital notes	–

¹ Stepping down to 1.19%.

² In the second quarter of 2019, the Group issued EUR 1,000 million 1.0% senior callable notes due in 2027. In July 2019, the offering was re-opened and the aggregate principal amount was increased from EUR 1,000 million to EUR 1,500 million.

Each of the series of Tier 1 Capital Notes and Tier 2 Capital Notes qualify as low-trigger capital instruments and have a write-down feature, which means that the full principal amount of the notes will be permanently written down to zero upon the occurrence of specified triggering events. These events occur when the amount of our CET1 ratio, together with an additional ratio described below that takes into account other outstanding capital instruments, falls below 5.125% for the Tier 1 Capital Notes and 5% for the Tier 2 Capital Notes. The write-down can only be prevented if FINMA, at our request, is satisfied that certain conditions exist and determines a write-down is not required. The capital notes will also be written down upon a non-viability event, which occurs when FINMA determines that a write-down is necessary, or that we require extraordinary public sector capital support, to prevent us from becoming insolvent, bankrupt or unable to pay a material amount of our debts, or other similar circumstances.

With respect to the capital instruments that specify a trigger event if the CET1 ratio were to fall below 5.125%, the Higher Trigger Capital Amount was CHF 8.3 billion and the Higher Trigger Capital Ratio (i.e., the ratio of the Higher Trigger Capital Amount to the aggregate of all RWA of the Group) was 2.9%, both as of the end of 2019.

With respect to the capital instruments that specify a trigger event if the CET1 ratio were to fall below 5%, the Higher Trigger Capital Amount was CHF 13.0 billion and the Higher Trigger Capital Ratio was 4.5%, both as of the end of 2019.

→ Refer to the table “BIS capital metrics – Group” for further information on the BIS metrics used to calculate such measures.

BIS capital metrics

BIS capital metrics – Group

end of	Phase-in			Look-through		
	2019	2018	% change	2019	2018	% change
Capital and risk-weighted assets (CHF million)						
CET1 capital	36,774	35,824	3	36,774	35,824	3
Tier 1 capital	49,791	46,040	8	49,791	46,040	8
Total eligible capital	53,038	50,239	6	52,725	49,548	6
Risk-weighted assets	290,463	284,582	2	290,463	284,582	2
Capital ratios (%)						
CET1 ratio	12.7	12.6	–	12.7	12.6	–
Tier 1 ratio	17.1	16.2	–	17.1	16.2	–
Total capital ratio	18.3	17.7	–	18.2	17.4	–

Eligible capital – Group

end of	Phase-in			Look-through		
	2019	2018	% change	2019	2018	% change
Eligible capital (CHF million)						
Total shareholders' equity	43,644	43,922	(1)	43,644	43,922	(1)
Regulatory adjustments ¹	(247)	(643)	(62)	(247)	(643)	(62)
Adjustments phased-in						
Goodwill ²	(4,848)	(4,762)	2	(4,848)	(4,762)	2
Other intangible assets ²	(38)	(47)	(19)	(38)	(47)	(19)
Deferred tax assets that rely on future profitability	(1,465)	(1,647)	(11)	(1,465)	(1,647)	(11)
Shortfall of provisions to expected losses	(458)	(461)	(1)	(458)	(461)	(1)
Gains/(losses) due to changes in own credit on fair-valued liabilities	2,911	804	262	2,911	804	262
Defined benefit pension assets ²	(2,263)	(1,374)	65	(2,263)	(1,374)	65
Investments in own shares	(426)	(32)	–	(426)	(32)	–
Other adjustments ³	(36)	64	–	(36)	64	–
Adjustments phased-in	(6,623)	(7,455)	(11)	(6,623)	(7,455)	(11)
CET1 capital	36,774	35,824	3	36,774	35,824	3
High-trigger capital instruments (7% trigger)	8,310	5,615	48	8,310	5,615	48
Low-trigger capital instruments (5.125% trigger)	4,707	4,601	2	4,707	4,601	2
Additional tier 1 capital	13,017	10,216	27	13,017	10,216	27
Tier 1 capital	49,791	46,040	8	49,791	46,040	8
Tier 2 low-trigger capital instruments (5% trigger)	2,934	3,508	(16)	2,934	3,508	(16)
Tier 2 instruments subject to phase-out	313	691	(55)	–	–	–
Tier 2 capital	3,247	4,199	(23)	2,934	3,508	(16)
Total eligible capital	53,038	50,239	6	52,725	49,548	6

¹ Includes regulatory adjustments not subject to phase-in, including a cumulative dividend accrual.

² Net of deferred tax liability.

³ Includes cash flow hedge reserve.

Capital movement – Group

	Phase-in		Look-through	
	2019	2018	2019	2018
CET1 capital (CHF million)				
Balance at beginning of period	35,824	36,711	35,824	34,824
Net income attributable to shareholders	3,419	2,024	3,419	2,024
Foreign exchange impact	(985) ¹	(308)	(985)	(266)
Impact of deductions relating to phase-in requirements	–	(1,843)	–	–
Repurchase of shares under the share buyback program	(1,000)	–	(1,000)	–
Regulatory adjustment of deferred tax assets	157	586	157	586
Regulatory adjustment of own credit on fair-valued financial liabilities	104	(199)	104	(199)
Other ²	(745)	(1,147)	(745)	(1,145)
Balance at end of period	36,774	35,824	36,774	35,824
Additional tier 1 capital (CHF million)				
Balance at beginning of period	10,216	14,771	10,216	12,438
Foreign exchange impact	(204)	109	(204)	97
Impact of deductions relating to phase-in requirements	–	445	–	0
Issuances	2,796	3,713	2,796	3,713
Redemptions	0	(9,081)	0	(6,139)
Other	209	259	209	107
Balance at end of period	13,017	10,216	13,017	10,216
Tier 2 capital (CHF million)				
Balance at beginning of period	4,199	5,214	3,508	4,127
Foreign exchange impact	(87)	(53)	(83)	(39)
Impact of deductions relating to phase-in requirements	–	50	–	0
Other ³	(865)	(1,012)	(491)	(580)
Balance at end of period	3,247	4,199	2,934	3,508
Eligible capital (CHF million)				
Balance at end of period	53,038	50,239	52,725	49,548

¹ Includes US GAAP cumulative translation adjustments and the foreign exchange impact on regulatory CET1 adjustments.

² Includes the impact of a dividend accrual, the net effect of share-based compensation and pensions and a change in other regulatory adjustments (e.g., goodwill).

³ Primarily reflects the impact of the prescribed amortization requirement as instruments move closer to their maturity date.

Our CET1 ratio was 12.7% as of the end of 2019 compared to 12.6% as of the end of 2018, with higher CET1 capital and slightly higher RWA. Our tier 1 ratio was 17.1% as of the end of 2019 compared to 16.2% as of the end of 2018. Our total capital ratio was 18.3% as of the end of 2019 compared to 17.7% as of the end of 2018.

CET1 capital was CHF 36.8 billion as of the end of 2019 compared to CHF 35.8 billion as of the end of 2018. CET1 was mainly impacted by net income attributable to shareholders, partially offset by the repurchase of shares under the share buyback program, a negative foreign exchange impact and a dividend accrual.

Additional tier 1 capital was CHF 13.0 billion as of the end of 2019 compared to CHF 10.2 billion as of the end of 2018, mainly reflecting the issuance of high-trigger additional tier 1 capital notes.

Tier 2 capital was CHF 3.2 billion as of the end of 2019 compared to CHF 4.2 billion as of the end of 2018, mainly due to the impact of the prescribed amortization requirement as instruments move closer to their maturity date.

Total eligible capital as of the end of 2019 was CHF 53.0 billion compared to CHF 50.2 billion as of the end of 2018, primarily reflecting increases in additional tier 1 capital and CET1 capital.

Risk-weighted assets

Our balance sheet positions and off-balance sheet exposures translate into RWA, which are categorized as credit, market and operational RWA. When assessing RWA, it is not the nominal size, but rather the nature (including risk mitigation such as collateral or hedges) of the balance sheet positions or off-balance sheet exposures that determines the RWA.

Credit risk RWA reflect the capital requirements for the possibility of a loss being incurred as the result of a borrower or counterparty failing to meet its financial obligations or as a result of a deterioration in the credit quality of the borrower or counterparty. Under Basel III, certain regulatory capital adjustments are dependent on the level of CET1 capital (thresholds). The amount above the threshold is deducted from CET1 capital and the amount below the threshold is risk weighted. RWA subject to such threshold adjustments are included in credit risk RWA. For measuring the capital requirements related to credit risk, we received approval from FINMA to use the advanced internal ratings-based (A-IRB) approach. Under the A-IRB approach for measuring credit risk, risk weights are determined by using internal risk parameters for probability of default (PD), loss given default (LGD) and effective maturity. The exposure at default (EAD) is either derived from balance sheet values or by using models. For the capital requirements for counterparty credit risk, we implemented the advanced credit valuation adjustment (CVA), which covers the risk of mark-to-market losses on the expected counterparty risk arising from changes in a counterparty's credit spreads.

Market risk RWA reflect the capital requirements of potential changes in the fair values of financial instruments in response to market movements inherent in both balance sheet and

off-balance sheet items. For calculating the capital requirements related to market risk, the internal models and standardized approaches are used. Within the Basel framework for FINMA regulatory capital purposes, we implemented risk measurement models, including an incremental risk charge (IRC), stressed value-at-risk (VaR) and risks not in VaR (RNIV).

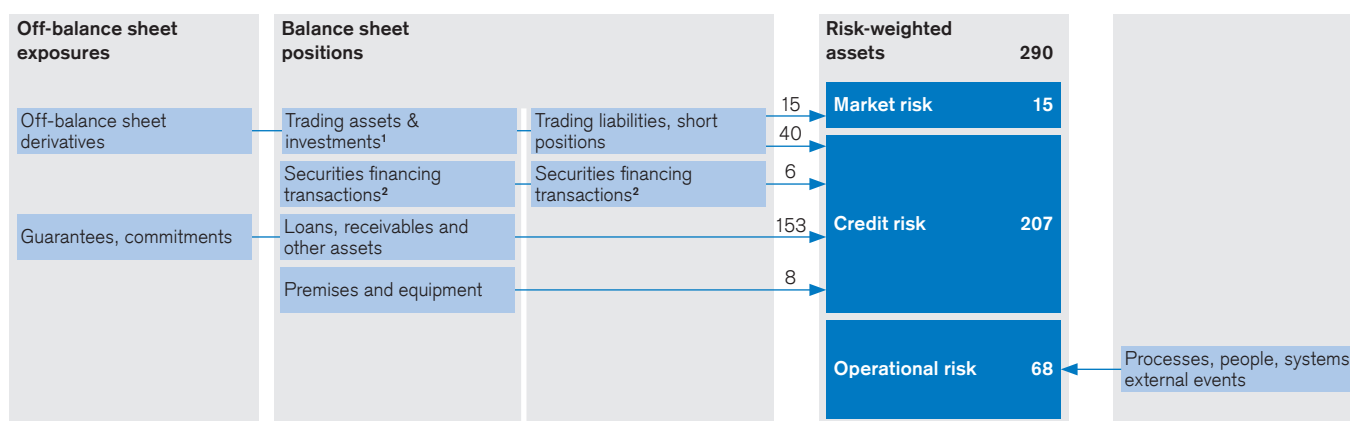
The IRC is a regulatory capital charge for default and migration risk on positions in the trading books and is intended to complement additional standards being applied to the VaR modeling framework, including stressed VaR. Stressed VaR replicates a VaR calculation on the Group's current portfolio, taking into account a one-year observation period relating to significant financial stress and helps reduce the pro-cyclicality of the minimum capital requirements for market risk. RNIV and stressed RNIV are risks that are not currently implemented within the Group's VaR model, such as certain basis risks, higher order risks and cross risks. For capital purposes, FINMA, in line with BIS requirements, uses a multiplier to impose an increase in market risk capital for every regulatory VaR backtesting exception above four in the prior rolling 12-month period. In 2019, our market risk capital multiplier remained at FINMA and BIS minimum levels and we did not experience an increase in market risk capital.

→ Refer to "Market risk review" in Risk management for further information.

Operational risk RWA reflect the capital requirements for the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. For calculating the capital requirements related to operational risk, we received approval from FINMA to use the advanced measurement approach (AMA). Under the AMA for measuring operational risk, we have identified key scenarios that describe our major operational risks using an event model.

Risk-weighted assets – Group

as of December 31, 2019 (CHF billion)



¹ Includes primarily trading assets, investment securities and other investments.

² Includes central bank funds sold, securities purchased under resale agreements and central bank funds purchased, securities sold under repurchase agreements and securities lending transactions.

Risk-weighted assets – Group

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit ¹	Corporate Center ¹	Group
2019 (CHF million)								
Credit risk	66,307	29,441	26,436	36,806	19,565	–	28,398	206,953
Market risk	977	1,490	3,010	7,480	97	–	2,138	15,192
Operational risk	11,058	12,857	7,182	12,491	3,897	–	20,833	68,318
Risk-weighted assets	78,342	43,788	36,628	56,777	23,559	–	51,369	290,463
2018 (CHF million)								
Credit risk	63,280	26,604	27,102	35,380	20,498	5,834	16,201	194,899
Market risk	1,315	1,669	3,507	9,158	200	1,305	1,489	18,643
Operational risk	11,880	11,843	6,547	14,478	3,492	10,787	12,013	71,040
Risk-weighted assets	76,475	40,116	37,156	59,016	24,190	17,926	29,703	284,582

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

Risk-weighted assets movements

RWA increased 2% to CHF 290.5 billion as of the end of 2019 from CHF 284.6 billion as of the end of 2018, primarily driven by increases relating to external model and parameter updates, movements in risk levels and methodology and policy changes in credit risk. These increases were partially offset by a negative foreign exchange impact, decreases in risk levels and decreases in internal model and parameter updates in market risk.

Excluding the foreign exchange impact, the increase in **credit risk** was primarily driven by increases in external model and parameter updates, movements in risk levels attributable to book size and methodology and policy changes, partially offset by a decrease in risk levels attributable to book quality. External model and parameter updates mainly reflected the phased-in impact of a mandated change from a model approach to a standardized approach for certain loans across all divisions, a mandated adjustment relating to residential real estate loans in Swiss Universal Bank and a mandated buffer related to the ship finance rating model in International Wealth Management, as well as the impact of the de-recognition of certain hedging transactions in Investment Banking & Capital Markets, the Corporate Center and Global Markets. It also included an additional phase-in of multipliers on income producing real estate (IPRE) and non-IPRE exposures, both within Swiss Universal Bank, and the phase-in of a multiplier on certain investment banking corporate exposures in Investment Banking & Capital Markets, Global Markets and Asia Pacific. The movements in risk levels attributable to book size were mainly driven by increases in equity exposures in International Wealth Management, Swiss Universal Bank, Global Markets and Asia Pacific and increases across most divisions relating to a regular update to the stressed window calibration,

partially offset by decreases from securitization structures in Investment Banking & Capital Markets. The increase resulting from methodology and policy changes reflected the impact of the new accounting standard relating to leases. The decrease in risk levels attributable to book quality was mainly due to a decrease in derivatives in Global Markets.

Excluding the foreign exchange impact, the decrease in **market risk** was primarily driven by movements in risk levels and internal model and parameter updates. The decreases in risk levels were mainly in International Wealth Management, Global Markets and the Corporate Center, partially offset by increases due to a regular update to the stressed window calibration, primarily in Global Markets and Asia Pacific. The decrease in internal model and parameter updates was mainly driven by RNIV methodology enhancements.

Excluding the foreign exchange impact, the decrease in **operational risk** was mainly driven by internal model and parameter updates related to the annual recalibration of the advanced measurement approach model. In addition, internal model and parameter updates reflected updated operational risk allocation keys, resulting in lower RWA relating to operational risk in Global Markets, the Corporate Center and Swiss Universal Bank, offset by higher RWA relating to International Wealth Management, Asia Pacific and Investment Banking & Capital Markets.

The foreign exchange impact of CHF 2.2 billion related to the decision in the fourth quarter of 2019 to calculate RWA relating to operational risk in US dollars rather than Swiss francs to better align the Group's capital usage to the underlying currency of its risks.

Risk-weighted asset movement by risk type – Group

2019	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit ¹	Corporate Center ¹	Total
Credit risk (CHF million)								
Balance at beginning of period	63,280	26,604	27,102	35,380	20,498	5,834	16,201	194,899
Transfers	–	–	–	–	–	(5,834)	5,834	–
Foreign exchange impact	(360)	(488)	(509)	(1,112)	(468)	–	(365)	(3,302)
Movements in risk levels	914	1,831	(422)	1,460	(1,561)	–	2,992	5,214
of which credit risk – book size ²	761	1,819	(684)	2,665	(1,111)	–	2,907	6,357
of which credit risk – book quality ³	153	12	262	(1,205)	(450)	–	85	(1,143)
Model and parameter updates – internal ⁴	(47)	242	(284)	(36)	(22)	–	(8)	(155)
Model and parameter updates – external ⁵	2,520	1,252	549	1,114	1,118	–	564	7,117
Methodology and policy changes ⁶	0	0	0	0	0	–	3,180	3,180
Balance at end of period	66,307	29,441	26,436	36,806	19,565	–	28,398	206,953
Market risk (CHF million)								
Balance at beginning of period	1,315	1,669	3,507	9,158	200	1,305	1,489	18,643
Transfers	–	–	–	–	–	(1,305)	1,305	–
Foreign exchange impact	(14)	(23)	(48)	(194)	(2)	–	(35)	(316)
Movements in risk levels	(304)	(810)	93	(666)	10	–	(479)	(2,156)
Model and parameter updates – internal ⁴	(20)	654	(542)	(806)	(6)	–	(28)	(748)
Model and parameter updates – external ⁵	0	0	0	(12)	(105)	–	(114)	(231)
Balance at end of period	977	1,490	3,010	7,480	97	–	2,138	15,192
Operational risk (CHF million)								
Balance at beginning of period	11,880	11,843	6,547	14,478	3,492	10,787	12,013	71,040
Transfers	–	–	–	–	–	(10,787)	10,787	–
Foreign exchange impact	(349)	(406)	(227)	(394)	(123)	–	(658)	(2,157)
Movements in risk levels	11	11	34	(55)	0	–	(22)	(21)
Model and parameter updates – internal ⁴	(484)	1,409	828	(1,538)	528	–	(1,287)	(544)
Balance at end of period	11,058	12,857	7,182	12,491	3,897	–	20,833	68,318
Total (CHF million)								
Balance at beginning of period	76,475	40,116	37,156	59,016	24,190	17,926	29,703	284,582
Transfers	–	–	–	–	–	(17,926)	17,926	–
Foreign exchange impact	(723)	(917)	(784)	(1,700)	(593)	–	(1,058)	(5,775)
Movements in risk levels	621	1,032	(295)	739	(1,551)	–	2,491	3,037
Model and parameter updates – internal ⁴	(551)	2,305	2	(2,380)	500	–	(1,323)	(1,447)
Model and parameter updates – external ⁵	2,520	1,252	549	1,102	1,013	–	450	6,886
Methodology and policy changes ⁶	0	0	0	0	0	–	3,180	3,180
Balance at end of period	78,342	43,788	36,628	56,777	23,559	–	51,369	290,463

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

² Represents changes in portfolio size.

³ Represents changes in average risk weighting across credit risk classes.

⁴ Represents movements arising from internally driven updates to models and recalibrations of model parameters specific only to Credit Suisse.

⁵ Represents movements arising from externally mandated updates to models and recalibrations of model parameters specific only to Credit Suisse.

⁶ Represents movements arising from externally mandated regulatory methodology and policy changes to accounting and exposure classification and treatment policies not specific only to Credit Suisse.

Leverage metrics

Credit Suisse has adopted the BIS leverage ratio framework, as issued by the BCBS and implemented in Switzerland by FINMA. Under the BIS framework, the leverage ratio measures tier 1 capital against the end-of-period exposure. As used herein, leverage exposure consists of period-end balance sheet assets and prescribed regulatory adjustments.

The leverage exposure was CHF 910.0 billion as of the end of 2019, an increase of 3% compared to CHF 881.4 billion as of the end of 2018. The increase in leverage exposure was mainly due to an increase in the Group's consolidated balance sheet, primarily reflecting higher operating activities, partially offset by a negative foreign exchange translation impact.

→ Refer to "Balance sheet and off-balance sheet" for further information on the movement in the Group's consolidated balance sheet.

Leverage exposure – Group

end of	2019	2018
Leverage exposure (CHF million)		
Swiss Universal Bank	264,987	255,480
International Wealth Management	100,664	98,556
Asia Pacific	115,442	106,375
Global Markets	257,407	245,664
Investment Banking & Capital Markets	42,590	40,485
Strategic Resolution Unit ¹	–	29,579
Corporate Center ¹	128,904	105,247
Leverage exposure	909,994	881,386

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

BIS leverage ratios – Group

The CET1 leverage ratio was 4.0% as of the end of 2019, compared to 4.1% as of the end of 2018, mainly reflecting higher leverage exposure. The tier 1 leverage ratio was 5.5% as of the end of 2019, compared to 5.2% as of the end of 2018, mainly reflecting higher tier 1 capital.

Leverage exposure components – Group

end of	Phase-in			Look-through		
	2019	2018	% change	2019	2018	% change
Leverage exposure (CHF million)						
Balance sheet assets	787,295	768,916	2	787,295	768,916	2
Adjustments						
Difference in scope of consolidation and tier 1 capital deductions ¹	(14,146)	(12,655)	12	(14,146)	(12,655)	12
Derivative financial instruments	75,856	73,110	4	75,856	73,110	4
Securities financing transactions	(29,580)	(32,278)	(8)	(29,580)	(32,278)	(8)
Off-balance sheet exposures	90,569	84,293	7	90,569	84,293	7
Total adjustments	122,699	112,470	9	122,699	112,470	9
Leverage exposure	909,994	881,386	3	909,994	881,386	3

¹ Includes adjustments for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation and tier 1 capital deductions related to balance sheet assets.

BIS leverage metrics – Group

end of	Phase-in			Look-through		
	2019	2018	% change	2019	2018	% change
Capital and leverage exposure (CHF million)						
CET1 capital	36,774	35,824	3	36,774	35,824	3
Tier 1 capital	49,791	46,040	8	49,791	46,040	8
Leverage exposure	909,994	881,386	3	909,994	881,386	3
Leverage ratios (%)						
CET1 leverage ratio	4.0	4.1	–	4.0	4.1	–
Tier 1 leverage ratio	5.5	5.2	–	5.5	5.2	–

Swiss metrics

Swiss capital metrics

As of the end of 2019, our Swiss CET1 ratio was 12.6%, our going concern capital ratio was 18.1%, our gone concern capital ratio was 13.2% and our TLAC ratio was 31.3%.

On a look-through basis, as of the end of 2019, our Swiss CET1 capital was CHF 36.7 billion and our Swiss CET1 ratio was 12.6%. Our going concern capital was CHF 49.8 billion and our going concern capital ratio was 17.1%. Our gone concern capital was CHF 41.1 billion and our gone concern capital ratio was 14.1%. Our total loss-absorbing capacity was CHF 90.9 billion and our TLAC ratio was 31.2%.

→ Refer to "Swiss Requirements" for further information on Swiss regulatory requirements.

Swiss capital metrics – Group

end of	Phase-in			Look-through		
	2019	2018	% change	2019	2018	% change
Swiss capital and risk-weighted assets (CHF million)						
Swiss CET1 capital	36,740	35,719	3	36,740	35,719	3
Going concern capital	52,691	49,443	7	49,757	45,935	8
Gone concern capital	38,576	35,678	8	41,138	37,909	9
Total loss-absorbing capacity	91,267	85,121	7	90,895	83,844	8
Swiss risk-weighted assets	291,282	285,193	2	291,282	285,193	2
Swiss capital ratios (%)						
Swiss CET1 ratio	12.6	12.5	–	12.6	12.5	–
Going concern capital ratio	18.1	17.3	–	17.1	16.1	–
Gone concern capital ratio	13.2	12.5	–	14.1	13.3	–
TLAC ratio	31.3	29.8	–	31.2	29.4	–

Swiss capital and risk-weighted assets – Group

end of	Phase-in			Look-through		
	2019	2018	% change	2019	2018	% change
Swiss capital (CHF million)						
CET1 capital – BIS	36,774	35,824	3	36,774	35,824	3
Swiss regulatory adjustments ¹	(34)	(105)	(68)	(34)	(105)	(68)
Swiss CET1 capital	36,740	35,719	3	36,740	35,719	3
Additional tier 1 high-trigger capital instruments	8,310	5,615	48	8,310	5,615	48
Grandfathered capital instruments	7,641	8,109	(6)	4,707	4,601	2
of which additional tier 1 low-trigger capital instruments	4,707	4,601	2	4,707	4,601	2
of which tier 2 low-trigger capital instruments	2,934	3,508	(16)	–	–	–
Swiss additional tier 1 capital	15,951	13,724	16	13,017	10,216	27
Going concern capital	52,691	49,443	7	49,757	45,935	8
Bail-in debt instruments	37,172	33,892	10	37,172	33,892	10
Tier 2 instruments subject to phase-out	314	691	(55)	–	–	–
Tier 2 amortization component	1,090	1,095	0	1,032	509	103
Tier 2 low-trigger capital instruments	–	–	–	2,934	3,508	(16)
Gone concern capital	38,576	35,678	8	41,138	37,909	9
Total loss-absorbing capacity	91,267	85,121	7	90,895	83,844	8
Risk-weighted assets (CHF million)						
Risk-weighted assets – BIS	290,463	284,582	2	290,463	284,582	2
Swiss regulatory adjustments ²	819	611	34	819	611	34
Swiss risk-weighted assets	291,282	285,193	2	291,282	285,193	2

¹ Includes adjustments for certain unrealized gains outside the trading book.

² Primarily includes differences in the credit risk multiplier.

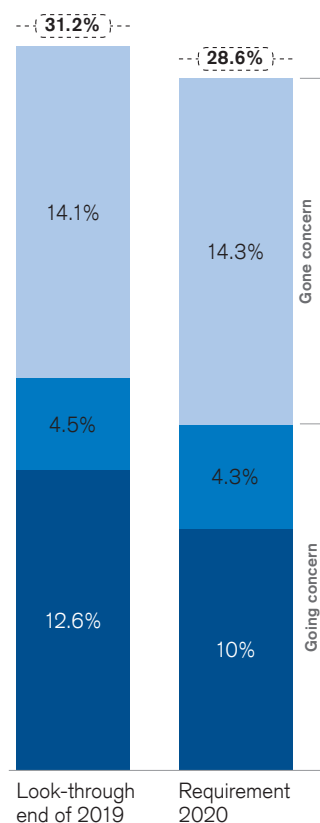
Swiss leverage metrics – Group

end of	Phase-in			Look-through		
	2019	2018	% change	2019	2018	% change
Swiss capital and leverage exposure (CHF million)						
Swiss CET1 capital	36,740	35,719	3	36,740	35,719	3
Going concern capital	52,691	49,443	7	49,757	45,935	8
Gone concern capital	38,576	35,678	8	41,138	37,909	9
Total loss-absorbing capacity	91,267	85,121	7	90,895	83,844	8
Leverage exposure	909,994	881,386	3	909,994	881,386	3
Swiss leverage ratios (%)						
Swiss CET1 leverage ratio	4.0	4.1	–	4.0	4.1	–
Going concern leverage ratio	5.8	5.6	–	5.5	5.2	–
Gone concern leverage ratio	4.2	4.0	–	4.5	4.3	–
TLAC leverage ratio	10.0	9.7	–	10.0	9.5	–

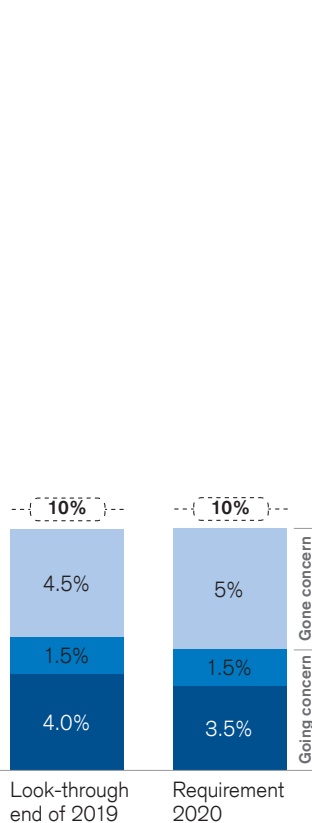
Rounding differences may occur.

Swiss capital and leverage ratios for Credit Suisse

Capital ratio



Leverage ratio



■ CET1 ■ Additional tier 1 ■ Bail-in debt instruments

Rounding differences may occur. Does not include the effects of the countercyclical buffers or any rebates for resolvability and for certain tier 2 low-trigger instruments recognized in gone concern capital.

Swiss leverage metrics

The leverage exposure used in the Swiss leverage ratios is measured on the same period-end basis as the leverage exposure for the BIS leverage ratio. As of the end of 2019, our Swiss CET1 leverage ratio was 4.0%, our going concern leverage ratio was 5.8%, our gone concern leverage ratio was 4.2% and our TLAC leverage ratio was 10.0%. On a look-through basis, as of the end of 2019, our Swiss CET1 leverage ratio was 4.0%, our going concern leverage ratio was 5.5%, our gone concern leverage ratio was 4.5% and our TLAC leverage ratio was 10.0%.

Bank regulatory disclosures

The following capital, RWA and leverage disclosures apply to the Bank. The business of the Bank is substantially the same as that of the Group, including business drivers and trends relating to capital, RWA and leverage metrics.

→ Refer to "BIS capital metrics", "Risk-weighted assets", "Leverage metrics", "Swiss metrics" for further information.

BIS capital metrics – Bank

end of	2019	2018	Phase-in % change
Capital and risk-weighted assets (CHF million)			
CET1 capital	41,933	38,915	8
Tier 1 capital	54,024	48,231	12
Total eligible capital	57,271	52,431	9
Risk-weighted assets	290,843	286,081	2
Capital ratios (%)			
CET1 ratio	14.4	13.6	–
Tier 1 ratio	18.6	16.9	–
Total capital ratio	19.7	18.3	–

The Bank's CET1 ratio was 14.4% as of the end of 2019 compared to 13.6% as of the end of 2018, mainly reflecting higher CET1 capital. The Bank's tier 1 ratio was 18.6% as of the end of 2019 compared to 16.9% as of the end of 2018. The Bank's total capital ratio was 19.7% as of the end of 2019 compared to 18.3% as of the end of 2018.

CET1 capital was CHF 41.9 billion as of the end of 2019 compared to CHF 38.9 billion as of the end of 2018. CET1 was mainly impacted by net income attributable to shareholders, partially offset by a negative foreign exchange impact.

Additional tier 1 capital was CHF 12.1 billion as of the end of 2019 compared to CHF 9.3 billion as of the end of 2018, mainly reflecting the issuance of high-trigger additional tier 1 capital notes.

Eligible capital and risk-weighted assets – Bank

end of	2019	2018	Phase-in % change
Eligible capital (CHF million)			
Total shareholders' equity	46,120	45,296	2
Regulatory adjustments ¹	(58)	(49)	18
Adjustments phased-in ²	(4,129)	(6,332)	(35)
CET1 capital	41,933	38,915	8
Additional tier 1 instruments	12,091 ³	9,316	30
Additional tier 1 capital	12,091	9,316	30
Tier 1 capital	54,024	48,231	12
Tier 2 low-trigger capital instruments (5% trigger)	2,934	3,508	(16)
Tier 2 instruments subject to phase-out	313	692	(55)
Tier 2 capital	3,247	4,200	(23)
Total eligible capital	57,271	52,431	9
Risk-weighted assets by risk type (CHF million)			
Credit risk	207,333	196,398	6
Market risk	15,192	18,643	(19)
Operational risk	68,318	71,040	(4)
Risk-weighted assets	290,843	286,081	2

¹ Includes regulatory adjustments not subject to phase-in, including a cumulative dividend accrual.

² Reflects 100% phased-in deductions since 2018, including goodwill, other intangible assets and certain deferred tax assets.

³ Consists of high-trigger and low-trigger capital instruments. Of this amount, CHF 8.3 billion consists of capital instruments with a capital ratio write-down trigger of 7% and CHF 3.8 billion consists of capital instruments with a capital ratio write-down trigger of 5.125%.

Tier 2 capital was CHF 3.2 billion as of the end of 2019 compared to CHF 4.2 billion as of the end of 2018, mainly due to the impact of the prescribed amortization requirement as instruments move closer to their maturity date.

The Bank's total eligible capital was CHF 57.3 billion as of the end of 2019 compared to CHF 52.4 billion as of the end of 2018, mainly reflecting increases in CET1 capital and additional tier 1 capital.

RWA increased CHF 4.8 billion to CHF 290.8 billion as of the end of 2019 compared to CHF 286.1 billion as of the end of 2018.

Leverage exposure components – Bank

end of			Phase-in
	2019	2018	% change
Leverage exposure (CHF million)			
Balance sheet assets	790,459	772,069	2
Adjustments			
Difference in scope of consolidation and tier 1 capital deductions ¹	(11,545)	(11,493)	0
Derivative financial instruments	75,906	73,258	4
Securities financing transactions	(29,580)	(32,278)	(8)
Off-balance sheet exposures	90,574	84,298	7
Total adjustments	125,355	113,785	10
Leverage exposure	915,814	885,854	3

¹ Includes adjustments for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation and tier 1 capital deductions related to balance sheet assets.

BIS leverage metrics – Bank

end of			Phase-in
	2019	2018	% change
Capital and leverage exposure (CHF million)			
CET1 capital	41,933	38,915	8
Tier 1 capital	54,024	48,231	12
Leverage exposure	915,814	885,854	3
Leverage ratios (%)			
CET1 leverage ratio	4.6	4.4	–
Tier 1 leverage ratio	5.9	5.4	–

Swiss capital metrics – Bank

end of			Phase-in
	2019	2018	% change
Swiss capital and risk-weighted assets (CHF million)			
Swiss CET1 capital	41,899	38,810	8
Going concern capital	56,924	51,634	10
Gone concern capital	38,574	35,683	8
Total loss-absorbing capacity	95,498	87,317	9
Swiss risk-weighted assets	291,650	286,682	2
Swiss capital ratios (%)			
Swiss CET1 ratio	14.4	13.5	–
Going concern capital ratio	19.5	18.0	–
Gone concern capital ratio	13.2	12.4	–
TLAC ratio	32.7	30.5	–

Rounding differences may occur.

Swiss capital and risk-weighted assets – Bank

end of			Phase-in
	2019	2018	% change
Swiss capital (CHF million)			
CET1 capital – BIS	41,933	38,915	8
Swiss regulatory adjustments ¹	(34)	(105)	(68)
Swiss CET1 capital	41,899	38,810	8
Additional tier 1 high-trigger capital instruments	8,315	5,624	48
Grandfathered capital instruments	6,710	7,200	(7)
of which additional tier 1 low-trigger capital instruments	3,776	3,692	2
of which tier 2 low-trigger capital instruments	2,934	3,508	(16)
Swiss additional tier 1 capital	15,025	12,824	17
Going concern capital	56,924	51,634	10
Bail-in debt instruments	37,170	33,897	10
Tier 2 instruments subject to phase-out	314	691	(55)
Tier 2 amortization component	1,090	1,095	0
Gone concern capital	38,574	35,683	8
Total loss-absorbing capacity	95,498	87,317	9

Risk-weighted assets (CHF million)

Risk-weighted assets – BIS	290,843	286,081	2
Swiss regulatory adjustments ²	807	601	34
Swiss risk-weighted assets	291,650	286,682	2

¹ Includes adjustments for certain unrealized gains outside the trading book.

² Primarily includes differences in the credit risk multiplier.

Swiss leverage metrics – Bank

end of			Phase-in
	2019	2018	% change
Swiss capital and leverage exposure (CHF million)			
Swiss CET1 capital	41,899	38,810	8
Going concern capital	56,924	51,634	10
Gone concern capital	38,574	35,683	8
Total loss-absorbing capacity	95,498	87,317	9
Leverage exposure	915,814	885,854	3
Swiss leverage ratios (%)			
Swiss CET1 leverage ratio	4.6	4.4	–
Going concern leverage ratio	6.2	5.8	–
Gone concern leverage ratio	4.2	4.0	–
TLAC leverage ratio	10.4	9.9	–

Rounding differences may occur.

Shareholders' equity

Group

The Group's total shareholders' equity was CHF 43.6 billion as of the end of 2019 compared to CHF 43.9 billion as of the end of 2018. Total shareholders' equity was negatively impacted by losses on fair value elected liabilities relating to credit risk, foreign exchange-related movements on cumulative translation adjustments, transactions relating to the settlement of share-based compensation awards, the repurchase of shares under the share buyback program and dividends paid. These movements were offset by net income attributable to shareholders and an increase in the share-based compensation obligation.

→ Refer to the "Consolidated statements of changes in equity" in VI – Consolidated financial statements – Credit Suisse Group for further information on the Group's total shareholders' equity.

Bank

The Bank's total shareholders' equity was CHF 46.1 billion as of the end of 2019 compared to CHF 45.3 billion as of the end of 2018. Total shareholders' equity was positively impacted by net income attributable to shareholders and an increase in the share-based compensation obligation. These movements were partially offset by losses on fair value elected liabilities relating to credit risk, foreign exchange-related movements on cumulative translation adjustments and transactions relating to the settlement of share-based compensation awards.

→ Refer to the "Consolidated statements of changes in equity" in VIII – Consolidated financial statements – Credit Suisse (Bank) for further information on the Bank's total shareholders' equity.

Shareholders' equity and share metrics

end of	Group			Bank		
	2019	2018	% change	2019	2018	% change
Shareholders' equity (CHF million)						
Common shares	102	102	0	4,400	4,400	0
Additional paid-in capital	34,661	34,889	(1)	45,774	45,557	0
Retained earnings	30,634	26,973	14	13,492	10,179	33
Treasury shares, at cost	(1,484)	(61)	–	–	–	–
Accumulated other comprehensive income/(loss)	(20,269)	(17,981)	13	(17,546)	(14,840)	18
Total shareholders' equity	43,644	43,922	(1)	46,120	45,296	2
Goodwill	(4,663)	(4,766)	(2)	(3,960)	(4,056)	(2)
Other intangible assets	(291)	(219)	33	(291)	(219)	33
Tangible shareholders' equity¹	38,690	38,937	(1)	41,869	41,021	2
Shares outstanding (million)						
Common shares issued	2,556.0	2,556.0	0	4,399.7	4,399.7	0
Treasury shares	(119.8)	(5.4)	–	–	–	–
Shares outstanding	2,436.2	2,550.6	(4)	4,399.7	4,399.7	0
Par value (CHF)						
Par value	0.04	0.04	0	1.00	1.00	0
Book value per share (CHF)						
Total book value per share	17.91	17.22	4	10.48	10.30	2
Goodwill per share	(1.91)	(1.87)	2	(0.90)	(0.92)	(2)
Other intangible assets per share	(0.12)	(0.08)	50	(0.06)	(0.06)	0
Tangible book value per share¹	15.88	15.27	4	9.52	9.32	2

¹ Management believes that tangible shareholders' equity and tangible book value per share, both non-GAAP financial measures, are meaningful as they are measures used and relied upon by industry analysts and investors to assess valuations and capital adequacy.

Foreign exchange exposure

Foreign exchange risk associated with investments in branches, subsidiaries and affiliates is managed within defined parameters that create a balance between the interests of stability of capital adequacy ratios and the preservation of Swiss franc shareholders' equity. The decisions regarding these parameters are made by

CARMC and are regularly reviewed. Foreign exchange risk associated with the nonfunctional currency net assets of branches and subsidiaries is managed through a combination of forward-looking and concurrent backward-looking hedging activity, which is aimed at reducing the foreign exchange rate induced volatility of reported earnings.

Share purchases

The Swiss Code of Obligations limits a corporation's ability to hold or repurchase its own shares. We may only repurchase shares if we have sufficient free reserves to pay the purchase price, and if the aggregate nominal value of the repurchased shares does not exceed 10% of our nominal share capital. Furthermore, we must create a special reserve in our parent company's financial statements in the amount of the purchase price of the acquired shares. In our consolidated financial statements, own shares are recorded at cost and reported as treasury shares, resulting in a reduction in total shareholders' equity. Shares repurchased by us do not carry any voting rights at shareholders' meetings.

In 2019, we purchased 951.7 million treasury shares and sold or re-issued 795.6 million treasury shares. Of these, 871.9 million shares were purchased through open market transactions, predominantly for market-making purposes and facilitating customer orders and to meet the Group's delivery obligations with respect to share-based compensation. As of December 31, 2019, the Group held 119.8 million treasury shares.

→ Refer to "Note 26 – Accumulated other comprehensive income and additional share information" in VI – Consolidated financial statements – Credit Suisse Group for information on movement in treasury shares.

At the 2018 Investor Day on December 12, 2018, we announced a share buyback program of Group ordinary shares for 2019. The Board of Directors approved the share buyback program of up to CHF 1.5 billion. We expected to buy back at least CHF 1.0 billion of shares in 2019, subject to market and economic conditions. We commenced the 2019 share buyback program on January 14, 2019 and repurchased 79.8 million shares on a second trading line on the SIX Swiss Exchange for a total of CHF 1.0 billion at an average share price of CHF 12.53, subject to deduction of applicable Swiss federal withholding tax.

As announced at the 2019 Investor Day on December 11, 2019, the Board of Directors approved an additional share buyback program for 2020 of up to CHF 1.5 billion. Prior to the spread of COVID-19, we had expected to buy back at least CHF 1.0 billion of shares in 2020, subject to market and economic conditions. We commenced the 2020 share buyback program on January 6, 2020 and are acquiring our own shares on a second trading line on the SIX Swiss Exchange, subject to deduction of applicable Swiss federal withholding tax. Until March 13, 2020, we had bought back CHF 325 million worth of shares.

In light of the recent market volatility and the likely impact of COVID-19 on economic activity over the near term, the Board of Directors will review its expectation for the balance of the program when there is greater certainty over the market, financial and economic outlook.

Our Board of Directors will propose to the shareholders at the Annual General Meeting (AGM) on April 30, 2020 that the shares repurchased in 2019 (79.8 million shares) and in early 2020 through March 13, 2020 (28.5 million shares) be cancelled by

means of a capital reduction. Shares repurchased later in 2020 are expected to be cancelled by means of a capital reduction to be proposed at a future AGM of shareholders.

→ Refer to "Impact of share-based compensation on shareholders' equity" in V – Compensation – Group compensation for further information.

Issuer purchases of equity securities

in	Total number of shares purchased (million) ¹	Average price paid per share purchased (CHF)	of which share buyback program ²	
			Total number of shares purchased (million)	Maximum amount that may yet be purchased (CHF million) ³
2019				
January	72.0	12.08	12.9	842
February	33.4	11.85	1.0	830
March	177.6	11.84	7.4	739
April	93.8	12.59	3.7	688
May	55.0	12.54	13.3	514
June	41.7	11.53	0.0	514
July	67.6	12.11	6.8	432
August	119.3	11.19	11.5	305
September	79.6	12.44	0.0	305
October	76.2	11.89	0.0	305
November	88.1	12.98	14.0	123
December	47.4	13.15	9.2	–
Total share purchases	951.7	–	79.8	–

¹ We purchased 871.9 million shares in 2019, other than through the share buyback program, through open market transactions, predominantly for market-making purposes and facilitating customer orders as well as to meet the Group's delivery obligations with respect to share-based compensation.

² At the 2018 Investor Day on December 12, 2018, we announced a share buyback program of Group ordinary shares for 2019. The Board of Directors approved the share buyback program of up to CHF 1.5 billion. The program was completed on December 30, 2019.

³ Based on our stated intention to buy back at least CHF 1.0 billion of shares.

Dividends and dividend policy

Under the Swiss Code of Obligations, dividends may be paid out only if and to the extent the corporation has distributable profits from previous business years, or if the free reserves of the corporation are sufficient to allow distribution of a dividend. In addition, at least 5% of the annual net profits must be retained and booked as general legal reserves for so long as these reserves amount to less than 20% of the paid-in share capital. Our reserves currently exceed this 20% threshold. Furthermore, dividends may be paid out only after shareholder approval at the AGM. The Board of Directors may propose that a dividend be paid out, but cannot itself set the dividend. In Switzerland, the auditors are required to confirm whether the appropriation of retained earnings is in accordance with Swiss law and the company's articles of incorporation. In practice, the shareholders usually approve the dividend proposal of the Board of Directors. Dividends are usually due and payable after the shareholders' resolution relating to the allocation of profits has been passed. Under the Swiss Code of Obligations,

the statute of limitations in respect of claiming the payment of dividends that have been declared is five years.

The dividend payment made in 2019 for the financial year 2018 consisted of a distribution of CHF 0.2625 per share payable out of capital contribution reserves in cash. The distribution was free of Swiss withholding tax and was not subject to income tax for Swiss resident individuals holding the shares as a private investment.

Our dividend payment policy seeks to provide investors with an efficient form of capital distribution relative to earnings. Our dividend payment policy is to pay a cash dividend per share, subject to performance and the decision of the Board of Directors and approval of our shareholders in due course. We expect to generate a sustainable ordinary dividend for shareholders and to increase the ordinary dividend by at least 5% per annum.

Our Board of Directors will propose to the shareholders at the AGM on April 30, 2020 a cash distribution of CHF 0.2776 per share for the financial year 2019. Fifty percent of the distribution will be paid out of capital contribution reserves, free of Swiss withholding tax and will not be subject to income tax for Swiss resident individuals, and 50% percent will be paid out of retained earnings, net of 35% Swiss withholding tax. The ex-dividend date has been set to May 7, 2020.

Reflecting our holding company structure, the Group is not an operating company and holds investments in subsidiaries. It is therefore reliant on the dividends of its subsidiaries to pay shareholder dividends and service its long-term debt. The subsidiaries of the Group are generally subject to legal restrictions on the amount of dividends they can pay. The amount of dividends paid by operating subsidiaries is determined after consideration of the expectations for future results and growth of the operating businesses.

→ Refer to "Proposed distribution out of capital contribution reserves" in VII – Parent company financial statements – Credit Suisse Group – Proposed appropriation of retained earnings and capital distribution for further information on dividends.

Dividend per ordinary share

	USD ¹	CHF
Dividend per ordinary share for the financial year		
2018	0.26	0.26
2017	0.25	0.25
2016	0.72	0.70
2015	0.72	0.70
2014	0.75	0.70

¹ Represents the distribution on each American Depositary Share. For further information, refer to credit-suisse.com/dividend.

Risk management

During 2019, the Group's credit risk profile was stable and market risk was generally at a low level. A number of governance and organizational initiatives were implemented.

In response to the evolution of business and market conditions, the Chief Risk Officer function (Risk) executed the following initiatives:

- The implementation in 2020 of the Executive Board Risk Forum, chaired by the Group Chief Risk Officer (CRO), responsible for decision making across risk types and functions.
- The implementation of enhanced risk reporting capabilities, resulting in FINMA recognizing the Group's material compliance with the Basel Committee on Banking Supervision's "Principles for effective risk data aggregation and risk reporting" (BCBS 239). The Group will continue to deepen the integration of the principles into all relevant aspects of its activities.
- The launch of a human capital and culture initiative to further develop the skills of the Risk function workforce while maintaining high standards for diversity and inclusion.

Key risk developments

We closely monitor the following key risk and global economic developments. Where applicable, we have assessed the Group's vulnerabilities under a number of specific stress scenarios, calibrated to various severities, related to these developments.

COVID-19

The rapid spread of COVID-19 inside China in February 2020 and across the world in March 2020 led to the introduction of tight government controls and travel bans, as well as the implementation of other measures which quickly closed down activity and increased economic disruption globally. Markets globally were negatively impacted, with the energy, travel and tourism and transportation sectors, as well as companies with close links to China's economy, being the worst affected so far. COVID-19 is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to affect the Group's financial performance, including credit loss estimates, trading revenues, net interest income and potential goodwill assessments. We are closely monitoring the spread of COVID-19 and the potential effects on our operations and business.

Global economic cycle

There was acute uncertainty over the durability of the global economic upswing for most of 2019. But that uncertainty eased in the final months of 2019 and in early 2020 as a result of positive developments in central bank monetary policy and the first phase of the trade deal agreed between the US and China. The deterioration in the global manufacturing sector has stabilized.

However, a large number of uncertainties are expected to persist, e.g., the impact of COVID-19, and systemic risks in the markets may continue to rise as the unintended consequence of central bank monetary policy accommodation. In addition, the prospect of slower world GDP growth and the decision in early March 2020 to unwind the oil output restraint agreement between OPEC and Russia led to a sharp fall in oil prices.

Trade tensions

The escalation of tensions between the US and China continued throughout 2019 with both countries implementing additional tariffs and with other aspects of the dispute such as access to advanced technologies becoming more pronounced. Furthermore, tensions increased between the US and other countries. The first phase of the trade deal agreed between the US and China provided some relief, however, a higher level of tariffs will remain in place and political considerations may continue to drive trade policies in the future.

US-Iran tensions

Tensions between the US and Iran escalated throughout 2019 and in early 2020. The US is attempting to force a renegotiation of the 2015 nuclear deal while Iran is threatening to leave that deal entirely and to expand its nuclear programs. Global financial markets were periodically impacted in 2019 and in the first quarter of 2020 due to the concern that further escalation and retaliation would severely disrupt oil and gas shipments from the Persian Gulf region with potentially significant impacts on the world economy.

Civil unrest in Hong Kong and Latin America

There was increasing social and political unrest in Hong Kong and in several countries in Latin America in 2019. In response to those pressures and the impact of COVID-19, Hong Kong's government responded with the announcement of an increase in fiscal support. Chile, the country in Latin America most significantly impacted by the 2019 civil unrest, has proposed constitutional changes which will be voted on later in 2020. However, civil unrest in these and other countries may continue to persist.

Turkey

Turkey's economy emerged from recession in 2019 and inflation slowed while the external deficit narrowed. However, economic policy remained focused on boosting GDP through short-term stimulus measures such as lower interest rates and through accelerated credit growth which may bring a widening again in the external deficit, higher debt levels and an increased dependence on foreign capital inflows.

Ship finance

The shift towards a more protectionist foreign trade policy by the US and the uncertainty surrounding global GDP growth continued to impact world trade and shipping markets. The industry was highly volatile with earnings and values extremely sensitive to changes in demand and supply for most of 2019, but with some improvement in the fourth quarter of 2019. However, shipping earnings and values in the first quarter of 2020 were adversely impacted by the spread of COVID-19.

Withdrawal of the UK from the EU

Uncertainty over the outcome of the negotiations surrounding the withdrawal of the UK from the EU persisted throughout 2019 and that uncertainty will likely continue to some extent in 2020. The UK formally left the EU at the end of January 2020 but it may be challenging to agree the details of new arrangements before the current transition period finishes on December 31, 2020. That uncertainty may continue to have a negative economic impact in the UK. We are focused on ensuring operational readiness in our EU entities and completing the transition of impacted operations and client migration activities throughout 2020 before the end of the transition period.

Climate change

Climate risk has become a key issue for banks and financial institutions due to increasing regulations and initiatives, industry developments, client and investor expectations and public pressure. Our Board of Directors (Board) and management are highly focused on this issue. In 2019, our sector policies and guidelines, which had previously excluded any form of financing for new greenfield thermal coal mines, were updated to also exclude any form of financing specifically related to the development of new coal-fired power plants. Climate-related risks are embedded in our Group-wide risk taxonomy.

Cyber risk

The financial industry continues to be increasingly reliant on technology and faces dynamic cyber threats from a variety of actors. We continue to invest significantly in our information and cybersecurity program in order to strengthen our ability to anticipate, detect, defend against and recover from cyber attacks. We regularly assess the effectiveness of our key controls and conduct ongoing employee training and awareness activities, including for key management personnel, in order to embed resilience and a strong cyber risk culture.

Replacement of interbank offered rates

A major structural change in global financial markets is in progress with respect to the replacement of interbank offered rate (IBOR) benchmarks. There are significant risks associated with the transition, including financial risk, non-financial risk (including legal, operational and conduct risk) and the risk of an untimely transition due to a lack of client or market readiness. Credit Suisse has a significant level of liabilities and assets linked to IBOR indices across businesses that require transition to alternative reference rates and has mobilized an IBOR transition program to coordinate transition readiness on a firm-wide basis.

Risk management oversight

Prudent risk-taking in line with the Group's strategic priorities is fundamental to our business and success. The primary objectives of risk management are to protect our financial strength and reputation, while ensuring that capital is well deployed to support business activities and growth. The Group's risk management framework is based on transparency, management accountability and independent oversight. Risk management is an integral part of the business planning process with strong senior management and Board involvement.

We continuously work to strengthen risk management across the Group in an effort to meet the challenges resulting from a volatile market environment and increasing complexity driven by the changing regulatory landscape. Utilizing comprehensive risk management processes and sophisticated control systems, we continuously work to minimize the negative impact that may arise from risk concentrations.

Risk culture

The Group's business operations are based on conscious and disciplined risk-taking. We believe that independent risk management, compliance and audit processes with proper management accountability are critical to the interests and concerns of stakeholders. The Group's risk culture is supported by the following principles:

- Establish a clear risk appetite that sets out the types and levels of risk we are prepared to take;
- Have in place risk management and compliance policies that set out authorities and responsibilities for taking and managing risks;
- Seek to establish resilient risk constraints that promote multiple perspectives on risk and reduce the reliance on single risk measures;
- Actively monitor risks and take mitigating actions where they fall outside accepted levels; and
- Breaches of risk limits or tolerances are identified, analyzed and escalated, and large, repeated or unauthorized exceptions may lead to terminations, adverse adjustments to compensation or other disciplinary action.

The Group promotes a strong risk culture where employees are encouraged to take accountability for identifying and escalating risks and for challenging inappropriate actions. The businesses are held accountable for managing all of the risks they generate, including those relating to employee behavior and conduct, in line with our risk appetite. Expectations on risk culture are regularly communicated by senior management, reinforced through policies and training, and considered in the performance assessment and compensation processes and, with respect to employee conduct, assessed by formal disciplinary review committees.

We seek to promote responsible behavior through the Group's Code of Conduct, which provides a clear statement on the conduct standards and ethical values expected of our employees

and members of the Board, so as to maintain and strengthen our reputation for integrity, fair dealing and measured risk-taking. In addition, our six conduct and ethics standards (client focus, meritocracy, stakeholder management, accountability, partner and transparency) are an important part of embedding our core ethical values into our business strategy and the organizational fabric.

The six conduct and ethics standards are designed to encourage employees to act with responsibility, respect, honesty and compliance to secure the trust of our stakeholders. Initiatives in this area have provided employees with practical guidance on careful and considered behavior and the importance of acting ethically and learning from mistakes. Our employee performance assessment and compensation processes are linked to the conduct and ethics standards and the Group's Code of Conduct.

→ Refer to "Conduct risk" in Risk coverage and management – Non-financial risk for further information.

Risk governance

Effective risk governance sets a solid foundation for comprehensive risk management discipline. The Group's risk governance framework is based on a "three lines of defense" governance model, where each line has a specific role with defined responsibilities and works in close collaboration to identify, assess and mitigate risks.

The first line of defense is the front office, which is responsible for pursuing suitable business opportunities within the strategic risk objectives and compliance requirements of the Group. Its primary responsibility is to ensure compliance with relevant legal and

regulatory requirements, maintain effective internal controls and ensure that the Group operates within its risk appetite.

The second line of defense includes functions across the Group such as Risk, Compliance, Regulatory Affairs, General Counsel and Product Control. The functions within the second line articulate standards and expectations for the effective management of risk and controls, including advising on, publishing related policies on and assessing compliance with applicable legal and regulatory requirements. They are responsible for reviewing, measuring and challenging front office activities and for producing independent assessments and risk reporting for senior management and regulatory authorities. Risk is also responsible for articulating and designing the risk appetite framework across the Group.

The third line of defense is the Internal Audit function, which monitors the effectiveness of controls across various functions and operations, including risk management and governance practices.

Effective March 5, 2020, the Regulatory Affairs function now reports directly to the Group Chief Compliance and Regulatory Affairs Officer (CCO).

The Group's operations are regulated by authorities in each of the jurisdictions in which we conduct business. Central banks and other bank regulators, financial services agencies, securities agencies and exchanges and self-regulatory organizations are among the regulatory authorities that oversee our businesses. FINMA is our primary regulator.

→ Refer to "Regulation and supervision" in I – Information on the company for further information.

Key management bodies and committees covering risk management matters

Group / Bank			
Board of Directors			
Risk Committee	Audit Committee	Conduct and Financial Crime Control Committee	Compensation Committee
Executive Board Executive Board Risk Forum			
Capital Allocation & Risk Management Committee (CARMC)			Valuation Risk Management Committee (VARMC)
Position & Client Risk (PCR)	Asset & Liability Management (ALM)	Internal Control System (ICS)	
Divisional risk management committees¹		Legal entities	
Swiss Universal Bank	Asia Pacific	<ul style="list-style-type: none"> ■ Risk boards and management committees for certain significant legal entities with independent governance and oversight ■ Responsible for assuring local regulatory compliance as well as defining local risk appetite 	
International Wealth Management	Global Markets and Investment Banking & Capital Markets		

¹ Divisional risks may be covered by the respective legal entity risk management committees.

The Group's governance includes a committee structure and a comprehensive set of corporate policies which are developed, reviewed and approved by the Board, the Executive Board, their respective committees, the CRO, the CCO and the board of directors of significant subsidiaries, in accordance with their respective responsibilities and levels of authority.

→ Refer to "Board of Directors" and "Executive Board" in IV – Corporate Governance for further information.

Board of Directors

The Board is responsible for our strategic direction, supervision and control, and for defining our overall tolerance for risk. For this purpose, the Board approves the risk management framework and sets overall risk appetite in consultation with its Risk Committee (Risk Committee).

The **Risk Committee** is responsible for assisting the Board in fulfilling its oversight responsibilities by periodically reviewing the Risk function, its resources and key risks.

The **Audit Committee** is responsible for assisting the Board in fulfilling its oversight responsibilities by monitoring management's approach with respect to financial reporting, internal controls, accounting and legal and regulatory compliance. Additionally, the Audit Committee is responsible for monitoring the independence and performance of internal and external auditors.

The **Conduct and Financial Crime Control Committee** is responsible for assisting the Board in fulfilling its oversight duties with respect to the Group's exposure to financial crime risk. It is tasked with monitoring and assessing the effectiveness of financial crime compliance programs and initiatives focused on improving conduct and vigilance within the context of combatting financial crime.

The **Compensation Committee** is responsible for determining, reviewing and proposing compensation principles for the Group. Under the compensation risk framework, various corporate functions including Risk, Compliance, General Counsel, Human Resources, Internal Audit and Product Control, provide input for the assessment of the divisions' and certain individuals' overall risk and conduct performance and determine an overall risk rating, which is presented to the chairs of the Compensation Committee, Risk Committee and Audit Committee, and is contemplated as part of the divisions' and certain individuals' performance.

Executive Board

The Executive Board is responsible for establishing our strategic business plans, subject to approval by the Board. It further reviews and coordinates significant initiatives for the Risk function and establishes Group-wide risk policies. The CRO and the CCO represent the Risk and Compliance functions, respectively, and provide regular information and reports to the Executive Board and the Board.

Designed and then implemented in 2020, the Executive Board Risk Forum, chaired by the CRO, is responsible for decision-making across risk types and functions. The forum's key responsibilities include the review and challenge of the Group's risk-taking, adjudicating material and cross-divisional, cross-functional escalated risk issues, oversight of critical approvals (e.g., risk appetite, limit allocation, risk capital allocation and M&A activity) and monitoring of key risk trends and relevant metrics.

Executive Board committees

Certain modifications were made to the Executive Board committees in 2020, including with respect to the three Capital Allocation & Risk Management Committee (CARMC) cycles. The responsibilities of the former Reputational Risk & Sustainability Committee were integrated into the new CARMC Position & Client Risk (PCR) cycle in order to enable more holistic assessments of all key position and client risk factors in a single committee. The responsibilities of the Risk Processes & Standards Committee have been allocated fully to the CRO.

The Capital Allocation & Risk Management Committee

(CARMC) is responsible for overseeing and directing our risk profile, recommending risk limits at the Group level to the Risk Committee and the Board, establishing and allocating risk appetite among the various businesses, reviewing new significant business strategies or changes in business strategies including business migrations, making risk-related decisions on escalations, and for applying measures, methodologies and tools to monitor and manage the risk portfolio. CARMC will furthermore escalate items requiring additional oversight to the Executive Board Risk Forum. There are three cycles of CARMC, which each meet quarterly.

- The PCR cycle implements market, credit and client risk management strategies for the Group and sets and approves risk appetite and other appropriate measures to monitor and manage the market, credit and client risk profile of the Group. The PCR cycle replaced the former Market & Credit Risks cycle and its mandate has been extended to cover client-related risks, including reputational risk.
- The Asset & Liability Management (ALM) cycle reviews the funding and balance sheet trends and activities, plans and monitors regulatory and business liquidity requirements and internal and regulatory capital adequacy, provides governance and oversight over all material business migrations and ensures that legal entity strategic initiatives are within the Group's risk appetite and appropriately supported and controlled.
- The Internal Control System (ICS) cycle monitors and analyzes significant non-financial risks (including operational, legal and compliance risks), reviews and approves the business continuity program's alignment with the corporate strategy on an annual basis, sets limits, caps and triggers on specific businesses to control significant non-financial risks (including operational risk exposure) and reviews and assesses the appropriateness and efficiency of the internal control systems.

The ALM cycle and the ICS cycle remained largely unchanged, with client and reputational risk now managed and monitored in the PCR cycle.

The **Valuation Risk Management Committee (VARMC)** is responsible for establishing policies regarding the valuation of certain material assets and the policies and calculation methodologies applied in the valuation process. Further, VARMC is responsible for monitoring and assessing valuation risks, reviewing inventory valuation conclusions and directing the resolution of significant inventory valuation issues.

Divisional and legal entity risk management committees

Divisional and legal entity risk management committees review risk, legal, compliance and internal control matters specific to the divisions and individual legal entities, respectively.

Risk organization

Risk is responsible for providing risk management oversight and establishing an organizational basis to manage risk matters. Risk challenges and engages with the business divisions in shaping the divisions' and the Group's risk profiles.

The key organizational elements of Risk include a structure consisting of divisional/legal entity coverage and global risk type functions. The structure reflects the Group's business strategy and legal entity considerations and is supported by strategy-enabling functions.

The Risk organization has continued to evolve, including the modification and formation of certain global risk type and strategy-enabling functions, in order to support our efforts to drive strategic and sustainable returns on risk that reflect the risk appetite of the Group.

Global risk type functions

The global risk type functions design our risk appetite framework and ensure globally harmonized models and methodologies. They comprise Credit Risk Management (including reputational risk), Market Risk Management, Non-Financial Risk Management, Model Risk Management, Fiduciary Risk Management, Global Treasury & Liquidity Risk, Enterprise Strategic Risk and Quantitative Analysis & Technology and are accountable for functional risk oversight and the risk constraint framework at the global and local legal entity level. They are also responsible for functional models, methodologies and policies and function-related regulatory change.

Credit Risk Review is a review function independent from Credit Risk Management with a direct reporting line to the Chair of the Risk Committee, administratively reporting to the CRO. Credit Risk Review assesses the Group's credit exposures and credit risk management processes and practices.

Divisional/legal entity coverage

Our governance framework includes dedicated risk management committees for each division. The divisional chief risk officers for Swiss Universal Bank, International Wealth Management, Asia Pacific, Global Markets and Investment Banking & Capital Markets have established granular risk appetite frameworks and

reporting capabilities to cover the specific needs of their business divisions and are responsible for ensuring alignment of the risk management activities within our divisions.

The legal entity chief risk officers provide risk oversight for certain significant legal entities in the locations of our main operations. They are responsible for ensuring that Group risk management and risk appetite frameworks are applied consistently and are locally compliant.

Strategy-enabling functions

Digital Transformation & Products Labs, a shared function between Compliance and Risk, drives the transformation of key front to back processes and the delivery of advanced analytics, case management, self-service digital assistance and robotics capabilities on a common platform.

CRO & Regulatory Change is responsible for the implementation of risk-relevant regulations impacting Credit Suisse, supporting the delivery of required changes for the businesses and Risk and facilitating related transitions for daily business operations.

Further strategy-enabling functions within the Risk organization include the chief operating officer and the chief of staff.

Compliance and Regulatory Affairs

Compliance

Compliance is an independent global function reporting to the CCO that works with the businesses to manage risks arising from the potential failure to comply with applicable laws, regulations, rules or market standards. As a second line of defense function, responsibilities include independently assessing compliance risk, executing monitoring and testing activities and reporting on adherence to our compliance risk appetite and other material matters to the Board and senior management.

Divisional chief compliance officers, who also provide compliance oversight for the most significant legal entities in their respective regions, are responsible for providing independent oversight and control over the compliance risks and regulatory risks relating to their respective divisions and legal entities.

Compliance runs global risk oversight programs, for example cross-border and client tax compliance, and establishes and monitors policies, guidelines, procedures and controls related to potential risks such as money laundering, bribery and corruption and sanctions. It is also responsible for the identification and remediation of significant breaches of the Group's compliance processes and controls.

Regulatory Affairs

Regulatory Affairs is an independent global function reporting to the CCO that is responsible for assisting the Group in mitigating regulatory risk through managing and ensuring the transparency of regulatory interactions of the Group and coordinating the execution of the Group's regulatory commitments for all relevant

divisions as well as corporate functions. In addition, it assists in appropriate and consistent positioning of the Group on matters of key strategic and regulatory significance. Regulatory Affairs thereby assesses the Group's delivery against regulatory expectations and strategically advises stakeholders on risk-related regulations affecting Credit Suisse.

Risk appetite framework

Overview

We maintain a comprehensive Group-wide risk appetite framework, which is governed by a global policy and provides a robust foundation for risk appetite setting and management across the Group. A key element of the framework is a detailed statement of the Board-approved risk appetite which is aligned to our financial and capital plans. The framework also encompasses the processes and systems for assessing the appropriate level of risk appetite required to constrain our overall risk profile.

Risk capacity is the maximum level of risk that we can assume given our current level of resources before breaching any constraints determined by liquidity and capital requirements, the operational environment and our responsibilities to depositors, shareholders, investors and other stakeholders. Risk appetite expresses the aggregate level and types of risk we are willing to assume within our risk capacity to achieve our strategic objectives and business plan. Risk profile is a point-in-time assessment of our net risk exposures aggregated within and across each

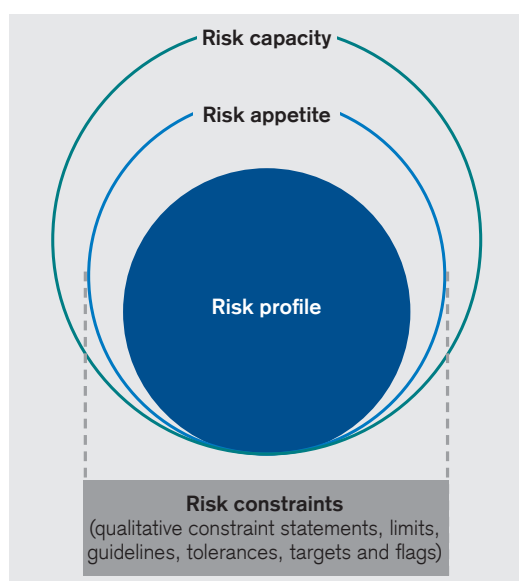
relevant risk category and is expressed in a variety of different quantitative risk metrics and qualitative risk observations. The size of our risk profile is restricted to the planned level of our risk appetite through the use of risk constraints, such as limits, guidelines, tolerances and targets.

Key aspects and process

The Group risk appetite framework is governed by an overarching global policy that encompasses the suite of specific policies, processes and systems with which the risk constraints are calibrated and the risk profile is managed. Strategic risk objectives (SROs) are effectively embedded across our organization at the Group, business division and legal entity level through a suite of different types of risk measures (quantitative and qualitative) as part of our efforts to ensure we operate within the thresholds defined by the Board. The SROs are regularly assessed as part of our continuing enhancements to our risk management processes. In December 2019, the Board approved a refined set of SROs to further support the Group's strategic objectives for 2020. The SROs have been redefined to be more specific and measurable and consist of:

- promoting stability of earnings to support performance in line with financial objectives;
- ensuring sound management of funding and liquidity in normal and stressed conditions;
- maintaining capital adequacy under both normal and stressed conditions; and
- maintaining the integrity of our business and operations.

Risk appetite framework – key definitions



Risk capacity Maximum level of risk that we can assume given our current level of resources before breaching any constraints determined by capital and liquidity requirements, the operational environment and our responsibilities to depositors, shareholders, investors and other stakeholders.

Risk appetite Aggregate level and types of risk we are willing to assume within our risk capacity to achieve our strategic objectives and business plan.

Risk profile Point-in-time assessment of our net risk exposures aggregated within and across each relevant risk category and expressed in a variety of different quantitative risk metrics and qualitative risk observations.

Risk constraints Quantitative and qualitative measures based on forward-looking assumptions that allocate our aggregate risk appetite to businesses, legal entities, risk categories, concentrations and, as appropriate, other levels.

The former SRO related to controlling concentration risks has been integrated into the SROs regarding stability of earnings, funding and liquidity and capital adequacy. The former SROs related to managing non-financial risk to ensure sustainable performance, minimizing reputational risk and managing and mitigating conduct risk have been consolidated under the new SRO related to maintaining the integrity of our business and operations.

Group-wide risk appetite is determined in partnership with the financial and capital planning process on an annual basis, based on bottom-up forecasts that reflect planned risk usage by the businesses and top-down, Board-driven strategic risk objectives and risk appetite. Scenario stress testing of financial and capital plans is an essential element in the risk appetite calibration process, through which our strategic risk objectives, financial resources and business plans are aligned. The capital plans are also analyzed using our economic capital coverage ratio, which provides a further means of assessing bottom-up risk plans with respect to available capital resources. The risk appetite is approved through a number of internal governance forums, including joint approval by the CRO and the CFO, CARMC, the Risk Committee and, subsequently, by the Board.

The risk appetite statement is the formal plan, approved by the Board, for our Group-wide risk appetite. Divisional allocations are cascaded from the Group and approved in divisional risk management committees. Legal entity risk appetites are set by the local legal entity board of directors within the limits established by the Group. The top-down and bottom-up risk appetite calibration process includes the following key steps:

Top-down:

- Group-level strategic risk objectives are agreed by the Board in line with our financial and capital objectives.
- Top-down risk capacities and risk appetites are determined with reference to available resources and key thresholds, such as minimum regulatory requirements.
- A risk appetite statement is determined and approved annually by the Board, and is based on the strategic risk objectives, the comprehensive scenario stress testing of our forecasted financial results and capital requirements, and our economic capital framework. A semi-annual review of the risk appetite and capacity levels is performed. The risk appetite statement comprises quantitative and qualitative risk measures necessary for adequate control of the risk appetite across the organization. The review of the top-down and bottom-up risk appetite levels and their allocation between divisions and legal entities is performed by CARMC.
- Separate legal entity risk appetite frameworks aligned to local regulatory requirements are in place for material subsidiaries. An integrated year-end planning process ensures that individual legal entity risk appetites are consistent with Group levels.
- Divisional risk committees are responsible for allocating risk appetite within the respective divisions based on individual business line reviews and requirements.

Bottom-up:

- Planned risk levels and related risk appetite requests are provided by front office business experts in conjunction with financial and capital plans in order to ensure consistency with the business strategy. Risk plans are reviewed by the relevant risk management committees.
- Bottom-up risk forecasts are aggregated across businesses to assess divisional and Group-wide risk plans and to support management decisions on variations to existing risk appetite levels or the possible need for new risk appetite measures.
- The effectiveness of risk appetite in support of business strategy execution and delivery against financial objectives is assessed via a risk appetite effectiveness framework. This framework assists senior management and the Board in ensuring that appropriate levels of risk appetite are set and that the subsequent risk constraints are appropriately calibrated.
- Risk, financial and capital plans are jointly reviewed and approved by the Executive Board and the Board.

The Group-wide risk appetite framework encompasses multiple quantitative and qualitative aspects. The quantitative risk appetite aspects are measured using various metrics, including stress scenario metrics related to capital, earnings and liquidity, risk-weighted assets and economic risk capital. The qualitative risk appetite aspects are used to monitor adherence to international and local laws and regulations, industry guidelines and internal policies, and are designed to manage and mitigate the Group's conduct and reputational risk. The division-specific risk appetite statements leverage the Group-wide quantitative and qualitative aspects by including constraints across credit risk, market risk and non-financial risk and are designed to ensure that risk-taking activity by our businesses remains within the Group-wide risk appetite.

Risk constraints

A core aspect of our risk appetite framework is a sound system of integrated risk constraints. These allow us to maintain our risk profile within our overall risk appetite, and encourage meaningful discussion between the relevant businesses, Risk functions and members of senior management around the evolution of our risk profile and risk appetite. Considerations include changing external factors (such as market developments, geopolitical conditions and client demand) as well as internal factors (such as financial resources, business needs and strategic views). Our risk appetite framework utilizes a suite of different types of risk constraints to reflect the aggregate risk appetite of the Group and to further cascade risk appetite across our organization, including among business divisions and legal entities. The risk constraints restrict our maximum balance sheet and off-balance sheet exposure given the market environment, business strategy and financial resources available to absorb losses. Different levels of seniority are mapped to each type of risk constraint, which require specific permanent or temporary modification, enforcement and breach response protocols. Risk constraints are monitored on a regular basis as part of our efforts to ensure they continue to fulfill their purposes.

We define the following risk constraint categories:

- **Qualitative constraints** represent constraints that are used to manage identified but unquantifiable or subjective risks, with adherence assessed by the appropriate level of constraint authority.
- **Quantitative constraints** represent constraints that are used to manage identified quantifiable risks and exist in the form of limits, guidelines, tolerances, targets and flags.

Constraint authority for the risk constraints is determined by the relevant approving body and constraints are currently in effect for all key risk governance bodies and committees including the Board, its Risk Committee, the Executive Board Risk Forum and CARMC. The appropriateness of the constraint types for the various risk classes within our risk appetite, including market, credit, non-financial and liquidity risk, is determined considering the respective characteristics of the various risk constraint types.

In general, risk constraints will be set in different ways depending on their respective functions and objectives. For example, certain risk constraints will reflect a maximum risk appetite, whereas others will be set closer to the current usage in order to ensure timely escalation and feedback among the relevant businesses, Risk functions and members of senior management. These considerations also influence the extent to which certain risk constraints may be introduced, modified or retired in response to changing external and internal factors.

We define the following types of risk constraints:

- **Qualitative constraint statements** are required for all qualitative constraints. Qualitative constraint statements need to be specific and to clearly define the respective risk to ensure that the risk profile for unquantifiable or subjective risks is readily assessable.
- **Limits, guidelines and tolerances** are specific threshold levels for a given risk metric. Limits are binding thresholds that require discussion to avoid a breach and trigger immediate remedial action if a breach occurs. Guidelines are thresholds which, if breached, require an action plan to reduce risk below the guideline or to propose, justify and agree to adjust the guideline. Tolerances are designed as management thresholds to initiate discussion, and breach of a tolerance level triggers review by the relevant constraint authority.
- **Targets** represent the level of risk that the Group intends to accept in pursuit of business objectives at a specific point in time in the future.
- **Flags** are early warning indicators, which serve primarily as a business risk management and supervisory control tool for our front offices, Treasury and Risk. Flags can be set for any quantifiable risk and may be complementary to other types of constraints.

With respect to limits, guidelines and tolerances, established criteria are applied in the selection of the appropriate risk constraint, including the assessment of (i) the materiality of the respective risk metric with regard to its contribution to the overall Group risk appetite; (ii) the importance of the risk constraint to the organization from a qualitative perspective; (iii) the characteristic of the respective risk, e.g., risk concentrations or high priority risk for the Group; and (iv) the availability of mitigating actions to manage the risk profile of the Group in relation to the respective risk.

We have established a constraint structure which manages the Group's risk profile using multiple metrics, including VaR, scenario analysis, economic risk capital and various exposure limits at the Group level. The overall risk limits for the Group are set by the Board in consultation with its Risk Committee and are binding. In 2019 and 2018, no Board limits were exceeded. The CRO may approve temporary excesses of certain CARMC limits up to a predefined level until the next CARMC meeting. The CRO also approves a corresponding remediation plan, with immediate notice of the temporary excess and remediation plan to the Group CEO, and subsequent notice to CARMC and the Board at their next meetings.

Dedicated constraints are also in place to cover the specific risk profiles of individual businesses and legal entities. In the context of the overall risk appetite of the Group, as defined by the limits set by the Board in consultation with its Risk Committee, CARMC is responsible for allocating key limits to divisions as deemed necessary to manage risk within individual lines of business. The divisional risk management committees and the divisional and legal entity chief risk officers are responsible for allocating risk appetite further within the organization. For this purpose, they use a detailed framework of individual risk limits designed to control risk-taking at a granular level by individual businesses and in the aggregate. The risk constraints are intended to:

- limit overall risk-taking to the Group's risk appetite;
- trigger senior management discussions with the businesses involved, risk management and governance committees in case of substantial change in the overall risk profile;
- ensure consistent risk measurement across businesses;
- provide a common framework for the allocation of resources to businesses; and
- provide a basis for protecting the Group's capital base and meeting strategic risk objectives.

The limit owners are responsible for reviewing warning triggers for risk limits. They may set warning triggers for potential limit excesses at any level lower than the approved limits as deemed appropriate after taking into account the nature of the underlying business. A comprehensive risk appetite constraint framework is in place which defines roles and responsibilities, including risk constraint setting and escalation authorities. Strict escalation procedures apply to any breach in risk constraints.

Risk coverage and management

We use a wide range of risk management practices to address the variety of risks that arise from our business activities. Policies, processes, standards, risk assessment and measurement methodologies, risk appetite constraints, and risk monitoring and reporting are key components of our risk management practices. Our risk management practices complement each other in our analysis of potential loss, support the identification of interdependencies and interactions of risks across the organization and provide a comprehensive view of our exposures. We regularly review and update our risk management practices to ensure consistency with our business activities and relevance to our business and financial strategies. Risk management practices have evolved over time without a standardized approach within the industry, therefore comparisons across firms may not be meaningful. In 2019, we updated our key risk type categories in order to better align these to our global risk taxonomy. Our key risk types include the following:

- Capital risk;
- Credit risk;
- Market risk;
- Non-financial risk;
- Model risk;
- Reputational risk;
- Business risk;
- Climate-related risks;
- Fiduciary risk; and
- Pension risk.

For purposes of categorizing key risk types, non-traded market risk and funding liquidity are together an individual risk type in our global risk taxonomy. While non-traded market risk is described further below as part of market risk, funding liquidity is managed by Treasury. Funding liquidity is the risk that the Group, although solvent, either does not have sufficient financial resources to enable it to meet its obligations as they fall due, or can secure such resources only at excessive cost.

→ Refer to "Liquidity and funding management" for further information on liquidity and funding risks.

Capital risk

Definition

Capital risk is the risk that we do not have adequate capital to support our activities and maintain the minimum capital requirements. Under the Basel framework, we are required to maintain a robust and comprehensive framework for assessing capital adequacy, defining internal capital targets and ensuring that these capital targets are consistent with our overall risk profile and the current operating environment.

Sources of capital risk

Capital risk results from the Group's risk exposures, available capital resources, regulatory requirements and accounting standards.

Evaluation and management of capital risk

The stress testing framework and economic risk capital are tools used by the Group to evaluate and manage capital risk. Our capital management framework is designed to ensure that we meet all regulatory capital requirements for the Group and its regulated subsidiaries.

→ Refer to "Capital strategy" and "Regulatory framework" in Capital management for further information on the management of capital and risk-weighted assets and regulatory capital requirements.

Overview of stress testing framework

Stress testing or scenario analysis represents a risk management approach that formulates hypothetical questions, including what would happen to our portfolio if, for example, historic or adverse forward-looking events were to occur. A well-developed stress testing framework provides a powerful tool for senior management to identify these risks and also take corrective actions to protect the earnings and capital from undesired impacts.

Stress testing is a fundamental element of our Group-wide risk appetite framework included in overall risk management to ensure that our financial position and risk profile provide sufficient resilience to withstand the impact of severe economic conditions. Stress testing results are monitored against limits, and are used in risk appetite discussions and strategic business planning and to support our internal capital adequacy assessment. Within the risk appetite framework, CARMC sets Group-wide and divisional stressed position loss limits to correspond to minimum post-stress capital ratios. Currently, limits are set on the basis of look-through BIS CET1 capital ratios. Stress tests also form an integral part of the Group's capital planning and the recovery and resolution plan (RRP) process. Within the RRP, stress tests provide the indicative scenario severity required to reach recovery and resolution capital levels.

Stress testing provides key inputs for managing the following objectives of the risk appetite framework:

- Ensuring Group-wide capital adequacy on both a regulatory basis and under stressed conditions: We run a suite of scenarios on forecasted financial metrics such as net revenues, total operating expenses, income before taxes and risk-weighted assets. The post-stress capital ratios are assessed against the risk appetite of the Group.
- Maintaining stable earnings: We mainly use stress testing to quantitatively assess earnings stability risk. Earnings-loss-triggers are established and monitored to contain excessive risk-taking which could compromise our earnings stability.

We also conduct externally defined stress tests that meet the specific requirements of regulators. For example, as part of various regular stress tests and analysis, FINMA requires a semi-annual loss potential analysis that includes two stress tests: an extreme scenario that sees the world economy experience a severe recession mainly as a result of a worsening of a European debt crisis and a less extreme China and US stress scenario.

Methodology and scope of Group-wide stress testing

Stress tests are carried out to determine stressed position losses, earnings volatility and stressed capital ratios using historical, forward-looking and reverse stress testing scenarios. The scope of stress testing includes market, credit, operational, business and pension risk. Stress tests also include the scenario impact on risk-weighted assets through changes to market, credit and operational components.

We use historical stress testing scenarios to consider the impact of market shocks from relevant periods of extreme market disturbance. Standardized severity levels allow comparability of severity across differing risk types. The calibration of bad day, bad week, severe event and extreme event scenarios involves the identification of the worst moves that have occurred in recent history. Severe flight to quality (SFTQ) is a key scenario used for Group-wide stress testing and risk appetite setting. It is a combination of market shocks and defaults that reflects conditions similar to what followed the 2008/2009 financial crisis. The SFTQ scenario assumes a severe crash across financial markets, along with stressed default rates.

We use forward-looking stress testing scenarios to complement historical scenarios. The forward-looking scenarios are centered on potential macroeconomic, geopolitical or policy threats. The Scenario Management Oversight Committee, comprised of internal economists and representatives of the front office, Risk and the CFO function (Finance), discusses the backdrop to several forward-looking scenarios. The Scenario Management Oversight Committee reviews a wide range of scenarios and selects those that are most relevant to the analysis of key macroeconomic shocks. Some examples of forward-looking scenarios include US and European country recessions, a so-called emerging markets economic “hard landing” and the impact of monetary policy changes by central banks. Various scenarios are also used to mitigate concentration risks across the entire Group, such as the credit concentration scenario. During 2019, the Group continued to focus on the following forward-looking scenarios:

- Financial sector problems in the eurozone: the markets challenge the solvency of a systemically-important bank, which puts the overall European financial sector and selected eurozone countries under acute pressure. The European economy is forced into recession. Contagion from a European recession to the US and emerging market economies is assumed to be substantial.
- An emerging markets “hard landing” scenario: there is a severe economic slowdown in China driven by a wave of defaults in the private non-financial and financial sectors. The problems in China negatively impact all large emerging markets through lower commodity prices, increased capital flight and reduced intra-regional foreign trade. There is also significant contagion to the economy in the US and in Europe.
- Stress scenarios for the UK and for the US: the scenarios take into account the large increase in economic policy outlook uncertainties and the higher risk that inflation significantly accelerates, bringing about a disorderly rise in government bond yields. The UK stress scenario focuses on the risks

which may materialize from the negotiations on leaving the EU. The US stress scenario focuses on the business risks which may materialize from more expansionary fiscal policies and from any shift toward more protectionist foreign trade practices.

We also use a flight to quality lite scenario (FTQ Lite), which is a one-in-three years likelihood scenario with a lower severity of impact than SFTQ but with a higher likelihood of occurrence. FTQ Lite is used to test the earnings robustness of the Group.

The scenarios are reviewed and updated regularly as markets and business strategies evolve. In 2019, a one-in-twenty-five years likelihood scenario called “Trade Wars Extreme” was developed to reflect the recent escalation of trade, technology and foreign investment tensions between the US and China. Trade Wars Extreme is used to test the capital adequacy of the Group. In addition to these periodic scenario analyses, we also perform ad hoc scenario analyses, for example in respect of the escalation in geopolitical tensions in the Middle East, in connection with current events as a proactive risk management tool.

We use reverse stress testing scenarios to complement traditional stress testing and enhance our understanding of business model vulnerabilities. Reverse stress testing scenarios define a range of severe adverse outcomes and identify what could lead to these outcomes. The more severe scenarios include large counterparty failures, sudden shifts in market conditions, operational risk events, credit rating downgrades and the shutdown of wholesale funding markets.

Overview of economic risk capital

Economic risk capital measures risks in terms of economic realities rather than regulatory or accounting rules and estimates the amount of capital needed to remain solvent and in business under extreme market, business and operating conditions over the period of one year, given a target financial strength (our long-term credit rating). This framework allows us to assess, monitor and manage capital adequacy and solvency risk in both “going concern” and “gone concern” scenarios. In a “going concern” scenario, we hold sufficient capital to absorb losses to ensure continuity of service. In a “gone concern” scenario, we hold sufficient capital to absorb unexpected losses at a confidence level of 99.97% and fund an orderly resolution without recourse to public resources. Economic risk capital supplements the Group’s RRP process.

Economic risk capital is used as a consistent and comprehensive tool for capital management and limit monitoring. Economic risk capital is a Group-wide risk management tool for measuring and reporting the combined impact from quantifiable risks such as market, credit, operational, pension and expense risks, each of which has an impact on our capital position. The economic risk capital coverage ratio is primarily meant to provide an assessment of our solvency and reflects our internal assessment of risk and loss absorbing capacity in an extreme scenario. It is defined as the ratio of capital available to absorb losses in a “gone concern” scenario (available economic capital) to capital needs (economic risk capital)

and is embedded in our risk appetite framework through our capital adequacy objective. Return on economic risk capital as a metric for performance management has been de-emphasized due to the limited benefits it provided compared to other metrics such as our return on regulatory capital for the Group and its divisions.

→ Refer to "Capital strategy" and "Regulatory framework" in Capital management for further information on our capital management framework.

Methodology and scope of economic risk capital

Economic risk capital is set to a level needed to absorb unexpected losses at a confidence level of 99.97%. Our economic risk capital model is a set of methodologies used for measuring quantifiable risks associated with our business activities on a consistent basis. It is calculated separately for position risk (reflecting our exposure to market and credit risks), operational risk and other risks, using appropriate methodologies for each risk category. Economic risk capital is calculated by aggregating position, operational and other risks.

Position risk is the level of unexpected loss from our portfolio of balance sheet and off-balance sheet positions over a one-year holding period and includes market and credit risks. It is calculated at a 99% confidence level for risk management purposes reflecting a "going concern" scenario and at a 99.97% confidence level for capital management purposes reflecting a "gone concern" resolution scenario. Our position risks categories are described in the table "Position risk categories". To determine our overall position risk, we consider the diversification benefit across risk types. When

analyzing position risk for risk management purposes, we look at individual risk types before and after the diversification benefit.

Operational risk is the risk of financial loss arising from inadequate or failed internal processes, people and systems or from external events. We use an internal model to calculate the economic capital requirement for operational risk at a 99.97% confidence level and a one-year holding period.

Other risks covered include expense risk, pension risk, owned real estate risk, foreign exchange risk between available economic capital and economic risk capital, interest rate risk on client interest rate margin positions and the benefit from deferred share-based compensation awards.

Available economic capital is our internal view of the capital available to absorb losses based on the reported BIS CET1 capital under Basel III, with economic adjustments applied to provide consistency with our economic risk capital.

The economic risk capital coverage ratio operates with a number of distinct bands that serve as key controls for monitoring and managing our operational solvency. An economic risk capital coverage ratio lower than 125% requires senior management review. Immediate actions such as risk reductions or capital measures would be triggered at a coverage ratio lower than 100%. The Board has set the minimum level for this coverage ratio at 80%.

Position risk categories

	Risks captured
Credit risk	<ul style="list-style-type: none"> ■ Risk of counterparty defaults relating to investment and private banking credit exposures directly held in the form of lending products (including loans and credit guarantees) or derivatives and shorter-term exposures such as underwriting commitments and trading book inventory; settlement risk is not captured in the economic risk capital framework ■ Potential changes in creditworthiness relating to private banking corporate and retail credit exposures
Non-traded credit spread risk	<ul style="list-style-type: none"> ■ Potential changes in creditworthiness relating to investment banking credit exposures
Securitized products	<ul style="list-style-type: none"> ■ Commercial and residential real estate activities, including mortgage-backed securities, mortgage loans and real estate acquired at auction, and other securitized products, including asset-backed securities ■ Benefits from certain market risk hedges
Traded risk	<ul style="list-style-type: none"> ■ Interest rates, credit spreads, foreign exchange rates, equity and commodity prices and volatilities, equity risk arbitrage, life finance and litigation activities, and illiquid hedge fund exposures ■ Risks currently not implemented in our economic risk capital models for traded risks, primarily for fixed income and equity trading, such as certain basis risks, higher order risks and cross risks between asset classes
Emerging markets country event risk	<ul style="list-style-type: none"> ■ Loss due to corporate counterparty defaults triggered by sovereign defaults
Equity investments	<ul style="list-style-type: none"> ■ Private equity and other illiquid equity investment exposures

Governance of capital risk

Our stress testing framework is comprehensive and governed by a dedicated steering committee, the Scenario Steering Committee. The Scenario Steering Committee reviews the scenario methodology and approves changes to scenario frameworks. It is comprised of experts in stress methodologies representing various risk functions (market risk, liquidity risk, credit risk and operational risk) and also represents the Group divisions and major legal entities. The Scenario Management Oversight Committee has received responsibility from CARMC for the Group-wide scenario calibration and analysis process, including the design of scenarios and the assessment and approval of scenario results. Stress tests are conducted on a regular basis and the results, trend information and supporting analysis are reported to the Board, senior management and regulators.

Our economic risk capital framework is governed and maintained by a dedicated steering committee, which regularly reviews, assesses and updates the economic risk capital methodology in light of market and regulatory developments, risk management practice and organizational changes. In addition, the steering committee approves new methodologies and prioritizes the implementation for its three components (position risk, operational risk and other risks).

Credit risk

Definition

Credit risk is the risk of financial loss arising as a result of a borrower or counterparty failing to meet its financial obligations or as a result of deterioration in the credit quality of the borrower or counterparty. In the event of a default, a bank generally incurs a loss equal to the amount owed by the debtor, less any recoveries from foreclosure, liquidation of collateral, the restructuring of the debtor company or other recovery proceeds from the debtor.

A change in the credit quality of a counterparty has an impact on the valuation of assets measured at fair value, with valuation changes recorded in the consolidated statements of operations.

Sources of credit risk

Credit risk arises from the execution of our business strategy in the divisions and reflects exposures directly held in the form of lending products (including loans and credit guarantees) or derivatives, shorter-term exposures such as underwriting commitments, and settlement risk related to the exchange of cash or securities outside of typical delivery versus payment structures. For the divisions, the main sources of credit risk are presented in the table "Main sources of credit risk by division".

Evaluation and management of credit risk

We use a credit risk management framework which provides for the consistent evaluation, measurement and management of credit risk across the Group. Assessment of credit risk exposures for internal risk estimates and risk-weighted assets are calculated based on probability of default (PD), loss given default (LGD) and exposure at default (EAD) models. The credit risk framework incorporates the following core elements:

- counterparty and transaction assessments: application of internal credit ratings (PD), assignment of LGD and EAD values in relation to counterparties and transactions;
- credit limits: establishment of credit limits, subject to approval by delegated authority holders, to serve as primary risk controls on exposures and to prevent undue risk concentrations;
- credit monitoring, impairments and provisions: processes to support the ongoing monitoring and management of credit exposures, supporting the early identification of deterioration and any subsequent impact; and
- risk mitigation: active management of credit exposures through the use of cash sales, participations, collateral, guarantees, insurance or hedging instruments.

Main sources of credit risk by division

Swiss Universal Bank	Real estate financing, lending to corporate clients and lending against financial collateral
International Wealth Management	Lending against financial collateral and real assets (e.g., real estate, ships, aircraft) and corporate lending
Asia Pacific	Lending to private clients against financial collateral, corporate lending and derivatives
Global Markets	Loan underwriting commitments, securities financing activities with institutional clients and derivatives
Investment Banking & Capital Markets	Corporate lending activities and derivatives
Corporate Center	Money market exposure through balance sheet management, credit exposure with central counterparties and legacy positions

Counterparty and transaction assessments

We evaluate and assess counterparties and clients to whom we have credit exposures. For the majority of counterparties and clients, we use internally developed statistical rating models to determine internal credit ratings which are intended to reflect the PD of each counterparty. These rating models are backtested against internal experience, validated by a function independent of model development and approved by our main regulators for application in the regulatory capital calculation under the A-IRB approach of the Basel framework. Findings from backtesting serve as a key input for any future rating model developments.

Internal statistical rating models are based on a combination of quantitative factors (e.g., financial fundamentals and market data) and qualitative factors (e.g., credit history and economic trends).

For the remaining counterparties where statistical rating models are not used, internal credit ratings are assigned on the basis of a structured expert approach using a variety of inputs such as peer analyses, industry comparisons, external ratings and research as well as the judgment of expert credit officers.

In addition to counterparty ratings, Credit Risk Management also assesses the risk profile of individual transactions and assigns transaction ratings which reflect specific contractual terms such as seniority, security and collateral.

Internal credit ratings may differ from external credit ratings, where available, and are subject to periodic review. Our internal

ratings are mapped to a PD band associated with each rating which is calibrated to historical default experience using internal data and external data sources. Our internal masterscale for credit ratings is shown in the table "Credit Suisse counterparty ratings".

LGD estimates the size of loss that may arise on a credit exposure in the event of a default. We assign LGD on credit exposures based on the structure of the transaction and credit mitigation such as collateral or guarantees. The LGD values are calibrated to reflect a downturn macroeconomic environment and include recovery costs.

EAD represents the expected amount of credit exposure in the event of a default and reflects the current drawn exposure and an expectation regarding the future evolution of the credit exposure. For loan exposures, a credit conversion factor is applied to project the additional drawn amount between current utilization and the approved facility amount. The credit exposure related to traded products such as derivatives is based on a simulation using statistical models.

We use internal rating methodologies consistently for the purposes of approval, establishment and monitoring of credit limits and credit portfolio management, credit policy, management reporting, risk-adjusted performance measurement, economic risk capital measurement and allocation and financial accounting.

Credit Suisse counterparty ratings

Ratings	PD bands (%)	Definition	S&P	Fitch	Moody's	Details
AAA	0.000–0.021	Substantially risk free	AAA	AAA	Aaa	Extremely low risk, very high long-term stability, still solvent under extreme conditions
AA+	0.021–0.027	Minimal risk	AA+	AA+	Aa1	Very low risk, long-term stability, repayment sources sufficient under lasting adverse conditions, extremely high medium-term stability
AA	0.027–0.034		AA	AA	Aa2	
AA-	0.034–0.044		AA-	AA-	Aa3	
A+	0.044–0.056	Modest risk	A+	A+	A1	Low risk, short- and medium-term stability, small adverse developments can be absorbed long term, short- and medium-term solvency preserved in the event of serious difficulties
A	0.056–0.068		A	A	A2	
A-	0.068–0.097		A-	A-	A3	
BBB+	0.097–0.167	Average risk	BBB+	BBB+	Baa1	Medium to low risk, high short-term stability, adequate substance for medium-term survival, very stable short term
BBB	0.167–0.285		BBB	BBB	Baa2	
BBB-	0.285–0.487		BBB-	BBB-	Baa3	
BB+	0.487–0.839	Acceptable risk	BB+	BB+	Ba1	Medium risk, only short-term stability, only capable of absorbing minor adverse developments in the medium term, stable in the short term, no increased credit risks expected within the year
BB	0.839–1.442		BB	BB	Ba2	
BB-	1.442–2.478		BB-	BB-	Ba3	
B+	2.478–4.259	High risk	B+	B+	B1	Increasing risk, limited capability to absorb further unexpected negative developments
B	4.259–7.311		B	B	B2	
B-	7.311–12.550		B-	B-	B3	
CCC+	12.550–21.543	Very high risk	CCC+	CCC+	Caa1	High risk, very limited capability to absorb further unexpected negative developments
CCC	21.543–100.00		CCC	CCC	Caa2	
CCC-	21.543–100.00		CCC-	CCC-	Caa3	
CC	21.543–100.00		CC	CC	Ca	
C	100	Imminent or actual loss	C	C	C	Substantial credit risk has materialized, i.e., counterparty is distressed and/or non-performing. Adequate specific provisions must be made as further adverse developments will result directly in credit losses.
D1	Risk of default		D	D		
D2	has materialized					

Transactions rated C are potential problem loans; those rated D1 are non-performing assets and those rated D2 are non-interest earning.

Credit limits

Our credit exposures are managed at the counterparty and ultimate parent level in accordance with credit limits which apply in relation to current and potential future exposures. Credit limits to counterparties and groups of connected companies are subject to formal approval under delegated authority within the divisions where the credit exposures are generated, and where significant in terms of size or risk profile, are subject to further escalation to the Group chief credit officer or CRO.

In addition to counterparty and ultimate parent exposures, credit limits and tolerances are also applied at the portfolio level to monitor and manage risk concentrations such as to specific industries, countries or products. In addition, credit risk concentration is regularly supervised by credit and risk management committees.

Credit monitoring, impairments and provisions

A rigorous credit quality monitoring process is performed to provide for early identification of possible changes in the credit-worthiness of clients, and includes regular asset and collateral quality reviews, business and financial statement analysis, and relevant economic and industry studies. Credit Risk Management maintains regularly updated watch lists and holds review meetings to re-assess counterparties that could be subject to adverse changes in creditworthiness. The review of the credit quality of clients and counterparties does not depend on the accounting treatment of the asset or commitment.

In the event that a deterioration in creditworthiness results in a default, credit exposures are transferred to recovery management functions within Credit Risk Management and are subject to formal reporting to the quarterly recovery review committee. The determination of any allowance for credit losses in relation to such exposures is based on an assessment of the exposure profile and expectations for recovery, which are discussed with the Group chief credit officer whose approval is required for any full or partial write-offs.

We have an impairment process for loans valued at amortized cost which are specifically classified as potential problem exposure, non-performing exposure, non-interest-earning exposure or restructured exposure. The Group maintains specific valuation allowances, which we consider a reasonable estimate of losses identified in the existing credit portfolio, and provides for loan losses based on a regular and detailed analysis of all counterparties, taking collateral value into consideration, where applicable. If uncertainty exists as to the repayment of either principal or interest, a specific valuation allowance is either created or adjusted accordingly. The specific allowance for loan losses is revalued by Credit Risk Management at least annually or more frequently depending on the risk profile of the borrower or credit-relevant events. A credit portfolio & provisions review committee regularly reviews the appropriateness of allowances for credit losses.

An inherent (or general) loss allowance is estimated for all loans not specifically identified as impaired and that, on a portfolio basis, are considered to contain inherent losses. The method for

determining the inherent loss in certain lending portfolios is based on a market-implied model using long-term industry-wide historical default and recovery data taking into account the credit rating and industry of each counterparty. A separate component of the calculation reflects the current market conditions in the allowance for loan losses. For all other exposures, depending on the business and the nature of the exposures, inherent losses in the lending portfolios are determined based on current internal risk ratings, collateral and exposure structure, applying historical default and loss experience in the ratings and loss parameters. Qualitative adjustments to reflect current market conditions or any other factors not captured by the model are approved by management and reflected in the allowance for loan losses. A provision for inherent losses on off-balance sheet lending-related exposure, such as contingent liabilities and irrevocable commitments, is also determined, using a methodology similar to that used for the loan portfolio.

With effect from January 1, 2020, the Group changed the methodology for the calculation of credit loss provisions driven by the adoption of a new accounting standard under US GAAP. The new methodology is a forward-looking expected loss approach referred to as a current expected credit losses (CECL) methodology. Under the former approach, provisions for credit losses were based on incurred losses only. The new methodology calculates the expected lifetime loss and requires new models and significant management judgement. The forward-looking component of the new models is reflected through forecasts of portfolio- and region-specific macro-economic factors. In addition to these factors for systematic risk, the models contain idiosyncratic risk drivers. Qualitative adjustments reflect remaining idiosyncratic and portfolio-specific risks, which are not captured in the models. The calibration of these models is based on internal and/or external data. Under the CECL-approach, PDs are based on internal credit ratings but also contain a time-dependent, forward-looking component and LGDs are calibrated specifically for use in our CECL models and can contain loan-specific attributes. In addition, selected LGD models contain a forward-looking component. Similar to LGDs, EAD models under the CECL-approach are calibrated separately and can contain loan-specific and/or forward-looking information. All CECL-models are subject to our internal governance processes.

Changes in the credit quality of loans held at fair value are reflected in valuation changes recorded directly in revenues, and therefore are not part of the impaired loans balance which only includes loans valued on an amortized cost basis.

Risk mitigation

Drawn and undrawn credit exposures are managed by taking financial and non-financial collateral supported by enforceable legal documentation, as well as by utilizing credit hedging techniques. Financial collateral in the form of cash, marketable securities (e.g., equities, bonds or funds) and guarantees serves to mitigate the inherent risk of credit loss and to improve recoveries in the event of a default. Financial collateral is subject to controls on eligibility and is supported by frequent market valuation depending on the asset class to ensure exposures remain adequately

collateralized. Depending on the quality of the collateral, appropriate haircuts are applied for risk management purposes.

Non-financial collateral such as residential and commercial real estate, tangible assets (e.g., ships or aircraft), inventories and commodities are valued at the time of credit approval and periodically thereafter depending on the type of credit exposure and collateral coverage ratio.

In addition to collateral, we also utilize credit hedging in the form of protection provided by single-name and index credit default swaps as well as structured hedging and insurance products. Credit hedging is used to mitigate risks arising from the loan portfolio, loan underwriting exposures and counterparty credit risk. Hedging is intended to reduce the risk of loss from a specific counterparty default or broader downturn in markets that impact the overall credit risk portfolio. Credit hedging contracts are typically bilateral or centrally cleared derivative transactions and are subject to collateralized trading arrangements. Hedging risk mitigation is evaluated to ensure that basis or tenor risk is appropriately identified and managed.

In addition to collateral and hedging strategies, we also actively manage our loan portfolio and may sell or sub-participate positions in the loan portfolio as a further form of risk mitigation.

Governance of credit risk

Credit risk is managed and controlled by Credit Risk Management and divisional chief risk officers within Risk and governed by a comprehensive framework of policies and committees. Key processes are reviewed through supervisory checks on a regular basis by Credit Risk Management, including the Group chief credit officer.

The Group chief credit officer has established an executive governance and change committee to support overall management and oversight of the Credit Risk Management function. The committee is comprised of senior personnel of key functions within Credit Risk Management and divisional chief credit officers. The governance framework is based on a committee structure covering key areas of the credit risk framework including the credit risk appetite committee, credit risk policy committee, credit risk controls committee and various project and change related governance committees. The governance framework ensures appropriate oversight of the global Credit Risk Management function and the maintenance of required global standards for the management of the Group's credit exposure.

Credit risk review

Governance and supervisory checks within Credit Risk Management are supplemented by the credit risk review function. The Credit Risk Review function is independent from Credit Risk Management with a direct functional reporting line to the Risk Committee Chair, administratively reporting to the CRO. Credit Risk Review's primary responsibility is to provide timely and independent assessments of the Group's credit exposures and credit risk management processes and practices. Any findings and agreed

actions are reported to senior management and, as necessary, to the Risk Committee.

Market risk

Definition

Market risk is the risk of financial loss arising from movements in market risk factors. The movements in market risk factors that generate financial losses are considered to be adverse changes in interest rates, credit spreads, foreign exchange rates, equity and commodity prices and other factors, such as market volatility and the correlation of market prices across asset classes. A typical transaction or position in financial instruments may be exposed to a number of different market risk factors.

Although market risk includes funding liquidity for purposes of categorizing our key risk types, the descriptions in this section primarily relate to traded market risk and non-traded market risk. Funding liquidity is the risk that the Group, although solvent, either does not have sufficient financial resources to enable it to meet its obligations as they fall due, or can secure such resources only at excessive cost.

→ Refer to "Liquidity and funding management" for further information on liquidity and funding risks.

Sources of market risk

Market risks arise from both our trading and non-trading business activities. The classification of assets and liabilities into trading book and banking book portfolios determines the approaches used for analyzing our market risk exposure. This classification reflects the business and regulatory risk management perspective with respect to trading intent, and may be different from the classification of these assets and liabilities as trading assets or trading liabilities for financial reporting purposes.

Trading book

Market risks from our trading book relate to our trading activities, primarily in Global Markets (which includes International Trading Solutions) and Asia Pacific. Our trading book, as measured for risk management purposes, typically includes fair-valued positions only and includes risks arising from our involvement in primary and secondary market activities, for client facilitation and market-making purposes, including derivatives markets.

The Group is active globally in the principal trading markets, using a wide range of trading and hedging products, including derivatives and structured products. Structured products are customized transactions often using combinations of financial instruments and are executed to meet specific client or internal needs. As a result of our broad participation in products and markets, the Group's trading strategies are correspondingly diverse and exposures are generally spread across a range of risks and locations.

The market risks associated with the portfolio, including the embedded derivative elements of our structured products, are actively monitored and managed as part of our overall risk management framework and are reflected in our VaR measures.

Banking book

Market risks from our banking book primarily relate to asset and liability mismatch exposures, lending related exposures that are fair-valued, equity participations and investments in bonds and money market instruments. Our businesses and Treasury have non-trading portfolios that carry market risks, mainly related to changes in interest rates but also to changes in foreign exchange rates, equity prices and, to a lesser extent, commodity prices. Our banking book, as measured for risk management purposes, typically includes loans, central bank funds sold, securities purchased under resale agreements and securities borrowing transactions, cash and due from banks, brokerage receivables, due to banks, customer deposits, central bank funds purchased, securities sold under repurchase agreements and securities lending transactions, brokerage payables, selected positions of short-term borrowings and long-term debt, hedging instruments and other assets and liabilities not included in the trading portfolio.

We assume interest rate risks in our banking book through lending and deposit-taking, money market and funding activities, and the deployment of our consolidated equity as well as other activities, including market making and trading activities involving banking book positions at the divisional level. Savings accounts and many other retail banking products have no contractual maturity date or direct market-linked interest rate and are risk-managed on a pooled basis using replication portfolios on behalf of our private banking, corporate and institutional businesses. The replication portfolios approximate the interest rate characteristics of the underlying products. This particular source of market risk is monitored on a daily basis.

The majority of non-trading foreign exchange risk is associated with our net investment in foreign branches, subsidiaries and affiliates denominated in currencies other than Swiss francs. This exposure is actively managed to hedge our capital and leverage ratios and is governed within our risk appetite framework.

Investments such as private equity, hedge funds, seed capital, collateralized loan obligation (CLO) risk retention and co-investments are classified as illiquid investments and subject to specific risk management and governance processes. Risk appetite for illiquid investments is proposed at Group and divisional levels and approved by CARMC.

Some fair-valued banking book exposures are also captured in the VaR model used for internal risk management purposes and the mark-to-market risk is managed in a similar manner as the market risk of the trading book.

Evaluation and management of market risk

We use market risk measurement and management methods capable of calculating comparable exposures across our many activities and employ focused tools that can model specific characteristics of certain instruments or portfolios. The tools are used for internal market risk management, internal market risk

reporting and external disclosure purposes. Our principal market risk measures for the trading book are VaR, scenario analysis, as included in our stress testing framework, position risk, as included in our economic risk capital, and sensitivity analysis. These measures complement each other in our market risk assessment and are used to measure market risk at the Group level. Our risk management practices are regularly reviewed to ensure they remain appropriate.

Measurement of market risk using value-at-risk

VaR is a risk measure that quantifies the potential loss on a given portfolio of financial instruments over a certain holding period that is expected not to be exceeded at a certain confidence level. VaR can be calculated for all financial instruments with adequate price histories. Positions are aggregated by risk factors rather than by product. For example, interest rate risk VaR captures potential losses driven by fluctuations of interest rates affecting a wide variety of interest rate products (such as interest rate swaps and swaptions) as well as other products (such as foreign exchange derivatives and equity derivatives) for which interest rate risk is not the primary market risk driver. The use of VaR allows the comparison of risk across different businesses. It also provides a means of aggregating and netting a variety of positions within a portfolio to reflect historical correlations between different assets, allowing for a portfolio diversification benefit. Our VaR model is designed to take into account a comprehensive set of risk factors across all asset classes.

VaR is an important tool in risk management and is used for measuring quantifiable risks from our activities exposed to market risk on a daily basis. In addition, VaR is one of the main risk measures for limit monitoring, financial reporting, calculation of regulatory capital and regulatory backtesting.

Our internal VaR model is based on historic data moves that derive plausible future trading losses. The model is responsive to changes in market conditions through the use of exponential weighting that applies a greater weight to more recent events, and the use of expected shortfall equivalent measures to ensure all extreme adverse events are considered in the model. We use the same VaR model for risk management (including limit monitoring and financial reporting), regulatory capital calculation and regulatory backtesting purposes, although confidence level, holding period, historical look-back period and the scope of financial instruments considered can be different.

For our risk management VaR, we use a rolling two-year historical dataset, a one-day holding period and a 98% confidence level. This means that we would expect daily mark-to-market trading losses to exceed the reported VaR not more than twice on average in 100 trading days over a multi-year observation period. The 98% confidence level VaR is calculated using an equivalent expected shortfall approach. The expected shortfall represents the average of the potential worst losses. This measure captures risks in trading books only and includes securitization positions. It

is closely aligned to the way we consider the risks associated with our trading activities and to the model we use to measure regulatory VaR for capital purposes. For internal risk management and monitoring purposes, we add certain fair-valued banking book positions to the scope of the risk management VaR calculation.

For regulatory capital purposes, we operate under the Basel III market risk framework which includes the following components for the calculation of regulatory capital: regulatory VaR, stressed VaR, IRC, risks not in VaR (RNIV), stressed RNIV and a regulatory prescribed standardized approach for securitizations. The regulatory VaR for capital purposes uses a two-year historical dataset, a ten-day holding period and a 99% confidence level calculated using an expected shortfall approach. This measure captures all risks in the trading book and foreign exchange and commodity risks in the banking book and excludes securitization positions, as these are treated under the securitization approach for regulatory purposes. Stressed VaR replicates the regulatory VaR calculation on the Group's current portfolio over a continuous one-year observation period that reflects a period of significant financial stress for the Group. The historical dataset starting in 2006 allows for the capturing of a longer history of potential loss events and helps reduce the pro-cyclicality of the minimum capital requirements for market risk. IRC is a regulatory capital charge for default and migration risk on positions in the trading books that may not be captured adequately under a ten-day holding period. RNIV captures a variety of risks, such as certain basis risks, higher order risks and cross risks between asset classes, not adequately captured by the VaR model for example due to lack of sufficient or accurate risk or historical market data.

Backtesting VaR uses a two-year historical dataset, a one-day holding period and a 99% confidence level calculated using an expected shortfall approach. This measure captures risks in the trading book and includes securitization positions. Backtesting VaR is not a component used for the calculation of regulatory capital but may have an impact through the regulatory capital multiplier if the number of backtesting exceptions exceeds regulatory thresholds.

Assumptions used in our market risk measurement methods for regulatory capital purposes are compliant with the standards published by the BCBS and other international standards for market risk management. We have approval from FINMA, as well as from other regulators for our subsidiaries, to use our regulatory VaR model in the calculation of market risk capital requirements. Ongoing enhancements to our VaR methodology are subject to regulatory approval or notification depending on their materiality, and the model is subject to regular reviews by regulators and the Group's independent Model Risk Management function.

Information required under Pillar 3 of the Basel framework related to risk is available on our website.

- Refer to ["credit-suisse.com/regulatorydisclosures"](https://www.credit-suisse.com/regulatorydisclosures) for further information.
- Refer to "Risk-weighted assets" in Capital management for further information on the use of our regulatory VaR model in the calculation of trading book market risk capital requirements.

VaR assumptions and limitations

The VaR model uses assumptions and estimates that we believe are reasonable, but VaR only quantifies the potential loss on a portfolio based on historical market conditions. The main assumptions and limitations of VaR as a risk measure are:

- VaR relies on historical data to estimate future changes in market conditions. Historical scenarios may not capture all potential future outcomes, particularly where there are significant changes in market conditions, such as increases in volatilities and changes in the correlation of market prices across asset classes;
- VaR provides an estimate of losses at a specified confidence level; the use of an expected shortfall equivalent measure allows all extreme adverse events to be considered in the model;
- VaR is based on either a one-day (for internal risk management, backtesting and disclosure purposes) or a ten-day (for regulatory capital purposes) holding period. This assumes that risks can be either sold or hedged over the holding period, which may not be possible for all types of exposure, particularly during periods of market illiquidity or turbulence; it also assumes that risks will remain in existence over the entire holding period; and
- VaR is calculated using positions held at the end of each business day and does not include intra-day changes in exposures.

To mitigate some of the VaR limitations and estimate losses associated with unusually severe market movements, we use other metrics designed for risk management purposes and described above, including stressed VaR, scenario analysis, as included in our stress testing framework, position risk, as included in our economic risk capital, and sensitivity analysis.

For some risk types there can be insufficient historical data for a calculation within the Group's VaR model. This often happens because underlying instruments may have traded only for a limited time. Where we do not have sufficient market data, either market data proxies or extreme parameter moves for these risk types are used. Market data proxies are selected to be as close to the underlying instrument as possible. Where neither a suitable market dataset nor a close proxy is available, extreme market moves are used.

We use a risk factor identification process to ensure that risks are identified for capture. There are two parts to this process. First, the market data dependency approach systematically determines the risk requirements based on data inputs used by front-office pricing models and compares this with the risk types that are captured by the Group's VaR model and the RNIV framework. Second, the product-based approach is a qualitative analysis of product types undertaken in order to identify the risk types that those product types would be exposed to. A comparison is again made with the risk types that are captured in the VaR and RNIV frameworks. This process identifies risks that are not yet captured in the VaR model or the RNIV framework. A plan for including these risks in one or the other framework can then be devised. RNIV is captured in our economic risk capital framework.

VaR backtesting

Backtesting is one of the techniques used to assess the accuracy and performance of our VaR model used by the Group for risk management and regulatory capital purposes and serves to highlight areas of potential enhancements. Backtesting is used by regulators to assess the adequacy of regulatory capital held by the Group, calculated using VaR.

Backtesting involves comparing the results produced by the VaR model with the hypothetical trading revenues on the trading book. Hypothetical trading revenues are defined in compliance with regulatory requirements and aligned with the VaR model output by excluding (i) non-market elements (such as fees, commissions, cancellations and terminations, net cost of funding and credit-related valuation adjustments) and (ii) gains and losses from intra-day trading. A backtesting exception occurs when a hypothetical trading loss exceeds the daily VaR estimate.

For capital purposes and in line with BIS requirements, FINMA increases the capital multiplier for every regulatory VaR backtesting exception above four in the prior rolling 12-month period, resulting in an incremental market risk capital requirement for the Group. VaR models with less than five backtesting exceptions are considered by regulators to be classified in a defined “green zone”. The “green zone” corresponds to backtesting results that do not themselves suggest a problem with the quality or accuracy of a bank’s model.

Sensitivity analysis

Market risks associated with our banking book positions are measured and monitored using several tools, including economic risk capital, scenario analysis, sensitivity analysis and VaR. For the purpose of this disclosure, the aggregated market risks associated with our banking book positions are measured using sensitivity analysis. Sensitivity analysis is a technique used to determine how different values of an independent variable will impact a particular dependent variable under a given set of assumptions. The sensitivity analysis for the banking book positions measures the potential change in economic value resulting from specified hypothetical shocks to market factors (e.g., interest rates). It is not a measure of the potential impact on reported earnings in the current period, since the banking book positions generally are not marked to market through the income statement.

Credit and debit valuation adjustments

Credit valuation adjustments are modifications to the measurement of the value of derivative assets used to reflect the credit risk of counterparties. Debit valuation adjustments are modifications to the measurement of the value of derivative liabilities used to reflect an entity’s own credit risk. These adjustments and their impact on revenues are not captured by the VaR framework.

Market risk constraints

Our market risk constraints framework encompasses specific constraints on various market risk measures, including VaR, results of scenario analysis and sensitivity analysis at the Group, divisional, legal entity and business line levels. For example, we

have controls over consolidated market risk exposures as well as concentrations in the portfolio. Risk constraints are cascaded to lower organizational levels within the businesses. Risk limits are binding and any significant increase in risk exposures is escalated in a timely manner. The Group’s Organizational Guidelines and Regulations and the Group’s internal policies determine limit-setting authority, temporary modification of such limits in certain situations and required approval authority at the Group, Bank, divisional, business and legal entity levels for any instances that could cause such limits to be exceeded. Market risk limit excesses are subject to a formal escalation procedure and the incremental risk associated with the excess must be approved by the responsible risk manager within Market Risk Management, with escalation to senior management if certain thresholds are exceeded. The majority of the market risk limits are monitored on a daily basis. Limits for which the inherent calculation time is longer or for which the risk profile changes less often are monitored less frequently depending on the nature of the limit (weekly, monthly or quarterly). The business is mandated to remediate market risk limit excesses within three business days upon notification. Remediation actions that take longer than three days are subject to an out-of-policy remediation process with senior management escalation.

Mitigation of market risk

Once a transaction has been executed, it is captured as part of our risk monitoring processes and subject to the market risk constraints framework. Specific policies ensure that for any new material and/or unusual transactions, the Market Risk Management function has been engaged and appropriate approvals are sought. These transactions are reviewed and approved by the Market Risk Management functions so that the risk profile of the portfolio is in line with the risk appetite after execution.

Market risk is mitigated using financial securities, derivatives, insurance contracts or other appropriate means.

Governance of market risk

Market risk is managed and controlled by Market Risk Management and divisional chief risk officers within Risk and governed by a comprehensive framework of policies and committees.

Oversight of the Market Risk Management function is provided by various committees and supervisory reviews at the Group, legal entity and divisional level, covering the related framework, risk appetite, quantitative approaches, evolving risk profile, material new trades and new business activity. The committees are comprised of senior market risk personnel. Relevant topics are escalated to senior management.

The governance framework ensures appropriate oversight of the Group’s market risk exposures.

VaR governance

Like other models, our VaR model is subject to internal governance including validation by a team of modeling experts independent from the model developers. Validation includes identifying and

testing the model's assumptions and limitations, investigating its performance through historical and potential future stress events, and testing that the live implementation of the model behaves as intended. We employ a range of different control processes to help ensure that the models used for market risk remain appropriate over time. As part of these control processes, a dedicated Market Risk Quantitative Steering Committee meets regularly to review model performance and approve any new or amended models.

Non-financial risk

Definition and sources of non-financial risk

Non-financial risk is the risk of an adverse direct or indirect impact originating from sources outside the financial markets, including but not limited to operational risk, technology risk, cyber risk, compliance risk, regulatory risk, legal risk and conduct risk.

Non-financial risk is inherent in most aspects of our business, including the systems and processes that support our activities. It comprises a large number of disparate risks that can manifest in a variety of ways. Examples include the risk of damage to physical assets, business disruption, failures relating to data integrity and trade processing, cyber attacks, internal or external fraudulent or unauthorized transactions, inappropriate cross-border activities, money laundering, improper handling of confidential information, conflicts of interest, improper gifts and entertainment and failure in duties to clients.

Non-financial risk can arise from a wide variety of internal and external forces, including human error, inappropriate conduct, failures in systems, processes and controls, deliberate attack or natural and man-made disasters. Outsourcing and external third parties may also create risks around maintaining business processes, system stability, data loss, data management, reputation and regulatory compliance. The main categories and sources of non-financial risk are described below.

Operational risk

Operational risk is the risk of an adverse impact arising from inadequate or failed internal processes, people or systems, or from external events. Operational risk does not include business and reputational risks; however, some operational risks can lead to reputational issues and as such these risks may be closely linked.

Technology risk

Technology risk deserves particular attention given the complex technological landscape that covers our business model. Ensuring that confidentiality, integrity and availability of information assets are protected is critical to our operations. Technology risk is the risk that system-related failures, such as service outages or information security incidents, may disrupt business. Technology risk is inherent not only in our IT assets, but also in the people and processes that interact with them including through dependency on third-party suppliers and the worldwide telecommunications infrastructure. We seek to ensure that the data used to support key business processes and reporting is secure, complete, accurate, available, timely and meets appropriate quality and integrity standards. We require our critical IT systems to be identified,

secure, resilient and available to support our ongoing operations, decision-making, communications and reporting. Our systems must also have the capabilities, capacity, scalability and adaptability to meet current and future business objectives, the needs of our customers and regulatory and legal expectations. Failure to meet these standards and requirements may result in adverse events that could subject us to reputational damage, fines, litigation, regulatory sanctions, financial losses or loss of market share. Technology risks are managed through our technology risk management program, business continuity management plan and business contingency and resiliency plans. Technology risks are included as part of our overall enterprise risk and control assessment based upon a forward-looking approach focusing on the most significant risks in terms of potential impact and likelihood.

Cyber risk

Cyber risk, which is part of technology risk, is the risk that the Group will be compromised as a result of cyber attacks, security breaches, unauthorized access, loss or destruction of data, unavailability of service, computer viruses or other events that could have an adverse security impact. Any such event could subject us to litigation or cause us to suffer a financial loss, a disruption of our businesses, liability to our clients, regulatory intervention or reputational damage. We could also be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures.

We recognize that cyber risk represents a rapidly evolving external risk landscape. The financial industry continues to face cyber threats from a variety of actors who are driven by monetary, political and other motivations. We actively monitor external incidents and threats and assess and respond accordingly to any potential vulnerabilities that this may reveal. We are also an active participant in industry forums and information exchange initiatives and engage in regulatory consultation on this subject.

We have an enterprise-wide cybersecurity strategy to provide strategic guidance as part of our efforts to achieve an optimized end-to-end security and risk competence that enables a secure and innovative business environment, aligned with the Group's risk appetite. A technology security team leverages a wide array of leading technology solutions and industry best practices to support our ability to maintain a secure perimeter and detect and respond to threats in real time.

We regularly assess the effectiveness of key controls and conduct ongoing employee training and awareness activities, including for key management personnel, in order to embed a strong cyber risk culture. As part of the enterprise risk and control framework (ERCF), the Executive Board as well as divisional and legal entity risk management committees are given updates on the broader technology risk exposure.

Significant incidents are escalated to the Risk Committee together with key findings and mitigating actions. Related business continuity and response plans are tested and simulations are conducted up to the Executive Board and Board level.

Legal risk

Legal risk is the risk of loss or imposition of damages, fines, penalties or other liability or any other material adverse impact arising from circumstances including the failure to comply with legal obligations, whether contractual, statutory or otherwise, changes in enforcement practices, the making of a legal challenge or claim against us, our inability to enforce legal rights or the failure to take measures to protect our rights.

Compliance risk

Compliance risk is the risk of legal or regulatory sanctions or financial loss that may result from the failure to comply with applicable laws, regulations, rules or market standards.

Regulatory risk

Regulatory risk is the risk that changes in laws, regulations, rules or market standards may limit our activities and have a negative effect on our business or our ability to implement strategic initiatives, or can result in an increase in operating costs for the business or make our products and services more expensive for clients.

Conduct risk

The Group considers conduct risk to be the risk that improper behavior or judgment by our employees may result in a negative financial, non-financial or reputational impact to our clients, employees or the Group, or negatively impact the integrity of the financial markets. Conduct risk may arise from a wide variety of activities and types of behaviors. A Group-wide definition of conduct risk supports the efforts of our employees to have a common understanding of and consistently manage and mitigate our conduct risk. Further, it promotes standards of responsible conduct and ethics in our employees. Managing conduct risk includes consideration of the risks generated by each business and the strength of the associated mitigating controls. Conduct risk is also assessed by reviewing and learning from past incidents within the Group and at other firms in the financial services sector.

The ongoing focus and investment in a strong risk culture is fundamental to the management of conduct risk. The Group's Code of Conduct provides a clear statement on our conduct expectations and ethical values, supported by our conduct and ethics standards.

In July 2019, oversight of conduct risk for the Group moved from Compliance to Human Resources to further increase effectiveness and synergies in how the Group manages and mitigates conduct risk across our entire employee base.

→ Refer to "Risk culture" in Risk management oversight and to "Corporate governance framework" in IV – Corporate Governance – Overview for further information on our Code of Conduct.

Evaluation and management of non-financial risks

We aim to maintain the integrity of our business, operations and reputation as a core principle guiding the management and oversight of non-financial risks by ensuring that our day-to-day operations are sustainable and resilient, do not expose us to significant losses and enable our employees to make decisions and conduct business in line with our values and desired reputation as a firm.

Each business area takes responsibility for its non-financial risks and the provision of adequate resources and procedures for the management of those risks. Businesses are supported by designated second line of defense teams that are responsible for independent risk oversight, methodologies, tools and reporting within their areas as well as working with management on non-financial risk issues that arise. Businesses and relevant control functions meet regularly to discuss non-financial risk issues and identify required actions to mitigate risks.

Non-Financial Risk Management oversees the Group's established ERCF, providing a consistent and unified approach to evaluating and monitoring the Group's non-financial risks. The ERCF sets common minimum standards across the Group for non-financial risk and control processes and review and challenge activities. Risk and control assessments are in place across all divisions and functions, consisting of the risk and control self-assessment, compliance risk assessment and legal risk assessment. Key non-financial risks are identified annually and represent the most significant risks requiring senior management attention. Where appropriate, remediation plans are put in place with ownership by senior management with ongoing Executive Board level oversight through CARMC.

Non-financial risk capital management

Our activities to manage non-financial risk capital include scenario analysis and operational risk regulatory capital measurement, as further described below. In addition, we transfer the risk of potential losses from certain non-financial risks to third-party insurance companies in certain instances.

Non-financial risk scenario analysis

Non-financial risk scenario analysis is forward-looking and is used to identify and measure exposure to a range of potential adverse events, such as unauthorized trading, transaction processing errors and compliance issues. These scenarios help businesses and functions assess the suitability of controls in light of existing risks and estimate hypothetical but plausible risk exposures. Scenarios are developed as qualitative estimation approaches to support stressed loss projections and capital calculations (both economic and regulatory capital) as part of regulatory requirements set by regulatory agencies in the jurisdictions in which we operate.

Non-financial risk regulatory capital measurement

We use a set of internally validated and approved models to calculate our regulatory capital requirements for non-financial risk (also referred to as “operational risk capital”) across the Group and for legal entities. For Group regulatory capital requirements, we use a model under the advanced measurement approach (AMA). The model is based on a loss distribution approach that uses relevant historical internal and external loss data to estimate frequency and severity distributions for different types of potential non-financial risk losses, such as an unauthorized trading incident, execution delivery errors, fraud, litigation events or a material business disruption. Business experts and senior management review and challenge model parameters in light of changes of business environment and internal control factors to ensure that the capital projection is reasonable and forward-looking. Deductions are taken from the regulatory capital requirement for non-financial risk to account for the mitigating values of insurance policies held by the Group. The regulatory capital requirement represents the 99.9th percentile of the estimated distribution of total operational losses for the Group over a one-year time horizon. A risk-sensitive approach is applied to allocate capital to the businesses. In order to align capital usage, as far as possible, to the predominant currency in which relevant risks originate we changed the calculation of the Group’s risk-weighted assets relating to non-financial risk and now use US dollars instead of Swiss francs. This change was approved by FINMA and was implemented in the fourth quarter of 2019.

Governance of non-financial risks

Effective governance processes establish clear roles and responsibilities for managing non-financial risks and define appropriate escalation processes for outcomes that are outside expected levels. We utilize a comprehensive set of policies and procedures that set out how employees are expected to conduct their activities.

Non-Financial Risk Management is responsible for setting minimum standards with policies and procedures for non-financial risks at the Group level. This includes ensuring the cohesiveness of policies, tools and practices throughout the Group particularly with regard to the identification, evaluation, mitigation, monitoring and reporting of these risks. Other second line of defense non-financial risk oversight functions are responsible for setting supplemental policies and procedures where applicable.

Non-financial risk exposures, metrics, issues and remediation efforts are discussed in quarterly CARMC internal control system meetings and in divisional operational risk and compliance management committee meetings, which have senior representatives from all relevant functions.

For conduct risk, periodic monitoring of metrics is based on thresholds set by severity level, with material trends identified and escalated as appropriate to senior management.

Model risk

Like most other financial firms, we rely on advanced quantitative models across all business lines and legal entities to support a broad range of applications, including estimating various forms of financial risk, valuation of securities, stress testing, assessing capital adequacy, providing wealth management services to clients and to meet various reporting requirements.

Definition and sources of model risk

Model risk is the risk of adverse consequences from decisions made based on model results that may be incorrect, misinterpreted or used inappropriately. All quantitative models are imperfect approximations that are subject to varying degrees of uncertainty in their output depending on, among other factors, the model’s complexity and its intended application. As a result, modeling errors are unavoidable and can result in inappropriate business decisions, financial loss, regulatory and reputational risk and incorrect or inadequate capital reporting. Model errors, intrinsic uncertainty and inappropriate use are the primary contributors to aggregate, Group-wide model risk.

Evaluation and management of model risk

Through our global model risk management and governance framework we seek to identify, measure and mitigate all significant risks arising from the use of models embedded within our global model ecosystem. Model risks can then be mitigated through a well-designed and robust model risk management framework, encompassing both model governance policies and procedures in combination with model validation best practices.

Robust model risk management is crucial to ensuring that the Group’s model risk is assessed and managed using a central inventory that includes all models of the Group in order to remain within a defined model risk appetite by focusing on identification, measurement and resolution of model limitations. Under the Group’s model governance policies, Model Risk Management validates and approves all new models and material changes to existing models before their implementation, in compliance with standards established by regulators. Developers, owners and model supervisors are responsible for identifying, developing, implementing and testing their models. Model supervisors are responsible for ensuring that models are submitted to Model Risk Management for validation and approval and entered into the Group’s model inventory. The Model Risk Management function is structured to be independent from model users, developers and supervisors.

A rigorous validation practice should ensure that models are conceptually sound, correctly implemented by the model owners and developers and functioning as intended. To accomplish this, model risk management deploys a team of objective, well-informed subject matter experts (the model validators) who have the necessary skills and knowledge to pose effective challenge to all classes of models as a guiding principle for mitigating model risk.

Under the Group model governance policies, all models are risk-tiered according to an internal scoring method that combines complexity and materiality to assign models into one of four risk tiers. These rating tiers are used to prioritize models and allocate resources for initial validations, annual reviews and ongoing monitoring.

Governance of model risk

Governance is an important part of model risk management. Various model review committees within Model Risk Management prepare aggregate model risk reports that serve to identify concentrations of model risk and to make recommendations for remediation. These reports are submitted regularly to a dedicated model risk governance committee which escalates issues as necessary to the Group's Model Risk Steering Committee and the Board's Risk Committee.

Model Risk Management reviews models annually, reports model limitations to key stakeholders, tracks remediation plans for validation findings and reports on model risk tolerance and metrics to senior management. Model Risk Management oversees controls to support a complete and accurate Group-wide model inventory and performs annual attestations affirming the completeness and accuracy of its model inventory.

Reputational risk

Definition and sources of reputational risk

Reputational risk is the risk that negative perception by our stakeholders, including clients, counterparties, employees, shareholders, regulators and the general public, may adversely impact client acquisition and damage our business relationships with clients and counterparties, affecting staff morale and reducing access to funding sources.

Reputational risk may arise from a variety of sources, including, but not limited to, the nature or purpose of a proposed transaction or service, the identity or activity of a potential client, the regulatory or political climate in which the business will be transacted, and the potentially controversial environmental or social impacts of a transaction or significant public attention surrounding the transaction itself. The risk may also arise from reputational damage in the aftermath of a non-financial risk incident, such as cyber crime or the failure by employees to meet expected conduct and ethical standards.

Evaluation and management of reputational risk

Reputational risk is included in the Group's risk appetite framework to ensure that risk-taking is aligned with the approved risk appetite. We highly value our reputation and are fully committed to protecting it through a prudent approach to risk-taking and a responsible approach to business. This is achieved through the use of dedicated processes, resources and policies focused on identifying, evaluating, managing and reporting potential reputational risks. This is also achieved by applying the highest standards of personal accountability and ethical conduct as set out in the Group's Code of Conduct and the Group's approach

to conduct and ethics. Reputational risk potentially arising from proposed business transactions and client activity is assessed in the reputational risk review process. The Group's global policy on reputational risk requires employees to be conservative when assessing potential reputational impact and, where certain indicators give rise to potential reputational risk, the relevant business proposal or service must be submitted through the reputational risk review process. This involves a submission by an originator (any employee), approval by a business area head or designee, and its subsequent referral to one of the assigned reputational risk approvers, each of whom is an experienced and high-ranking senior manager, independent of the business divisions, who has authority to approve, reject or impose conditions on our participation in the transaction or service.

Governance of reputational risk

The PCR cycle within CARMC, on a global level, and the reputational risk committees, on a divisional or legal entity level, are the governing bodies responsible for the oversight and active discussion of reputational risk and sustainability issues. At the Board level, the Risk Committee and Audit Committee jointly assist the Board in fulfilling its reputational risk oversight responsibilities by reviewing and approving the Group's risk appetite framework as well as assessing the adequacy of the management of reputational risks.

In order to inform our stakeholders about how we manage some of the environmental and social risks inherent to the banking business, we publish our *Corporate Responsibility Report*, in which we also describe our efforts to conduct our operations in a manner that is environmentally and socially responsible and broadly contributes to society.

→ Refer to "credit-suisse.com/responsibility" for our Corporate Responsibility Report.

Business risk

Definition and sources of business risk

Business risk is the risk of not achieving our financial goals and ambitions in connection with the Group's strategy and how the business is managed in response to the external operating environment. External factors include both market and economic conditions, as well as shifts in the regulatory environment. Internally, we face risks arising from inappropriate strategic decisions, ineffective implementation of business strategies or an inability to adapt business strategies in response to changes in the operating environment, including in relation to client and competitor behavior.

Our businesses are exposed to a variety of risks that could adversely impact the Group's dividend payments or share buyback programs. In addition, the Group depends on dividends, distributions and other payments from its subsidiaries and the capital payouts in these subsidiaries might be restricted as a result of regulatory, tax or other constraints.

→ Refer to "Risk factors" in I – Information on the company for further information.

Evaluation and management of business risk

The Group financial plan serves as the basis for the financial goals and ambitions against which the businesses and legal entities are assessed regularly throughout the year. These regular reviews include evaluations of financial performance, capitalization and capital usage, key business risks, overall operating environment and business strategy. This enables management to identify and execute changes to the Group's operations and strategy where needed.

Governance of business risk

Strategic and related financial plans are developed by each division annually and aggregated into a Group financial plan, which is reviewed by the CRO, CFO and CEO before presentation to the full Executive Board. Following approval by the Executive Board, the Group financial plan is submitted for review and approval to the Board. On a regular basis, the Board and the Executive Board conduct more fundamental in-depth reviews of the Group's strategy and reassess our performance objectives.

→ Refer to "Strategy" in I – Information on the company for further information.

Climate-related risks

Definition of climate-related risks

Climate-related risks are the potentially adverse direct and indirect impacts on the Group's financial metrics, operations or reputation due to transitional or physical effects of climate change. Climate-related risks could manifest themselves through existing risk types such as credit risk, market risk, non-financial risk, business risk or reputational risk.

Sources of climate-related risks

We have identified several key risks and opportunities originating from either the physical or the transitional effects of climate change. Physical risks can arise from climate and weather-related events (e.g., heatwaves, droughts, floods, storms and sea-level rise) and can potentially result in material financial losses, impairing asset values and the creditworthiness of borrowers. Transitional risks can arise from the process of adjustment towards a low carbon economy through changes in climate policy, technological developments and disruptive business models, and shifting investor and consumer sentiment. Physical and transitional climate risks can affect us as an organization either directly, through our physical assets, costs and operations, or indirectly, through our financial relationships with our clients.

Evaluation and management of climate-related risks

In 2018, we established a climate change program to address the recommendations of the Financial Stability Board's Taskforce on Climate-related Financial Disclosures (TCFD) with respect to external disclosures on climate-related risks and opportunities. In 2019, we integrated our TCFD adoption program into a Group-wide climate risk strategy program, which aims to develop strategies to support our clients' energy transition toward low-carbon operations, technologies and services, as well as to facilitate the

implementation of the TCFD recommendations. The climate risk strategy program is sponsored by the CRO and has senior management representation from our five business divisions, as well as from the General Counsel, Compliance and Risk functions and the Impact Advisory and Finance department.

Credit Suisse is pursuing a three-pronged approach as part of our efforts to address climate-related risks. First, we are preparing to work with our clients to support their transition to low-carbon and climate-resilient business models, and we are working to further integrate climate change into our risk management models. Second, we are focusing on delivering sustainable finance solutions that help our clients achieve their goals and contribute to the realization of the UN Sustainable Development Goals; and third, we are working on further reducing the carbon footprint of our own operations.

Our efforts to implement the TCFD recommendations continued in 2019. Below is the summary of our activities.

Strategy

We aim to leverage existing risk management processes and capabilities for the management of climate risk exposures by mapping the underlying climate risks to our existing risk types. As methodologies for assessing climate risk evolve, we are developing consistent climate-related metrics that we believe are useful for risk management purposes.

The Group has enhanced its internal reports and is developing further climate risk-related scenario analysis in addition to the 2°C and 4°C scenarios introduced in 2018.

The Group is engaged in a range of activities which may support the transition to a lower carbon and more climate-resilient economy. Our green finance solutions are designed to achieve a positive impact on the environment while also creating financial value for our clients, drawing upon the expertise of various specialist departments across our divisions.

In September 2019, we signed the UN Principles for Responsible Banking, which call for the banking sector to align with the objectives of the UN Sustainable Development Goals and the Paris Climate Agreement and represent a comprehensive framework for the integration of sustainability across all business areas for signatories.

Risk management

Climate-related risks are embedded in our Group-wide risk taxonomy. These risks – alongside other environmental and social risks – are considered within the Group-wide, standardized reputational risk review process. We have identified sensitive sectors which pose greater environmental and social risks (including impacts to the climate) and have developed policies and guidelines to govern the responsible provision of financial services to clients within these sectors. These sector policies and guidelines

cover the following areas: oil and gas, mining, power generation, forestry and agribusiness (covering pulp and paper and palm oil production). As a consequence, within the reputational risk review process, we evaluate factors such as a company's greenhouse gas footprint or its energy efficiency targets while some of our policies and guidelines require clients to have a plan in place to deal with climate change risks. In 2019, our sector policies and guidelines, which had previously excluded any form of financing for new greenfield thermal coal mines, were updated to also exclude any form of financing specifically related to the development of new coal-fired power plants. Moreover, we are working with other banks to develop methodologies to measure the alignment of credit portfolios with the objectives of the Paris Agreement. Direct physical risks of climate change are identified and assessed through the business continuity management process alongside other physical risks such as natural disasters.

Metrics and targets

We have developed a range of internal analytics on our own exposures to climate-impacted sectors.

From 2013 to the end of 2019, we supported the issuance of over USD 30 billion of sustainability-related debt financing products such as green bonds, sustainability bonds, climate action bonds and bonds linked to the United Nation's Sustainable Development Goals as well as green certificates of deposits and commercial paper. We are also active in the sustainability lending market and during 2019 we participated in a total of over USD 20 billion worth of sustainability-linked loans.

We actively support clean and renewable energy businesses. From 2010 through the end of 2019, we were involved in over 130 transactions in this field with a value of over USD 100 billion.

Furthermore, we manage and disclose greenhouse gas emissions from our own operations on the basis of an ISO 14001-certified environmental management system. At an operational level, we have been working on a greenhouse gas neutral basis globally since 2010. In 2019, approximately 90% of the Group's electricity consumed globally was generated using renewable resources.

Governance of climate-related risks

Climate change-related responsibilities are included in the Board's Risk Committee charter. At the Executive Board level, the PCR cycle within CARMC assumes responsibility for the overall climate change strategy and is mandated to ensure that the capabilities for the management of relevant long-term risk trends, including climate change, are put in place. Furthermore, key internal policies incorporate important elements of climate risk management. In 2019, a specific session of a Board meeting was devoted to climate-related risks and sustainability topics.

→ Refer to "[credit-suisse.com/responsibility](https://www.credit-suisse.com/responsibility)" for our Corporate Responsibility Report.

Fiduciary risk

Definition and sources of fiduciary risk

Fiduciary risk is the risk of financial loss arising when the Group or its employees, acting in a fiduciary capacity as trustee, investment manager or as mandated by law, do not act in the best interest of the client in connection with the provision of advice and/or management of our client's assets including from a product-related market, credit, liquidity, counterparty and non-financial risk perspective.

Evaluation and management of fiduciary risk

As fiduciary risk primarily relates to discretionary investment-related activities, assessing investment performance and reviewing forward-looking investment risks in our client portfolios and investment funds is central to our investment oversight program. Areas of focus include:

- Measuring and monitoring investment performance of discretionary client portfolios and investment funds and comparing the returns against benchmarks and peer groups to understand level, sources and drivers of the returns.
- Assessing risk measures such as exposure, sensitivities, stress scenarios, expected volatility and liquidity across our portfolios to ensure that we are managing the assets in line with the clients' expectations and risk tolerance.
- Treating clients with a prudent standard of care, which includes information disclosure, subscriptions and redemptions processes, trade execution and requiring the highest ethical conduct.
- Ensuring discretionary portfolio managers' investment approach is in accordance with prospectus, regulations and client guidelines.
- Monitoring client investment guidelines or investment fund limits. In certain cases, internal limits or guidelines are also established and monitored.

Governance of fiduciary risk

Sound governance is essential for all discretionary management activities including trade execution and the investment process. Our program targets daily, monthly or quarterly monitoring of all portfolio management activities with independent analysis provided to senior management. Formal review meetings are in place to ensure that investment performance and risks are in line with expectations and adequately supervised.

Pension risk

Definition and sources of pension risk

Pension risk is the financial risk from contractual or other liabilities to which we are exposed as a sponsor of and/or participant in pension plans. It is the risk that we may be required to make unexpected payments or other contributions to a pension plan because of a potential obligation (i.e., underfunding).

We sponsor three types of pension plans:

- defined benefit plans;
- defined contribution plans; and
- our Swiss savings plan.

Pension risk arises from defined benefit plans and the Swiss savings plan, which has elements of a defined benefit plan. Under these plans, we, as the plan sponsor, bear the potential risk of having to provide additional funding in the event of a plan shortfall whereby the plan liabilities exceed the plan assets. Under defined contribution plans there is no defined benefit at retirement and the employee bears the investment risk; as a result, the plan sponsor is not responsible for a shortfall. The majority of our pension risk derives from the defined benefit plans in Switzerland, the UK and the US.

Sources of risks can be broadly categorized into asset investment risks (e.g., underperformance of bonds, equities and alternative investments) and liability risks, primarily from changes in interest rates, inflation and longevity.

Evaluation and management of pension risk

Pension plan structure

The Group's major pension plans are established as separate entities from the sponsor firm and are governed by trustees who are charged with safeguarding the interests of the plan members pursuant to statutory and regulatory requirements. Risk-taking activity within the Group's pension funds is not typically within the direct control of the sponsor firm. There is however a risk that we, as the plan sponsor, may have a potential obligation to contribute due to underfunding which could have a negative impact on the Group's capital and income before taxes.

Metrics and targets

Pensions risk forms an integral part of the Group's risk appetite assessment with internal macro-economic stress scenarios used for Group-wide stress testing. These are incremental to the assessment performed by the trustees and their external advisers.

Within Risk, pension risk is measured and quantified through both our stress testing framework and internal capital metrics used to assess the Group's capital requirements. These measures are intended to assess the potential impact from the revaluation of pension assets and liabilities on the Group's capital metrics and income before taxes.

Governance of pension risk

The overall pension risk framework and governance structure of our pension plans consists of three components:

- Trustees who may be independent from the employer depending on local jurisdictional requirements act on behalf of the

beneficiaries of the pension plan with additional oversight by actuaries and external consultants. Trustees are responsible for ensuring that the pension plan is run properly and the member benefits are secure.

- Depending on the jurisdiction there is oversight provided by senior management, trustees, actuaries and/or advisors in relation to local funding, investment strategy, plan changes or other actions of the pension fund.
- Risk monitors and reports various metrics and analytics to senior management in Risk and to relevant pension committees (e.g., economic risk capital, severe flight to quality and loss potential analysis).

Risk portfolio analysis

Capital risk

Economic risk capital

Methodology and model developments

The Group's economic risk capital methodology is regularly reviewed and updated in order to ensure that the model remains relevant as markets and business strategies evolve.

→ Refer to "Economic risk capital" in Risk coverage and management – Capital risk for further information on the 2019 economic risk capital methodology changes.

During 2019, we enhanced the data capture for non-traded credit spread risk and recalibrated certain model parameters for traded and securitized products risks within our position risk model. Within other risks, we enhanced the data capture and recalibrated certain model parameters for the expense risk model. Excluding changes and updates implemented in 2019, the Group's economic risk capital as of December 31, 2018 would have been CHF 28.0 billion, a decrease of CHF 1.4 billion, or 4.7%.

In line with the measurement of regulatory capital metrics such as BIS CET1 capital, prior-period balances are not restated for methodology changes, dataset updates or model parameter updates.

Available economic capital trends

As of December 31, 2019, our available economic capital for the Group was CHF 53.3 billion, an increase of CHF 4.2 billion from December 31, 2018. BIS CET1 capital increased CHF 1.0 billion, mainly reflecting net income attributable to shareholders, partially offset by the repurchase of shares under the 2019 share buy-back program, a negative foreign exchange impact and a dividend accrual. Economic adjustments increased CHF 3.2 billion, mainly driven by the issuance of high-trigger tier 1 capital instruments.

Economic risk capital and coverage ratio

end of	2019	2018	% change
Available economic capital (CHF million, except where indicated)			
BIS CET1 capital (Basel III)	36,774	35,824	3
Economic adjustments ¹	16,556	13,355	24
Available economic capital	53,330	49,179	8
Position risk			
Credit risk	1,921	2,155	(11)
Non-traded credit spread risk	3,146	3,463	(9)
Securitized products	2,543	1,706	49
Traded risk	1,294	1,574	(18)
Emerging markets country event risk	713	697	2
Equity investments	834	417	100
Diversification benefit ²	(1,363)	(1,195)	14
Position risk (99% confidence level for risk management purposes)	9,088	8,817	3
Economic risk capital			
Position risk (99.97% confidence level)	20,182	19,471	4
Operational risk	6,474	6,702	(3)
Other risks ³	2,694	3,248	(17)
Economic risk capital	29,350	29,421	0
Economic risk capital coverage ratio (%) ⁴	182	167	-

¹ Includes primarily high- and low-trigger capital instruments, adjustments to unrealized gains on owned real estate, reduced recognition of deferred tax assets and adjustments to treatment of pension assets and obligations. Economic adjustments are made to BIS CET1 capital to enable comparison between economic risk capital and available economic capital under the Basel III framework.

² Diversification benefit represents the reduction in risk that occurs when combining different, not perfectly correlated risk types in the same portfolio and is measured as the difference between the sum of the individual risk types and the risk calculated on the combined portfolio.

³ Includes owned real estate risk, expense risk, pension risk, foreign exchange risk between available economic capital and economic risk capital, interest rate risk on treasury positions, diversification benefits and the impact from deferred share-based compensation awards.

⁴ Ratio of available economic capital to economic risk capital.

Economic risk capital by division

	End of period			Average		
	2019	2018	% change	2019	2018	% change
CHF million						
Swiss Universal Bank	5,597	5,562	1	5,441	5,634	(3)
International Wealth Management	3,202	3,128	2	3,195	3,206	0
Asia Pacific	5,369	4,499	19	5,023	3,965	27
Global Markets	7,922	7,819	1	8,035	7,491	7
Investment Banking & Capital Markets	3,630	3,815	(5)	3,723	3,384	10
Strategic Resolution Unit ¹	-	3,006	(100)	-	3,837	(100)
Corporate Center ¹	3,630	1,592 ²	128	4,090	1,718 ²	138
Economic risk capital	29,350	29,421	0	29,507	29,235	1

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit within the Corporate Center. From the first quarter of 2019, average economic risk capital of the Strategic Resolution Unit is included in the Corporate Center.

² Included primarily operational risk and expense risk.

Economic risk capital trends

Compared to December 31, 2018, our economic risk capital was stable at CHF 29.4 billion as of December 31, 2019, reflecting an increase in position risk, offset by decreases in other risks and operational risk. The increase in position risk was primarily driven by higher securitized products risk, mainly due to higher exposures and a reduced benefit from equity derivative hedges in Global Markets, and higher equity investments exposures,

primarily reflecting a change in accounting treatment for our equity investment in SIX Group AG reported in Swiss Universal Bank and International Wealth Management. These increases were partially offset by lower traded risk, mainly due to reduced higher order risks in equity derivatives in Global Markets and the impact from the recalibration of certain model parameters, and lower credit risk. Lower credit risk mainly reflected reduced counterparty exposures in Global Markets and the Corporate Center,

lower corporate loan exposures in Swiss Universal Bank and enhanced data capture for benefits from hedging transactions executed in connection with the Group's risk-weighted assets. The decrease in other risks was mainly due to lower expense risk, primarily driven by lower operating expenses and the enhanced data capture and parameter recalibration mainly impacting Swiss Universal Bank, International Wealth Management and Global Markets. This decrease was partially offset by higher pension risk, primarily driven by the impact of lower interest rates on our Swiss pension plan, and a reduced benefit from deferred share-based compensation awards across all business divisions. The decrease in operational risk was mainly driven by the change in the calculation of the Group's risk-weighted assets relating to operational risk to use US dollars instead of Swiss francs. Excluding the US dollar translation impact, economic risk capital increased 2%.

As part of our overall risk management, we hold a portfolio of hedges. Hedges are impacted by market movements, similar to other trading securities, and may result in gains or losses which offset losses or gains on the portfolios they were designated to hedge. Due to the varying nature and structure of hedges, these gains or losses may not wholly offset the losses or gains on the portfolios.

Credit risk

Credit risk overview

All transactions that are exposed to potential losses arising as a result of a borrower or counterparty failing to meet its financial obligations or as a result of deterioration in the credit quality of the borrower or counterparty are subject to credit risk exposure measurement and management.

→ Refer to "Impaired loans" in VI – Consolidated financial statements – Credit Suisse Group – Note 19 – Loans, allowance for loan losses and credit quality for information on credit quality and aging analysis of loans.

For regulatory capital purposes, credit risk comprises several regulatory categories where credit risk measurement and related regulatory capital requirements are subject to different measurement approaches under the Basel framework. Details on regulatory credit risk categories, credit quality indicators and credit risk concentration are available in our disclosures required under Pillar 3 of the Basel framework related to risk, which will be available on our website.

→ Refer to "credit-suisse.com/regulatorydisclosures" for further information.

Loans and irrevocable loan commitments

The following table provides an overview of loans and irrevocable loan commitments by division in accordance with accounting principles generally accepted in the US and are not comparable with the regulatory credit risk exposures presented in our disclosures required under Pillar 3 of the Basel framework.

Loans and irrevocable loan commitments

end of	2019	2018
CHF million		
Gross loans	297,841	288,596
Irrevocable loan commitments	125,127	118,446
Total loans and irrevocable loan commitments	422,968	407,042 ¹
of which Swiss Universal Bank	183,604	178,595
of which International Wealth Management	58,774	56,013
of which Asia Pacific	50,295	48,087
of which Global Markets	78,420	76,312 ¹
of which Investment Banking & Capital Markets	49,833	46,001
of which Strategic Resolution Unit ²	–	1,591
of which Corporate Center ²	2,042	443

¹ Prior period has been corrected.

² Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit within the Corporate Center.

Loans held-for-sale and traded loans

As of December 31, 2019 and 2018, loans held-for-sale included CHF 25 million and CHF 29 million, respectively, of seasoned US subprime residential mortgages from consolidated variable interest entities (VIE). Traded loans included US subprime residential mortgages of CHF 173 million and CHF 761 million as of December 31, 2019 and 2018, respectively.

Loans

The table "Loans" provides an overview of our loans by loan classes, impaired loans, the related allowance for loan losses and selected loan metrics by business division. The carrying values of loans and related allowance for loan losses are presented in accordance with generally accepted accounting standards in the US and are not comparable with the regulatory credit risk exposures presented in our disclosures required under Pillar 3 of the Basel framework.

Compared to December 31, 2018, gross loans increased CHF 9.2 billion to CHF 297.8 billion as of December 31, 2019, mainly due to higher loans to the real estate sector, higher loans collateralized by securities, higher loans to financial institutions and higher consumer mortgages, partially offset by the translation impact from the US dollar and the euro. The net increase of CHF 2.5 billion in loans to the real estate sector mainly reflected increases in Asia Pacific and Swiss Universal Bank. Loans collateralized by securities increased CHF 2.3 billion, mainly driven by increases in International Wealth Management, Asia Pacific and Investment Banking & Capital Markets. The net increase of CHF 1.9 billion in loans to financial institutions was mainly driven by increases in Global Markets, Asia Pacific and Swiss Universal Bank. Consumer mortgages increased CHF 1.7 billion, mainly driven by an increase in Swiss Universal Bank.

Loans

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit ¹	Corporate Center ¹	Credit Suisse
2019 (CHF million)								
Mortgages	104,257	3,883	1,400	0	0	–	39	109,579
Loans collateralized by securities	6,757	20,466	15,110	7	1,993	–	31	44,364
Consumer finance	3,791	504	21	7	0	–	78	4,401
Consumer	114,805	24,853	16,531	14	1,993	–	148	158,344
Real estate	23,569	2,076	3,095	287	178	–	15	29,220
Commercial and industrial loans	29,395	25,294	21,712	5,170	3,198	–	879	85,648
Financial institutions	2,650	1,619	4,678	10,469	510	–	441	20,367
Governments and public institutions	744	237	878	2,237	0	–	166	4,262
Corporate & institutional	56,358 ²	29,226 ³	30,363 ⁴	18,163	3,886	–	1,501	139,497
Gross loans	171,163	54,079	46,894	18,177	5,879	–	1,649	297,841
of which held at fair value	190	31	3,922	7,537	484	–	498	12,662
Net (unearned income) / deferred expenses	96	(106)	(45)	(47)	(15)	–	1	(116)
Allowance for loan losses ⁵	(487)	(179)	(74)	(70)	(73)	–	(63)	(946)
Net loans	170,772	53,794	46,775	18,060	5,791	–	1,587	296,779
2018 (CHF million)								
Mortgages	102,358	3,979	1,435	0	0	73	0	107,845
Loans collateralized by securities	6,978	19,416	14,161	0	1,444	35	0	42,034
Consumer finance	3,298	508	3	13	0	83	0	3,905
Consumer	112,634	23,903	15,599	13	1,444	191	0	153,784
Real estate	22,902	2,109	1,273	184	242	17	0	26,727
Commercial and industrial loans	30,291	24,095	21,938	5,182	3,567	458	167	85,698
Financial institutions	2,294	1,592	4,175	9,080	632	521	200	18,494
Governments and public institutions	694	245	843	1,876	0	235	0	3,893
Corporate & institutional	56,181 ²	28,041 ³	28,229 ⁴	16,322	4,441	1,231	367	134,812
Gross loans	168,815	51,944	43,828	16,335	5,885	1,422	367	288,596
of which held at fair value	37	85	5,263	7,572	1,221	695	0	14,873
Net (unearned income) / deferred expenses	82	(118)	(33)	(32)	(11)	(1)	0	(113)
Allowance for loan losses ⁵	(504)	(131)	(82)	(60)	(69)	(56)	0	(902)
Net loans	168,393	51,695	43,713	16,243	5,805	1,365	367	287,581

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit within the Corporate Center.

² The values of financial collateral and mortgages related to secured loans, considered up to the amount of the related loans, were CHF 10,038 million and CHF 33,920 million, respectively, as of December 31, 2019, and CHF 10,834 million and CHF 33,533 million, respectively, as of December 31, 2018.

³ The values of financial collateral and mortgages related to secured loans, considered up to the amount of the related loans, were CHF 22,816 million and CHF 2,826 million, respectively, as of December 31, 2019, and CHF 22,040 million and CHF 2,151 million, respectively, as of December 31, 2018.

⁴ The values of financial collateral and mortgages related to secured loans, considered up to the amount of the related loans, were CHF 19,606 million and CHF 822 million, respectively, as of December 31, 2019, and CHF 17,220 million and CHF 183 million, respectively, as of December 31, 2018.

⁵ Allowance for loan losses is only based on loans that are not carried at fair value.

On a divisional level, gross loans increased CHF 3.1 billion in Asia Pacific, CHF 2.3 billion in Swiss Universal Bank, CHF 2.1 billion in International Wealth Management and CHF 1.8 billion in Global Markets. At the beginning of 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group and the residual loan portfolio of CHF 1.4 billion reported as of the end of 2018 was transferred to the Corporate Center. Investment Banking & Capital Markets gross loans were stable.

→ Refer to "Note 19 – Loans, allowance for loan losses and credit quality" in VI – Consolidated financial statements – Credit Suisse Group for further information.

As of December 31, 2019, 97% of the aggregate Swiss residential mortgage loan portfolio of CHF 110.5 billion had a loan-to-value (LTV) ratio equal to or lower than 80%. As of December 31, 2018, 97% of the aggregate Swiss residential mortgage loan portfolio of CHF 108.5 billion had an LTV ratio equal to or lower than 80%. For substantially all Swiss residential mortgage loans originated in 2019 and 2018, the average LTV ratio was equal to or lower than 80% at origination. Our LTV ratios are based on the most recent appraised value of the collateral.

Impaired loans

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit ¹	Corporate Center ¹	Credit Suisse
2019 (CHF million)								
Non-performing loans	453	482	166	36	51	–	62	1,250
Non-interest-earning loans	204	43	0	0	0	–	13	260
Non-performing and non-interest-earning loans	657	525	166	36	51	–	75	1,510
Restructured loans	66	203	0	5	8	–	68	350
Potential problem loans	155	47	0	32	29	–	3	266
Other impaired loans	221	250	0	37	37	–	71	616
Gross impaired loans²	878	775³	166	73	88	–	146	2,126
of which loans with a specific allowance	799	468	166	68	80	–	133	1,714
of which loans without a specific allowance	79	307	0	5	8	–	13	412
2018 (CHF million)								
Non-performing loans	365	534	183	29	37	55	0	1,203
Non-interest-earning loans	245	43	0	0	0	12	0	300
Non-performing and non-interest-earning loans	610	577	183	29	37	67	0	1,503
Restructured loans	76	130	0	5	8	80	0	299
Potential problem loans	247	128	2	9	0	4	0	390
Other impaired loans	323	258	2	14	8	84	0	689
Gross impaired loans²	933	835³	185	43	45	151	0	2,192
of which loans with a specific allowance	842	308	100	38	37	145	0	1,470
of which loans without a specific allowance	91	527	85	5	8	6	0	722

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit within the Corporate Center.

² Impaired loans are only based on loans that are not carried at fair value.

³ Includes gross impaired loans of CHF 39 million and CHF 62 million as of December 31, 2019 and 2018, respectively, which are mostly secured by guarantees provided by investment-grade export credit agencies.

Impaired loans

Compared to December 31, 2018, gross impaired loans decreased CHF 66 million to CHF 2.1 billion as of December 31, 2019, mainly driven by lower potential problem loans and lower non-interest-earning loans in Swiss Universal Bank and lower potential problem loans and lower non-performing loans in International Wealth Management. These decreases were partially offset, primarily by higher non-performing loans in Swiss Universal Bank and higher restructured loans in International Wealth Management.

In International Wealth Management, gross impaired loans decreased CHF 60 million, primarily driven by reductions in ship finance, aviation finance and export finance, partially offset by increases in European mortgages and lombard lending. In Swiss Universal Bank, gross impaired loans decreased CHF 55 million, mainly reflecting repayments and write-offs in commodity trade finance and write-offs in the large Swiss corporates and

in the small and medium-sized enterprises business areas, partially offset by newly impaired positions in the commodity trade finance, the large Swiss corporates and the small and medium-sized enterprises business areas. In Asia Pacific, gross impaired loans decreased CHF 19 million, mainly driven by the write-off of an Indian infrastructure development company and four lombard loans in Hong Kong and a repayment in ship finance, partially offset by newly impaired share-backed loans. Gross impaired loans in Investment Banking & Capital Markets and in Global Markets increased CHF 43 million and CHF 30 million, respectively, mainly driven by the impairment of several US-based revolving loans in the oil and gas, supermarket and security guard services sectors, partially offset by a write-off in the supermarket sector in Europe. At the beginning of 2019, the residual impaired loan portfolio of CHF 151 million as of the end of 2018 in the Strategic Resolution Unit was transferred to the Corporate Center.

→ Refer to "Impaired loans" in VI – Consolidated financial statements – Credit Suisse Group – Note 19 – Loans, allowance for loan losses and credit quality for information on categories of impaired loans.

Allowance for loan losses

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit ¹	Corporate Center ¹	Credit Suisse
2019 (CHF million)								
Balance at beginning of period²	504	131	82	60	69	56	0	902
of which individually evaluated for impairment	358	91	47	27	30	55	0	608
of which collectively evaluated for impairment	146	40	35	33	39	1	0	294
Transfers and reclassifications	0	0	0	0	0	(56)	56	0
Net movements recognized in statements of operations	106	49	43	36	46	–	4	284
Gross write-offs	(136)	(15)	(75)	(29)	(42)	–	(2)	(299)
Recoveries	10	2	10	1	1	–	1	25
Net write-offs	(126)	(13)	(65)	(28)	(41)	–	(1)	(274)
Provisions for interest	5	14	15	1	2	–	5	42
Foreign currency translation impact and other adjustments, net	(2)	(2)	(1)	1	(3)	–	(1)	(8)
Balance at end of period²	487	179	74	70	73	–	63	946
of which individually evaluated for impairment	345	131	23	24	24	–	62	609
of which collectively evaluated for impairment	142	48	51	46	49	–	1	337

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit within the Corporate Center.

² Allowance for loan losses is only based on loans that are not carried at fair value.

The following tables provide an overview of changes in impaired loans and related allowance for loan losses by loan portfolio segment.

Gross impaired loans by loan portfolio segment

	Consumer	Corporate & institutional	Total
2019 (CHF million)			
Balance at beginning of period	677	1,515	2,192
New impaired loans	488	757	1,245
Increase in existing impaired loans	25	73	98
Reclassifications to performing loans	(260)	(99)	(359)
Repayments ¹	(121)	(483)	(604)
Liquidation of collateral, insurance or guarantee payments	(43)	(95)	(138)
Sales ²	0	(11)	(11)
Write-offs	(77)	(193)	(270)
Foreign currency translation impact and other adjustments, net	(6)	(21)	(27)
Balance at end of period	683	1,443	2,126

¹ Full or partial principal repayments.

² Includes transfers to loans held-for-sale for intended sales of held-to-maturity loans.

Allowance for loan losses by loan portfolio segment

	Consumer	Corporate & institutional	Total
2019 (CHF million)			
Balance at beginning of period	187	715	902
of which individually evaluated for impairment	146	462	608
of which collectively evaluated for impairment	41	253	294
Net movements recognized in statements of operations	63	221	284
Gross write-offs	(86)	(213)	(299)
Recoveries	9	16	25
Net write-offs	(77)	(197)	(274)
Provisions for interest	14	28	42
Foreign currency translation impact and other adjustments, net	(1)	(7)	(8)
Balance at end of period	186	760	946
of which individually evaluated for impairment	145	464	609
of which collectively evaluated for impairment	41	296	337

Allowance for loan losses

Compared to December 31, 2018, the allowance for loan losses increased CHF 44 million to CHF 946 million as of December 31, 2019, primarily due to net increases in International Wealth Management, Global Markets and Investment Banking & Capital Markets, partially offset by decreases in Swiss Universal Bank and Asia Pacific. In International Wealth Management, the increase in allowance for loan losses of CHF 48 million mainly reflected increased provisions in ship finance, lombard lending and European mortgages, partially offset by reductions in export finance. In Global Markets and Investment Banking & Capital Markets, the increase in allowance for loan losses of CHF 10 million and CHF 4 million, respectively, mainly reflected a new provision on a US-based revolving loan in the oil and gas sector based on the valuation of reserves, partially offset by a write-off in the supermarket sector in Europe. Additionally, the increase in allowance for loan losses reflects higher market-implied PDs and an

increase in the loss emergence period parameter. In Swiss Universal Bank, the decrease in allowance for loan losses of CHF 17 million mainly reflected write-offs in the commodity trade finance, the large Swiss corporates, consumer finance and the small and medium-sized enterprises business areas, partially offset by new provisions in the small and medium-sized enterprises, the consumer finance and the commodity trade finance business areas. In Asia Pacific, the decrease in allowance for loan losses of CHF 8 million mainly reflected the write-off of four lombard loans in Hong Kong and an Indian infrastructure development company, partially offset by a new provision on an Indonesian share-backed loan based on collateral fair value. Additionally, the increase in allowance for loan losses reflects higher market-implied PDs. At the beginning of 2019, the allowance for loan losses of CHF 56 million on the residual loan portfolio as of the end of 2018 in the Strategic Resolution Unit was transferred to the Corporate Center.

Loan metrics

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit ¹	Corporate Center ¹	Credit Suisse
2019 (%)								
Non-performing and non-interest-earning loans / Gross loans	0.4	1.0	0.4	0.3	0.9	–	6.5	0.5
Gross impaired loans / Gross loans	0.5	1.4	0.4	0.7	1.6	–	12.7	0.7
Allowance for loan losses / Gross loans	0.3	0.3	0.2	0.7	1.4	–	5.5	0.3
Specific allowance for loan losses / Gross impaired loans	39.3	16.9	13.9	32.9	27.3	–	42.5	28.6
2018 (%)								
Non-performing and non-interest-earning loans / Gross loans	0.4	1.1	0.5	0.3	0.8	9.2	0.0	0.5
Gross impaired loans / Gross loans	0.6	1.6	0.5	0.5	1.0	20.8	0.0	0.8
Allowance for loan losses / Gross loans	0.3	0.3	0.2	0.7	1.5	7.7	0.0	0.3
Specific allowance for loan losses / Gross impaired loans	38.4	10.9	25.4	62.8	66.7	36.4	–	27.7

Gross loans and gross impaired loans exclude loans carried at fair value and the allowance for loan losses is only based on loans that are not carried at fair value.

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit within the Corporate Center.

Derivative instruments

The Group enters into derivative contracts in the normal course of business for market making, positioning and arbitrage purposes, as well as for our own risk management needs, including mitigation of interest rate, foreign exchange and credit risk.

Derivatives are either privately negotiated OTC contracts or standard contracts transacted through regulated exchanges. The most frequently used derivative products include interest rate swaps, cross-currency swaps and credit default swaps (CDS), interest rate and foreign exchange options, foreign exchange forward contracts, and foreign exchange and interest rate futures.

The replacement values of derivative instruments correspond to their fair values at the dates of the consolidated balance sheets and arise from transactions for the account of individual customers and for our own account. Positive replacement values (PRV) constitute an asset, while negative replacement values (NRV) constitute a liability. Fair value does not indicate future gains or losses, but rather premiums paid or received for a derivative instrument at inception, if applicable, and unrealized gains and losses from marking to market

all derivatives at a particular point in time. The fair values of derivatives are determined using various methodologies, primarily observable market prices where available and, in their absence, observable market parameters for instruments with similar characteristics and maturities, net present value analysis or other pricing models as appropriate.

The following table illustrates how credit risk on derivatives receivables is reduced by the use of legally enforceable netting agreements and collateral agreements. Netting agreements allow us to net balances from derivative assets and liabilities transacted with the same counterparty when the netting agreements are legally enforceable. Replacement values are disclosed net of such agreements in the consolidated balance sheets. Collateral agreements are entered into with certain counterparties based upon the nature of the counterparty and/or the transaction and require the placement of cash or securities with us as collateral for the underlying transaction. The carrying values of derivatives are presented in accordance with generally accepted accounting standards in the US and are not comparable with the derivatives metrics presented in our disclosures required under Pillar 3 of the Basel framework.

Derivative instruments by maturity

end of / due within	2019				2018			
	Less than 1 year	1 to 5 years	More than 5 years	Positive replacement value	Less than 1 year	1 to 5 years	More than 5 years	Positive replacement value
CHF billion								
Interest rate products	6.1	18.1	44.3	68.5	8.0	19.1	42.6	69.7
Foreign exchange products	11.7	5.6	4.7	22.0	14.8	7.5	5.6	27.9
Equity/index-related products	6.4	5.3	0.3	12.0	5.5	5.8	0.2	11.5
Credit derivatives	0.5	4.7	1.0	6.2	0.6	2.9	1.9	5.4
Other products ¹	0.4	0.0	1.0	1.4	0.7	0.0	1.0	1.7
OTC derivative instruments	25.1	33.7	51.3	110.1	29.6	35.3	51.3	116.2
Exchange-traded derivative instruments				5.7				12.2
Netting agreements ²				(97.9)				(110.1)
Total derivative instruments				17.9				18.3
of which recorded in trading assets				17.7				18.3
of which recorded in other assets				0.2				0.0

¹ Primarily precious metals, commodity and energy products.

² Taking into account legally enforceable netting agreements.

Derivative transactions exposed to credit risk are subject to a credit request and approval process, ongoing credit and counterparty monitoring and a credit quality review process. The

following table represents the rating split of our credit exposure from derivative instruments.

Derivative instruments by counterparty credit rating

end of	2019	2018
CHF billion		
AAA	1.2	1.3
AA	6.5	5.9
A	2.4	3.3
BBB	4.8	5.5
BB or lower	2.2	1.7
OTC derivative instruments	17.1	17.7
Exchange-traded derivative instruments ¹	0.8	0.6
Total derivative instruments ¹	17.9	18.3

¹ Taking into account legally enforceable netting agreements.

Derivative instruments by maturity and by counterparty credit rating for the Bank are not materially different, neither in absolute amounts nor in terms of movements, from the information for the Group presented above.

Derivative instruments are categorized as exposures from trading activities (trading) and those qualifying for hedge accounting (hedging). Trading includes activities relating to market making, positioning and arbitrage. It also includes economic hedges where the Group enters into derivative contracts for its own risk management purposes, but where the contracts do not qualify for hedge accounting under US GAAP. Hedging includes contracts that qualify for hedge accounting under US GAAP, such as fair value hedges, cash flow hedges and net investment hedges.

→ Refer to "Note 27 – Offsetting of financial assets and financial liabilities" in VI – Consolidated financial statements – Credit Suisse Group for further information on offsetting of derivatives.

→ Refer to "Note 32 – Derivatives and hedging activities" in VI – Consolidated financial statements – Credit Suisse Group for further information on derivatives, including an overview of derivatives by products categorized for trading and hedging purposes.

Forwards and futures

The Group enters into forward purchase and sale contracts for mortgage-backed securities, foreign currencies and commitments to buy or sell commercial and residential mortgages. In addition, we enter into futures contracts on equity-based indices and other financial instruments, as well as options on futures contracts. These contracts are typically entered into to meet the needs of customers, for trading and for hedging purposes.

On forward contracts, the Group is exposed to counterparty credit risk. To mitigate this credit risk, we limit transactions by counterparty, regularly review credit limits and adhere to internally established credit extension policies.

For futures contracts and options on futures contracts, the change in the market value is settled with a clearing broker in cash each day. As a result, our credit risk with the clearing broker is limited to the net positive change in the market value for a single day.

Swaps

Swap agreements consist primarily of interest rate swaps, CDS, currency and equity swaps. The Group enters into swap agreements for trading and risk management purposes. Interest rate swaps are contractual agreements to exchange interest rate payments based on agreed upon notional amounts and maturities. CDS are contractual agreements in which the buyer of the swap pays a periodic fee in return for a contingent payment by the seller of the swap following a credit event of a reference entity. A credit event is commonly defined as bankruptcy, insolvency, receivership, material adverse restructuring of debt, or failure to meet payment obligations when due. Currency swaps are contractual agreements to exchange payments in different currencies based on agreed notional amounts and currency pairs. Equity swaps are contractual agreements to receive the appreciation or depreciation in value based on a specific strike price on an equity instrument in exchange for paying another rate, which is usually based on an index or interest rate movements.

Options

We write options specifically designed to meet the needs of customers and for trading purposes. These written options do not expose us to the credit risk of the customer because, if exercised, we and not our counterparty are obligated to perform. At the beginning of the contract period, we receive a cash premium. During the contract period, we bear the risk of unfavorable changes in the value of the financial instruments underlying the options. To manage this market risk, we purchase or sell cash or derivative financial instruments. Such purchases and sales may include debt and equity securities, forward and futures contracts, swaps and options.

We also purchase options to meet customer needs, for trading purposes and for hedging purposes. For purchased options, we obtain the right to buy or sell the underlying instrument at a fixed price on or before a specified date. During the contract period, our risk is limited to the premium paid. The underlying instruments for these options typically include fixed income and equity securities, foreign currencies and interest rate instruments or indices. Counterparties to these option contracts are regularly reviewed in order to assess creditworthiness.

Selected European credit risk exposures

The scope of our disclosure of European credit risk exposure includes all countries of the EU which are rated below AA or its equivalent by at least one of the three major rating agencies and where our gross exposure exceeds our quantitative threshold of EUR 0.5 billion. We believe this external rating is a useful measure in determining the financial ability of countries to meet their financial obligations, including giving an indication of vulnerability to adverse business, financial and economic conditions.

Monitoring of selected European credit risk exposures

The Group's credit risk exposure to these European countries is managed as part of our overall risk management process. The Group makes use of country limits and performs scenario analyses on a regular basis, which include analyses of our indirect sovereign credit risk exposures from our exposures to selected European financial institutions. This assessment of indirect sovereign credit risk exposures includes analysis of publicly available disclosures of counterparties' exposures to the European countries within the defined scope of our disclosure. We monitor the concentration of collateral underpinning our OTC derivative and reverse repurchase agreement exposures through monthly reporting, and also monitor the impact of sovereign rating downgrades on collateral eligibility. Strict limits on sovereign collateral from G7 and non-G7 countries are monitored monthly. Similar disclosure is part of our regular risk reporting to regulators.

As part of our global scenario framework, the counterparty credit risk stress testing framework measures counterparty exposure under scenarios calibrated to the 99th percentile for the worst one month and one year moves observed in the available history, as well as the absolutely worst weekly move observed in the same dataset. The scenario results are aggregated at the counterparty level for all our counterparties, including all European countries to which we have exposure. Furthermore, counterparty default scenarios are run where specific entities are set to default. In one of these scenarios, a European sovereign default is investigated. This scenario determines the maximum exposure that we have to this country in the event of its default and serves to identify those counterparties where exposure will rise substantially as a result of the modeled country defaulting.

The scenario framework also considers a range of other severe scenarios, including a specific eurozone crisis scenario which assumes the default of selected European countries, currently modeled to include Greece, Ireland, Italy, Portugal and Spain. It is assumed that the sovereigns, financial institutions and corporates within these countries default, with a 100% loss of sovereign and financial institutions exposures and a 0% to 100% loss of corporates depending on their credit ratings. As part of this scenario, we additionally assume a severe market sell-off involving an equity market crash, widening credit spreads, a rally in the price of gold and a devaluation of the euro. In addition, the eurozone crisis scenario assumes the default of a small number of our market counterparties that we believe would be severely affected by a default across the selected European countries. These counterparties are assumed to default as we believe that they would be the most affected institutions because of their direct presence in the relevant countries and their direct exposures. Through these processes, revaluation and redenomination risks on our exposures are considered on a regular basis by our risk management function.

Presentation of selected European credit risk exposures

The basis for the presentation of the country exposure is our internal risk domicile view. The risk domicile view is based on the domicile of the legal counterparty, i.e., it may include exposure to a legal entity domiciled in the reported country even if its parent is located outside of the country.

The credit risk exposure in the table is presented on a risk-based view before deduction of any related allowance for loan losses. We present our credit risk exposure and related risk mitigation for the following distinct categories:

- *Gross credit risk exposure* includes the principal amount of loans drawn, letters of credit issued and undrawn portions of committed facilities, the PRV of derivative instruments after consideration of legally enforceable netting agreements, the notional value of investments in money market funds and the market values of securities financing transactions and the debt cash trading portfolio (short-term securities) netted at the issuer level.
- *Risk mitigation* includes CDS and other hedges, at their net notional amount, guarantees, insurance and collateral (primarily cash, securities and, to a lesser extent, real estate, mainly for exposures of our private banking, corporate and institutional businesses to corporates & other). Collateral values applied for the calculation of the net exposure are determined in accordance with our risk management policies and reflect applicable margining considerations.
- *Net credit risk exposure* represents gross credit risk exposure net of risk mitigation.
- *Inventory* represents the long inventory positions in trading and non-trading physical debt and synthetic positions, each at market value, all netted at the issuer level. Physical debt is non-derivative debt positions (e.g., bonds), and synthetic positions are created through OTC contracts (e.g., CDS purchased and/or sold and total return swaps).

CDS presented in the risk mitigation column are purchased as a direct hedge to our OTC exposure and the risk mitigation impact is considered to be the notional amount of the contract for risk purposes, with the mark-to-market fair value of CDS risk-managed against the protection provider. Net notional amounts of CDS reflect the notional amount of CDS protection purchased less the notional amount of CDS protection sold and are based on the origin of the CDS reference credit, rather than that of the CDS counterparty. CDS included in the inventory column represent contracts recorded in our trading books that are hedging the credit risk of the instruments included in the inventory column and are disclosed on the same basis as the value of the fixed income instrument they are hedging.

The Group does not have any tranching CDS positions on these European countries and only an insignificant amount of indexed credit derivatives is included in inventory.

The credit risk of CDS contracts themselves, i.e., the risk that the CDS counterparty will not perform in the event of a default, is managed separately from the credit risk of the reference credit. To mitigate such credit risk, generally all CDS contracts

are collateralized. In addition, they are executed with counterparties with whom we have an enforceable International Swaps and Derivatives Association (ISDA) master agreement that provides for daily margining.

Selected European credit risk exposures

	Gross credit risk exposure	Risk mitigation		Net credit risk exposure	Inventory ²	Net synthetic inventory ³	Total credit risk exposure	
		CDS	Other ¹				Gross	Net
December 31, 2019								
Cyprus (EUR million)								
Sovereign	0	0	0	0	1	0	1	1
Financial institutions	14	0	14	0	1	0	15	1
Corporates & other	1,495	0	1,188	307	0	0	1,495	307
Total	1,509	0	1,202	307	2	0	1,511	309
Greece								
Sovereign	59	59	0	0	0	(9)	59	0
Financial institutions	256	0	255	1	0	0	256	1
Corporates & other	543	0	451	92	4	1	547	96
Total	858	59	706	93	4	(8)	862	97
Ireland								
Sovereign	1,443	0	0	1,443	0	(6)	1,443	1,443
Financial institutions	1,634	0	260	1,374	24	(46)	1,658	1,398
Corporates & other	888	0	336	552	19	(353)	907	571
Total	3,965	0	596	3,369	43	(405)	4,008	3,412
Italy								
Sovereign	522	108	41	373	72	72	594	445
Financial institutions	823	0	409	414	90	(39)	913	504
Corporates & other	3,572	119	2,911	542	92	(145)	3,664	634
Total	4,917	227	3,361	1,329	254	(112)	5,171	1,583
Malta								
Financial institutions	89	0	0	89	0	0	89	89
Corporates & other	555	0	520	35	3	3	558	38
Total	644	0	520	124	3	3	647	127
Portugal								
Sovereign	0	0	0	0	25	24	25	25
Financial institutions	390	0	272	118	15	0	405	133
Corporates & other	247	3	204	40	1	(161)	248	41
Total	637	3	476	158	41	(137)	678	199
Spain								
Sovereign	392	0	0	392	0	(65)	392	392
Financial institutions	1,162	10	723	429	54	(32)	1,216	483
Corporates & other	1,896	0	1,290	606	100	(4)	1,996	706
Total	3,450	10	2,013	1,427	154	(101)	3,604	1,581
Total								
Sovereign	2,416	167	41	2,208	98	16	2,514	2,306
Financial institutions	4,368	10	1,933	2,425	184	(117)	4,552	2,609
Corporates & other	9,196	122	6,900	2,174	219	(659)	9,415	2,393
Total	15,980	299	8,874	6,807	501	(760)	16,481	7,308

¹ Includes other hedges (derivative instruments), guarantees, insurance and collateral.

² Represents long inventory positions netted at issuer level.

³ Substantially all of which results from CDS; represents long positions net of short positions.

Development of selected European credit risk exposures

On a gross basis, before taking into account risk mitigation, our risk-based sovereign credit risk exposure to Cyprus, Croatia, Greece, Ireland, Italy, Malta, Portugal and Spain decreased 25% to EUR 2,514 million as of December 31, 2019, compared to EUR 3,350 million as of December 31, 2018. Our net exposure to these sovereigns was EUR 2,306 million, 13% lower compared to EUR 2,640 million as of December 31, 2018. Our non-sovereign risk-based credit risk exposure in these countries as of December 31, 2019 included net exposures to financial institutions of EUR 2,609 million, 6% higher compared to December 31, 2018, and net exposures to corporates and other counterparties of EUR 2,393 million, 17% lower compared to December 31, 2018. As of December 31, 2019, we had no credit risk exposure to Croatia.

A significant majority of the purchased credit protection is transacted with central counterparties or banks outside of the disclosed countries. For credit protection purchased from central counterparties or banks in the disclosed countries, such credit risk is reflected in the gross and net exposure to each respective country.

Sovereign debt rating developments

From year-end 2018 through February 29, 2020, the long-term sovereign debt ratings of the countries listed in the table changed as follows: Standard & Poor's increased Croatia's rating from BB+ to BBB-, increased Greece's rating from B+ to BB-, increased Ireland's rating from A+ to AA-, increased Portugal's rating from BBB- to BBB and increased Spain's rating from

A- to A. Fitch increased Croatia's rating from BB+ to BBB- and increased Greece's rating from BB- to BB. Moody's increased the Czech Republic's rating from A1 to AA3, increased Greece's rating from B3 to B1 and increased Malta's rating from A3 to A2. These rating changes did not have a significant impact on the Group's financial position, result of operations, liquidity or capital resources.

Market risk

Trading book

Development of trading book risks

The tables entitled "One-day, 98% trading book risk management VaR" and "Average one-day, 98% trading book risk management VaR by division" show our trading book market risk exposure, as measured by one-day, 98% risk management VaR in Swiss francs and US dollars. As we measure trading book VaR for internal risk management purposes using the US dollar as the base currency, the VaR figures were translated into Swiss francs using daily foreign exchange translation rates. VaR estimates are computed separately for each risk type and for the whole portfolio. The different risk types are grouped into five categories including interest rate, credit spread, foreign exchange, commodity and equity risks.

We regularly review our VaR model to ensure that it remains appropriate given evolving market conditions and the composition of our trading portfolio. In 2019, there were no material changes to our VaR methodology.

Average one-day, 98% trading book risk management VaR by division

in	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Strategic Resolution Unit ¹	Corporate Center ¹	Diversi- fication benefit ²	Credit Suisse
CHF million								
2019	0	2	10	23	–	3	(11)	27
2018	0	2	15	22	3	0	(13)	29
2017	0	4	13	21	6	0	(18)	26
USD million								
2019	0	2	10	24	–	3	(12)	27
2018	0	2	15	23	4	0	(15)	29
2017	0	4	13	21	6	0	(18)	26

Excludes risks associated with counterparty and own credit exposures. Investment Banking & Capital Markets has only banking book positions.

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit within the Corporate Center.

² Difference between the sum of the standalone VaR for each division and the VaR for the Group.

One-day, 98% trading book risk management VaR

in / end of	Interest rate	Credit spread	Foreign exchange	Commodity	Equity	Diversification benefit ¹	Total
CHF million							
2019							
Average	16	22	4	2	10	(27)	27
Minimum	7	17	2	1	7	- ²	21
Maximum	34	34	9	3	16	- ²	32
End of period	19	22	3	1	9	(29)	25
2018							
Average	17	20	4	1	11	(24)	29
Minimum	11	17	3	1	8	- ²	22
Maximum	26	23	14	2	24	- ²	36
End of period	16	19	3	1	14	(23)	30
2017							
Average	16	19	6	2	10	(27)	26
Minimum	11	16	4	1	8	- ²	21
Maximum	23	23	12	6	13	- ²	31
End of period	15	19	5	1	10	(22)	28
USD million							
2019							
Average	16	22	4	2	10	(27)	27
Minimum	8	16	2	1	7	- ²	21
Maximum	34	34	9	3	16	- ²	33
End of period	19	23	3	1	9	(29)	26
2018							
Average	18	20	5	1	12	(27)	29
Minimum	11	17	3	1	9	- ²	22
Maximum	26	24	14	3	24	- ²	36
End of period	16	19	3	1	14	(23)	30
2017							
Average	16	19	6	2	10	(27)	26
Minimum	11	17	4	1	8	- ²	22
Maximum	23	23	12	7	13	- ²	33
End of period	15	19	5	1	10	(21)	29

Excludes risks associated with counterparty and own credit exposures.

¹ Diversification benefit represents the reduction in risk that occurs when combining different, not perfectly correlated risk types in the same portfolio and is measured as the difference between the sum of the individual risk types and the risk calculated on the combined portfolio.

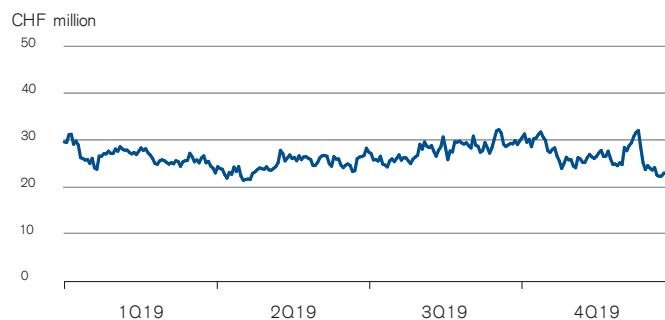
² As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit.

We measure VaR in US dollars, as the majority of our trading activities are conducted in US dollars.

Period-end risk management VaR of USD 26 million as of December 31, 2019 decreased 13% compared to USD 30 million as of December 31, 2018, mainly due to the equities profile in Global Markets and Asia Pacific and reduced rates risk in Asia Pacific. Average risk management VaR of USD 27 million in 2019 decreased 7% compared to 2018.

The chart entitled "Daily trading book risk management VaR" shows the aggregated market risk in our trading book on a consolidated basis.

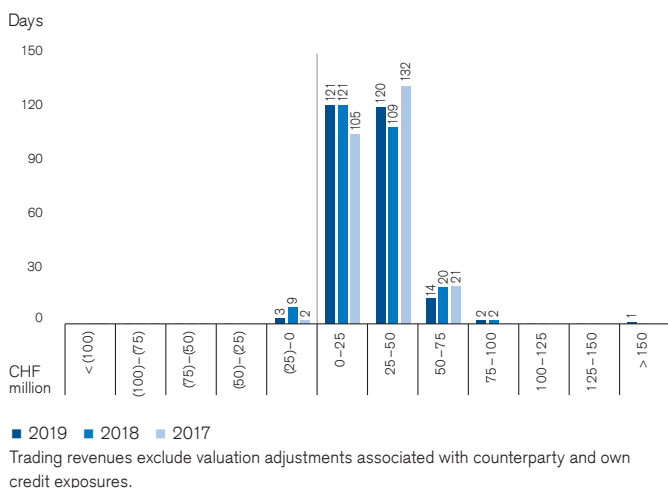
Daily trading book risk management VaR



Excludes risks associated with counterparty and own credit exposures.

The histogram entitled “Actual daily trading revenues” compares the actual daily trading revenues for 2019 with those for 2018 and 2017. The dispersion of trading revenues indicates the day-to-day volatility in our trading activities. In 2019, we had three trading loss days compared to nine trading loss days in 2018, each with a trading loss not exceeding CHF 25 million.

Actual daily trading revenues



For capital purposes and in line with BIS requirements, FINMA increases the capital multiplier for every regulatory VaR backtesting exception above four in the prior rolling 12-month period, resulting in an incremental market risk capital requirement for the

Group. For 2019 we had no backtesting exceptions in our regulatory VaR model, compared to one backtesting exception in 2018 and no backtesting exceptions in 2017, remaining in the regulatory “green zone” for all three periods.

→ Refer to “Risk-weighted assets” in Capital management for further information on the use of our regulatory VaR model in the calculation of trading book market risk capital requirements.

Banking book

Development of banking book interest rate risks

Interest rate risk on banking book positions is measured by estimating the impact resulting from a one basis point parallel increase in yield curves on the present value of interest rate-sensitive banking book positions. This is measured on the Group’s entire banking book. Interest rate risk sensitivities disclosed below are in line with our internal risk management view.

→ Refer to credit-suisse.com/regulatorydisclosures for the Group’s publication “Pillar 3 and regulatory disclosures – Credit Suisse Group AG” which includes additional information on regulatory interest rate risk in the banking book in accordance with the new FINMA rules, effective since January 1, 2019.

As of December 31, 2019, the interest rate sensitivity of a one basis point parallel increase in yield curves was negative CHF 4.0 million, compared to negative CHF 1.5 million as of December 31, 2018. The change was mainly driven by exposure movements related to private banking activities in Switzerland and increased volumes in net interest income hedging activities driven by the alignment of the Group’s capital hedging strategy in connection with the change in the calculation of the Group’s risk-weighted assets relating to operational risk to use US dollars instead of Swiss francs.

One basis point parallel increase in yield curves by currency – banking book positions

end of	CHF	USD	EUR	GBP	Other	Total
2019 (CHF million)						
Impact on present value	(1.8)	(2.1)	0.0	(0.2)	0.1	(4.0)
2018 (CHF million)						
Impact on present value	0.0	(1.6)	0.1	(0.1)	0.1	(1.5)

Interest rate risk on banking book positions is also assessed using other measures, including the potential value change resulting from a significant change in yield curves. The table “Interest rate scenario results – banking book positions” shows the impact of immediate 100 basis point and 200 basis point moves in the yield curves.

As of December 31, 2019, the most adverse impact of a 200 basis point upward or downward move in yield curves on the present value of banking book positions was a loss of CHF 628 million, compared to a loss of CHF 183 million as of December 31, 2018, primarily driven by the impact of the alignment of the Group’s capital hedging strategy.

Interest rate scenario results – banking book positions

end of	CHF	USD	EUR	GBP	Other	Total
2019 (CHF million)						
Increase (+)/decrease (-) in interest rates						
+200 bp	(335)	(337)	58	(28)	14	(628)
+100 bp	(175)	(187)	13	(15)	8	(356)
-100 bp	192	223	17	17	(9)	440
-200 bp	400	481	65	34	(17)	963
2018 (CHF million)						
Increase (+)/decrease (-) in interest rates						
+200 bp	17	(266)	61	(8)	13	(183)
+100 bp	6	(145)	20	(5)	7	(117)
-100 bp	0	169	0	7	(9)	167
-200 bp	6	362	20	15	(18)	385

Development of banking book equity risks

The Group's equity portfolios of the banking book include positions in private equity, hedge funds, strategic investments and other instruments. These positions may not be strongly correlated with general equity markets. Equity risk on banking book positions is measured using sensitivity analysis that estimates the potential change in value resulting from a 10% decline in the equity markets of developed nations and a 20% decline in the equity markets of emerging market nations. The estimated impact of this scenario would have been a decrease of CHF 330 million in the value of the banking book portfolio as of December 31, 2019, compared to a decrease of CHF 312 million as of December 31, 2018.

Development of banking book commodity risks

The Group's commodity portfolios of the banking book include mainly precious metals, primarily gold. Commodity risk on banking

book positions is measured using sensitivity analysis that estimates the potential change in value resulting from a 20% weakening in commodity prices. The estimated impact of this scenario on the value of the banking book portfolio would have been a decrease of CHF 0.2 million and CHF 0.1 million as of December 31, 2019 and 2018, respectively.

Credit and debit valuation adjustments

VaR excludes the impact of changes in both counterparty and our own credit spreads on derivative products. As of December 31, 2019, the estimated sensitivity implies that a one basis point increase in credit spreads, both counterparty and our own, would have resulted in a CHF 1.2 million gain on the overall derivatives position in our trading businesses. In addition, a one basis point increase in our own credit spread on our fair valued structured notes portfolio (including the impact of hedges) would have resulted in a CHF 15.3 million gain as of December 31, 2019.

Balance sheet and off-balance sheet

As of the end of 2019, total assets of CHF 787.3 billion increased 2% and total liabilities of CHF 743.6 billion increased 3% compared to the end of 2018, primarily reflecting higher operating activities, partially offset by a negative foreign exchange translation impact.

The majority of our transactions are recorded on our balance sheet. However, we also enter into transactions that give rise to both on and off-balance sheet exposure.

Balance sheet

Total assets were CHF 787.3 billion as of the end of 2019, an increase of CHF 18.4 billion, or 2%, compared to the end of 2018. Excluding the foreign exchange translation impact, total assets increased CHF 26.7 billion. Trading assets increased CHF 20.2 billion, or 15%, primarily reflecting increases in debt and equity securities, partially offset by the foreign exchange translation impact. Net loans increased CHF 9.2 billion, or 3%, mainly due to higher loans to the real estate sector, higher loans collateralized

by securities, higher loans to financial institutions and higher consumer mortgages, partially offset by the foreign exchange translation impact. Cash and due from banks increased CHF 1.8 billion, or 2%, mainly driven by higher cash positions at the Fed, the SNB and the ECB, partially offset by a decrease in US treasury bills. Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions decreased CHF 10.1 billion, or 9%, primarily due to a decrease in cash collateral, a decrease in reverse repurchase transactions from banks and the foreign exchange translation impact, partially offset by an increase in reverse repurchase transactions from customers. Brokerage receivables decreased CHF 3.3 billion, or 8%, primarily due to a decrease in failed trades, lower futures balances and open trades with customers, partially offset by an increase in margin lending. All other assets were stable.

Balance sheet summary

	2019	2018	end of 2017	% change	
				19 / 18	18 / 17
Assets (CHF million)					
Cash and due from banks	101,879	100,047	109,815	2	(9)
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	106,997	117,095	115,346	(9)	2
Trading assets	153,797	133,635	156,715	15	(15)
Net loans	296,779	287,581	279,149	3	3
Brokerage receivables	35,648	38,907	46,968	(8)	(17)
All other assets	92,195	91,651	88,296	1	4
Total assets	787,295	768,916	796,289	2	(3)
Liabilities and equity (CHF million)					
Due to banks	16,744	15,220	15,413	10	(1)
Customer deposits	383,783	363,925	361,162	5	1
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	27,533	24,623	26,496	12	(7)
Trading liabilities	38,186	42,169	39,119	(9)	8
Long-term debt	152,005	154,308	173,032	(1)	(11)
Brokerage payables	25,683	30,923	43,303	(17)	(29)
All other liabilities	99,647	93,729	95,575	6	(2)
Total liabilities	743,581	724,897	754,100	3	(4)
Total shareholders' equity	43,644	43,922	41,902	(1)	5
Noncontrolling interests	70	97	287	(28)	(66)
Total equity	43,714	44,019	42,189	(1)	4
Total liabilities and equity	787,295	768,916	796,289	2	(3)

Total liabilities were CHF 743.6 billion as of the end of 2019, an increase of CHF 18.7 billion, or 3%, compared to the end of 2018. Excluding the foreign exchange translation impact, total liabilities increased CHF 26.4 billion. Customer deposits increased CHF 19.9 billion, or 5%, mainly due to an increase in certificates of deposits, partially offset by decreases in time and demand deposits and the foreign exchange translation impact. Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions increased CHF 2.9 billion, or 12%, mainly reflecting increases in federal funds purchased, repurchase transactions with banks and cash collateral, partially offset by a decrease in repurchase transactions with customers. Due to banks increased CHF 1.5 billion, or 10%, primarily reflecting an increase in time deposits. Brokerage payables decreased CHF 5.2 billion, or 17%, primarily due to decreases in margin lending with customers, failed trades and open trades with banks. Trading liabilities decreased CHF 4.0 billion, or 9%, primarily reflecting decreases in short positions and derivative instruments. Long-term debt was stable. All other liabilities increased CHF 5.9 billion, or 6%, primarily including an increase of CHF 6.5 billion, or 29%, in short-term borrowings, partially offset by a decrease of CHF 1.5 billion, or 4%, in obligation to return securities received as collateral.

→ Refer to "Liquidity and funding management" and "Capital management" for more information, including our funding of the balance sheet and the leverage ratio.

Off-balance sheet

We enter into off-balance sheet arrangements in the normal course of business. Off-balance sheet arrangements are transactions or other contractual arrangements with, or for the benefit of, an entity that we do not consolidate. These transactions include derivative instruments, guarantees and similar arrangements, retained or contingent interests in assets transferred to an unconsolidated entity in connection with our involvement with special purpose entities (SPEs), and obligations and liabilities (including contingent obligations and liabilities) under variable interests in unconsolidated entities that provide financing, liquidity, credit and other support.

Derivative instruments

We enter into derivative contracts in the normal course of business for market making, positioning and arbitrage purposes, as well as for our own risk management needs, including mitigation of interest rate, foreign exchange and credit risk.

→ Refer to "Derivative instruments" in Risk management – Risk portfolio analysis – Credit risk and "Note 32 – Derivatives and hedging activities" and "Note 35 – Financial instruments" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Guarantees and similar arrangements

In the ordinary course of business, guarantees and indemnifications are provided that contingently obligate us to make payments to a guaranteed or indemnified party based on changes in an asset, liability or equity security of the guaranteed or indemnified party. We may be contingently obligated to make payments to a guaranteed party based on another entity's failure to perform, or we may have an indirect guarantee of the indebtedness of others. Guarantees provided include, but are not limited to, customary indemnifications to purchasers in connection with the sale of assets or businesses; to investors in private equity funds sponsored by us regarding potential obligations of their employees to return amounts previously paid as carried interest; and to investors in our securities and other arrangements to provide gross-up payments if there is a withholding or deduction because of a tax assessment or other governmental charge.

In connection with the sale of assets or businesses, we sometimes provide the acquirer with certain indemnification provisions. These indemnification provisions vary by counterparty in scope and duration and depend upon the type of assets or businesses sold. They are designed to transfer the potential risk of certain unquantifiable and unknowable loss contingencies, such as litigation, tax and intellectual property matters, from the acquirer to the seller. We closely monitor all such contractual agreements in order to ensure that indemnification provisions are adequately provided for in our consolidated financial statements.

US GAAP requires disclosure of our maximum potential payment obligations under certain guarantees to the extent that it is possible to estimate them and requires recognition of a liability for the fair value of obligations undertaken for guarantees issued or amended after December 31, 2002.

→ Refer to "Note 33 – Guarantees and commitments" in VI – Consolidated financial statements – Credit Suisse Group for disclosure of our estimated maximum payment obligations under certain guarantees and related information.

Representations and warranties on residential mortgage loans sold

In connection with the Global Markets division's sale of US residential mortgage loans, we have provided certain representations and warranties relating to the loans sold. We have provided these representations and warranties relating to sales of loans to institutional investors, primarily banks, and non-agency, or private label, securitizations. The loans sold are primarily loans that we have purchased from other parties. The scope of representations and warranties, if any, depends on the transaction, but can include: ownership of the mortgage loans and legal capacity to sell the loans; loan-to-value ratios and other characteristics of the property, the borrower and the loan; validity of the liens securing the loans and absence of delinquent taxes or related liens; conformity to underwriting standards and completeness of documentation; and origination in compliance with law. If it is determined that representations and warranties were breached, we may be required to repurchase the related loans or indemnify the investors to make them whole for losses. Whether we will incur a loss in connection with repurchases and make whole payments depends on:

the extent to which claims are made; the validity of such claims made within the statute of limitations (including the likelihood and ability to enforce claims); whether we can successfully claim against parties that sold loans to us and made representations and warranties to us; the residential real estate market, including the number of defaults; and whether the obligations of the securitization vehicles were guaranteed or insured by third parties.

→ Refer to "Representations and warranties on residential mortgage loans sold" in Note 33 – Guarantees and commitments in VI – Consolidated financial statements – Credit Suisse Group for further information.

Involvement with special purpose entities

In the normal course of business, we enter into transactions with, and make use of, SPEs. An SPE is an entity in the form of a trust or other legal structure designed to fulfill a specific limited need of the company that organized it and is generally structured to isolate the SPE's assets from creditors of other entities, including the Group. The principal uses of SPEs are to assist us and our clients in securitizing financial assets and creating investment products. We also use SPEs for other client-driven activity, such as to facilitate financings, and for Group tax or regulatory purposes.

→ Refer to "Note 34 – Transfers of financial assets and variable interest entities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

From time to time, we may issue subordinated and senior securities through SPEs that lend the proceeds to the Group.

Contractual obligations and other commercial commitments

In connection with our operating activities, we enter into certain contractual obligations and commitments to fund certain assets. Our contractual obligations and commitments include short and long-term on-balance sheet obligations as well as future contractual interest payments and off-balance sheet obligations. Total obligations increased CHF 15.0 billion in 2019 to CHF 653.4 billion, primarily reflecting increases in customer deposits of CHF 19.9 billion to CHF 383.8 billion and in short-term borrowings of CHF 6.5 billion to CHF 28.4 billion. The increases were partially offset by decreases in brokerage payables of CHF 5.2 billion to CHF 25.7 billion, in trading liabilities of CHF 4.0 billion to CHF 38.2 billion and in long-term debt of CHF 2.3 billion to CHF 152.0 billion.

→ Refer to "Note 23 – Leases", "Note 25 – Long-term debt" and "Note 33 – Guarantees and commitments" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Contractual obligations and other commercial commitments

	2019				2018	
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total	Total
Payments due within						
On- and off-balance sheet obligations (CHF million)						
Due to banks	16,734	0	10	0	16,744	15,220
Customer deposits	382,369	685	27	702	383,783	363,925
Short-term borrowings	28,385	0	0	0	28,385	21,926
Long-term debt ¹	23,896	37,021	33,559	57,529	152,005 ²	154,308 ²
Contractual interest payments ³	814	802	584	515	2,715 ⁴	3,561
Trading liabilities	38,186	0	0	0	38,186	42,169
Brokerage payables	25,683	0	0	0	25,683	30,923
Operating lease obligations	468	758	622	1,963	3,811	4,251 ⁵
Purchase obligations	895	700	306	152	2,053	2,040
Total obligations ⁶	517,430	39,966	35,108	60,861	653,365	638,323

¹ Refer to "Debt issuances and redemptions" in Liquidity and funding management – Funding management and "Note 25 – Long-term debt" in VI – Consolidated financial statements – Credit Suisse Group for further information on long-term debt.

² Includes non-recourse liabilities from consolidated VIEs of CHF 1,671 million and CHF 1,764 million as of December 31, 2019 and 2018, respectively.

³ Includes interest payments on fixed rate long-term debt, fixed rate interest-bearing deposits (excluding demand deposits) and fixed rate short-term borrowings, which have not been effectively converted to variable rate on an individual instrument level through the use of swaps.

⁴ Due to the non-determinable nature of interest payments, the following notional amounts have been excluded from the table: variable rate long-term debt of CHF 66,486 million, variable rate short-term borrowings of CHF 25,920 million, variable rate interest-bearing deposits and demand deposits of CHF 140,782 million, fixed rate long-term debt and fixed rate interest-bearing deposits converted to variable rate on an individual instrument level through the use of swaps of CHF 76,786 million and CHF 745 million, respectively.

⁵ Upon adoption of ASU 2016-02 and its subsequent amendments on January 1, 2019, the Group revised the future operating lease commitments to reflect the expected term of the leases. Previously, the operating lease commitments were based on the minimum contractual term of the lease.

⁶ Excludes total accrued benefit liability for pension and other post-retirement benefit plans of CHF 446 million and CHF 508 million as of December 31, 2019 and 2018, respectively, recorded in other liabilities in the consolidated balance sheets, as the accrued liability does not represent expected liquidity needs. Refer to "Note 31 – Pension and other post-retirement benefits" in VI – Consolidated financial statements – Credit Suisse Group for further information on pension and other post-retirement benefits.

IV – Corporate Governance

Overview	178
Shareholders	182
Board of Directors	188
Executive Board	210
Additional information	220

Corporate Governance

During 2019, the Group's corporate governance framework was largely stable, while a number of changes were made to the constitution of the Executive Board, most notably the appointment of a new Group CEO in February 2020.

Overview

The Group's corporate governance reflects our commitment to safeguarding the interests of our stakeholders. Our corporate governance complies with internationally accepted standards, and we recognize the importance of good corporate governance. We know that transparent disclosure of our governance helps stakeholders assess the quality of the Group's corporate governance and assists investors in their investment decisions.

Corporate Governance developments

The key corporate governance developments for the Group in 2019 and in early 2020 included:

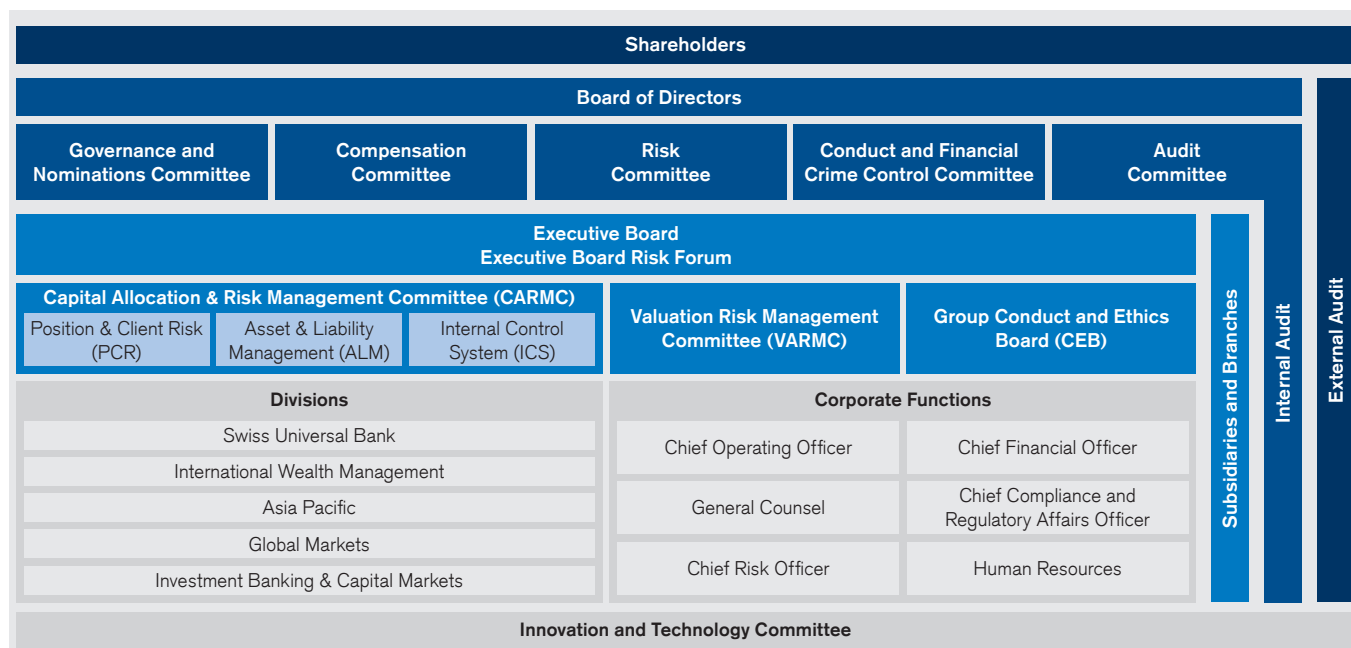
- The resignation of Group Chief Executive Officer (CEO) Tidjane Thiam and the Board's appointment of Thomas Gottstein as new CEO effective February 14, 2020;
- The selection and nomination of Board member candidate Richard Meddings for election at the 2020 AGM, a chartered accountant and recognized financial expert with over 30 years of experience in the financial services sector and experience chairing the audit and risk committees at listed companies, and the announcement that Alexander Gut will not stand for re-election at the 2020 AGM;
- A number of changes to the Executive Board, covering the appointments of Lara Warner as Chief Risk Officer, Lydie Hudson as Chief Compliance Officer (Chief Compliance and Regulatory Affairs Officer since an organizational change on March 5, 2020) and Antoinette Poschung as Global Head of Human Resources, all effective February 26, 2019, followed by the appointments of Philipp Wehle as CEO International Wealth Management (effective July 1, 2019), James Walker as Chief Operating Officer (effective October 1, 2019), David Miller as CEO Investment Banking & Capital Markets (effective November 11, 2019) and André Helfenstein as CEO Swiss Universal Bank (effective February 14, 2020);
- The election of two new Group Board of Directors (Board) members, Christian Gellerstad and Shan Li, at the 2019 Annual General Meeting (AGM), adding to the Board's financial services industry expertise, in particular with respect to global wealth management and the Asian financial services markets;
- The successful set-up and operation of the Group Conduct and Financial Crime Control Committee, effective as of

January 1, 2019, which oversees the Group's financial crime compliance programs and related initiatives;

- Enhancements to the Executive Board Risk Committee structure to facilitate more effective oversight of top level risk issues, including the introduction of an Executive Board Risk Forum and certain modifications to the three cycles of the Capital Allocation & Risk Management Committee; and
- Preparations for the transition of the Group's external auditor from KPMG AG (KPMG) to PricewaterhouseCoopers AG (PwC), effective for the fiscal year ending December 31, 2020; the Board will propose PwC to succeed KPMG as the Group's new statutory auditor at the 2020 AGM.

We regularly monitor developments in corporate governance guidelines, regulations and best practice standards in all jurisdictions relevant to our business operations. In 2019, the Swiss parliament continued to debate the proposed revisions to Swiss company law, which include proposals that impact executive compensation, such as transferring the regulations of the Swiss Ordinance Against Excessive Compensation with respect to Listed Corporations (Compensation Ordinance, OAEC) into a Federal Act, shareholder meetings and gender diversity at the board and executive board levels. Specific measures include guidelines for representation of each gender on the board of directors and executive board of listed companies of at least 30% and 20% respectively. Listed companies will have a transitional period of five years to comply with the gender guidelines for the board of directors and ten years for the implementation at the level of the executive board. There will be no sanctions for non-compliance, but disclosure obligations will apply ("comply or explain"). On January 1, 2019, reporting against the UK Financial Reporting Council Wates Corporate Governance Principles for Large Private Companies (Wates Principles), a new code for corporate governance of large UK private companies, became effective. The six principles include purpose and leadership, board composition, board responsibilities, opportunity and risk, remuneration and stakeholder relationships and engagement. The Wates Principles are applicable to, but not mandatory for, large, unlisted UK-based companies, including the Group's UK subsidiaries. Two of the Group's major subsidiaries in the UK, Credit Suisse International and Credit Suisse Securities (Europe) Limited, have adopted the Wates Principles for the purposes of their 2019 annual reporting.

Corporate Governance Framework



Governance of crisis management

The Group has a crisis management framework and robust governance processes in place to enable the effective management of crisis situations. The crisis management framework includes the implementation of global and regional Crisis Assessment Teams (CAT) and Crisis Management Teams (CMT) consisting of representatives from senior management and specialist functions from across the firm. The Global CAT assesses the impact of a specific crisis event to the firm on a global level and provides recommendations for final decisions to the Global CMT, whose members include all members of the Executive Board. In the case of a specific crisis event, firm-wide business continuity management response measures are triggered and overseen by the Executive Board. Such an event could include, for example, a sovereign crisis, large single name default, cyber or other operational incident and global macroeconomic or market event or public health crisis, such as the COVID-19 outbreak. Once the crisis management process is invoked, multiple response measures are triggered, including Group crisis specific risk reporting, if necessary, and other potential steps, such as notification of regulators. In February 2020, in response to the COVID-19 outbreak in countries and regions in which the Group operates, the Executive Board invoked our crisis management process and put in place various response measures in order to ensure continuity of our business operations and protect the health and safety of our employees, including travel restrictions, a quarantine protocol, guidelines for client meetings and employee gatherings and certain changes to the daily operations of critical processes. The Board is involved in the ongoing monitoring of the Group's response to the current market volatility and operational challenges, including business continuity management and the effectiveness of the crisis mitigation measures put in place, and engages in regular dialogue with the Executive Board regarding these matters.

Corporate Governance framework

The Group's corporate governance framework consists of its governing bodies and its corporate governance policies and procedures, which define the competencies of the governing bodies and other corporate governance rules, as well as the practices to be followed throughout the Group, in line with Swiss corporate law and international best practice standards for corporate governance. The governing bodies of the Group are:

- the General Meeting of Shareholders;
- the Board of Directors;
- the Executive Board; and
- the external auditors.

The shareholders elect the members of the Board and the external auditors on an annual basis and approve required resolutions at the AGM, such as the consolidated financial statements, capital increases and Board and Executive Board compensation. The Board is responsible for the overall strategic direction, supervision and control of the Group and appoints the members of the Executive Board. The Executive Board is responsible for the day-to-day operational management of the Group's business and for developing and implementing business plans.

The Group is engaged in the banking business and is structured into five business divisions – Swiss Universal Bank; International Wealth Management; Asia Pacific; Global Markets; and Investment Banking & Capital Markets. Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center. The divisions are supported by corporate functions that provide infrastructure and services and have internal control responsibilities. The Group's banking

business is carried out through its legal entities, which are operational in various jurisdictions and subject to the governance rules and supervision of the regulators in those jurisdictions. The Group has identified certain major subsidiary companies, which, in aggregate, account for a significant proportion of the Group's business operations. These major subsidiaries, which are all subsidiaries of Credit Suisse AG, are: Credit Suisse (Schweiz) AG; Credit Suisse Holdings (USA) Inc.; Credit Suisse International; and Credit Suisse Securities (Europe) Ltd. Certain business activities of Credit Suisse Securities (Europe) Ltd. are in the process of being merged into Credit Suisse International, such that Credit Suisse Securities (Europe) Ltd. is expected to no longer be defined as a major subsidiary by the end of 2020. This is in line with our objective to streamline and optimize our legal entity structure in the context of the Group's legal entity strategy. Corporate governance at these major subsidiaries is closely aligned with the Group's corporate governance.

As part of the Group's preparations for the UK withdrawal from the EU, certain business operations have been transferred from subsidiaries of Credit Suisse in the UK to other subsidiaries in Germany, Credit Suisse (Deutschland) AG, and in Spain, Credit Suisse Securities Sociedad de Valores, S.A., thus increasing the importance of these EU subsidiaries to the Group's overall operations. The corporate governance at these EU subsidiaries has been adapted accordingly, including by strengthening the respective boards of directors through the appointment of new senior management representatives as board members.

→ Refer to "Credit Suisse" in II – Operating and financial review for further information.

The Group's corporate governance framework is depicted in the chart above. The duties and responsibilities of the governing bodies are described in further detail in the sections below.

The Group's corporate governance policies and procedures, adopted by the Board, are defined in a series of documents, including the following, which are available on our website at [credit-suisse.com/governance](https://www.credit-suisse.com/governance):

- **Articles of Association (AoA):** define the purpose of the business, the capital structure and the basic organizational framework. The AoA of Credit Suisse Group AG (Group) are dated April 26, 2019, and the AoA of Credit Suisse AG (Bank) are dated September 4, 2014. The Group's and the Bank's AoAs are available on our website at [credit-suisse.com/articles](https://www.credit-suisse.com/articles).
- **Code of Conduct:** defines the Group's ethical values and professional standards that the Board and all employees are required to follow, including adherence to all relevant laws, regulations and policies in order to maintain and strengthen our reputation for integrity, fair dealing and measured risk taking. Our Code of Conduct is available on our website at [credit-suisse.com/code](https://www.credit-suisse.com/code) in ten languages.
- **Organizational Guidelines and Regulations (OGR):** define the organizational structure of the Group and the responsibilities and sphere of authority of the Board, its committees and the various senior management bodies within the Group, as well as the relevant reporting procedures. The OGR is available on our website at [credit-suisse.com/ogr](https://www.credit-suisse.com/ogr).

- **Board charter:** outlines the organization and responsibilities of the Board. The Board charter is available on our website at [credit-suisse.com/boardcharter](https://www.credit-suisse.com/boardcharter).
- **Board committee charters:** define the organization and responsibilities of the committees. The Board committee charters are available on our website at [credit-suisse.com/committeecharter](https://www.credit-suisse.com/committeecharter).
- **Compensation policy:** provides a foundation for the development of sound compensation plans and practices. The Group's compensation policy is available on our website at [credit-suisse.com/compensationpolicy](https://www.credit-suisse.com/compensationpolicy).

The summaries herein of the material provisions of our AoA and the Swiss Code of Obligations do not purport to be complete and are qualified in their entirety by reference to the AoA and the Swiss Code of Obligations.

Credit Suisse Group AG and Credit Suisse AG are registered companies in Switzerland. The Group's shares are listed on the SIX Swiss Exchange and – in the form of American Depositary Shares (ADS), as evidenced by American Depositary Receipts – on the New York Stock Exchange (NYSE). The business purpose of the Group, as set forth in Article 2 of its AoA, is to hold direct or indirect interests in all types of businesses in Switzerland and abroad, in particular in the areas of banking, finance, asset management and insurance. The business purpose of the Bank, as set forth in Article 2 of its AoA, is to operate as a bank, with all related banking, finance, consultancy, service and trading activities in Switzerland and abroad. The AoA of the Group and the Bank set forth their powers to establish new businesses, acquire a majority or minority interest in existing businesses and provide related financing and to acquire, mortgage and sell real estate properties both in Switzerland and abroad.

Company details

	Group	Bank
Legal name	Credit Suisse Group AG	Credit Suisse AG
Business purpose	Operate as a holding company	Operate as a bank
Registration details	Commercial register of the Canton of Zurich as of March 3, 1982; No. CHE-105.884.494	Commercial register of the Canton of Zurich as of April 27, 1883; No. CHE-106.831.974
Date incorporated, with unlimited duration	March 3, 1982	July 5, 1856
Registered office	Paradeplatz 8 8001 Zurich Switzerland	Paradeplatz 8 8001 Zurich Switzerland
Equity listing	SIX Swiss Exchange ISIN: CH0012138530 NYSE in the form of ADS ISIN: US2254011081	–
Authorized representative in the US	Credit Suisse (USA), Inc., 11 Madison Avenue, New York, New York, 10010	Credit Suisse (USA), Inc., 11 Madison Avenue, New York, New York, 10010

→ Refer to "II – Operating and financial review" for a detailed review of our operating results.

→ Refer to "Note 40 – Significant subsidiaries and equity method investments" in VI – Consolidated financial statements – Credit Suisse Group for a list of significant subsidiaries and associated entities.

Employee relations

As of December 31, 2019, we had 47,860 employees worldwide, of which 16,140 were in Switzerland and 31,720 were abroad. Our corporate titles include managing director, director, vice president, assistant vice president and non-officer staff. The majority of our employees do not belong to unions. We have not experienced any significant strikes, work stoppages or labor disputes in recent years. We consider our relations with our employees to be good.

→ Refer to "Credit Suisse" in II – Operating and financial review for further information on our responsibility as an employer.

Code of Conduct

At Credit Suisse, we are convinced that our responsible approach to business is a decisive factor in determining our long-term success. We therefore expect all of our employees and members of the Board to observe the professional standards and ethical values set out in our Code of Conduct, including our commitment to complying with all applicable laws, regulations and policies in order to safeguard our reputation for integrity, fair dealing and measured risk-taking. The Code of Conduct also implements requirements stipulated under the US Sarbanes-Oxley Act of 2002 (SOX) by including provisions on ethics for our CEO and our principal financial and accounting officers and other persons performing similar functions. No waivers or exceptions are permissible under our Code of Conduct.

→ Refer to [credit-suisse.com/code](https://www.credit-suisse.com/code) for our Code of Conduct.

Corporate Responsibility

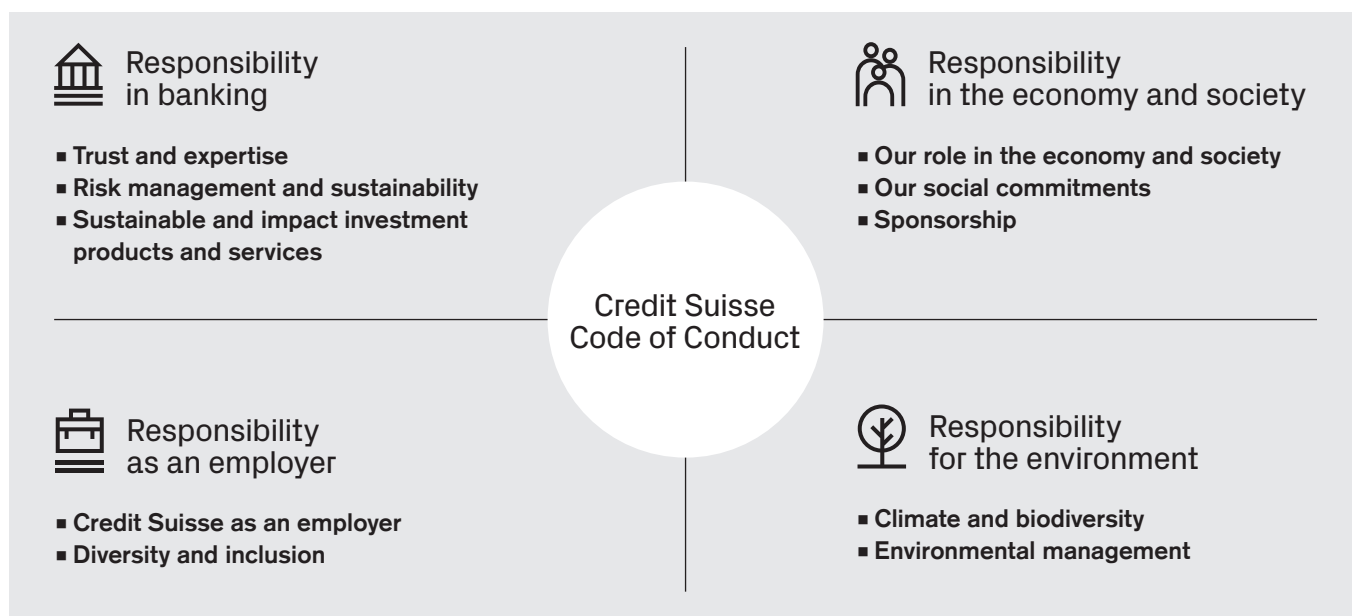
For Credit Suisse, corporate responsibility is about creating sustainable value for clients, shareholders, employees and other stakeholders. We strive to comply with the ethical values and professional standards set out in our Code of Conduct in every aspect of our work, including in our relationship with stakeholders. We do so based on a broad understanding of our duties as a financial services provider and employer and as an integral part

of the economy and society. This approach also reflects our commitment to protecting the environment. We publish a Corporate Responsibility Report each year and aim to focus our corporate responsibility reporting activities on topics that are relevant to our business and our stakeholders, including through a materiality assessment that we undertake in order to identify critical economic, environmental and social issues.

The Group's reporting on corporate responsibility reflects the GRI Standards for sustainability reporting (Core option) while also providing information on the progress we have made in implementing the Ten Principles of the United Nations (UN) Global Compact as well as examples of how we can contribute to the realization of the UN Sustainable Development Goals. Our Corporate Responsibility Report 2019 will be voluntarily reported to the SIX Swiss Exchange in accordance with the opting-in regulation for companies issuing sustainability reports.

Our approach to corporate responsibility, illustrated in the chart below, is broad and considers our respective responsibilities toward clients, shareholders, employees, the environment and society as a whole, which we believe is essential for our long-term success. Competence, client focus, compliance, diligence and responsible conduct from qualified and motivated employees are key to the success of our business. As a global financial institution, we see ourselves as an integral part of the economy and society. Through our role as a financial intermediary, the Group supports entrepreneurship and economic growth and makes an economic contribution as an employer, taxpayer and contractual partner. We also support various humanitarian and charitable organizations and projects as well as cultural and sporting events. The Group supports environmental sustainability, for example, through the development of sustainable and impact investment products and services. The Group's Statement on Sustainability is published on our website at [credit-suisse.com/responsibility](https://www.credit-suisse.com/responsibility).

Our understanding of Corporate Responsibility



Corporate Responsibility activities

During 2019, the Group undertook a wide range of activities that reflect its commitment to the corporate responsibility approach described above and made a number of important achievements towards further embedding Environmental, Social and Governance (ESG) considerations in various aspects of our business endeavors. Such activities and achievements include:

- Becoming a founding signatory to the Principles for Responsible Banking of the UN Environment Programme Finance Initiative, which specify the role and responsibilities of the banking sector in the development of a sustainable future;
- The launch of a Group-wide climate risk strategy program with the aim of supporting our clients' transition to low-carbon and climate resilient business models, further integrating climate change into our risk management models, delivering sustainable financial solutions to clients and reducing our own carbon footprint;
- The review by our Sustainability Affairs function of a selection of transactions and client relationships for potential environmental and social risks and engagement with some of the clients involved in these transactions as part of the assessment process;
- Continued efforts to address the recommendations by the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) for voluntary reporting on material risks and opportunities arising from climate change. The Group is working with other banks to develop methodologies for measuring the alignment of credit portfolios with the objectives of the Paris Agreement;
- Expansion of the Impact Advisory and Finance (IAF) department to facilitate projects and initiatives that have a positive economic and social impact while focusing primarily on delivering a financial return for clients. The IAF department generated significant momentum across both wealth management and corporate and investment banking in 2019, reflected, for example, through the launch of a partnership with the Climate Bonds Initiative and an increased volume of green bonds issued for our clients;
- The announcement by Credit Suisse Asset Management of plans to integrate ESG factors into its investment process. In the first phase, more than 30 actively managed investment funds were repositioned to fulfill ESG criteria defined by the Credit Suisse Investing Framework and Asset Management is working to expand its ESG offerings;
- The announcement in July 2019 of a new three-year partnership with the non-profit career pathways organization HERE to HERE, including committed funding. The partnership will support the work of CareerWise New York, whose youth apprenticeship system helps young people make the transition from education to employment;
- Continued volunteering by a large number of Credit Suisse employees around the world to help charitable causes, leveraging their skills and expertise for the benefit of local communities. The bank encourages employees to devote up to four days per year to support social projects run by our partners; and
- The further strengthening of our diversity and inclusion framework and the continuation of initiatives such as our "Real Returns" program and measures to promote the advancement of women, as well as building our Diversity Internship Program. Our efforts to foster an inclusive workplace have been recognized with various awards.

The Group's Corporate Responsibility Report is available on our website at credit-suisse.com/responsibility.

Shareholders

Capital structure

Our total issued share capital as of December 31, 2019 was CHF 102,240,469 divided into 2,556,011,720 shares, with a nominal value of CHF 0.04 per share. As a result of the share buyback program approved by the Board for 2019, the Group bought back 79,818,000 shares worth CHF 1,000,244,961 during 2019. On December 11, 2019, the Group announced that the Board had approved a share buyback program for 2020 to purchase up to CHF 1.5 billion of Group shares and the expectation of a buyback of at least CHF 1.0 billion in 2020, subject to market and economic conditions and in line with the Group's intention to distribute at least 50% of net income to shareholders. In light of the recent market volatility and the likely impact of COVID-19 on economic activity in the near term, the Board of Directors will review its expectation for the balance of the program when there is greater certainty over the market, financial and economic outlook.

→ Refer to "Share repurchases" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management for further information.

→ Refer to "Note 15 – Share capital, conditional, conversion and authorized capital of Credit Suisse Group" in VII – Parent company financial statements – Credit Suisse Group and our AoA (Articles 26, 26c and 27) for information on changes to our capital structure during the year. Refer to credit-suisse.com/annualreporting for prior year annual reports.

Shareholder information

Shareholder base

We have a broad shareholder base, with the majority of shares owned directly or indirectly by institutional investors outside Switzerland. As of December 31, 2019, 105,042 shareholders were registered in our share register with 1,390,960,326 shares, representing 54% of the total shares issued. The remaining 46% of shares are not registered in our share register. As of December 31, 2019, 91,129,317 or 3.6%, of the issued shares were in the form of ADS. The information provided in the following tables reflects the distribution of Group shares as registered in our share register as of December 31, 2019.

Distribution of Group shares

end of	2019								2018
	Number of shareholders		Number of shares		Number of shareholders		Number of shares		
		%		%		%		%	
Distribution of Group shares									
Private investors	102,226	97	193,914,934	8	109,205	97	201,455,312	8	
of which Switzerland	91,492	87	161,708,453	6	99,472	88	178,240,134	7	
of which foreign	10,734	10	32,206,481	1	9,733	9	23,215,178	1	
Institutional investors	2,816	3	1,197,045,392	47	3,206	3	1,274,073,707	50	
of which Switzerland	2,444	2	275,856,250	11	2,773	2	291,385,944	11	
of which foreign ¹	372	0	921,189,142	36	433	0	982,687,763	38	
Shares registered in share register	105,042	100	1,390,960,326	54	112,411	100	1,475,529,019	58	
of which Switzerland	93,936	89	437,564,703	17	102,245	91	469,626,078	18	
of which Europe	9,398	9	578,893,120	23	9,178	8	623,937,087	24	
of which US ¹	139	0	349,295,718	14	144	0	356,918,183	14	
of which other	1,569	1	25,206,785	1	844	1	25,047,671	1	
Shares not registered in share register	-	-	1,165,051,394	46	-	-	1,080,482,701	42	
Total shares issued	-	-	2,556,011,720	100	-	-	2,556,011,720	100	

¹ Includes shares issued in the form of ADS.

Distribution of institutional investors in share register by industry

end of	2019								2018
	Number of shareholders		Number of shares		Number of shareholders		Number of shares		
		%		%		%		%	
Institutional investors by industry									
Banks	18	1	987,663	0	21	1	1,235,285	0	
Insurance companies	77	3	16,219,642	1	83	3	17,129,086	1	
Pension funds	388	14	57,414,038	5	431	13	62,737,967	5	
Investment trusts	324	12	203,160,475	17	371	12	207,173,146	16	
Other trusts	451	16	9,895,856	1	524	16	9,247,355	1	
Governmental institutions	24	1	757,697	0	22	1	646,705	0	
Other ¹	1,435	51	148,320,147	12	1,642	51	157,040,518	12	
Direct entries	2,717	96	436,755,518	36	3,094	97	455,210,062	36	
Fiduciary holdings	99	4	760,289,874	64	112	3	818,863,645	64	
Total institutional investors	2,816	100	1,197,045,392	100	3,206	100	1,274,073,707	100	

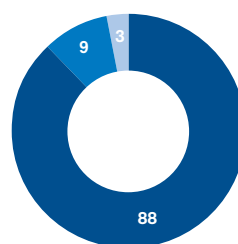
Rounding differences may occur.

¹ Includes various other institutional investors for which a breakdown by industry type was not available.

Through the use of an external global market intelligence firm, we regularly gather additional information on the composition of our shareholder base, including information on shares that are not registered in our share register. According to this data, our shareholder base as of December 31, 2019 comprised 88% institutional investors, with around half of such investors located in North America. The distribution of Group shareholdings by investor type and region is shown as follows:

Group shares by investor type

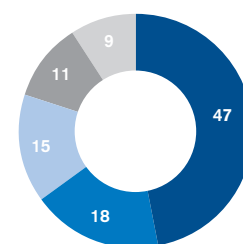
End of 2019 (in %)



■ Institutional investors
■ Private investors
■ Other investors

Institutional investors by region

End of 2019 (in %)



■ North America ■ Switzerland
■ UK & Ireland ■ Europe
■ Other

Shareholder engagement

The Group engages regularly with its shareholders and proxy advisors. The purpose of such engagements is to understand the perspectives of its shareholders, exchange views about the Group's strategy, financial performance, corporate governance and compensation and other matters of importance to the Group or its shareholders. Shareholder engagement meetings may be attended by the Chairman of the Board (Chairman), the Compensation Committee Chair, the CEO, CFO and other members of the Board or senior management. The responsibility for shareholder engagement is overseen by our Investor Relations department. The Group aims to ensure that all shareholders receive the relevant information they need to keep abreast of current Group developments and make informed decisions.

Information policy

We are committed to an open and fair information policy with our shareholders and other stakeholders. Our Investor Relations and Corporate Communications departments are responsible for addressing inquiries received. All Group shareholders registered in our share register receive an invitation to our AGM, including instructions on how to receive the annual report and other reports. Each registered shareholder may elect to receive the quarterly reports on our financial performance. All of these reports and other information can be accessed on our website at credit-suisse.com/investors.

Notices required under Swiss law

Notices to shareholders required under Swiss law are made by publication in the Swiss Official Gazette of Commerce. The Board may designate further means of communication for publishing notices to shareholders. Notices required under the listing rules of the SIX Swiss Exchange will either be published in two Swiss newspapers in German and French and sent to the SIX Swiss Exchange or otherwise communicated to the SIX Swiss Exchange in accordance with applicable listing rules. The SIX Swiss Exchange may further disseminate the relevant information.

Significant shareholders

Under the Swiss Federal Act on Financial Market Infrastructure and Market Conduct in Securities and Derivative Trading (FMIA), anyone holding shares in a company listed on the SIX Swiss Exchange is required to notify the company and the SIX Swiss Exchange if their holding reaches, falls below or exceeds the following thresholds: 3%, 5%, 10%, 15%, 20%, 25%, 33 $\frac{1}{3}$ %, 50% or 66 $\frac{2}{3}$ % of the voting rights entered into the commercial register, whether or not the voting rights can be exercised (that is, notifications must also include certain derivative holdings such as

options or similar instruments). Following receipt of such notification, the company has an obligation to inform the public. In addition, pursuant to the Swiss Code of Obligations, a company must disclose in the notes to its annual consolidated financial statements the identity of any shareholders who own in excess of 5% of its shares. The following provides an overview of the holdings of our significant shareholders, including any rights to purchase or dispose of shares, based on the most recent disclosure notifications. In line with the FMIA requirements, the percentages indicated below were calculated in relation to the share capital reflected in the AoA at the time of the disclosure notification. As shareholders are only required to notify the company and the SIX Swiss Exchange if their holding reaches, falls below or exceeds the thresholds listed above, the percentage holdings of our significant shareholders may vary at any given time compared to the date of submission of the most recent notification for these respective shareholders. The full text of all notifications can be found on our website at credit-suisse.com/shareholders. Each share entitles the holder to one vote, except as described below.

→ Refer to "Note 3 – Business developments, significant shareholders and subsequent events" in VI – Consolidated financial statements – Credit Suisse Group for further information on significant shareholders.

The Group also holds positions in its own shares, including shares acquired through the share buyback program described above, which are subject to the same disclosure requirements as significant external shareholders. These positions fluctuate and, in addition to the activity from our share buyback program, primarily reflect activities related to market making, facilitating client orders and satisfying the obligations under our employee compensation plans. Shares held by the Group have no voting rights. As of December 31, 2019, our holdings amounted to 4.87% purchase positions (4.62% registered shares and 0.25% share acquisition rights) and 4.41% sales positions (disposal rights), mainly related to the Group's outstanding tier 1 capital instruments, which would be converted into Group ordinary shares upon the occurrence of certain specified triggering events. As a result of the share buyback programs for 2019 and 2020, the Group's purchase positions in its own shares increased steadily during 2019 and early 2020. The Board will propose to the shareholders at the 2020 AGM that the shares repurchased in 2019 and in early 2020 through March 13, 2020 be cancelled by means of a capital reduction.

→ Refer to "Issuances and redemptions" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management for further information.

Cross shareholdings

The Group has no cross shareholdings in excess of 5% of capital or voting rights with any other company.

Significant shareholders

	Group publication of notification	Number of shares (million)	Approximate shareholding % ¹	Purchase rights %
December 31, 2019 or the most recent notification date				
Qatar Investment Authority (registered entity – Qatar Holding LLC)	September 6, 2018	133.2	5.21	0.39 ²
Norges Bank	February 15, 2018	127.4	4.98	–
The Olayan Group (registered entity – Comp petrol Establishment)	December 12, 2018	126.0	4.93	0.07 ³
BlackRock Inc.	September 2, 2017	86.9	4.17	–
Harris Associates L.P.	November 9, 2013 ⁴	81.5	5.17	–
Dodge & Cox	December 28, 2018 ⁵	78.2	3.06	–
Silchester International Investors LLP	December 7, 2018	77.4	3.03	–
December 31, 2018 or the most recent notification date				
Qatar Investment Authority (registered entity – Qatar Holding LLC)	September 6, 2018	133.2	5.21	0.39
Norges Bank	February 15, 2018	127.4	4.98	–
The Olayan Group (registered entity – Comp petrol Establishment)	December 12, 2018	126.0	4.93	0.07
BlackRock Inc.	September 2, 2017	86.9	4.17	–
Harris Associates L.P.	November 9, 2013	81.5	5.17	–
Dodge & Cox	December 28, 2018	78.2	3.06	–
Silchester International Investors LLP	December 7, 2018	77.4	3.03	–
December 31, 2017 or the most recent notification date				
Norges Bank	February 15, 2018	127.4	4.98	–
Qatar Investment Authority (registered entity – Qatar Holding LLC)	August 16, 2017	126.2	4.94	10.97
The Olayan Group (registered entity – Crescent Holding GmbH)	June 2, 2017	106.6	4.93	5.29
BlackRock Inc.	September 2, 2017	86.9	4.17	–
Harris Associates L.P.	November 9, 2013	81.5	5.17	–
Capital Group Companies, Inc.	October 31, 2017	76.6	3.01	–

¹ The approximate shareholding percentages were calculated in relation to the share capital at the time of the relevant disclosure notification. They therefore do not reflect changes in such percentages that would result from changes in the number of outstanding shares, following the date of the disclosure notification.

² Credit Suisse Group (Guernsey) II Limited redeemed its CHF 2.5 billion 9.0% and USD 1.72 billion 9.5% high-trigger tier 1 capital instruments (perpetual security with mandatory contingent conversion into shares) for redemption on October 23, 2018. As a result of this transaction, the 10.97% purchase rights for Qatar Investment Authority disclosed in 2017 no longer exist. The 0.39% purchase rights relate to put options.

³ Credit Suisse Group (Guernsey) II Limited redeemed its USD 1.725 billion 9.5% high-trigger tier 1 capital instruments (perpetual security with mandatory contingent conversion into shares) for redemption on October 23, 2018. As a result of this transaction, 5.24% of the 5.29% purchase rights for The Olayan Group disclosed in 2017 no longer exist. The 0.07% purchase rights relate to put options and perpetual tier 1 contingent convertible capital notes.

⁴ This position includes the reportable position of Harris Associates Investment Trust (4.97% shares), as published by the SIX Swiss Exchange on August 1, 2018.

⁵ This position includes the reportable position of Dodge & Cox International Stock Fund (3.09% shares), as published by SIX Swiss Exchange on February 5, 2019.

Shareholder rights

We are fully committed to the principle of equal treatment of all shareholders. The following information summarizes certain shareholder rights at the Group.

Voting rights and transfer of shares

There is no limitation under Swiss law or the AoA on the right to own Group shares.

In principle, each share represents one vote at the AGM. Shares held by the Group have no voting rights. Shares for which a single shareholder or shareholder group can exercise voting rights may not exceed 2% of the total outstanding share capital, unless one

of the exemptions discussed below applies. The restrictions on voting rights do not apply to:

- the exercise of voting rights by the independent proxy as elected by the AGM;
- shares in respect of which the shareholder confirms to us that the shareholder has acquired the shares in the shareholder's name for the shareholder's own account and in respect of which the disclosure requirements in accordance with the FMIA and the relevant ordinances and regulations have been fulfilled; or
- shares that are registered in the name of a nominee, provided that this nominee is willing to furnish us, on request, the name, address and shareholdings of any beneficial owner or group of related beneficial owners on behalf of whom the nominee holds 0.5% or more of the total outstanding share capital of the Group.

To execute voting rights, shares need to be registered in the share register directly or in the name of a nominee. In order to be registered in the share register, the purchaser must file a share registration form with the depository bank. The registration of shares in the share register may be requested at any time. Failing such registration, the purchaser may not vote or participate in shareholders' meetings. However, each shareholder, whether registered in the share register or not, is entitled to receive dividends or other distributions approved at the AGM. Transfer restrictions apply regardless of the way and the form in which the registered shares are kept in the accounts and regardless of the provisions applicable to transfers. The transfer of intermediated securities based on Group shares, and the pledging of these intermediated securities as collateral, is based on the provisions of the Swiss Federal Intermediated Securities Act. The transfer or pledging of shares as collateral by means of written assignment is not permitted.

→ Refer to credit-suisse.com/articles for information in our AoA (Art. 10 and 14a) on share register and transfer of shares, voting rights and the independent proxy.

Annual General Meeting

Under Swiss law, the AGM must be held within six months of the end of the fiscal year. Notice of an AGM, including agenda items and proposals submitted by the Board and by shareholders, must be published in the Swiss Official Gazette of Commerce at least 20 days prior to the AGM.

Shares only qualify for voting at an AGM if they are registered in the share register with voting rights no later than three days prior to the AGM.

Convocation of shareholder meetings

The AGM is convened by the Board or, if necessary, by the statutory auditors, with 20 days' prior notice. The Board is further required to convene an Extraordinary General Meeting (EGM) if so resolved at a shareholders' meeting or if so requested by shareholders holding in aggregate at least 10% of the nominal share capital. The request to call an EGM must be submitted in writing to the Board, and, at the same time, Group shares representing at least 10% of the nominal share capital must be deposited for safekeeping. The shares remain in safekeeping until the day after the EGM.

Request to place an item on the agenda

Shareholders holding shares with an aggregate nominal value of at least CHF 40,000 have the right to request that a specific item be placed on the agenda and voted upon at the AGM. The request to include a particular item on the agenda, together with a relevant proposal, must be submitted in writing to the Board no later than 45 days before the meeting and, at the same

time, Group shares with an aggregate nominal value of at least CHF 40,000 must be deposited for safekeeping. The shares remain in safekeeping until the day after the AGM.

Quorum requirements

The AGM may, in principle, pass resolutions without regard to the number of shareholders present at the meeting or represented by proxy, except as discussed below. Resolutions and elections generally require the approval of a majority of the votes represented at the meeting, except as otherwise provided by mandatory provisions of law or by the AoA.

Shareholders' resolutions that require a vote by a majority of the votes represented include:

- amendments to the AoA, unless a supermajority is required;
- election of members of the Board, the Chairman, the members of the Compensation Committee, the independent proxy and statutory auditors;
- approval of the compensation of the members of the Board and the Executive Board;
- approval of the annual report and the statutory and consolidated accounts;
- discharge of the acts of the members of the Board and Executive Board; and
- determination of the appropriation of retained earnings.

A quorum of at least two-thirds of the votes represented is required for resolutions on:

- change of the purpose of the company;
- creation of shares with increased voting powers;
- implementation of transfer restrictions on shares;
- increase in conditional and authorized capital;
- increase of capital by way of conversion of capital surplus or by contribution in kind;
- restriction or suspension of pre-emptive subscription rights;
- change of location of the principal office; and
- dissolution of the company without liquidation.

A quorum of at least half of the total share capital and approval by at least three-quarters of the votes represented is required for resolutions on:

- the conversion of registered shares into bearer shares;
- amendments to the AoA relating to registration and voting rights of nominee holders; and
- the dissolution of the company.

A quorum of at least half of the total share capital and the approval of at least seven-eighths of the votes cast is required for amendments to provisions of the AoA relating to voting rights.

Say on pay

In accordance with the Swiss Code of Best Practice for Corporate Governance, the Group submitted the compensation report (contained in the Compensation section of the Annual Report) for a consultative vote by shareholders at the 2019 AGM. In accordance with the Compensation Ordinance, the Group will submit the following Board and Executive Board compensation recommendations for binding votes by shareholders at the 2020 AGM:

- For the Board: a maximum amount of compensation for the Board for the period from the 2020 AGM to the 2021 AGM;
- For the Executive Board: an aggregate amount of variable compensation comprising the variable short-term incentive (STI) compensation for Executive Board members for the 2019 financial year;
- For the Executive Board: a maximum amount of fixed compensation for the Executive Board for the period from the 2020 AGM to the 2021 AGM; and
- For the Executive Board: an aggregate amount of variable compensation comprising the variable long-term incentive (LTI) compensation for Executive Board members for the 2020 financial year (based on fair value at grant).

In line with current practice, the Group will continue to submit the compensation report for a consultative vote by shareholders.

→ Refer to "V – Compensation" for further information on the binding vote.

Discharge of the acts of the Board and the Executive Board

According to Swiss law, the AGM has the power to discharge the actions of the members of the Board and the Executive Board. The 2019 AGM granted discharge to the members of the Board and the Executive Board for the 2018 financial year.

Pre-emptive subscription rights and preferential subscription rights

Under Swiss law, any share issue, whether for cash or non-cash consideration or no consideration, is subject to the prior approval of the shareholders. Shareholders of a Swiss corporation have certain pre-emptive subscription rights to subscribe for new issues of shares and certain preferential rights to subscribe for option bonds, convertible bonds or similar debt instruments with option or convertible rights in proportion to the nominal amount of shares held. A resolution adopted at a shareholders' meeting with a supermajority may, however, limit or suspend pre-emptive subscription rights in certain limited circumstances.

Duty to make an offer

Swiss law provides that anyone who, directly or indirectly or acting in concert with third parties, acquires 33 $\frac{1}{3}$ % or more of the

voting rights of a listed Swiss company, whether or not such rights are exercisable, must make an offer to acquire all of the listed equity securities of such company, unless the AoA of the company provides otherwise. Our AoA does not include a contrary provision. This mandatory offer obligation may be waived under certain circumstances by the Swiss Takeover Board or the Swiss Financial Market Supervisory Authority FINMA (FINMA). If no waiver is granted, the mandatory offer must be made pursuant to procedural rules set forth in the FMIA and implementing ordinances.

Clauses on changes in control

To the best of our knowledge, there are no agreements in place that could lead to a change in control of the Group. Subject to certain provisions in the Group's employee compensation plans, which allow for the Compensation Committee or Board to determine the treatment of outstanding awards for all employees, including the Executive Board members, in the case of a change in control, there are no provisions that require the payment of extraordinary benefits in the agreements and plans benefiting members of the Board and the Executive Board or any other members of senior management. Specifically, there are no contractually agreed severance payments in the case of a change in control of the Group.

→ Refer to "Contract lengths, termination and change in control provisions" in V – Compensation – Executive Board compensation for 2017 for further information on the clauses on changes in control.

Borrowing and raising funds

Neither Swiss law nor our AoA restrict our power to borrow and raise funds in any way. The decision to borrow funds is passed by or under the direction of our Board, with no shareholders' resolution required.

Liquidation

Under Swiss law and our AoA, the Group may be dissolved at any time by a shareholders' resolution which must be passed by:

- a supermajority of at least three-quarters of the votes cast at the meeting in the event the Group were to be dissolved by way of liquidation; and
- a supermajority of at least two-thirds of the votes represented and an absolute majority of the par value of the shares represented at the meeting in other cases.

Dissolution by order of FINMA is possible if we become bankrupt. Under Swiss law, any surplus arising out of liquidation (after the settlement of all claims of all creditors) is distributed to shareholders in proportion to the paid-up par value of shares held.

Board of Directors

General information

Membership and qualifications

The AoA (Chapter IV, Section 2, The Board of Directors, Art. 15.1 of the Group's AoA and Chapter III, Section 6. Board of Directors, Art. 6.1 of the Bank's AoA) provide that the Board shall consist of a minimum of seven members. The Board currently consists of 13 members. We believe that the size of the Board must be such that the committees can be staffed with qualified members. At the same time, the Board must be small enough to ensure an effective and rapid decision-making process. Board members are elected at the AGM by our shareholders individually for a period of one year and are eligible for re-election. Shareholders will also elect a member of the Board as the Chairman and each of the members of the Compensation Committee for a period of one year. One year of office is understood to be the period of time from one AGM to the close of the next AGM. Members of the Board shall generally retire after having served on the Board for 12 years. Under certain circumstances, the Board may extend the limit of terms of office for a particular Board member for a maximum of three additional years.

An overview of the Board and the committee membership is shown in the following table. The composition of the Boards of the Group and the Bank is identical.

Board composition and succession planning

The Governance and Nominations Committee (formerly Chairman's and Governance Committee) regularly considers the composition of the Board as a whole and in light of staffing requirements for the committees. The Governance and Nominations Committee recruits and evaluates candidates for Board membership based on criteria as set forth by the OGR (Chapter II Board of Directors, Item 8.2.3). The Governance and Nominations Committee may also retain outside consultants with respect to the identification and recruitment of potential new Board members. In assessing candidates, the Governance and Nominations Committee considers the requisite skills and characteristics of Board members as well as the composition of the Board as a whole. Among other considerations, the Governance and Nominations Committee takes into account skills, management experience, independence and diversity in the context of the needs of the Board to fulfill its responsibilities. The Governance and Nominations Committee also considers other activities and commitments of an individual in order to be satisfied that a proposed member of the Board can devote enough time to a Board position at the Group.

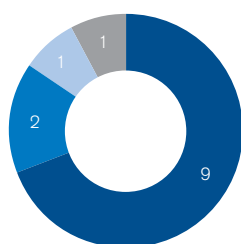
→ Refer to "Mandates" for further information.

Members of the Board of Directors

	Board member since	Independence	Governance and Nominations Committee	Audit Committee	Compensation Committee	Conduct and Financial Crime Control Committee	Risk Committee
Elected at 2019 AGM							
Urs Rohner, Chairman	2009	Independent	Chair	–	–	Chair	–
Iris Bohnet	2012	Independent	–	–	Member	–	–
Christian Gellerstad	2019	Independent	–	–	Member	Member	–
Andreas Gottschling	2017	Independent	Member	Member	–	–	Chair
Alexander Gut	2016	Independent	–	Member	–	–	–
Michael Klein	2018	Independent	–	–	Member	–	Member
Shan Li	2019	Independent	–	–	–	–	Member
Seraina Macia	2015	Independent	–	–	–	–	Member
Kai S. Nargolwala	2013	Independent	Member	–	Chair	Member	–
Ana Paula Pessoa	2018	Independent	–	Member	–	Member	–
Joaquin J. Ribeiro	2016	Independent	–	Member	–	–	–
Severin Schwan, Vice-Chair and Lead Independent Director	2014	Independent	Member	–	–	–	Member
John Tiner	2009	Independent	Member	Chair	–	Member	Member

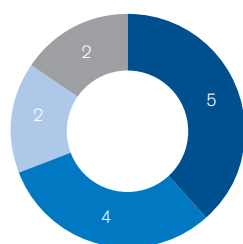
Board composition

Industry experience



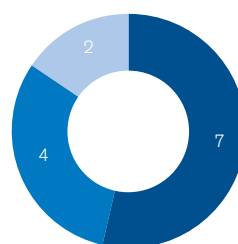
- Financial services (banking, insurance)
- Law, government & academia
- Pharma, manufacturing & technology
- Advertising, marketing & media

Geographical focus¹



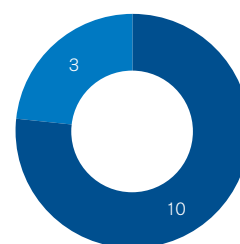
- Americas
- Switzerland
- EMEA
- Asia Pacific

Length of tenure



- 4 years and less
- Between 5 and 8 years
- Between 9 and 12 years

Gender diversity



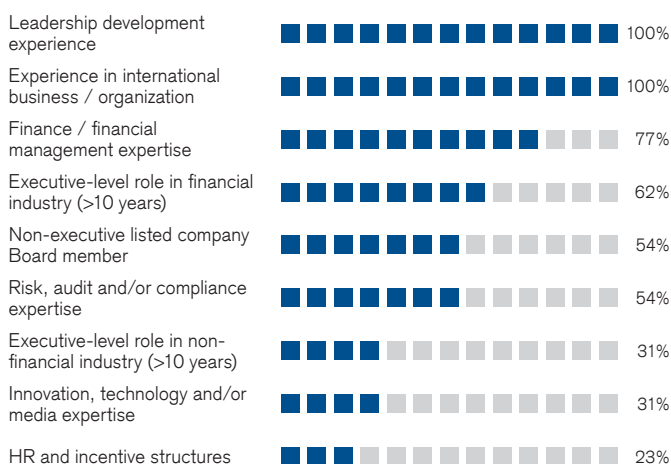
- Male
- Female

¹ Geographical focus represents the region in which the Board member has mostly focused his or her professional activities and may differ from the nationality of that individual.

The background, skills and experience of our Board members are diverse and broad and include holding or having held top management positions at financial services and other companies in Switzerland and abroad, as well as leading positions in government, academia and international organizations. The Board is composed of individuals with wide-ranging professional expertise in key areas including finance and financial management, risk management, audit, innovation and technology, legal, compliance and regulatory affairs, advertising, marketing and media, and human resources and incentive structures. Diversity of culture, experience and opinion are important aspects of Board composition, as well as gender diversity. While the ratio of female-to-male Board members may vary in any given year, the Board is committed to maintaining a good gender balance over the long term. The collective experience and expertise of our Board members as of the end of 2019 across those key areas considered particularly relevant for the Group is illustrated in the following chart.

Board member experience and expertise

(Number and percentage of Board members)



In areas where the Board's collective experience and expertise may require strengthening, the Board may either decide to nominate a new Board member candidate with specialist expertise, engage outside experts or take other measures. For example, prior to 2019, the Board had one member with deep knowledge of and experience in Asia. In consideration of the Group's ambition to expand its business in China, the Board concluded that it needed additional Board level experience and expertise, in particular of the Chinese financial services markets, and consequently nominated Shan Li as a new Board member, who was elected to the Board at the 2019 AGM.

To maintain a high degree of expertise, diversity and independence in the future, the Board has a succession planning process in place to identify potential candidates for the Board at an early stage. With this process, we are well prepared when Board members rotate off the Board. The objectives of the succession planning process are to ensure adequate representation of key Board competencies and a Board composition that is well-suited to address future challenges, while maintaining the stability and professionalism of the Board. Potential candidates are evaluated according to criteria defined to assess the candidates' expertise and experience, which include the following:

- proven track record as an executive with relevant leadership credentials gained in an international business environment in financial services or another industry;
- relevant functional skills and credentials in the key areas listed above;
- understanding of global banking, financial markets and financial regulation;
- broad international experience and global business perspective, with a track record of having operated in multiple geographies;
- ability to bring insight and clarity to complex situations and to both challenge and constructively support management;
- high level of integrity and affinity with the Group's values and corporate culture; and
- willingness to commit sufficient time to prepare for and attend Board and committee meetings.

The evaluation of candidates also considers formal independence and other criteria for Board membership, consistent with legal and regulatory requirements and the Swiss Code of Best Practice for Corporate Governance. Furthermore, we believe that other aspects, including team dynamics and personal reputation of Board members, play a critical role in ensuring the effective functioning of the Board. This is why the Group places the utmost importance on the right mix of personalities who are also fully committed to making their blend of specific skills and experience available to the Board.

While the Board is continually engaged in considering potential candidates throughout the year, succession planning for the next year is typically kicked off at the Board's annual strategy offsite, which is held mid-year. In addition to its discussions of the Group's strategy, the Board holds a dedicated session on corporate governance, at which, among other topics, current Board composition and future needs are discussed, including the needs for suitable Board committee composition. Based on the outcome of these discussions, the interest and availability of certain candidates will be explored further. The Board's discussions will continue at its annual self-assessment session, which usually takes place at year-end, and it will consider specific changes in Board composition to be proposed at the next AGM. The Board will ultimately approve candidates to be nominated as new Board members for election at the AGM at its February or March meetings, shortly before the publication of this report.

Chairman succession

At the AGM 2021, Urs Rohner will have served on the Board for the maximum standard term limit of 12 years and has accordingly

informed the Board, already a long time ago, that he will not stand for re-election at the 2021 AGM. The Board has therefore put a process in place to evaluate potential candidates and nominate a successor to Urs Rohner as Chairman of the Board for election at the 2021 AGM. The Governance and Nominations Committee is leading the Chairman's succession process, which is well underway and progressing according to plan.

New members and continuing training

Any newly appointed member is required to participate in an orientation program to become familiar with our organizational structure, strategic plans, significant financial, accounting and risk issues and other important matters relating to the governance of the Group. The orientation program is designed to take into account the new Board member's individual background and level of experience in each specific area. Moreover, the program's focus is aligned with any committee memberships of the person concerned. Board members are encouraged to engage in continuing training. The Board and the committees of the Board regularly ask specialists within the Group to speak about specific topics in order to enhance the Board members' understanding of issues that already are, or may become, of particular importance to our business.

Meetings

In 2019, the Board held seven meetings in person and nine additional meetings. In addition, the Board held a two and a half-day strategy session. The members of the Board are encouraged to attend all meetings of the Board and the committees on which they serve.

Meeting attendance – Board and Board committees

	Board of Directors ¹	Governance and Nominations Committee ²	Audit Committee ³	Compensation Committee ⁴	Conduct and Financial Crime Control Committee ⁵	Risk Committee ⁶
in 2019						
Total number of meetings held	16	16	17	11	6	7
of which in-person meetings	7	1	9	6	6	7
of which telephone conference meetings	9	15	8	5	0	0
Meeting attendance, in %	99	91	99	95	100	93
Number of members who missed no meetings	13	4	4	4	5	6
Number of members who missed one meeting	2	0	1	2	0	0
Number of members who missed two or more meetings	0	2	0	0	0	1
Approximate meeting duration, in hours ⁷	7.5–8.5	1–2	3.5–4.5	2–3	2–3	3.5–4.5

Meeting attendance is shown for the calendar year 2019, which spans two Board periods. While there were 13 members prior to the 2019 AGM and 13 members thereafter, there were 15 individuals in total who served as Board members during 2019.

¹ The Board consisted of 13 members at the beginning and the end of the year, with 2 members joining the Board (Christian Gellerstad and Shan Li) and 2 members leaving the Board (Andreas N. Koopmann and Alexandre Zeller).

² The Governance and Nominations Committee consisted of 6 members at the beginning of the year and 5 at the end of the year, with 1 member leaving the committee (Alexandre Zeller).

³ The Audit Committee consisted of 5 members at the beginning and the end of the year.

⁴ The Compensation Committee consisted of 4 members at the beginning and the end of the year, with 2 members joining the Board (Christian Gellerstad and Michael Klein) and 2 members leaving the Board (Andreas N. Koopmann and Alexandre Zeller).

⁵ Established as of January 1, 2019. The Conduct and Financial Crime Control Committee consisted of 5 members at the beginning and the end of the year, with 1 member joining the committee (Christian Gellerstad) and 1 member leaving the committee (Alexandre Zeller).

⁶ The Risk Committee consisted of 5 members at the beginning of the year and 6 members at the end of the year, with 1 member joining the committee (Shan Li).

⁷ The approximate meeting duration in hours refers to the in-person meetings only, with the exception of the Governance and Nominations Committee, which holds the majority of its meetings per telephone conference. The meetings of the Compensation Committee are on average 2–3 hours, with the exception of the meeting at the beginning of the year for the purposes of proposing variable compensation for the Group and the Executive Board; the approximate duration of this meeting is 4–5 hours.

All members of the Board are expected to spend the necessary time outside of these meetings needed to discharge their responsibilities appropriately. The Chairman calls the meeting with sufficient notice and prepares an agenda for each meeting. However, any other Board member has the right to call an extraordinary meeting, if deemed necessary. The Chairman has the discretion to invite members of management or others to attend the meetings. Generally, the members of the Executive Board attend part of the meetings to ensure effective interaction with the Board. The Board also holds separate private sessions without management present. Minutes are kept of the proceedings and resolutions of the Board.

Meeting attendance – individual Board members

Attendance (%)	< 75	75–84	85–94	95–100
Board member				
Urs Rohner, Chairman				■
Iris Bohnet				■
Christian Gellerstad ¹				■
Andreas Gottschling				■
Alexander Gut				■
Michael Klein			■	
Shan Li ¹				■
Seraina Macia				■
Kai S. Nargolwala			■	
Ana Paula Pessoa				■
Joaquin J. Ribeiro			■	
Severin Schwan			■	
John Tiner				■

Includes Board and Committee meeting attendance.

¹ Board member as of the 2019 AGM.

From time to time, the Board may make certain decisions via circular resolution, unless a member asks that the matter be discussed in a meeting and not decided upon by way of written consent. As of the date of the publication of this report, in 2020, the Board has held three meetings in person and two additional meetings.

Mandates

Our Board members may assume board or executive level or other roles in companies and organizations outside of the Group, which are collectively referred to as mandates. The Compensation Ordinance sets out that companies must include provisions in their articles of association to define the activities that fall within the scope of a mandate and set limits on the number of mandates that board members and executive management may hold. According to the Group's AoA (Chapter IV, Section 2, The Board of Directors, Art. 20b), mandates include activities in the most senior executive and management bodies of listed companies and all other legal entities that are obliged to obtain an entry in the Swiss commercial register or a corresponding foreign register. Board members are obligated to disclose all mandates to the Group and changes thereto, which occur during their board tenure. Board members wishing to assume a new mandate with a company or organization must first consult with the Chairman before accepting such mandate, in order to ensure there are no conflicts of interest or other issues.

The limitations on mandates assumed by Board members outside of the Group are summarized in the table below.

Type of mandate and limitation – Board

Type of mandate	Limitation
Listed companies	No more than four other mandates
Other legal entities ¹	No more than five mandates
Legal entities on behalf of the Group ²	No more than ten mandates
Charitable legal entities ³	No more than ten mandates

¹ Includes private non-listed companies.

² Includes memberships in business and industry associations.

³ Also includes honorary mandates in cultural or educational organizations.

No Board member holds mandates in excess of these restrictions. The restrictions shown above do not apply to mandates of Board members in legal entities controlled by the Group such as subsidiary boards.

→ Refer to "Audit Committee" in Board committees for further information on limits on Audit Committee service.

Independence

The Board consists solely of non-executive directors within the Group, of which at least the majority must be determined to be independent. In its independence determination, the Board takes into account the factors set forth in the OGR (Chapter II Board of Directors, Item 3.2), the committee charters and applicable laws, regulations and listing standards. Our independence standards are also periodically measured against other emerging best practice standards.

The Governance and Nominations Committee performs an annual assessment of the independence of each Board member and reports its findings to the Board for the final determination of independence of each individual member. The Board has applied the independence criteria of the SIX Swiss Exchange Directive on Information relating to Corporate Governance, FINMA, the Swiss Code of Best Practice for Corporate Governance and the rules of the NYSE and the Nasdaq Stock Market (Nasdaq) in determining the definition of independence.

Independence criteria applicable to all Board members

In general, a director is considered independent if the director:

- is not, and has not been for the past three years, employed as an Executive Board member at the Group or any of its subsidiaries or in another significant function at the Group;
- is not, and has not been for the past three years, an employee or affiliate of the Group's external auditor;
- does not, according to the Board's assessment, maintain a material direct or indirect business relationship with the Group or any of its subsidiaries which causes a conflict of interest due to its nature or extent; and
- is not, or has not been for the past three years, part of an interlocking directorate in which an Executive Board member serves on the compensation committee of another company that employs the Board member.

Whether or not a relationship between the Group or any of its subsidiaries and a member of the Board is considered material depends in particular on the following factors:

- the volume and size of any transactions concluded in relation to the financial status and credit standing of the Board member concerned or the organization in which he or she is a partner, significant shareholder or executive officer;
- the terms and conditions applied to such transactions in comparison to those applied to transactions with counterparties of a similar credit standing;
- whether the transactions are subject to the same internal approval processes and procedures as transactions that are concluded with other counterparties;

- whether the transactions are performed in the ordinary course of business; and
- whether the transactions are structured in such a way and on such terms and conditions that the transaction could be concluded with a third party on comparable terms and conditions.

Moreover, Board members with immediate family members who would not qualify as independent according to the above listed criteria shall be subject to a three-year cooling-off period for purposes of determining their independence after fulfilment of the independence criteria by the immediate family member. Significant shareholder status is generally not considered a criterion for independence unless the shareholding exceeds 10% of the Group's share capital or in instances where the shareholder may otherwise influence the Group in a significant manner.

Specific independence considerations

Board members serving on the Audit Committee are subject to independence requirements in addition to those required of other Board members. None of the Audit Committee members may be an affiliated person of the Group or may, directly or indirectly, accept any consulting, advisory or other compensatory fees from us other than their regular compensation as members of the Board and its committees.

For Board members serving on the Compensation Committee, the independence determination considers all factors relevant to determining whether a director has a relationship with the Group that is material to that director's ability to be independent from management in connection with the duties of a Compensation Committee member, including, but not limited to:

- the source of any compensation of the Compensation Committee member, including any consulting, advisory or other compensatory fees paid by the Group to such director; and
- whether the Compensation Committee member is affiliated with the Group, any of its subsidiaries or any affiliates of any of its subsidiaries.

Other independence standards

While the Group is not subject to such standards, the Board acknowledges that some proxy advisors apply different standards for assessing the independence of our Board members, including the length of tenure a Board member has served, the full-time status of a Board Member, annual compensation levels of Board members within a comparable range to executive pay or a Board member's former executive status for periods further back than the preceding three years.

Independence determination

As of December 31, 2019, all members of the Board were determined by the Board to be independent.

Board leadership

Chairman of the Board

The Chairman is a non-executive member of the Board, in accordance with Swiss banking law, and performs his role on a full-time basis, in line with the practice expected by FINMA, our main regulator. The Chairman:

- coordinates the work within the Board;
- works with the committee chairmen to coordinate the tasks of the committees;
- ensures that the Board members are provided with the information relevant for performing their duties;
- drives the Board agenda;
- drives key Board topics, especially regarding the strategic development of the Group, succession planning, the structure and organization of the Group, corporate governance, as well as compensation and compensation structure, including the performance evaluation and compensation of the CEO and the Executive Board;
- chairs the Board, the Governance and Nominations Committee, the Conduct and Financial Crime Control Committee and the Shareholder Meetings;
- takes an active role in representing the Group to key shareholders, investors, regulators and supervisors, industry associations and other external stakeholders;
- has no executive function within the Group;
- with the exception of the Governance and Nominations Committee and the Conduct and Financial Crime Control Committee, is not a member of any of the other Board standing committees; and
- may attend all or parts of selected committee meetings as a guest without voting power.

Vice-Chair and Lead Independent Director

There may be one or more Vice-Chairs. The Vice-Chair:

- is a member of the Board;
- is a designated deputy to the Chairman; and
- assists the Chairman by providing support and advice to the Chairman, assuming the Chairman's role in the event of the Chairman's absence or indisposition and leading the Board accordingly.

According to the Group's OGR (Chapter II Board of Directors, Item 3.4), the Board may appoint a Lead Independent Director. If the Chairman is determined not to be independent by the Board, the Board must appoint a Lead Independent Director. The Lead Independent Director:

- may convene meetings without the Chairman being present;
- takes a leading role among the Board members, particularly when issues between a non-independent Chairman and the independent Board members arise (for example, when the non-independent Chairman has a conflict of interest);
- leads the Board's annual assessment of the Chairman; and
- ensures that the work of the Board and Board-related processes continue to run smoothly.

Severin Schwan currently serves as the Vice-Chair and the Lead Independent Director.

Segregation of duties

In accordance with Swiss banking law, the Group operates under a dual board structure, which strictly segregates the duties of supervision, which are the responsibility of the Board, from the duties of management, which are the responsibility of the Executive Board. The roles of the Chairman (non-executive) and the CEO (executive) are separate and carried out by two different people.

Board responsibilities

In accordance with the OGR (Chapter II Board of Directors, Item 5.1), the Board delegates certain tasks to Board committees and delegates the management of the company and the preparation and implementation of Board resolutions to certain management bodies or executive officers to the extent permitted by law, in particular Article 716a and 716b of the Swiss Code of Obligations, and the AoA (Chapter IV, Section 2, The Board of Directors, Art. 17 of the Group's AoA and Chapter III, Section 6. Board of Directors, Art. 6.3 of the Bank's AoA).

With responsibility for the overall direction, supervision and control of the company, the Board:

- regularly assesses our competitive position and approves our strategic and financial plans and risk appetite statement and overall risk limits;
- appoints or dismisses the CEO and the members of the Executive Board and appoints or dismisses the head of Internal Audit as well as the regulatory auditor;
- receives a status report at each ordinary meeting on our financial results, capital, funding and liquidity situation;
- receives, on a monthly basis, management information packages, which provide detailed information on our performance and financial status, as well as quarterly risk reports outlining recent developments and outlook scenarios;
- is provided by management with regular updates on key issues and significant events, as deemed appropriate or requested;
- has access to all information concerning the Group in order to appropriately discharge its responsibilities;
- reviews and approves significant changes in our structure and organization;
- approves the annual variable compensation for the Group and the divisions and recommends compensation of the Board and Executive Board for shareholder approval at the AGM;
- provides oversight on significant projects including acquisitions, divestitures, investments and other major projects;
- approves the recovery and resolution plans of the Group and its major subsidiaries; and
- along with its committees, is entitled, without consulting with management and at the Group's expense, to engage external legal, financial or other advisors, as it deems appropriate, with respect to any matters within its authority.

Management information system

The Group has a comprehensive management information system (MIS) in place as part of our efforts to ensure the Board and senior management are provided with the necessary information and reports to carry out their respective oversight and management responsibilities. The Chairman may request additional reports as deemed appropriate.

Governance of Group subsidiaries

The Board assumes oversight responsibility for establishing appropriate governance for Group subsidiaries. The governance of the Group is based on the principles of an integrated oversight and management structure with global scope, which enables management of the Group as one economic unit. The Group sets corporate governance standards to ensure the efficient and harmonized steering of the Group. In accordance with the OGR (Chapter II Board of Directors, Item 5.1.12), the Board appoints or dismisses the chairperson and the members of the board of directors of the major subsidiaries of the Group and approves their compensation. A policy naming the subsidiaries in scope and providing guidelines for the nomination and compensation process is periodically reviewed by the Board. The governance of the major subsidiaries, subject to compliance with all applicable local laws and regulations, should be consistent with the corporate governance principles of the Group, as reflected in the OGR and other corporate governance documents. In order to facilitate consistency and alignment of Group and subsidiary governance, it is the Group's policy for the Board to appoint at least one Group director to each of the boards of its major subsidiaries. Directors and officers of the Group and its major subsidiaries are committed to ensuring transparency and collaboration throughout the Group.

Board evaluation

The Board performs a self-assessment once a year, where it reviews its own performance against the responsibilities listed in its charter and the Board's objectives and determines future objectives, including any special focus objectives for the coming year. The performance assessment of the Chairman is led by the Vice-Chairman; the Chairman does not participate in the discussion of his own performance. As part of the self-assessment, the Board evaluates its effectiveness with respect to a number

of different aspects, including board structure and composition, communication and reporting, agenda setting and continuous improvement. From time to time, the Board may also mandate an external advisor to facilitate the evaluation process. The Board plans to mandate an external firm to perform a board effectiveness evaluation in the second half of 2020. Similar to the previous evaluation concluded in 2017, the 2020 effectiveness evaluation is anticipated to include a comprehensive review of Board processes and documentation, interviews by the external assessor with the Chairman and the individual Board members, the participation of the external assessor as an observer in Board and Board committee meetings and a presentation and discussion of the results at a Board meeting in 2020 or early 2021. The Board is targeting performing an external board effectiveness evaluation every three years.

Board changes

At the 2019 AGM, Christian Gellerstad and Shan Li were elected as new members of the Board. Andreas Koopmann did not stand for re-election and Alexandre Zeller stepped down from the Board with effect from February 28, 2019. The Board proposes Richard Meddings for election as a new non-executive Board member at the AGM on April 30, 2020. Richard Meddings, chairman of the UK bank TSB Bank plc, is a recognized financial expert with over 30 years of experience in the financial services sector spanning retail banking, wealth management and investment banking. He was a main board director of Standard Chartered Group plc for 12 years from 2002 to 2014 and finance director during the period from 2006 to 2014. Richard Meddings is a chartered accountant and his experience as a non-executive director includes chairing the audit and risk committees at listed companies, including Deutsche Bank AG, Legal & General Group Plc and 3i, as well as Her Majesty's Treasury in the UK. Richard Meddings is expected to succeed John Tiner as Audit Committee Chair, subject to his election at the 2020 AGM and formal Board appointment. Of the current Board members, Alexander Gut will not stand for re-election at the AGM. The Board proposes that all other current members of the Board be re-elected to the Board, proposes the re-election of Urs Rohner as Chairman and proposes Iris Bohnet, Christian Gellerstad, Kai S. Nargolwala and Michael Klein as members of the Compensation Committee.

Board activities

During 2019 and early 2020, the Board focused on a number of key areas, including but not limited to the activities described below. Specifically, the Board:

- unanimously accepted the resignation of Tidjane Thiam as CEO, which was announced on February 7, 2020 and followed a thorough deliberation by the Board and a discussion with the CEO regarding the reputational impact on Credit Suisse of the media coverage of the observation incidents, which occurred in 2019;
- approved the appointment of Thomas Gottstein as the new CEO, effective February 14, 2020, and reviewed and approved a number of other changes to the Executive Board, upon the recommendation of the Governance and Nominations Committee;
- received regular updates on the firm-wide business continuity management and crisis response measures put in place by the Executive Board following the outbreak of COVID-19 in early 2020, as well as on the assessment of the observed market volatility and other related impacts on the Group's operations;
- held its annual strategy workshop with the Executive Board, which included assessments of the Group's capital strength and regulatory capital requirements, growth opportunities in each of the business divisions and the Group's competitive positioning, economic environment and industry outlook;
- conducted strategic business reviews, including a review of Swiss Universal Bank, with a focus on investments in digital capabilities and future service models, selected growth initiatives in International Wealth Management and collaboration opportunities with our investment banking businesses and our plans for growing our business in China;
- reviewed and approved the transaction announced in June 2019 to combine the our open architecture investment fund platform, Credit Suisse InvestLab AG, with Allfunds Group;
- continued to closely monitor progress of the Group's strategic EU program in an effort to ensure a smooth transition of all impacted business areas in anticipation of the UK's expected withdrawal from the EU;
- reviewed and approved the Group's key financial ambitions for 2020 and the launch of the 2020 share buyback program, as well as the Group's risk appetite framework and related risk constraints for 2020, following an assessment by the Risk Committee;
- launched the new Board committee, the Conduct and Financial Crime Control Committee, which further focuses the Board's ongoing oversight of the effectiveness of the Group's financial crime compliance programs, and successfully integrated the committee into the Board's governance setup;
- ordered and closely supervised the special investigations into the observation incidents of two former Executive Board members reported extensively in the media, emphasized that it considers the observations to be unacceptable and not commensurate with the corporate culture promoted by the Board and initiated measures together with management to enhance related internal policies and escalation procedures with the aim of preventing such activity from occurring in the future;
- enhanced its oversight of the global Conduct and Ethics program by establishing a dedicated conduct and ethics session as a standing item at regular Board meetings co-led by the Chief Compliance and Regulatory Affairs Officer and the Global Head of Human Resources; topics reviewed during 2019 included employee engagement and training initiatives, conduct risk trends and insights from ongoing efforts to address sexual harassment at work;
- held dedicated review sessions with the Chief Risk Officer and Chief Compliance and Regulatory Affairs Officer, newly appointed in 2019, with respect to the Risk and Compliance organizations, current capabilities and key priorities for the future;
- reviewed and approved Credit Suisse's Swiss Emergency Plan for submission to FINMA, according to the requirements for systematically important banks in Switzerland under the Swiss "Too Big to Fail" regime, which was regarded as effective by FINMA in February 2020;
- reviewed the Group's talent management strategy, including key initiatives within the areas of recruitment, training and diversity and inclusion and held an interactive session with participants of the Group's senior talent program;
- reviewed and approved variable compensation for the 2019 financial year for the Group and for the Executive Board; recommended the proposals for Executive Board compensation to the 2020 AGM for approval;
- continued to focus on corporate governance at the Group's major subsidiaries and held the fourth annual board leadership event, involving board members of the Group and each of the major subsidiaries, which included a comprehensive review of the Group's approach to sustainability and perspectives on climate risk;
- reviewed progress of the Group's cybersecurity programs and conducted for the first time a cyber incident simulation at the Board level, together with internal and external experts; and
- maintained Board-level focus on innovation and technology through the Board's advisory Innovation and Technology Committee.

Board committees

The Board has five standing committees: the Governance and Nominations Committee, the Audit Committee, the Compensation Committee, the Conduct and Financial Crime Control Committee and the Risk Committee. In addition, the Board retains an advisory committee, the Innovation and Technology Committee. Except for the Compensation Committee members, who are elected by the shareholders on an annual basis, the committee members are appointed by the Board for a term of one year.

At each Board meeting, the Chairs of the committees report to the Board about the activities of the respective committees. In addition, the minutes and documentation of the committee meetings are accessible to all Board members.

Each committee has its own charter, which has been approved by the Board. Each standing committee performs a self-assessment once a year, where it reviews its own performance against the responsibilities listed in its charter and the committee's objectives and determines any special focus objectives for the coming year.

Governance and Nominations Committee

The Governance and Nominations Committee consists of the Chairman, the Vice-Chair and the Chairs of the committees of the Board and other members appointed by the Board. It may include non-independent Board members; however, the majority of members must qualify as independent. Our Governance and Nominations Committee currently consists of five members, following Alexandre Zeller's departure from the Board as of

February 28, 2019. All of our Governance and Nominations Committee members are independent.

The Governance and Nominations Committee generally meets on a monthly basis and the meetings are usually attended by the CEO. It may also ask other members of management or specialists to attend a meeting.

As part of its main duties and responsibilities, the Governance and Nominations Committee:

- acts as counselor to the Chairman and supports him in the preparation of the Board meetings;
- addresses the corporate governance issues affecting the Group and develops and recommends to the Board corporate governance principles and such other corporate governance-related documents as it deems appropriate for the Group;
- reviews the independence of the Board members annually and recommends its assessment to the Board for final determination;
- is responsible for setting selection criteria for Board membership, which shall reflect the requirements of applicable laws and regulations, and identifying, evaluating and nominating candidates for Board membership;
- guides the Board's annual performance assessment of the Chairman, the CEO and the members of the Executive Board;
- proposes to the Board the appointment, replacement or dismissal of members of the Executive Board as well as other appointments requiring endorsement by the Board; and
- reviews succession plans with the Chairman and the CEO relating to Executive Board positions and keeps informed on other top management succession plans.

Governance and Nominations Committee activities

During 2019 and early 2020, the Governance and Nominations Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Governance and Nominations Committee:

- advised and supported the Chairman on the selection of a successor to Tidjane Thiam as CEO and endorsed the recommendation of Thomas Gottstein as the new CEO to the Board for approval in February 2020;
- led the assessment and selection of Richard Meddings, the new Board member candidate proposed for election at the AGM on April 30, 2020 and expected to succeed John Tiner as Audit Committee Chair;
- advised on the Executive Board changes and recommended approval by the Board for successors to the roles of Chief Risk Officer, Chief Compliance and Regulatory Affairs Officer, Global Head of Human Resources, Chief Operating Officer and the divisional CEOs of International Wealth Management, Investment Banking & Capital Markets and Swiss Universal Bank;
- supported the Chairman in planning for the Board's annual strategy workshop in 2019, which was focused on defining the Group's future strategic priorities in the first full year following completion of the Group's three-year restructuring program;
- proposed the initiation of special investigations by an external law firm, Homburger, into the observation of two former Executive Board members for approval by the Board, including delegation of the investigation supervision to the Audit Committee Chair;
- reviewed and endorsed board succession plans for our major subsidiary boards, including the appointments of a new non-executive chair of Credit Suisse (Schweiz) AG to succeed Alexandre Zeller, who stepped down from the Group and Swiss subsidiary boards with effect from February 28, 2019, as well as the appointment of André Helfenstein as CEO of Credit Suisse (Schweiz) AG to succeed Thomas Gottstein with effect from February 14, 2020;
- provided guidance for the annual performance assessments of the Chairman and the CEO; and
- prepared the annual independence assessment of the Board members and recommended its approval by the Board.

Audit Committee

The Audit Committee consists of at least three members, all of whom must be independent. The Chair of the Risk Committee is generally appointed as one of the members of the Audit Committee. Our Audit Committee currently consists of five members, all of whom are independent.

The Audit Committee charter stipulates that all Audit Committee members must be financially literate. In addition, they may not serve on the Audit Committee of more than two other companies, unless the Board deems that such membership would not impair their ability to serve on our Audit Committee.

Furthermore, the US Securities and Exchange Commission (SEC) requires disclosure about whether a member of the Audit Committee is an audit committee financial expert within the meaning of SOX. The Board has determined that John Tiner is an audit committee financial expert.

Pursuant to its charter, the Audit Committee holds meetings at least once each quarter, prior to the publication of our consolidated financial statements. Typically, the Audit Committee convenes for a number of additional meetings and workshops throughout the year. The meetings are attended by management representatives, as appropriate, the Head of Internal Audit and senior representatives of the external auditor. A private session with Internal Audit and the external auditors is regularly scheduled to provide them with an opportunity to discuss issues with the Audit Committee without management being present. The Head of Internal Audit reports directly to the Audit Committee Chair.

As part of its main duties and responsibilities, the Audit Committee:

- monitors and assesses the overall integrity of the financial statements as well as disclosures of the financial condition, results of operations and cash flows;
- monitors the adequacy of the financial accounting and reporting processes and the effectiveness of internal controls over financial reporting;
- monitors processes designed to ensure compliance by the Group in all significant respects with legal and regulatory requirements, including disclosure controls and procedures;
- monitors the adequacy of the management of operational risks jointly with the Risk Committee, including the assessment of the effectiveness of internal controls that go beyond the area of financial reporting;
- monitors the adequacy of the management of reputational risks, jointly with the Risk Committee;
- reviews jointly with the Conduct and Financial Crime Control Committee any significant matters related to compliance and conduct for which a joint review is determined to be appropriate; and
- monitors the qualifications, independence and performance of the external auditors and of Internal Audit.

The Audit Committee is regularly informed about significant projects and initiatives aimed at further improving processes and receives regular updates on significant legal, compliance, disciplinary, tax and regulatory matters. Furthermore, the Audit Committee has established procedures for the receipt, retention and treatment of complaints of a significant nature regarding accounting, internal accounting controls, auditing or other matters alleging potential misconduct, including a whistleblower hotline to provide the option to report complaints on a confidential, anonymous basis.

Audit Committee activities

During 2019 and early 2020, the Audit Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Audit Committee:

- performed its regular review of the quarterly and annual financial results and related accounting, reporting and internal control and disclosure matters;
- held specific reviews on certain accounting and reporting matters of particular relevance in 2019, such as Group tax matters, including the assessment of the US base erosion and anti-abuse tax;
- received an update on the assessment of the Group's global booking model and profitability review program focused on the investment banking businesses and opportunities to simplify the relationships between entities, as well as plans for a next phase of the program to include all business divisions and material legal entities;
- maintained a focus on compliance topics through briefings at every regular meeting by the Chief Compliance Officer on key compliance risks and associated internal controls;
- conducted comprehensive reviews on internal control matters related to privileged access rights to IT systems and the respective remediation programs;
- reviewed the Group's whistleblowing processes and governance, as well as select cases and their resolution;
- reviewed, jointly with the Conduct and Financial Crime Control Committee, Internal Audit report findings as well as the application and development of automated transaction surveillance technology, in the context of financial crime compliance;
- received regular updates on the implementation of the new US GAAP accounting standard for current expected credit losses (CECL), which became effective on January 1, 2020;
- held, jointly with the Risk Committee, a comprehensive session on IT architecture, including system architecture complexity and associated risks, end-of-life management (renewal of legacy infrastructure), architecture simplification and platform strategy;
- reviewed, jointly with the Risk Committee, the Group's data management framework, related regulatory commitments and internal reporting and escalation procedures of data issues;
- reviewed, jointly with the Risk Committee, the Group's third-party risk management, including an overview of external third-party relationships, the respective risk profile and regulatory requirements and the related assessment processes;
- received regular updates from the Head of Internal Audit on key audit findings and held a dedicated workshop with the Internal Audit senior leadership team about their risk assessments for the organization, emerging risk and control themes, and audit planning and methodology, as well as on organizational matters of the Internal Audit function, such as talent and succession planning;
- supervised the transition program for the Group's external audit firm from KPMG to PwC and acknowledged the independence confirmation provided by PwC in mid-2019.

Internal Audit

Our Internal Audit function comprises a team of around 400 professionals, substantially all of whom are directly involved in auditing activities. The Head of Internal Audit reports directly to the Audit Committee Chair and the Audit Committee directs and oversees the activities of the Internal Audit function.

Internal Audit performs an independent and objective assurance function that is designed to add value to our operations. Using a systematic and disciplined approach, the Internal Audit team evaluates and enhances the effectiveness of our risk management, control and governance processes.

Internal Audit is responsible for carrying out periodic audits in line with the Internal Audit Charter, which is approved by the Audit Committee and available publicly. It regularly and independently assesses the risk exposure of our various business activities, taking into account industry trends, strategic and organizational decisions, best practice and regulatory matters. Based on the

results of its assessment, Internal Audit develops detailed annual audit objectives, defining key risk themes and specifying resource requirements for approval by the Audit Committee.

As part of its efforts to achieve best practice, Internal Audit regularly benchmarks its methods and tools against those of its peers. In addition, it submits periodic internal reports and summaries thereof to the management teams as well as the Chairman and the Audit Committee Chair. The Head of Internal Audit reports to the Audit Committee at least quarterly and more frequently as appropriate. Internal Audit coordinates its operations with the activities of the external auditor for maximum effect.

The Audit Committee annually assesses the performance and effectiveness of the Internal Audit function. For 2019, the Audit Committee concluded that the Internal Audit function was effective and independent, with the appropriate resources to deliver against the Internal Audit Charter.

External Audit

The Audit Committee is responsible for the oversight of the external auditor. The external auditor reports directly to the Audit Committee and the Board with respect to its audit of the Group's financial statements and is ultimately accountable to the shareholders. The Audit Committee pre-approves the retention of, and fees paid to, the external auditor for all audit and non-audit services.

→ Refer to "External audit" in Additional information for further information.

External Auditor rotation

As disclosed in the 2018 Annual Report, PwC will be appointed as the new statutory auditor for the fiscal year ending December 31, 2020, subject to shareholder approval at the AGM in April 2020. PwC's appointment as FINMA regulatory auditor by the Board, effective for the fiscal year ending December 31, 2020, is conditional upon shareholder approval of PwC as statutory auditor.

Over the course of 2019, corresponding measures were undertaken by the Audit Committee to ensure an orderly and effective transition of external auditor responsibilities. The Audit Committee reviewed the processes followed to ensure PwC's independence, according to applicable external auditor independence standards, and extended the scope of its policy on non-audit service restrictions to PwC. The Audit Committee accepted PwC's formal independence confirmation letter in July 2019.

Compensation Committee

The Compensation Committee consists of at least three members of the Board, all of whom must be independent. Our Compensation Committee currently consists of four members. All of our Compensation Committee members are independent.

Pursuant to its charter, the Compensation Committee holds at least four meetings per year. Additional meetings may be

scheduled at any time. The meetings are attended by management representatives, as appropriate.

As part of its main duties and responsibilities, the Compensation Committee:

- reviews the Group's compensation policy;
- establishes new compensation plans or amending existing plans and recommends them to the Board for approval;
- reviews the performance of the Group and the divisions and recommends the variable compensation pools for the Group and the divisions to the Board for approval;
- proposes individual compensation for the Board members to the Board;
- discusses and recommends to the Board a proposal for the CEO's compensation;
- discusses and recommends to the Board the Executive Board members' compensation based on proposals by the CEO;
- reviews and recommends to the Board the compensation for individuals being considered for an Executive Board position; and
- reviews and endorses the annual compensation report submitted for a consultative vote by shareholders at the AGM.

In accordance with the Compensation Ordinance, all compensation proposals for members of the Board and the Executive Board are subject to AGM approval.

The Compensation Committee is authorized to retain outside advisors, at the Group's expense, for the purpose of providing guidance to the Compensation Committee as it carries out its responsibilities. Prior to their appointment, the Compensation Committee conducts an independence assessment of the advisors pursuant to the rules of the SEC and the listing standards of the NYSE and Nasdaq.

→ Refer to "The Compensation Committee" in V – Compensation – Compensation governance for information on our compensation approach, principles and objectives and outside advisors.

Compensation Committee activities

During 2019 and early 2020, the Compensation Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Compensation Committee:

- continued to engage extensively with shareholders on compensation, including holding numerous meetings with shareholders involving the Chairman, the Compensation Committee Chair and the Global Head of Human Resources; feedback and key issues resulting from these meetings were addressed regularly by the full committee;
- reviewed and approved the Executive Board compensation design for 2020, which remained generally consistent with the 2019 compensation design, and recommended the performance metrics and targets for the 2020 STI and LTI awards, reflecting the Group's strategy and financial goals for 2020, as well as non-financial metrics;
- reviewed and recommended approval by the Board of the compensation arrangements for the incoming and outgoing Executive Board members during 2019 and early 2020, including for the newly appointed Group CEO;
- conducted the annual review of the Group's compensation framework and determined that it remains fit for purpose and aligned with our compensation objectives overall;
- assessed the Group's performance and determined the variable compensation pools for 2019, taking into account the input from the Group's risk and control functions, including the Conduct and Ethics boards;
- previewed the proposed variable compensation amounts for specific groups of employees, in line with regulatory guidance and the Group's Compensation Policy, including any disciplinary issues and/or points of positive recognition;
- received and assessed periodic reports on industry and regulatory developments, including executive pay trends, competitor practices and key corporate governance developments and regulatory themes with implications for compensation; and
- reviewed and approved the 2019 edition of the Group's Compensation Policy and Implementation Standards and continued to focus on ensuring comprehensive and transparent disclosure in the Group's compensation report.

Conduct and Financial Crime Control Committee

In 2019, the Conduct and Financial Crime Control Committee was established, reflecting the Group's priority to rigorously address financial crime risk and ensure that the highest standards of conduct and vigilance are maintained throughout the Group. The Conduct and Financial Crime Control Committee consists of at least three members. It may include non-independent members; however, the majority of members must qualify as independent. The Audit Committee Chair is generally appointed as one of the members of the Conduct and Financial Crime Control Committee. The Conduct and Financial Crime Control Committee currently consists of five members, all of whom are independent.

Pursuant to its charter, the Conduct and Financial Crime Control Committee holds at least four meetings a year. The Conduct and Financial Crime Control Committee may convene for additional meetings throughout the year in order to appropriately discharge its responsibilities. The meetings are attended by management representatives and representatives of Internal Audit and the Group's external auditors, as appropriate.

The Conduct and Financial Crime Control Committee assists the Board in fulfilling its oversight duties with respect to the Group's exposure to financial crime risk. It is tasked with monitoring and assessing the effectiveness of financial crime compliance programs and initiatives focused on improving conduct and vigilance within the context of combatting financial crime.

As part of its main duties and responsibilities, the Conduct and Financial Crime Control Committee:

- reviews and assesses the Group's overall compliance framework for addressing financial crime risk, including policies, procedures and organizational set-up;

- monitors and assesses the effectiveness of financial crime compliance programs, including those with respect to the following areas: anti-money laundering, client identification and know-your-client procedures, client on and off boarding, politically exposed persons, economic and trade sanctions, anti-bribery, anti-corruption and client tax compliance;
- reviews the status of the relevant policies and procedures and the implementation of significant initiatives focused on improving conduct and vigilance within the context of combatting financial crime, including employee awareness and training programs;
- reviews and monitors investigations into allegations of financial crime or other reports of misconduct pertaining to the areas specified above;
- reviews with management, Internal Audit and the external auditors audit findings and recommendations with respect to the areas specified above, including annual regulatory audit reports;
- receives regular updates by management on regulatory, legislative and industry specific developments with respect to the areas specified above;
- reviews jointly with the Audit Committee and/or Risk Committee any matters for which a joint review is determined to be appropriate, including the annual compliance risk assessment and the Group's framework for addressing conduct risk; and
- provides support to the Compensation Committee and advice, as relevant and appropriate, with respect to the areas specified above as part of the Group's compensation process.

The responsibilities assumed by the new Conduct and Financial Crime Control Committee were previously performed by the Audit Committee in the context of its oversight role over significant compliance matters.

Conduct and Financial Crime Control Committee activities

During 2019 and early 2020, the Conduct and Financial Crime Control Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Conduct and Financial Crime Control Committee:

- reviewed the set-up, capabilities and leadership of the Financial Crime Compliance function and received regular updates on the Group's financial crime compliance activities and key metrics at every meeting, as well as updates on significant financial crime compliance-related regulatory and policy developments;
- received progress updates at every meeting on the key deliverables of the remediation plan in connection with the recommendations by FINMA as part of the enforcement decrees from September 2018, which mandated further improvements in anti-money laundering processes, and reviewed status reports on the related work of an independent third party appointed by FINMA;
- conducted focused sessions on specific financial crime compliance programs, including anti-money laundering controls throughout the client lifecycle, enhanced controls applied to specific client groups, such as politically exposed persons, and the Group's programs for implementing and monitoring economic sanctions compliance;
- reviewed conduct and financial crime compliance initiatives within each of the business divisions together with the divisional CEOs and the Chief Compliance Officer;
- received quarterly updates from Internal Audit focused on financial crime compliance related findings in Internal Audit reports and discussed the results of the annual anti-money laundering regulatory audits with KPMG;
- regularly reviewed the status and findings of global investigations into financial crime compliance matters, as well as related conduct investigations;
- reviewed the status of major initiatives focused on enhanced technology and data analytics solutions to support key financial crime compliance processes, such as a technology supported solution to provide greater transparency to and improve the effectiveness of the client onboarding and ongoing client risk management process;
- held several joint sessions with the Audit Committee, including a session on financial crime compliance transaction monitoring and surveillance methods and technology solutions; and
- endorsed the initial Conduct and Financial Crime Control Committee charter and recommended its approval by the Board.

Risk Committee

The Risk Committee consists of at least three members. It may include non-independent members. The Chair of the Audit Committee is generally appointed as one of the members of the Risk Committee. Our Risk Committee currently consists of six members, all of whom are independent.

Pursuant to its charter, the Risk Committee holds at least four meetings a year. In addition, the Risk Committee usually convenes for additional meetings throughout the year in order to appropriately discharge its responsibilities. The meetings are attended by management representatives, as appropriate.

The Risk Committee is responsible for assisting the Board in fulfilling its oversight responsibilities by periodically reviewing the Group's risk management function, its resources and key risks.

As part of its main duties and responsibilities, the Risk Committee:

- reviews and assesses the integrity and adequacy of the risk management function of the Group;
- reviews and calibrates risk appetite at the Group level and at the level of key businesses, considering capital, liquidity, funding, credit, market, model, climate and, jointly with the Audit Committee, operational and reputational risk;
- reviews and calibrates major risk concentrations;

- reviews and assesses, jointly with the Audit Committee, the status of major infrastructure and committed change programs; and
- reviews and assesses, jointly with the Audit Committee, the internal control environment of the Group, including business continuity management, the enterprise risk and control framework and the firm-wide risk management framework as well as the control functions' input into remuneration.

The Risk Committee is regularly informed about the risk profile of the Group, including major risk topics and key initiatives aimed at responding to regulatory change and further improving risk management across the Group. In addition, the Risk Committee mandates the Credit Risk Review function to independently assess Credit Suisse's credit risk management practices, identify issues impacting the quality of credit risk management and report its findings to the Risk Committee.

The Risk Committee furthermore looks to ensure that key risk developments are addressed appropriately, such as the evolving cyber risk landscape. Senior management, the Board and the Risk Committee are actively engaged and regularly informed on the extent of the threats and mitigations in place to manage cyber incidents. Related business continuity and response plans are tested and simulations are conducted up to the Executive Board and the Board level. Significant incidents are escalated to the Risk Committee together with key findings and mitigations actions.

Risk Committee activities

During 2019 and early 2020, the Risk Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Risk Committee:

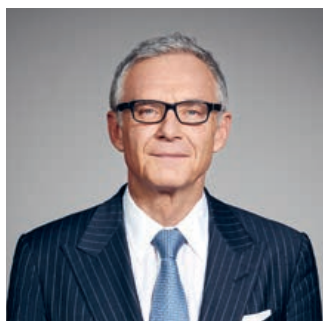
- maintained its focus on supporting the Board in reviewing strategically important topics, including adequacy of capital, liquidity and funding and the allocation of capital to Group businesses and major subsidiaries;
- received regular updates on key change programs in line with regulatory expectations including the Basel Committee on Banking Supervision 239 principles for effective risk data aggregation and risk reporting;
- reviewed and endorsed the revised risk appetite framework and the Group's strategic risk objectives and the risk appetite statements for the Bank;
- reviewed implications of Basel III reforms as part of the Group Internal Capital Adequacy Assessment Process (ICAAP) review and Fundamental Review of Trading Book (FRTB) update;
- monitored aspects of the Group's risk management framework, for example with respect to model risk, sovereign risk, liquidity risk, stress testing and the internal control framework;
- conducted focused credit risk reviews for a number of risk concentrations, including credit exposure, collateral concentration, illiquid positions, emerging market countries and leveraged lending;
- regularly monitored the risk profile and risk appetite for various businesses, including the Corporate Bank, International Wealth Management Private Banking, various Swiss Universal Bank businesses and APAC Markets;
- monitored progress on the Group's IBOR transition program, an effort to coordinate transition readiness on a firm-wide basis for the expected replacement of certain IBOR benchmarks by the end of 2021, which included updates on key transition risks and transition scenario analysis;
- reviewed, jointly with the Audit Committee, risks related to data management, IT and outsourcing;
- reviewed, jointly with the Innovation and Technology Committee, risks related to IT security, data protection and cyber risk; and
- reviewed the Group's policy and position with respect to reputational risk and sustainability, with particular focus on existing reputational risk process challenges and key developments related to sustainability, such as the TCFD recommendations.

Innovation and Technology Committee

The Board established an Innovation and Technology Committee as an interdisciplinary advisory group in 2015. The group acts as a senior platform to discuss internal progress in relation to innovation and technology initiatives, as well as relevant industry-wide technology trends. The Innovation and Technology Committee is chaired by former Group Board member Sebastian Thrun in his role as senior advisor. Participants in the Innovation and Technology Committee include Board members, members of management, internal technology experts and a senior cybersecurity advisor. In 2019, the Innovation and Technology Committee held two

meetings. Committee activities included a review of digitalization initiatives in the Swiss Universal Bank division, selected innovation projects within the finance function and an assessment of the Group's cyber and information security-related operations, which was conducted jointly with the Risk Committee. The committee was furthermore briefed about the activities and progress of Credit Suisse Labs, a business wholly owned and operated by Credit Suisse, which focuses on the development of new business and technology concepts, products and platforms for use by Credit Suisse and potentially the broader banking industry.

Biographies of the Board



Urs Rohner
Born 1959
Swiss Citizen
Board member since 2009

Chairman of the Board



Iris Bohnet
Born 1966
Swiss Citizen
Board member since 2012

Professional history

2004–present Credit Suisse
Chairman of the Board and the Governance and Nominations Committee (2011–present)
Chair of the Conduct and Financial Crime Control Committee (2019–present)
Member of the Innovation and Technology Committee (2015–present)
Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2015–present)
Vice-Chair of the Board and member of the Governance and Nominations Committee (2009–2011)
Member of the Risk Committee (2009–2011)
Chief Operating Officer (2006–2009)
General Counsel (2004–2009)
Member of the Executive Board (2004–2009)

2000–2004 ProSiebenSat.1 Media AG,
Chairman of the Executive Board and CEO

1983–1999 Lenz & Staehelin
Partner (1992–1999)
Attorney (1983–1988; 1990–1992)

1988–1989 Sullivan & Cromwell LLP, New York, attorney

Education

1990 Admission to the bar of the State of New York
1986 Admission to the bar of the Canton of Zurich
1983 Master in Law (lic.iur.), University of Zurich, Switzerland

Other activities and functions

GlaxoSmithKline plc, board member
Swiss Bankers Association, vice-chairman¹
Swiss Finance Council, board member¹
Institute of International Finance, board member¹
European Banking Group, member¹
European Financial Services Roundtable, member¹
University of Zurich Department of Economics, chairman of the advisory board
Lucerne Festival, board of trustees member

¹ Mr. Rohner performs functions in these organizations in his capacity as Chairman of the Group.

Professional history

2012–present Credit Suisse
Member of the Compensation Committee (2012–present)
Member of the Innovation and Technology Committee (2015–present)

1998–present Harvard Kennedy School
Academic Dean (2018–present, 2010–2014)
Albert Pratt Professor of Business and Government (2018–present)
Director of the Women and Public Policy Program (2008–present)
Professor of public policy (2006–2018)
Associate professor of public policy (2003–2006)
Assistant professor of public policy (1998–2003)

1997–1998 Haas School of Business, University of California at Berkeley, visiting scholar

Education

1997 Doctorate in Economics, University of Zurich, Switzerland
1992 Master's degree in Economic History, Economics and Political Science, University of Zurich, Switzerland

Other activities and functions

Applied, board member
Economic Dividends for Gender Equality (EDGE), advisory board member
We share tech, advisory board member
Women in Banking and Finance, patron
UK Government Equalities Office/BIT, advisor
Take The Lead Women, advisor
genEquality, advisor



Christian Gellerstad
 Born 1968
 Swiss and Swedish Citizen
 Board member since 2019



Andreas Gottschling
 Born 1967
 German Citizen
 Board member since 2017

Professional history

2019–present	Credit Suisse
	Member of the Compensation Committee (2019–present) Member of the Conduct and Financial Crime Control Committee (2019–present)
1994–2018	Pictet Group
	CEO, Pictet Wealth Management (2007–2018) Executive Committee Member, Banque Pictet & Cie SA, Geneva (2013–2018) Equity Partner, Pictet Group (2006–2018) CEO and Managing Director Banque Pictet & Cie (Europe) S.A, Luxembourg (2000–2007) Deputy CEO and Senior Vice President, Pictet Bank & Trust Ltd., Bahamas (1996–2000) Financial Analyst & Portfolio Manager, Pictet & Cie, Geneva (1994–1996)
Before 1994	Cargill International, Emerging Markets Trader

Education

1996	Certified International Investment Analyst (CIIA) and Certified Portfolio Manager and Financial Analyst (AZEK)
1993	Master in Business Administration and Economics, University of St. Gallen (HSG), Switzerland

Other activities and functions

Taurus Group SA, board member
FAVI SA, board member
AFICA SA, board member
Tsampéhro SA, board member

Professional history

2017–present	Credit Suisse
	Chair of the Risk Committee (2018–present) Member of the Governance and Nominations Committee (2018–present) Member of the Audit Committee (2018–present) Member of the Risk Committee (2017–present) Member of the board of Credit Suisse International and Credit Suisse Securities (Europe) Limited (UK subsidiaries) (2018–present)
2013–2016	Erste Group Bank, Vienna, Chief Risk Officer and Member of the Management Board
2012–2013	McKinsey and Company, Zurich, Senior Advisor Risk Practice
2005–2012	Deutsche Bank, London, Frankfurt and Zurich
	Member of the Risk Executive Committee & Divisional Board (2005–2012) Global Head Operational Risk (2006–2010) Global Head of Risk Analytics and Instruments (2005–2011)
2003–2005	LGT Capital Management, Switzerland, Head of Quant Research
2000–2003	Euroquants, Germany, Consultant
1997–2000	Deutsche Bank, Frankfurt, Head of Quantitative Analysis

Education

1997	Doctorate in Economics, University of California, San Diego, USA
1991	Postgraduate Studies in Physics, Mathematics and Economics, Harvard University, Cambridge, US
1990	Degrees in Mathematics and Economics, University of Freiburg, Germany

Other activities and functions

Mr. Gottschling currently does not hold directorships in other organizations.



Alexander Gut
 Born 1963
 Swiss and British Citizen
 Board member since 2016



Michael Klein
 Born 1963
 US Citizen
 Board member since 2018

Professional history

2016–present	Credit Suisse Member of the Audit Committee (2016–present) Member of the Innovation and Technology Committee (2017–present) Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2016–present)
2007–present	Gut Corporate Finance AG, managing partner
2003–2007	KPMG Switzerland Member of the Executive Committee, Switzerland (2005–2007) Partner and Head of Audit Financial Services, Switzerland (2004–2007) and region Zurich (2003–2004)
2001–2003	Ernst & Young, partner of the Transaction Advisory Services practice
1991–2001	KPMG Switzerland Senior Manager, Audit Financial Services Senior Manager, Banking Audit Banking auditor

Education

1996	Swiss Certified Accountant, Swiss Institute of Certified Accountants and Tax Consultants
1995	Doctorate in Business Administration, University of Zurich
1990	Masters degree in Business Administration, University of Zurich

Other activities and functions

Adecco Group Ltd., board member and chairman of the governance and nomination committee

Professional history

2018–present	Credit Suisse Member of the Compensation Committee (2019–present) Member of the Risk Committee (2018–present)
2010–present	M Klein & Company, Managing Partner
1985–2008	Citigroup Vice Chairman Chairman Institutional Clients Group Chairman & Co-CEO Markets & Banking Co-President Markets & Banking CEO, Global Banking CEO Markets and Banking EMEA Various senior management positions

Education

1985	Bachelors of Science in Economics (Finance and Accounting), The Wharton School, University of Pennsylvania
------	--

Other activities and functions

Clarivate Analytics, board member
 Churchill Capital Corp. II, chairman and CEO
 Churchill Capital Corp. III, chairman and CEO
 TBG Europe NV, board member
 Pro Football Hall of Fame Village, Director
 Harvard Global Advisory Board, member
 Peterson Institute for International Economics, board member
 The World Food Programme, investment advisory board member
 Conservation International, board member
 Horace Mann School, board of trustees member



Shan Li
 Born 1963
 Chinese Citizen
 Board member since 2019



Seraina Macia
 Born 1968
 Swiss and Australian Citizen
 Board member since 2015

Professional history

2019–present	Credit Suisse Member of the Risk Committee (2019–present)
2015–present	Silk Road Finance Corporation Limited, Hong Kong, CEO
2010–present	Chinastone Capital Management Limited, Shanghai, chairman and CEO
2005–present	San Shan Capital Partners, Hong Kong, Founding partner
1998–present	Fang Holdings Limited, Co-founder
2013–2015	China Development Bank, Beijing, Chief International Business advisor
2010–2011	UBS Asia Investment Bank, Hong Kong, vice chairman
2001–2005	Bank of China International Holdings, Hong Kong, CEO
1999–2001	Lehman Brothers Asia, Hong Kong, Head of China Investment Banking
1998–1999	China Development Bank, Beijing, Deputy Head of Investment Bank Preparation Leading Group
1993–1998	Goldman Sachs Executive Director, Goldman Sachs International, London (1997–1998) Executive Director, Goldman Sachs (Asia), Hong Kong (1995–1997) International Economist, Goldman Sachs & Co., New York (1993–1995)
1993	Credit Suisse First Boston, New York, Associate

Education

1994	PhD in Economics, Massachusetts Institute of Technology (MIT)
1988	MA in Economics, University of California, Davis
1986	BS in Management Information Systems, Tsinghua University, Beijing

Other activities and functions

CMMB Vision Holdings Ltd, board member
 Chinese Financial Association of Hong Kong, vice chairman
 13th National Committee of the Chinese People's Political Consultative Conference (CPPCC), member
 MIT Economics Visiting Committee, member
 Silk Road Planning Research Center, vice chairman
 Tsinghua Institute for Governance Studies, vice chairman
 MIT Sloan Finance Advisory Board, member
 National Center for Economics Research at Tsinghua University, deputy director

Professional history

2015–present	Credit Suisse Member of the Risk Committee (2018–present) Member of the Audit Committee (2015–2018)
2017–present	Blackboard U.S. Holdings, Inc. (AIG Corporation) Executive vice president & CEO of Blackboard (AIG technology-focused subsidiary; formerly Hamilton USA)
2016–2017	Hamilton Insurance Group CEO Hamilton USA
2013–2016	AIG Corporation Executive vice-president and CEO Regional Management & Operations of AIG, New York (2015–2016) CEO and President of AIG EMEA, London (2013–2016)
2010–2013	XL Insurance North America, chief executive
2002–2010	Zurich Financial Services President Specialties Business Unit, Zurich North America Commercial, New York (2007–2010) CFO, Zurich North America Commercial, New York (2006–2007) Various positions, among others: head of the joint investor relations and rating agencies management departments; head of rating agencies management; senior investor relations officer (2002–2008)
2000–2002	NZB Neue Zuercher Bank, founding partner and financial analyst
1990–2000	Swiss Re Rating agency coordinator, Swiss Re Group (2000) Senior underwriter and deputy head of financial products, Melbourne (1996–1999) Various senior underwriting and finance positions, Zurich (1990–1996)

Education

2001	Chartered Financial Analyst (CFA), CFA Institute, US
1999	MBA, Monash Mt Eliza Business School, Australia
1997	Post-graduate certificate in Management, Deakin University, Australia

Other activities and functions

BanQu, chair
 CFA Institute, member
 Food Bank for New York City, board member



Kai S. Nargolwala
Born 1950
Singaporean Citizen
Board member since 2013



Ana Paula Pessoa
Born 1967
Brazilian Citizen
Board member since 2018

Professional history

2008–present	Credit Suisse
	Member of the Conduct and Financial Crime Control Committee (2019–present)
	Chair of the Compensation Committee (2017–present)
	Member of the Governance and Nominations Committee (2017–present)
	Member of the Innovation and Technology Committee (2015–present)
	Member of the Compensation Committee (2014–present)
	Member of the Risk Committee (2013–2017)
	Non-executive chairman of Credit Suisse's Asia-Pacific region (2010–2011)
	Member of the Executive Board (2008–2010)
	CEO of Credit Suisse Asia Pacific region (2008–2010)
1998–2007	Standard Chartered plc, main board executive director
Prior to 1998	Bank of America
	Group executive vice president and head of Asia Wholesale Banking group in Hong Kong (1990–1995)
	Head of High Technology Industry group in San Francisco and New York (1984–1990)
	Various management and other positions in the UK (1976–1984)
	Peat Marwick Mitchell & Co., London, accountant (1970–1976)

Education

1974	Fellow of the Institute of Chartered Accountants (FCA), England and Wales
1969	BA in Economics, University of Delhi

Other activities and functions

Prudential plc. / Prudential Corporation Asia Limited, board member
PSA International Pte. Ltd. Singapore, board member
Clifford Capital Pte. Ltd., director and non-executive chairman
Temasek Sustainable Finance Steering Committee, co-chair
Singapore Institute of Directors, Fellow

Professional history

2018–present	Credit Suisse
	Member of the Conduct and Financial Crime Control Committee (2019–present)
	Member of the Audit Committee (2018–present)
	Member of the Innovation and Technology Committee (2018–present)
2017–present	Kunumi AI, Partner, Investor and Chair
2015–2017	Olympic & Paralympic Games 2016, CFO of Organising Committee
2012–2015	Brunswick Group, Managing partner of Brazilian Branch
2001–2011	Infoglobo Newspaper Group, CFO and Innovation Director
1993–2001	Globo Organizations, Senior Management positions in several media divisions

Education

1991	MA, FRI (Development Economics), Stanford University, California
1988	BA, Economics and International Relations, Stanford University, California

Other activities and functions

Suzano Pulp and Paper, board member
Vinci Group, board member
News Corporation, board member
Global Advisory Council for Stanford University, member
Instituto Atlântico de Governo, advisory board member
The Nature Conservancy, advisory board member
Stanford Alumni Brasil Association (SUBA), board member
Fundação Roberto Marinho, member of the audit committee



Joaquin J. Ribeiro
 Born 1956
 US Citizen
 Board member since 2016



Severin Schwan
 Born 1967
 Austrian, German and Swiss
 Citizen
 Board member since 2014
Vice-Chair of the Board
Lead Independent Director

Professional history

2016–present	Credit Suisse
	Member of the Audit Committee (2016–present)
1997–2016	Deloitte LLP (USA)
	Vice chairman (2010–2016)
	Chairman of Global Financial Services Industry practice (2010–2016)
	Head of US Financial Services Industry practice (2003–2010)
	Head of Global Financial Services Industry practice in Asia (1997–2003)
	Head of South East Asian Corporate Restructuring practice (1997–2000)
2005–2010	World Economic Forum, senior advisor to Finance Governor’s Committee

Education

1996	Executive Business Certificate, Columbia Business School, New York
1988	MBA in Finance, New York University, New York
1980	Certified Public Accountant, New York
1978	Bachelor degree in Accounting, Pace University, New York

Other activities and functions

Mr. Riberio currently does not hold directorships in other organizations.

Professional history

2014–present	Credit Suisse
	Vice-Chair and Lead Independent Director (2017–present)
	Member of the Governance and Nominations Committee (2017–present)
	Member of the Risk Committee (2014–present)
	Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2015–2017)
1993–present	Roche Group
	CEO (2008–present)
	Member of the board of Roche Holding Ltd. (2013–present)
	CEO, Division Roche Diagnostics (2006–2008)
	Head Asia Pacific Region, Roche Diagnostics Singapore (2004–2006)
	Head Global Finance & Services, Roche Diagnostics Basel (2000–2004)
	Various management and other positions with Roche Germany, Belgium and Switzerland (1993–2000)

Education

1993	Doctor of Law, University of Innsbruck, Austria
1991	Master’s degrees in Economics and Law, University of Innsbruck, Austria

Other activities and functions

International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), vice-president
 International Business Leaders Advisory Council for the Mayor of Shanghai, member



John Tiner
 Born 1957
 British Citizen
 Board member since 2009

Professional history

2009–present	Credit Suisse
	Member of the Conduct and Financial Crime Control Committee (2019–present)
	Chair of the Audit Committee (2011–present)
	Member of the Governance and Nominations Committee (2011–present)
	Member of the Risk Committee (2011–present)
	Member of the Audit Committee (2009–present)
	Member of the board of Credit Suisse Holdings (USA), Inc., Credit Suisse (USA), Inc. and Credit Suisse Securities (USA), LLC (US subsidiaries) (2015–present)
2008–2013	Resolution Operations LLP, CEO
2001–2007	Financial Services Authority (FSA)
	CEO (2003–2007)
	Managing director of the investment, insurance and consumer directorate (2001–2003)
Prior to 2001	Arthur Andersen, UK
	Managing partner, UK Business Consulting (1998–2001)
	Managing partner, Worldwide Financial Services practice (1997–2001)
	Head of UK Financial Services practice (1993–1997)
	Partner in banking and capital markets (1988–1997)
	Auditor and consultant, Tansley Witt (later Arthur Andersen UK) (1976–1988)

Education

2010	Honorary Doctor of Letters, Kingston University, London
1980	UK Chartered Accountant, Institute of Chartered Accountants in England and Wales

Other activities and functions

Ardonagh Group Limited, chairman
 Salcombe Brewery Limited, chairman

Former members of the Board

Information about former members of the Board is available on our website at credit-suisse.com/annualreporting.

Honorary Chairman of Credit Suisse Group AG

Rainer E. Gut, born 1932, Swiss Citizen, was appointed Honorary Chairman of the Group in 2000 after he retired as Chairman, a position he had held from 1986 to 2000. Mr. Gut was a member of the board of Nestlé SA, Vevey, from 1981 to 2005, where he was vice-chairman from 1991 to 2000 and chairman from 2000 to 2005. As Honorary Chairman, Mr. Gut does not have any function in the governance of the Group and does not attend the meetings of the Board.

Secretaries of the Board

Joan E. Belzer
 Roman Schaerer

Executive Board

Membership

The Executive Board is the most senior management body of the Group. Its members are appointed by the Board. Prior to the appointment of an Executive Board member, the terms and conditions of the individual's employment contract with the Group are reviewed by the Compensation Committee. The Executive Board currently consists of twelve members. The composition of the Executive Board of the Group and the Bank is identical, with the exception of André Helfenstein, who is a member of the Executive Board of the Group, but not the Bank.

Executive Board changes

The Group announced a number of changes to the Executive Board in 2019 and early 2020. On February 26, 2019, Lydie Hudson and Antoinette Poschung were appointed as new Executive Board members in the roles of Chief Compliance Officer (Chief

Compliance and Regulatory Affairs Officer since the organizational change on March 5, 2020) and Global Head of Human Resources, respectively. Lara Warner, who previously held the role of Chief Compliance and Regulatory Affairs Officer, was appointed Chief Risk Officer. Peter Goerke, former Chief Human Resources Officer, and Joachim Oechslein, former Chief Risk Officer, stepped down from the Executive Board. Effective July 1, 2019, Philipp Wehle was appointed as the new CEO of International Wealth Management to succeed Iqbal Khan, who stepped down from the Executive Board. Effective October 1, 2019, James B. Walker was appointed as Chief Operating Officer (COO), succeeding Pierre-Olivier Bouée, who resigned from the Executive Board as a consequence of the observation incidents. Mr. Bouée was later dismissed for cause. On November 11, 2019, David Miller was appointed as the new CEO of Investment Banking & Capital Markets to succeed Jim Amine, who took on a newly created role as head of Private Credit Opportunities within the Group's Asset Management business.

Members of the Executive Board as of December 31, 2019

	Executive Board member since	Role
Tidjane Thiam, Chief Executive Officer	2015	Group CEO
Romeo Cerutti, General Counsel	2009	Corporate Function Head
Brian Chin, CEO Global Markets	2016	Divisional Head
Thomas P. Gottstein, CEO Swiss Universal Bank	2015	Divisional Head
Lydie Hudson, Chief Compliance Officer	2019	Corporate Function Head
David R. Mathers, Chief Financial Officer	2010	Corporate Function Head
David Miller, CEO Investment Banking & Capital Markets	2019	Divisional Head
Antoinette Poschung, Global Head of Human Resources	2019	Corporate Function Head
Helman Sitohang, CEO Asia Pacific	2015	Divisional Head
James B. Walker, Chief Operating Officer	2019	Corporate Function Head
Lara J. Warner, Chief Risk Officer	2015	Corporate Function Head
Philipp Wehle, CEO International Wealth Management	2019	Divisional Head

On February 7, 2020, Thomas Gottstein was appointed Group CEO, succeeding Tidjane Thiam, and André Helfenstein was appointed as the new CEO of Swiss Universal Bank and

Executive Board member of the Group, as well as the new CEO of Credit Suisse (Schweiz) AG, succeeding Thomas Gottstein. Both appointments were effective as of February 14, 2020.

Members of the Executive Board as of February 14, 2020

	Executive Board member since	Role
Thomas P. Gottstein, Chief Executive Officer	2015	Group CEO
Romeo Cerutti, General Counsel	2009	Corporate Function Head
Brian Chin, CEO Global Markets	2016	Divisional Head
André Helfenstein, CEO Swiss Universal Bank	2020	Divisional Head
Lydie Hudson, Chief Compliance and Regulatory Affairs Officer ¹	2019	Corporate Function Head
David R. Mathers, Chief Financial Officer	2010	Corporate Function Head
David Miller, CEO Investment Banking & Capital Markets	2019	Divisional Head
Antoinette Poschung, Global Head of Human Resources	2019	Corporate Function Head
Helman Sitohang, CEO Asia Pacific	2015	Divisional Head
James B. Walker, Chief Operating Officer	2019	Corporate Function Head
Lara J. Warner, Chief Risk Officer	2015	Corporate Function Head
Philipp Wehle, CEO International Wealth Management	2019	Divisional Head

¹ Lydie Hudson assumed responsibility for Regulatory Affairs effective March 5, 2020.

Responsibilities

The Executive Board is responsible for the day-to-day operational management of the Group under the leadership of the CEO.

As part of its main duties and responsibilities, the Executive Board:

- establishes the strategic business plans for the Group overall as well as for the principal businesses, subject to approval by the Board;
- regularly reviews and coordinates significant initiatives, projects and business developments in the divisions and the corporate functions, including important risk management matters;
- regularly reviews the consolidated and divisional financial performance, including progress on key performance indicators, as well as the Group's capital and liquidity positions and those of its major subsidiaries;
- appoints and dismisses senior managers, with the exception of managers from Internal Audit, and periodically reviews senior management talent across the Group and talent development programs;
- reviews and approves business transactions, including mergers, acquisitions, establishment of joint ventures and establishment of subsidiary companies; and
- approves key policies for the Group.

Executive Board committees

The Executive Board has several standing committees, which are chaired by an Executive Board member and meet periodically throughout the year and/or as required. These committees are:

- The Executive Board Risk Forum: the Executive Board Risk Forum, chaired by the CRO, was newly established in 2020 and is responsible for decision making across risk types and functions. The forum's key responsibilities include the review and challenge of the Group's risk-taking strategy, adjudicating material and cross-divisional, cross-functional escalated risk issues, oversight of critical approvals (e.g., risk appetite, limit allocation, risk capital allocation and mergers & acquisitions activity) and monitoring of key risk trends and relevant metrics.
- Capital Allocation & Risk Management Committee (CARMC): CARMC is responsible for overseeing and directing our risk profile, recommending risk limits at the Group level to the Risk Committee and the Board, establishing and allocating risk appetite among the various businesses, reviewing new significant business strategies or changes in business strategies including business migrations, making risk-related decisions on escalations and for applying measures, methodologies and tools to monitor and manage the risk portfolio. CARMC will furthermore escalate items requiring additional oversight to the Executive Board Risk Forum. There are three cycles of

CARMC which each meet quarterly: the Position & Client Risk cycle (chaired by the CRO), the Asset & Liability Management cycle (chaired by the CFO) and the Internal Control System cycle (jointly chaired by the CRO and the Chief Compliance Officer (Chief Compliance and Regulatory Affairs Officer since March 5, 2020)).

- Valuation Risk Management Committee (VARMC): VARMC (chaired by the CFO) is responsible for establishing policies regarding the valuation of certain material assets and the policies and calculation methodologies applied in the valuation process. Additionally, VARMC is responsible for monitoring and assessing valuation risks, reviewing inventory valuation conclusions and directing the resolution of significant valuation issues.
- Group Conduct and Ethics Board: the Group CEB (co-chaired by the Global Head of Human Resources and the Chief Compliance Officer (Chief Compliance and Regulatory Affairs Officer since March 5, 2020)) is responsible for overseeing how conduct and ethics matters are handled within the divisions and corporate functions and ensuring consistency and alignment of practices across the Group. The Group CEB conducts reviews of employee sanctions and may perform subsequent evaluations for specific matters that have been escalated by the CEBs established for each division and the corporate functions. The Group CEB also oversees the activities of the conduct and ethics ombudsperson.

The role of the conduct and ethics ombudsperson was created in 2018 as a result of a review of the Group's global approach to handling claims of sexual harassment. The ombudsperson is accountable directly to the Chief Executive Officer and the Group Conduct and Ethics Board. The ombudsperson's role is to serve as a point of immediate escalation when sexual harassment claims arise and to ensure there is appropriate awareness of and attention to such claims. The ombudsperson works with our Compliance, General Counsel and Human Resources functions as well as our business divisions to review our relevant global training programs, policies and protocols, so that they can be further enhanced as part of our efforts to prevent sexual harassment at work and to make sure all cases are managed in a fair, accurate and consistent way within our global framework.

→ Refer to "Risk management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for information on our risk management oversight.

Two former Executive Board standing committees, the Reputational Risk and Sustainability Committee (RRSC) and the Risk Processes and Standards Committee (RPSC), no longer exist as standalone committees. The responsibilities of the former RRSC have been integrated into the CARMC Position & Client Risk cycle, in order to enable more holistic assessments of all key position and client risk factors in a single committee. The responsibilities of the former RPSC are allocated fully to the CRO.

Executive Board mandates

Our Executive Board members may, similar to our Board members, assume board or executive level or other roles in companies and organizations outside of the Group, which are collectively referred to as mandates. According to the Group's AoA (Chapter IV, Section 3, The Executive Board, Art. 20f), the number of mandates Executive Board members may hold in listed companies and other organizations outside of the Group is subject to certain restrictions, in order to comply with the Compensation Ordinance and to ensure that our Executive Board members dedicate sufficient time to fulfil their executive roles.

The limitations on mandates assumed by Executive Board members outside of the Group are summarized in the table below.

Type of mandate and limitation – Executive Board

Type of mandate	Limitation
Listed Companies	No more than one other mandate
Other legal entities ¹	No more than two mandates
Legal entities on behalf of the Group ²	No more than ten mandates
Charitable legal entities ³	No more than ten mandates

¹ Includes private non-listed companies.

² Includes memberships in business and industry associations.

³ Also includes honorary mandates in cultural or educational organizations.

No Executive Board member holds mandates in excess of these restrictions. The restrictions shown above do not apply to mandates of Executive Board members in legal entities controlled by the Group, such as subsidiary boards.

→ Refer to "Mandates" in Board of Directors for further information.

Biographies of the Executive Board members



Thomas P. Gottstein

Born 1964
Swiss Citizen
Member since 2015

**Chief Executive Officer
(as of February 14, 2020)**



Tidjane Thiam

Born 1962
French and Ivorian Citizen
Member 2015–2020

**Chief Executive Officer
(until February 14, 2020)**

Professional history

1999–present	Credit Suisse
	Chief Executive Officer of the Group (2020–present) CEO Credit Suisse (Schweiz) AG (2016–2020) CEO Swiss Universal Bank (2015–2020) Head of Premium Clients Switzerland & Global External Asset Managers (2014–2015) Head of Investment Banking Coverage Switzerland (2010–2013) Co-Head of Equity Capital Markets EMEA (2007–2009) Head of Equity Capital Markets Switzerland, Austria and Scandinavia, London (2005–2007) Head of Equity Capital Markets Switzerland, Zurich (2002–2005) Investment Banking Department Switzerland (1999–2002)
Prior to 1999	UBS
	Telecoms Investment Banking and Equity Capital Markets, London Group Controlling, Zurich

Education

1995	PhD in Finance and Accounting, University of Zurich
1989	Degree in Business Administration and Economics, University of Zurich

Other activities and functions

Pension Fund of Credit Suisse Group (Switzerland), foundation board and investment committee member
Pension Fund 2 of Credit Suisse Group (Switzerland), foundation board member
Credit Suisse Foundation, board member
Private Banking Steering Committee of the Swiss Banking Association, member
FINMA Private Banking Panel, member
SIX Group AG, board and the risk committee member
Swiss Entrepreneurs Foundation, board member
Europa Forum Luzern, executive committee member
Opernhaus Zurich, board and audit committee member

Professional history

2015–2020	Credit Suisse
	Chief Executive Officer of the Group (2015–2020) Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2016–2020)
2008–2015	Prudential plc
	Group Chief Executive (2009–2015) Chief Financial Officer (2008–2009)
2002–2008	Aviva
	Chief Executive, Europe (2006–2008) Managing director, International (2004–2006) Group strategy & development director (2002–2004)
2000–2002	McKinsey & Co, partner, Paris
1998–1999	Minister of planning and development, Côte d'Ivoire
1994–1999	National Bureau for Technical Studies & Development, Côte d'Ivoire, Chairman and Chief Executive
Prior to 1994	McKinsey & Co, consultant, Paris, London and New York

Education

1988	Master of Business Administration, INSEAD
1986	Ingénieur Civil des Mines, Ecole Nationale Supérieure des Mines de Paris
1984	Ingénieur Diplômé de l'École polytechnique, Ecole Polytechnique, Paris

Other activities and functions

International Olympic Committee, member
Group of Thirty (G30), member
International Business Council of the World Economic Forum, member



Romeo Cerutti
 Born 1962
 Swiss and Italian Citizen
 Member since 2009
General Counsel



Brian Chin
 Born 1977
 US Citizen
 Member since 2016
CEO
Global Markets

Professional history

2006–present	Credit Suisse
	General Counsel (2009–present)
	Global Co-Head of Compliance (2008–2009)
	General Counsel, Private Banking (2006–2009)
1999–2006	Lombard Odier Darier Hentsch & Cie
	Partner of the Group Holding (2004–2006)
	Head of Corporate Finance (1999–2004)
1995–1999	Homburger Rechtsanwälte, Zurich, attorney-at-law
Prior to 1995	Latham and Watkins, Los Angeles, attorney-at-law

Education

1998	Post-doctorate degree in Law (Habilitation), University of Fribourg
1992	Admission to the bar of the State of California
1992	Master of Law (LLM), University of California, Los Angeles
1990	Doctorate in Law, University of Fribourg
1989	Admission to the bar of the Canton of Zurich
1986	Master in Law (lic.iur.), University of Fribourg

Other activities and functions

Vifor Pharma Ltd., vice-chairman
 Swiss Finance Institute (SFI), chairman
 American-Swiss Chamber of Commerce, legal group member
 Ulrico Hoepli Foundation, board of trustees member

Professional history

2003–present	Credit Suisse
	CEO Global Markets (2016–present)
	Member of the board of Credit Suisse Holdings (USA), Inc., Credit Suisse (USA), Inc. and Credit Suisse Securities (USA) LLC (US subsidiaries) (2016–present)
	Co-Head of Credit Pillar within Global Markets (2015–2016)
	Global Head of Securitized Products and Co-Head of Fixed Income, Americas (2012–2016)
	Other senior positions within Investment Banking (2003–2012)
2000–2003	Deloitte & Touche LLP, senior analyst, Securitization Transaction Team
Prior to 2000	PriceWaterhouseCoopers LLP, Capital Markets Advisory Services
	The United States Attorney's Office, Frauds division

Education

2000	BS in Accounting, Rutgers University
------	--------------------------------------

Other activities and functions

Credit Suisse Americas Foundation, board member



André Helfenstein
 Born 1967
 Swiss and British Citizen
 Member since 2020
CEO Swiss Universal Bank



Lydie Hudson
 Born 1979
 US Citizen
 Member since 2019
**Chief Compliance and
 Regulatory Affairs Officer**

Professional history

2007–present	Credit Suisse CEO Swiss Universal Bank (2020–present) CEO Credit Suisse (Schweiz) AG (2020–present) Head of Institutional Clients, Swiss Universal Bank (2017–2020) Head of Corporate & Institutional Clients, Swiss Universal Bank (2015–2017) Private & Wealth Management organization in Switzerland: Region Head Zurich and Head of Private Banking Clients, Region Zurich (2013–2015) Private & Wealth Management organization in Switzerland: Head of Private Clients Region Zurich (2010–2013) Global Head of Products, Sales & Pricing, Credit Suisse Private Banking (2007–2010)
1996–2007	The Boston Consulting Group (BCG) Partner & Managing Director (2005–2007) Director BCG Switzerland Recruiting and Member of the BCG Switzerland and US Career Development Committees (2005–2007) Various management and other positions (1996–2000)
1993–1995	STB Unternehmensentwicklungen AG (VZ VermögensZentrum AG), Associate

Education

1992	Master Degree in Business, University of St. Gallen
1990	Certificate in Psychology/Sociology, Université de la Sorbonne

Other activities and functions

Neue Aargauer Bank, board member
 Tonhalle Gesellschaft Zurich, board member
 Venture Incubator AG, board member
 BAFT Transaction Banking Global Leaders, advisory board member
 Foundation Bessamin, member

Professional history

2008–present	Credit Suisse Chief Compliance and Regulatory Affairs Officer (2020–present) Chief Compliance Officer (2019–2020) COO, Global Markets (2015–2019) COO, Global Equities (2014–2015) Various management and strategy roles in Equities, Fixed Income and Asset Management (2008–2014)
2006–2008	The Boston Consulting Group, consultant
2001–2004	Lehman Brothers, associate, analyst, Global Real Estate Group

Education

2006	Master in Business Administration (MBA), Harvard Business School
2001	Bachelor of Arts, International Politics and Economics, Middlebury College

Other activities and functions

Good Shepherd Services, board member
 World Economic Forum, Young Global Leader



David R. Mathers
 Born 1965
 British Citizen
 Member since 2010
Chief Financial Officer



David Miller
 Born 1965
 US Citizen
 Member since 2019
**CEO
 Investment Banking &
 Capital Markets**

Professional history

1998–present	Credit Suisse
	Chief Financial Officer (2010–present) CEO of Credit Suisse International and Credit Suisse Securities (Europe) Limited (UK subsidiaries) (2016–present) Chairman of Asset Resolution Unit (2019–present) Head of Strategic Resolution Unit (2015–2018) Head of IT and Operations (2012–2015) Head of Finance and COO of Investment Banking (2007–2010) Senior positions in Credit Suisse's Equity business, including Director of European Research and Co-Head of European Equities (1998–2007)
Prior to 1998	HSBC
	Global head of equity research (1997–1998) Research analyst, HSBC James Capel (1987–1997)

Education

1991	Associate Certification, Society of Investment Analysis
1991	MA in Natural Sciences, University of Cambridge, England
1987	BA in Natural Sciences, University of Cambridge, England

Other activities and functions

European CFO Network, member
 Women in Science & Engineering (WISE) program and academic awards and grants at Robinson College, Cambridge, sponsor
 Various other charitable commitments

Professional history

2000–present	Credit Suisse
	CEO Investment Banking & Capital Markets (2019–present) Member of the board of Credit Suisse Holdings (USA), Inc., Credit Suisse (USA), Inc. and Credit Suisse Securities (USA) LLC (US subsidiaries) (2019–present) Head of Credit (2016–2019) Co-Head of Global Markets Americas (2016–2019) Head of Global Credit Products (2015–2019) Co-Head of Global Credit Products and Co-Head of Fixed Income Americas (2013–2015) Head of Global Leveraged Finance Capital Markets (2008–2013) Co-Head of Syndicated Loan Group (2006–2013) Fixed Income CMBS Wind Down (2009–2010) Origination Officer, Syndicated Loan Capital Markets (2004–2006) Various functions in loan origination and banking (2000–2004)
Prior to 2000	Donaldson, Lufkin & Jenrette (DLJ), Los Angeles
	Senior Vice President, loan origination (1997–2000)

Education

1998	MBA in Finance, Cornell University
1987	BS in Electrical Engineering, Cornell University

Other activities and functions

Credit Suisse Americas Foundation, board member
 Cornell University, College Board of Advisors member



Antoinette Poschung
 Born 1956
 Swiss Citizen
 Member since 2019
Global Head of Human Resources



Helman Sitohang
 Born 1965
 Singaporean Citizen
 Member since 2015
CEO Asia Pacific

Professional history

2008–present	Credit Suisse Global Head of Human Resources (2019–present) Conduct and ethics ombudsperson (2018–present) Head of Human Resources for Corporate Functions (2018–2019) Head of Talent Development & Organizational Effectiveness (2015–2017) Head of Compensation, Benefits & Payroll (2012–2014)
2007–2008	AXA-Winterthur, member of the Executive Board and Head of Human Resources
2003–2007	“Winterthur” Swiss Insurance Group, Head of Human Resources
2001–2003	Canton Zurich, Head of Human Resources for the Cantonal Administration
1998–2001	Baloise Group, Head of Human Resources Basler Insurance

Education

2016	Certificate of Organizational and Executive Coaching, Columbia University
1989	Master in Education, Psychology and Philosophy, University of Zurich

Other activities and functions

Ms. Poschung currently does not hold directorships in other organizations.

Professional history

1999–present	Credit Suisse CEO Asia Pacific (2015–present) Regional CEO APAC (2014–2015) Head of Investment Banking Asia Pacific (2012–2015) Co-Head of the Emerging Markets Council (2012–2015) CEO of South East Asia (2010–2015) Co-Head of the Investment Banking Department – Asia Pacific (2009–2012) Co-Head of the Global Markets Solutions Group – Asia Pacific (2009–2012) Country CEO, Indonesia (1999–2010)
Prior to 1999	Bankers Trust, derivatives group Citibank, corporate bank Schlumberger Overseas, field engineer

Education

1989	BS degree in Engineering, Bandung Institute of Technology
------	---

Other activities and functions

Credit Suisse Foundation, board member
 Room to Read Singapore Ltd., regional board member, chairman of SEA board



James B. Walker
 Born 1965
 British and US Citizen
 Member since 2019
Chief Operating Officer



Lara J. Warner
 Born 1967
 Australian and US Citizen
 Member since 2015
Chief Risk Officer

Professional history

2009–present	Credit Suisse
	Chief Operating Officer (2019–present) Chief Financial Officer of Credit Suisse Holdings (USA), Inc. and Regional Americas Finance lead (2018–2019) Finance Chief Operating Officer (2016–2019) Head of Finance Change (2014–2019) Global Head of Product Control (2011–2019) Head of Americas Investment Banking Operations and Global Head of OTC Operations (2009–2011)
2007–2009	Barclays Capital, New York, CFO, Americas
1994–2007	Merrill Lynch
	CFO, Global Markets & Investment Banking, New York (2005–2007) CFO, Global Equities and Fixed Income, New York (2003–2005) CFO, Global Fixed Income, New York (2002–2003) CFO, Securities Services Division, New York (2000–2002) Various senior management positions (1994–2000)
1986–1994	Morgan Stanley, various finance and derivative finance roles

Education

1986	Postgraduate Diploma Finance, University of Stirling
1985	Bachelor of Science Mathematics, University of Glasgow

Other activities and functions

Mr. Walker currently does not hold directorships in other organizations.

Professional history

2002–present	Credit Suisse
	Chief Risk Officer (2019–present) Member of the board of Credit Suisse Holdings (USA), Inc., Credit Suisse (USA), Inc. and Credit Suisse Securities (USA) LLC (US subsidiaries) (2019–present) Chief Compliance and Regulatory Affairs Officer (2015–2019) Chief Operating Officer, Investment Banking (2013–2015) Chief Financial Officer, Investment Banking (2010–2015) Head of Global Fixed Income Research (2009–2010) Head of US Equity Research (2004–2009) Senior Equity Research Analyst (2002–2004)
1999–2001	Lehman Brothers, equity research analyst
Prior to 1999	AT&T
	Director of Investor Relations (1997–1999) Chief Financial Officer, Competitive Local Exchange Business (1995–1997) Various finance and operating roles (1988–1995)

Education

1988	Bachelor of Science – Finance, Pennsylvania State University
------	--

Other activities and functions

Women’s Leadership Board of Harvard University’s John F. Kennedy School of Government, member
 Harvard Kennedy School – Dean’s Executive Committee, board member
 Pennsylvania State University Board of Visitors, member
 Aspen Institute’s Business and Society Program, board member



Philipp Wehle

Born 1974
German Citizen
Member since 2019

**CEO International Wealth
Management**

Former members of the Executive Board

Information about former members of the Executive Board is available on our website at [credit-suisse.com/annualreporting](https://www.credit-suisse.com/annualreporting).

Professional history

2005–present Credit Suisse

CEO International Wealth Management (2019–present)
Head of International Wealth Management Finance (2015–2019)
Head of Finance Private Banking Coverage (2015)
Head of Financial Management Region & Wealth Management Switzerland (2013–2014)
Head of Financial Management Private Banking Asia Pacific (2011–2012)
Head of Controlling Private Banking Switzerland (2007–2011)
Senior Project Manager, Business Development Private Banking Switzerland (2005–2007)

2001–2005 Consart Management Consultants,
Consultant / Project Manager

Education

2001 Master's Degree in Economics, University of Bonn, Germany

Other activities and functions

Credit Suisse Asset Management & Investor Services (Schweiz) Holding AG,
board member

Additional information

Banking relationships with Board and Executive Board members and related party transactions

The Group is a global financial services provider. Many of the members of the Board and the Executive Board, their close family members or companies associated with them maintain banking relationships with us. The Group or any of its banking subsidiaries may from time to time enter into financing and other banking agreements with companies in which current members of the Board or the Executive Board have a significant influence as defined by the SEC, such as holding executive and/or board level roles in these companies. With the exception of the transactions described below, relationships with members of the Board or the Executive Board and such companies are in the ordinary course of business and are entered into on an arm's length basis. Also, unless otherwise noted, all loans to members of the Board, members of the Executive Board, their close family members or companies associated with them were made in the ordinary course of business, were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and did not involve more than the normal risk of collectability or present other unfavorable features. As of December 31, 2019, 2018 and 2017, there were no loan exposures to such related parties that were not made in the ordinary course of business and at prevailing market conditions.

→ Refer to "Board loans" and "Executive Board loans (audited)" in V – Compensation – Board of Directors compensation and – Executive Board compensation for 2019, respectively, for the outstanding loans to members of the Board and the Executive Board.

Related party transactions

In December 2018, a subsidiary of the Group executed a transaction with an affiliate to sell a minority interest in a trading platform for a gain of approximately USD 80 million.

External Audit

External audit forms an integral part of the Group's corporate governance framework and plays a key role by providing an independent assessment of our operations and internal controls.

→ Refer to "Audit Committee" in Board of Directors – Board committees for further information on the responsibilities of the audit committee.

Principal external auditor

The Group retains a single global audit firm as its principal external auditor to perform both the statutory (financial) audit and the regulatory audit work mandated by FINMA. The AGM elects the statutory auditor annually, while the Board is responsible for the appointment of the regulatory auditor.

Our principal external auditor is KPMG, Badenerstrasse 172, 8004 Zurich, Switzerland. The mandate was first given to KPMG for the business year 1989/1990. The Group is not subject to mandatory external audit firm rotation requirements; however, the lead audit partners are subject to periodic rotation requirements. Audit partner rotation is key to ensuring the highest level of audit quality. In general, audit partners with key roles or signing obligations for the Group or material Group entities are subject to a maximum of five years of service. Audit partners with roles overseeing non-material Group entities or serving a supplemental role are subject to a maximum of seven years of service. Specialist partners, including (but not limited to) IT, valuation, tax and forensic areas are not subject to mandated rotation. The lead Group engagement partners are Philipp Rickert, Global Lead Partner (since 2019) and Nicholas Edmonds, Group Engagement Partner (since 2016). Philipp Rickert concurrently serves as the Lead Regulatory Audit Partner (since 2019).

For the 2020 AGM, the Board has proposed PwC for election as the new statutory auditor, effective for the fiscal year ending December 31, 2020 and subject to shareholder approval and has also appointed PwC as the new regulatory auditor. PwC will therefore replace KPMG as the Group's principal external auditor, effective for the fiscal year ending December 31, 2020.

→ Refer to "Audit Committee" in Board of Directors – Board committees for further information on audit rotation.

Governance

The Audit Committee monitors and pre-approves the fees to be paid to the principal external auditor for its services. It has developed and approved a policy on the engagement of public accounting firms that is designed to help ensure that the independence of the external auditor is maintained at all times.

The policy limits the scope of services that the principal external auditor may provide to us or any of our subsidiaries in connection with its audit and stipulates certain permissible types of non-audit services, including audit-related services and tax services that have been pre-approved by the Audit Committee. The principal external auditor is required to report periodically to the Audit Committee about the scope of the services it has provided and the fees for the services it has performed to date. The principal external auditor also provides a report as to its independence to the Audit Committee at least once a year. In accordance with our pre-approval policy and as in prior years, all non-audit services provided in 2019 were pre-approved.

The fees paid to KPMG as the Group's principal external auditor for the financial years 2019 and 2018 are provided in the following table.

Fees paid to the principal external auditor

for financial year	2019	2018	% change
Fees (CHF million)			
Audit services ¹	56.0	49.8	12
Audit-related services ²	5.5	5.7	(4)
Tax services ³	2.4	3.0	(20)

1 Audit services include the integrated audit of the Group's consolidated and statutory financial statements, interim reviews and comfort and consent letters. Additionally they include all assurance and attestation services related to the regulatory filings of the Group and its subsidiaries. Audit fees exclude value-added taxes.

2 Audit-related services are primarily in respect of: (i) reports related to the Group's compliance with provisions of agreements or calculations required by agreements; (ii) accounting advice; (iii) audits of private equity funds and employee benefit plans; and (iv) regulatory advisory services.

3 Tax services are in respect of tax compliance and consultation services, including: (i) preparation and/or review of tax returns of the Group and its subsidiaries; (ii) assistance with tax audits and appeals; and (iii) confirmations relating to the Qualified Intermediary status of Group entities.

The principal external auditor attends all meetings of the Audit Committee and reports on the findings of its audit and/or interim review work. The Audit Committee reviews the principal external auditor's audit plan on an annual basis and evaluates the performance of the principal external auditor and its senior representatives in fulfilling their responsibilities. Moreover, the Audit Committee recommends to the Board the appointment or replacement of the principal external auditor, subject to shareholder approval as required by Swiss law.

Special auditor

In addition, we have mandated BDO AG, Fabrikstrasse 50, 8031 Zurich, Switzerland, as special auditor for the purposes of issuing the legally required report for capital increases in accordance with Article 652f of the Swiss Code of Obligations, mainly relating to the valuation of companies in consideration of the qualified capital increases involving contributions in kind. BDO AG did not provide any such services in 2019 and 2018.

Other information

Complying with rules and regulations

We fully adhere to the principles set out in the Swiss Code of Best Practice for Corporate Governance, dated August 28, 2014, including its appendix stipulating recommendations on the process for setting compensation for the Board and the Executive Board.

In connection with our primary listing on the SIX Swiss Exchange, we are subject to the Directive on Information relating to Corporate Governance, dated March 20, 2018, and its updated version. Our shares are also listed on the NYSE in the form of ADS and certain of the Group's exchange traded notes are listed on Nasdaq. As a result, we are subject to certain US rules and regulations. We adhere to the NYSE's and Nasdaq's corporate governance listing standards (NYSE and Nasdaq standards), with a few exceptions where the rules are not applicable to foreign private issuers.

The following are the significant differences between our corporate governance standards and the corporate governance standards applicable to US domestic issuers listed on the NYSE and Nasdaq:

- Approval of employee benefit plans: NYSE and Nasdaq standards require shareholder approval of the establishment of, and material revisions to, certain equity compensation plans. We comply with Swiss law, which requires that shareholders approve the creation of conditional capital used to allow for the issuance of shares for employee benefit plans and other equity compensation plans, but does not require shareholders to approve the terms of those plans.
- Risk assessment and risk management: NYSE standards allocate to the Audit Committee responsibility for the discussion of guidelines and policies governing the process by which risk assessment and risk management is undertaken, while at the Group these duties are assumed by the Risk Committee. Whereas our Audit Committee members satisfy the NYSE as well as Nasdaq independence requirements, our Risk Committee may include non-independent members.
- Independence of nominating and corporate governance committee: NYSE and Nasdaq standards require that all members of the nominating and corporate governance committee be independent. The Group's Governance and Nominations Committee is currently composed entirely of independent members, but according to its charter, may include non-independent members.
- Reporting: NYSE standards require that certain board committees report specified information directly to shareholders, while under Swiss law only the Board reports directly to the shareholders and the committees submit their reports to the full Board.
- Appointment of the external auditor: NYSE and Nasdaq standards require that an Audit Committee of a listed company comply with and have the authority necessary to comply with the requirements of Rule 10A-3 of the Securities Exchange Act of 1934. Rule 10A-3 requires the Audit Committee to be directly responsible for the appointment, compensation, retention and oversight of the external auditor unless there is a conflicting requirement under home country law. Under Swiss law, the appointment of the external auditor must be approved by the shareholders at the AGM based on the proposal of the Board, which receives the advice and recommendation of the Audit Committee.
- Audit Committee charter: Nasdaq standards require the Audit Committee to review and assess the adequacy of its charter on an annual basis, while our Audit Committee's charter only requires review and assessment from time to time.
- Executive sessions: NYSE and Nasdaq standards require the board of directors to meet regularly in executive sessions composed solely of independent directors. Our Board meets regularly in executive sessions comprising all directors, including any directors determined to be not independent. If any item discussed at the meeting raises a conflict of interest for any of our directors, however, such director does not participate in the related decision making. In line with Swiss law, the Board does not include any directors who are also members of management.
- Quorums: Nasdaq standards require that the company's by-laws provide for a quorum of at least 33 $\frac{1}{3}$ % of the

outstanding shares of the company's common stock for any meeting of the holders of common stock. The Group's AoA (Chapter IV, Section 1, The General Meeting of Shareholders, Art. 12), call for a quorum in certain instances, but do not require a quorum of 33 $\frac{1}{3}$ % or greater of the holders of the outstanding shares of common stock for any meeting of shareholders.

- Independence: NYSE and Nasdaq independence standards specify thresholds for the maximum permissible amount of (i) direct compensation that can be paid by the company to a director or an immediate family member thereof, outside of such director's directorship fees and other permitted payments; and (ii) payments between the company and another company at which such director or an immediate family member thereof is an executive officer, controlling shareholder, partner or employee. Our independence standards do not specify thresholds for direct compensation or cross-company revenues, but consider these facts in the overall materiality of the business relationship determination for independence purposes.

Fiduciary duties and indemnification

The Swiss Code of Obligations requires directors and members of senior management to safeguard the interests of the corporation and, in connection with this requirement, imposes the duties of care and loyalty on directors and members of senior management. While Swiss law does not have a specific provision on conflicts of interest, the duties of care and loyalty are generally understood to disqualify directors and members of senior management from participating in decisions that could directly affect them. Directors and members of senior management are personally liable to the corporation for any breach of these provisions.

The Group's AoA and the Bank's AoA do not contain provisions regarding the indemnification of directors and officers. According to Swiss statutory law, an employee has a right to be indemnified by the employer against losses and expenses incurred by such person in the execution of such person's duties under an employment agreement, unless the losses and expenses arise from the employee's gross negligence or willful misconduct. It is our policy to indemnify current and former directors and/or employees against certain losses and expenses in respect of service as a director or employee of the Group, one of the Group's affiliates or another entity that we have approved, subject to specific conditions or exclusions. We maintain directors' and officers' insurance for our directors and officers.

Fees and charges for holders of ADS

In November 2016, the Group entered into a deposit agreement with The Bank of New York Mellon as depositary for the ADS (Depositary). In accordance with the deposit agreement, the Depositary may charge holders of our ADS, either directly or indirectly, fees or charges up to the amounts described below.

The Depositary collects its fees and related expenses for the delivery and surrender of ADS directly from investors depositing or surrendering ADS for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees and expenses for making distributions to holders by deducting those fees and expenses from the amounts distributed or by selling a portion of distributable property to pay the fees and expenses. The Depositary may generally refuse to provide fees and expenses until its fees for those services are paid.

Fees and charges for holders of ADS

Fees

USD 5 (or less) per 100 ADS (or portion thereof)	For the issuance of ADS, including issuances resulting from a distribution of shares, share dividends, share splits and other property; for ADS issued upon the exercise of rights; and for the surrender of ADS for cancellation and withdrawal of shares.
USD 0.05 (or less) per ADS	For any distribution of cash to ADS registered holders, including upon the sale of rights or other entitlements.
Registration or transfer fees	For the transfer and registration of shares on our share register to or from the name of the Depositary or its agent when the holder deposits or withdraws shares.

Charges

Expenses of the Depositary	For cable and facsimile transmissions (when expressly provided in the deposit agreement); and for converting foreign currency to US dollars.
Taxes and other governmental charges	Paid, as necessary, to the Depositary or the custodian who pays certain charges on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or applicable interest or penalty thereon.
Other charges	Paid, as necessary, to the Depositary or its agents for servicing the deposited shares.

Amounts paid by the Depositary to the Group

In 2019, in accordance with the deposit agreement, the Depositary made payments to the Group in an aggregated amount of USD 400 million, including for the reimbursement of expenses relating to its ADS program. The Depositary has also contractually agreed to provide certain ADS program-related services free of charge.

Under certain circumstances, including removal of the Depositary or termination of the ADS program by the Group, the Group is required to repay certain amounts paid to the Group and to compensate the Depositary for payments made or services provided on behalf of the Group.

V – Compensation

Letter from the Chair of the Compensation Committee	224
Executive Board compensation	228
Group compensation	236
Board of Directors compensation	245
Compensation design	250
Compensation governance	254
Report of the Statutory Auditor	256

Compensation

Letter from the Chair of the Compensation Committee



Kai S. Nargolwala
Chair of the
Compensation Committee

Dear shareholders

As Chair of the Compensation Committee of the Board of Directors (Compensation Committee), I am pleased to present to you the 2019 Compensation Report.

During 2019, we faced many external challenges and changes in our operating environment. Nonetheless, the strategy we embarked on at the inception of our restructuring period has placed us in a more resilient position, despite global and, in particular, European headwinds. We were gratified to see the depth of talent that we were able to draw upon internally, for example by elevating several senior managers to the Executive Board, reflecting the strong foundation of succession planning and talent development at Credit Suisse.

In line with our commitment to rebalancing the share of profits between shareholders and employees, we kept the Group variable incentive compensation awarded relatively flat, despite significant increases in profitability.

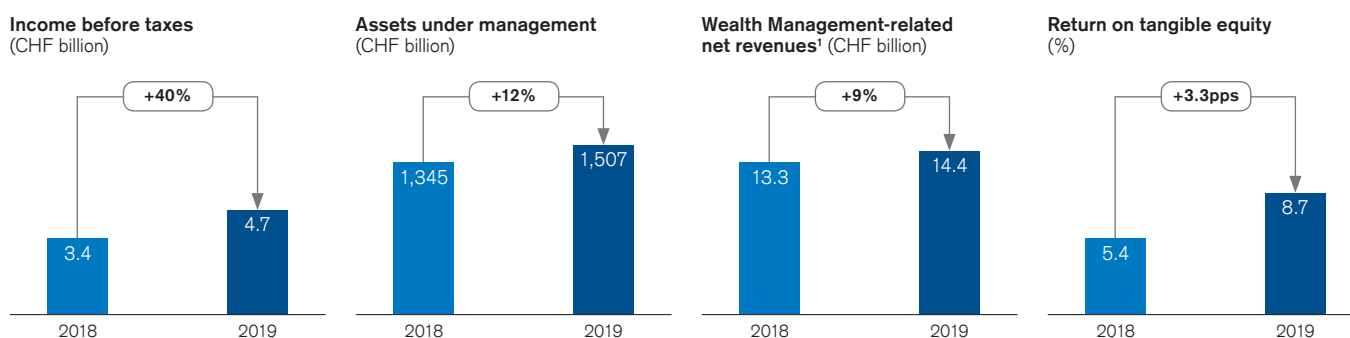
On a personal note, I appreciated the opportunity to meet with many of our shareholders and gain insights from them. I trust that this Compensation Report, and the decision-making and outcomes that it describes, is reflective of the feedback received.

Performance highlights in 2019

In the first year after the end of the restructuring period, we continued to improve our operating performance despite volatile markets, a continued low or negative interest rate environment and uncertain political and trade developments. In particular, the Compensation Committee noted the following Group performance highlights:

- Income before taxes of CHF 4.7 billion, an increase of 40% year-on-year;
- Net income attributable to shareholders of CHF 3.4 billion, an increase of 69% year-on-year;
- Group net new assets of CHF 79.3 billion and assets under management of CHF 1,507.2 billion in 2019, compared with CHF 53.7 billion and CHF 1,344.9 billion respectively in 2018;
- Wealth Management-related revenues grew by 9% year-on-year in a challenging environment;
- Global Markets delivered net revenue growth of 13% year-on-year to USD 5.8 billion, growing market share across our key franchises;
- Return on tangible equity (RoTE) of 8.7%, up from 5.4% for the prior year;
- Tangible book value per share (TBVPS) of CHF 15.88, up 4% year-on-year; and
- Continued focus on improving risk management and effective compliance and controls, with enhanced supervision facilitated by the Conduct and Financial Crime Control Committee of the Board of Directors.

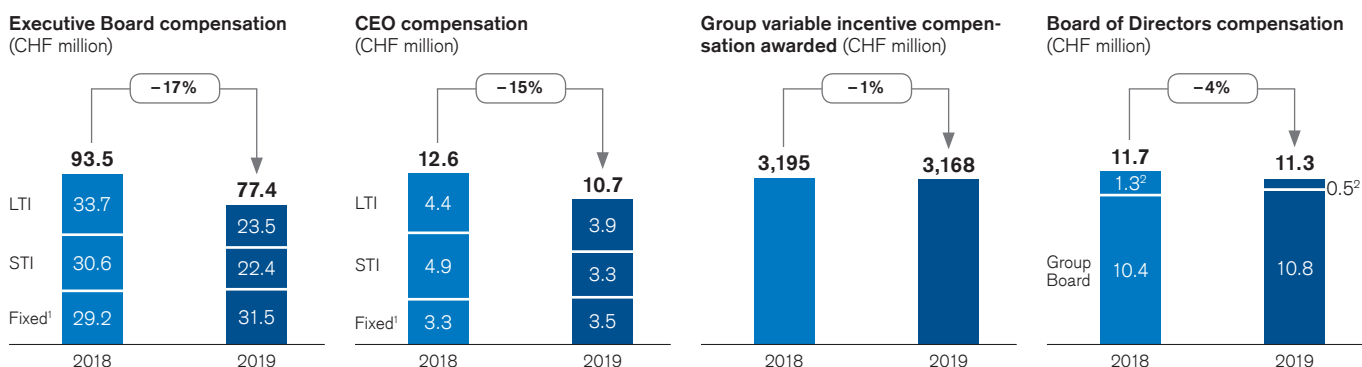
Group performance highlights



Return on tangible equity is based on tangible shareholders' equity, a non-GAAP financial measure, which is calculated by deducting goodwill and other intangible assets from total shareholders' equity as presented in our balance sheet. Tangible book value per share is a non-GAAP financial measure, which is calculated by dividing tangible shareholders' equity by total number of shares outstanding.

¹ References to our Wealth Management-related businesses mean our Swiss Universal Bank division, our International Wealth Management division and our Wealth Management & Connected business within our Asia Pacific division or their combined results.

Compensation outcomes for 2019



Figures above may contain rounding differences.

¹ Fixed compensation includes base salary, role-based allowances, dividend equivalents, pension and other benefits.

² Compensation related to subsidiary board membership.

Executive Board compensation

The total aggregate Executive Board compensation for 2019 of CHF 77.4 million is comprised of:

- CHF 31.5 million fixed compensation, a portion of which has been paid from the approved pool as fixed compensation for new and promoted Executive Board members;
- CHF 22.4 million short-term incentive (STI) award, subject to shareholder approval at the 2020 Annual General Meeting (AGM); and
- CHF 23.5 million long-term incentive (LTI) opportunity at fair value at the time of grant. This is down from CHF 30.2 million, the amount approved at the 2019 AGM, due to step-downs and departures from the Executive Board.

→ Refer to "Executive Board compensation" for further information.

Executive Board compensation for 2019 is 17% lower than the amount for 2018. The main drivers of this decrease are the changes in Executive Board member composition during the year (including related forfeitures of outstanding compensation), lower performance achieved on the 2019 STI awards and a lower fair value of the 2019 LTI opportunities as approved at the 2019 AGM. If all of the

Executive Board members in office at the end of 2019 had been in their respective roles for the entire year, total compensation would have been approximately CHF 81.4 million, or 13% lower than Executive Board compensation in 2018.

Chief Executive Officer (CEO) compensation

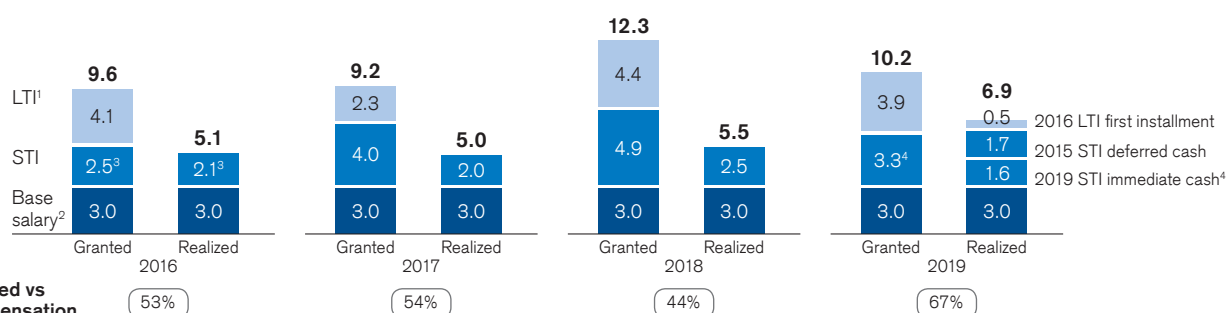
Mr. Thiam's total compensation granted for 2019 of CHF 10.7 million is 15% lower than for the prior year. This decrease is mainly driven by a lower achievement on the STI 2019 financial performance targets, his non-financial assessment score of 50% and the lower fair value of the 2019 LTI opportunity. The non-financial assessment score of 50% for his 2019 STI was reduced from 100% for 2018 STI.

Mr. Thiam's realized compensation for 2019 was CHF 6.9 million (excluding dividend equivalents, pension and other benefits), compared with CHF 5.5 million for the prior year. As illustrated in the chart below, this increase was mainly due to the delivery in 2019 of the first vesting tranche of the 2016 LTI award and the payout of the 50% deferred component of the 2015 STI award.

→ Refer to "Compensation of the CEO and the highest paid Executive Board member" in Executive Board compensation for further information.

CEO granted vs realized compensation (excluding dividend equivalents, pension and benefits)

(CHF million)



Figures above may contain rounding differences.

¹ LTI expressed as fair value at the date of grant, determined using a probabilistic valuation method applied by one of the major international accounting firms. The awards have a total maximum opportunity of CHF 7.5 million for 2016, CHF 4.5 million for 2017, CHF 7.5 million for 2018 and CHF 7.5 million for 2019.

² In addition to base salary, the CEO received dividend equivalents, pension and other benefits which are not included in the figures above but are published in the Executive Board compensation table in the Executive Board compensation section.

³ The full amount of the 40% voluntary reduction on the 2016 STI award was applied to the deferred component, resulting in CHF 2.1 million of non-deferred cash awards realized for 2016 and CHF 0.4 million of deferred cash awards to be realized in 2020.

⁴ 2019 STI subject to approval at the 2020 AGM.

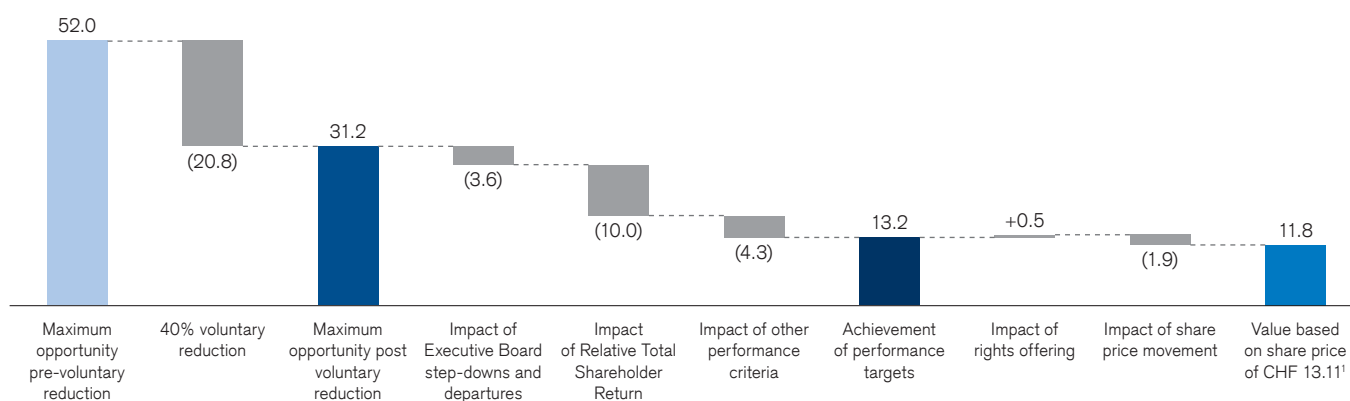
Vesting of the 2017 LTI (2017-2019 performance cycle)

To align the interests of the Executive Board to those of long-term shareholders, more than half of the Executive Board variable incentive compensation is in the form of LTI opportunities, subject to challenging performance conditions over a three-year performance period, and further subject to share price performance until settlement of the award. The end of 2019 marked

the completion of the 2017 LTI performance period, with the estimated value at the end of 2019 shown in the following diagram. The 2017 LTI awards vest in equal tranches on the third, fourth and fifth anniversaries of the grant date. The final value of the awards at delivery may differ from the value at the end of 2019 due to subsequent share price movement.

Estimated value of the 2017 LTI awards

2017-2019 performance cycle (in CHF million)



Figures above may contain rounding differences.

¹ Based on share price as of December 31, 2019. The number of shares earned based on achievement of the performance targets over the three-year performance period was 899,897 (including the impact of the rights offering) and these shares vest in three equal tranches on the third, fourth and fifth anniversaries of the grant date.

Group compensation

Within total compensation awarded, variable incentive compensation decreased by 1%. The Compensation Committee considered a range of factors in determining the Group's variable incentive compensation pool, including the Group's financial performance in 2019, progress made against strategic objectives, relative performance compared to peers, market position and trends, as well as control, risk, compliance and conduct and ethics considerations. While the Group significantly increased its profitability in 2019, with income before taxes up by 40% year-on-year, the Compensation Committee recommended not to increase the Group variable incentive compensation pool in order to re-balance the distribution of profits between shareholders and employees and to return more value to shareholders.

→ Refer to the "Group compensation and benefits expense" table in Group compensation and "Determination of variable incentive compensation pools" in Compensation design for further information.

The Group variable incentive compensation pool includes the amounts for the CEO and the other Executive Board members. Although the overall pool is lower by 1% compared with the previous year, differentiation has been made such that high-performing employees received year-on-year increases in variable incentive compensation to reflect their contribution to the Group's improved financial performance.

As in the case of Executive Board compensation, the variable incentive awards granted to Group employees are designed to be aligned with the interests of shareholders. For example, a high proportion of the variable incentive compensation of employees at higher seniority levels is deferred over several years and awarded in the form of shares or performance share awards. The performance share awards are subject to negative adjustment in the event of a divisional loss or a negative return on equity of the Group. Given the loss before taxes in the Investment Banking & Capital Markets division for 2019, a negative adjustment has been applied to performance share awards held by employees who received those awards while being a member of that division in the past.

Board of Directors (Board) compensation

Total Board fees, including subsidiary board fees, for the 2019 AGM to 2020 AGM period are within the amount that was approved prospectively by shareholders at the 2019 AGM. Board compensation was 4% lower than for the prior period, primarily reflecting changes in Board composition and lower subsidiary board fees resulting from the chairman of the board of Credit Suisse (Schweiz) AG no longer being a member of the Group Board.

→ Refer to "Board of Directors compensation" for further information.

Annual review of our compensation framework and shareholder engagement

The Compensation Committee reviewed market developments to assess whether current practices remain appropriately competitive, and considered feedback received from meetings with shareholders during the year as well as the consultative vote on the 2018 Compensation Report. Based on this review and feedback, the Compensation Committee decided to maintain the overall compensation framework, with one refinement for the Executive Board 2020 STI: the non-financial assessment will be consolidated from six categories to four, namely Strategy/Client Focus, Risk and Compliance, Conduct and Ethics, and People, to simplify and better reflect the key focus areas that are not already captured by the financial criteria.

“Say-on-Pay” compensation proposals at the 2020 AGM

At the 2020 AGM, we will be seeking shareholder support for the following say-on-pay proposals:

- Maximum aggregate amount of fixed compensation for the Executive Board for the 2020 AGM to 2021 AGM period (CHF 31.0 million);
- Aggregate 2019 STI award to be granted to the Executive Board (CHF 22.4 million);
- Aggregate 2020 LTI opportunity at fair value at the time of grant (CHF 28.6 million, based on a maximum opportunity of CHF 53.75 million); and
- Maximum aggregate amount of compensation for the Board for the 2020 AGM to 2021 AGM period (CHF 12.0 million).

Further information on each of these proposals are contained in the “Say-on-Pay” brochure that accompanies the AGM invitation and is also available at <https://www.credit-suisse.com/agm>.

Observation events

Finally, it would be remiss of me not to address the issues surrounding the observation events and their impact on the performance management and compensation decision-making. There has been much media coverage of the observation events and related circumstances. While we believe that these events have not had any long lasting impact on shareholder value or affected our client relationships, certainly the level of media scrutiny and the potential damage to our reputation was concerning.

Thorough independent investigations were carried out with respect to the observations and the related circumstances, which confirmed that the events only involved certain isolated individuals in the firm. During the course of these investigations, one former

Executive Board member who was ultimately responsible for initiating the observation events was less than forthcoming. This individual has been dismissed for cause, resulting in forfeiture of all his outstanding deferred compensation awards. Given that no other Executive Board member was found to have been involved, the observation events did not have an impact on the compensation of the other Executive Board members. Mr. Thiam has taken accountability for the events and accepted a reduction of his non-financial assessment score for his 2019 STI to 50%, compared with a score of 100% for the previous year.

In recognition of Mr. Thiam’s contributions to the successful restructuring of the Group and given no evidence of his direct participation in the observation matter, it was decided to treat him as a “good leaver” for the purposes of his outstanding compensation. Accordingly, he will continue to receive contractual payments during his notice period, which will end on August 31, 2020, but will not receive any LTI opportunity for 2020. No severance payments were made and previously awarded deferred compensation will continue to vest as per original schedule, subject to the achievement of any specified performance conditions, forfeiture, malus and non-solicitation rules. In addition, the value of his deferred share awards will continue to be subject to share price movements until settlement.

I would like to reiterate that our Executive Board members are subject to the same disciplinary proceedings and rules relating to the application of malus as any other employee at any level. Any conduct during the year that falls short of the highest standards of professionalism would be addressed in the non-financial assessments, which have a direct impact on the STI paid out. Additionally, in case of breach of our internal policies or improper conduct, malus may be applied to outstanding awards. We treat the Executive Board members as we would any other employees and we do not make any severance payments to exiting Executive Board members.

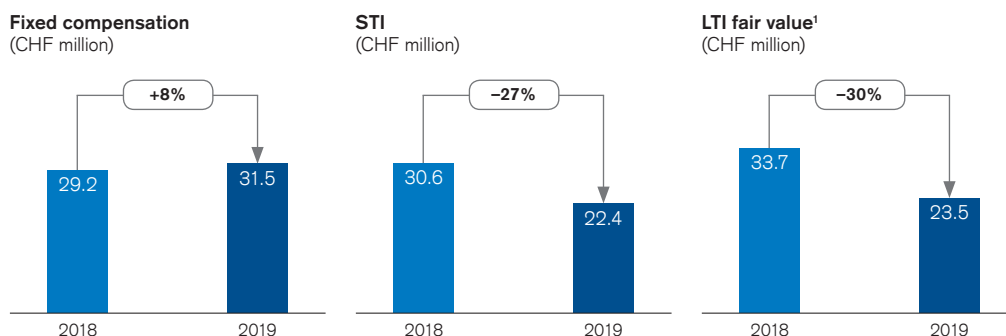
On behalf of the Compensation Committee, I would like to thank you for your support and feedback, which we will continue to seek as we review and refine our compensation practices to ensure that they remain aligned with the interests of our shareholders and fully compliant with all legal and regulatory requirements.



Kai S. Nargolwala
Chair of the Compensation Committee
Member of the Board of Directors
March 2020

Executive Board compensation

Compensation outcomes for 2019



¹ The fair value of the LTI awards as of the date of grant is determined using a probabilistic valuation method applied by one of the major international accounting firms.

Fixed compensation

The total fixed compensation for the Executive Board was CHF 31.5 million in 2019 compared with CHF 29.2 million for 2018.

Annual short-term incentive (STI) awards

The 2019 STI awards were determined based on performance in 2019 measured against pre-defined financial and non-financial criteria. The average maximum opportunity for Executive Board members (excluding the CEO) was 1.23 times base salary, compared with 1.36 times for the prior year. The aggregate STI award amount for the Executive Board of CHF 22.4 million was 27% lower than the previous year, mainly due to the changes in Executive Board composition (including related forfeitures of outstanding compensation), lower achievement of the financial performance targets set for 2019 and lower achievement of the non-financial criteria as assessed by the Compensation Committee. The outcomes of the financial component of the STI are shown in the diagram below and demonstrate that the performance targets were set at challenging levels, given that despite significant improvement in the year-on-year results, the maximum payout levels were not attained:

- Adjusted income before taxes of CHF 5.0 billion was 18% higher compared with the prior year, and between the threshold and target performance levels;
- RoTE of 8.7% increased 3.3 percentage points compared with the prior year, and between the target and maximum performance levels.

For the non-financial performance assessment, the Compensation Committee evaluated the Executive Board's performance against six broad categories and determined that on average, they had achieved 76% of the maximum opportunity for the non-financial component compared with 91% for 2018. Excluding the CEO, the overall non-financial score was 82% of the maximum opportunity, compared with 89% for 2018. A summary of the non-financial assessment appears further below.

The 2019 STI compensation will be submitted for shareholder approval at the 2020 AGM on a retrospective basis.

2019 STI awards: performance against targets

Performance criteria	Weighting	Performance levels			2019 result	Payout level (% of maximum opportunity)			
		Threshold	Target	Maximum		0%	Threshold 25%	Target 67%	Maximum 100%
Adjusted income before taxes (CHF billion)	33 $\frac{1}{3}$ %	4.2	5.2	6.1	5.0	57%			
RoTE (%)	33 $\frac{1}{3}$ %	6.0%	8.5%	10.5%	8.7%	71%			
Non-financial criteria (average)	33 $\frac{1}{3}$ %	See separate description				76%			
Total	100%					68%			

Adjusted results are non-GAAP financial measures which exclude certain items included in our reported results. Refer to "Reconciliation of adjusted results" in II – Operating and financial review – Credit Suisse for further information. RoTE is based on tangible shareholders' equity, a non-GAAP financial measure, which is calculated by deducting goodwill and other intangible assets from total shareholders' equity as presented in our balance sheet.

2019 STI awards: non-financial performance assessment

Category	Executive Board assessment	CEO assessment
Strategic repositioning	<ul style="list-style-type: none"> Achieved Group net new assets of CHF 79 billion, 48% higher than the prior year Continued to maintain prudent cost management after the achievement of the cost target at the end of 2018, while investing in growth areas Continued to change the allocation of capital, prioritizing higher-return, more capital efficient and less volatile businesses 	<ul style="list-style-type: none"> During 2019 Mr. Thiam continued to focus on the rebalancing of the Group's activities, including the shift of capital towards the higher growth and less volatile Wealth Management-related businesses He continued to oversee the maintenance of the Group's strong capital position and cost management after a three-year period of deep restructuring
Client focus, Quality of Business and Innovation	<ul style="list-style-type: none"> Received various industry awards that acknowledge excellence in client service, including Euromoney Awards for "Best Bank in Switzerland 2019", "Best Investment Bank in Switzerland 2019", and "Asia's Best Bank for Wealth Management"; The Banker "Best Private Bank for Entrepreneurs"; International Finance Review "Best Asia Bank" Top five ranking in Global Initial Public Offerings (Dealogic) Number two ranking in Leveraged Finance and number one ranking in Sponsors for 2019 (Dealogic) Continued to leverage technology advancements with a strengthened operating model, with ~250 applications decommissioned, ~50% of infrastructure incident tickets automated and ~40% of Credit Suisse servers on private cloud 	<ul style="list-style-type: none"> Mr. Thiam continued to drive a culture of client focus, reflected by high client satisfaction results and positive net new assets in each quarter of 2019 He has overseen the growth of the investment banking businesses in key segments, with a top five ranking in Initial Public Offerings and top two in Leveraged Finance (Dealogic)
Talent management	<ul style="list-style-type: none"> Implemented several programs for the development of talent and the next generation of leaders, with 48% of senior leadership roles (Managing Directors and Directors) filled internally Ensured key talent retention as reflected by lower top performers attrition rates, with voluntary turnover of 9.8% in 2019 compared with 11.4% in 2018 Continued to actively focus on Diversity and Inclusion measures and programs, and the proportion of women in senior management positions (Managing Directors and Directors) increased to 22% in 2019 from 21% in the prior year 	<ul style="list-style-type: none"> Mr. Thiam has been instrumental in driving several people development and diversity initiatives, focusing not only on gender but also on ethnicity He has promoted the development of internal talent, as reflected by all five of the new Executive Board members in 2019 being internal candidates
Risk and Regulatory	<ul style="list-style-type: none"> Supported and contributed to constructive dialogue with key regulators Continued investment in control functions to improve models and systems in our efforts to better assess and monitor risks Actively managed operational and business risks ~ 80% of audit reports received at least a satisfactory or higher rating Launched a Group-wide climate risk strategy program with the aim of supporting clients transition to low-carbon and climate resilient business models, further integrating climate change into the Group's risk management models, delivering sustainable financial solutions to clients and reducing the Group's own carbon footprint Integrated environmental, social and governance factors (ESG) into certain investment processes 	<ul style="list-style-type: none"> Mr. Thiam continued to strengthen the relationships with the Group's key regulators Mr. Thiam has encouraged the greater focus on environmental, social and corporate governance factors, such as the integration of ESG into the investment process of Credit Suisse Asset Management funds
Conduct and Ethics	<ul style="list-style-type: none"> Continued to strengthen the global conduct and ethics culture through the implementation of Group-wide training programs, system and process control improvements, and through leading by example Lowered the number of more severe disciplinary cases by ~20% compared with the prior year Established a dedicated conduct and ethics session as a standing item at regular Board meetings co-led by the Chief Compliance Officer and the Global Head of Human Resources; topics reviewed during 2019 included employee engagement and training initiatives, conduct risk trends and insights from ongoing efforts to address sexual harassment at work 	<ul style="list-style-type: none"> Mr. Thiam has continued to strengthen the global conduct and ethics culture through a formalized conduct and ethics framework and Group-wide training programs He continued to support investment in the control functions as an important element of business growth He has led by example in terms of personal commitment to the Group's conduct and ethics standards, but recognizing that the observation matter had a significant impact on the Group, his non-financial assessment score has been reduced
Teamwork and Leadership	<ul style="list-style-type: none"> Continued progress to deepen the collaboration amongst the businesses, including continued growth in International Trading Solutions (ITS) revenues in 2019 Established APAC Trading Solutions (ATS) to replicate the success of ITS and leverage global connectivity 	<ul style="list-style-type: none"> During his leadership, Mr. Thiam fostered a spirit of teamwork and collaboration amongst the Executive Board members, which has filtered throughout the organization He steered an integrated approach between the wealth management and investment banking businesses, as evidenced by the strong ITS business model

2019 long-term incentive (LTI) opportunities (2019-2021 performance period)

The fair value of the 2019 LTI at the time of grant was CHF 30.2 million, as determined by one of the major international accounting firms and as approved by shareholders at the 2019 AGM, and CHF 23.5 million after forfeitures due to step-downs and departures from the Executive Board. The amount achieved at the end of the performance cycle may differ from the fair value at grant, and therefore the actual performance will be measured and disclosed at the end of the three-year performance period. The average maximum opportunity for Executive Board members (excluding the CEO) was 2.20 times base salary, compared with 2.32 times base salary for the prior year.

→ Refer to "Compensation design" and the 2018 Annual Report for further information.

Compensation of the CEO and highest paid Executive Board member

For 2019, CEO Tidjane Thiam, the highest paid Executive Board member, was awarded total compensation of CHF 10.7 million (including dividend equivalents and pension and other benefits). This amount was 15% lower than the prior year, mainly due to lower achievement of the STI financial performance targets, the score for the non-financial assessment of 50% for 2019 and a lower fair value of the 2019 LTI opportunity compared with the prior year LTI. His annual 2019 STI award was based on the same financial criteria and performance as described earlier for the Executive Board. The non-financial component was assessed by the Compensation Committee to be 50% of his maximum opportunity, compared with 100% for the prior year, in light of the observation events.

In terms of compensation realized in 2019, Mr. Thiam received CHF 6.9 million in the form of:

- CHF 3.0 million base salary;
- CHF 1.6 million non-deferred cash component of the 2019 STI award (paid out in 2020, subject to shareholder approval at the 2020 AGM);
- Group shares with a value at delivery of CHF 0.5 million in relation to the first vested installment of the 2016 LTI; and
- CHF 1.7 million deferred cash portion of the 2015 STI award.

In addition, Mr. Thiam received CHF 0.3 million as compensation for dividend equivalents on vested awards and CHF 0.3 million in pension and other benefits.

2020 LTI opportunities (2020-2022 performance period)

The 2020 LTI opportunities will have the same structure, financial metrics and RTSR payout levels as the 2019 LTI opportunities, but with revised performance levels. After taking into consideration the Group's internal financial plan, prior-year performance, analyst expectations and the Group's publicly stated ambitions, the Compensation Committee decided to raise the threshold RoTE level to 7.0%, and increase the target RoTE level to 10.5% with the maximum performance level set to 13.0%. The corresponding TBVPS performance levels for the threshold, target and maximum have been increased to CHF 18.10, CHF 19.60 and CHF 20.90, respectively, as shown in the table below. The fair value at grant of the 2020 LTI is 53% of the maximum opportunity. At the 2020 AGM, shareholders will be asked to approve an aggregate 2020 LTI amount of CHF 28.6 million, based on the fair value at grant. This amount will form part of the 2020 Executive Board compensation disclosure.

Performance target levels for the 2020 LTI

Performance criteria	Performance targets		
	Threshold	Target	Maximum
Three-year average RoTE	7.0%	10.5%	13.0%
Three-year average TBVPS (CHF)	18.10	19.60	20.90

2017 LTI awards (2017-2019 performance period)

As disclosed in the 2016 Compensation Report, performance for the 2017 LTI awards was measured over a period of three years against a combination of Group and division-specific financial metrics, as well as an RTSR component (50% weighting). The 2017 LTI awards had an aggregate maximum opportunity of CHF 31.2 million. The initial number of shares granted was calculated by dividing the maximum opportunity by the Credit Suisse Group share price at the time of grant. Reflecting the share price under-performance over the 2017-2019 performance measurement period, the RTSR component resulted in a 25% payout. Also taking into consideration the performance against the financial criteria, the number of shares earned based on performance conditions represents 48% of the maximum opportunity for the Executive Board, in aggregate. For the CEO, the number of shares earned based on performance conditions over the three-year period (payout level) represents 51% of his maximum opportunity, and for the divisional and function heads, the payout levels range from 41% to 65% of the individual maximum opportunities. The impact of share price movements since the grant date is illustrated in the diagram below, with the value of the 2017 LTI award based on the share price at the end of 2019 being 41% of the maximum opportunity. The LTI award vests in three equal tranches on the third, fourth and fifth anniversaries of the grant date. The final value of the awards at delivery may differ from the value at the end of 2019 due to subsequent share price movements.

Vesting of 2017 LTI awards

The number of shares initially granted was determined by dividing the LTI maximum opportunity (after the 40% voluntary reduction) by the share price at the time of grant.	100% LTI maximum opportunity
The percentage of shares earned is based on the achievement of performance targets over the three-year performance period.	48% Achievement of performance targets
Shares vest in three equal tranches on the third, fourth and fifth anniversaries of the grant date. Based on the share price at the end of 2019, the value of these shares was 41% of the 2017 LTI maximum opportunity.	41% Value of earned shares based on share price as of December 31, 2019

2017 LTI awards: performance against targets

Performance criteria	Weighting ¹			Target performance level	2019 result	Payout level (% of maximum opportunity)			
	CEO	Divisional Head	Functional Head			0%	Threshold 25%	Target 80%	Maximum 100%
Relative Total Shareholder Return (RTSR) ²	50%	50%	50%		11	25%			
CET 1 ratio ³ (%)	5%	5%	5%	12.9%	12.8%	76%			
CET 1 leverage ratio (%)	5%	5%	5%	3.9%	4.0%	94%			
Cost target ⁴ (CHF million)	15%	20%	15%	17,239	16,697	100%			
Divisional metrics (average)	25%	20%	25%			43%			
Total	100%	100%	100%			48%			

¹ Due to the nature of the role, the weighting of the Group and divisional metrics is different for the Executive Board member who is categorized as UK PRA MRT.

² RTSR is measured over the three-year performance period 2017-2019, and the 2019 result is a ranking of 11 out of 19 publicly-listed companies.

³ The CET1 ratio excludes CHF 2.2 billion of additional risk-weighted assets arising from Basel III rule changes effective in 2018 relating to banking book securitizations that were not yet in place when the 2017 target was set.

⁴ The cost target is based on adjusted operating expenses and also excludes debit valuation adjustments (DVA) related volatility of CHF 53 million and certain accounting changes of CHF 193 million (which had not been in place when the cost target was set in 2017). Adjusted results are non-GAAP financial measures that exclude certain items included in our reported results. Refer to the "Reconciliation of adjusted results" table in II – Operating and financial review – Credit Suisse for further information

Supplementary information

Executive Board compensation (audited)

in	Base salaries and role-based allowances	Dividend equivalents ¹	Pension and other benefits ²	Total fixed compensation	STI awards (Non-deferred) ³	STI awards (Deferred) ⁴	Total STI awards	LTI awards fair value (Deferred) ⁵	Total variable compensation	Total compensation ^{6,7}
2019 (CHF million)										
17 members	27.03	2.06	2.46	31.55	11.04	11.35	22.39	23.49	45.88	77.43
% of total compensation ⁸				41%			29%	30%	59%	
of which joiners and leavers during 2019 (10 individuals)	10.57	0.67	1.08	12.32	3.36	3.36	6.72	3.56	10.28	22.60
% of total compensation				55%			30%	15%	45%	
of which CEO: Tidjane Thiam	3.00	0.26	0.25	3.51	1.63	1.63	3.26	3.95	7.21	10.72
% of total compensation				33%			30%	37%	67%	
2018 (CHF million)										
12 members	26.35	0.77	2.08	29.20	15.10	15.46	30.56	33.73	64.29	93.49
% of total compensation ⁸				32%			33%	35%	68%	
of which CEO: Tidjane Thiam	3.00	0.00	0.35	3.35	2.47	2.47	4.94	4.36	9.30	12.65
% of total compensation				26%			39%	35%	74%	

For the individuals who joined the Executive Board and the individuals who left the Executive Board during 2019, compensation relating to the period during which they were members of the Executive Board and, for leavers, during their respective notice period is included in the table above.

1 Dividend equivalents were paid in cash, consistent with dividends paid on actual shares.

2 Other benefits consist of housing allowances, expense allowances and relocation allowances.

3 STI non-deferred awards for 2019 comprised CHF 10.74 million (for 2018 CHF 14.74 million) cash, with a further CHF 0.30 million (for 2018 CHF 0.36 million) granted as blocked shares to Mr. Mathers, to comply with regulatory requirements given that he was categorized as UK PRA MRT during 2019 and 2018.

4 STI deferred awards for 2019 comprised CHF 10.89 million (for 2018 CHF 14.93 million) in deferred cash awards as well as CHF 0.46 million (for 2018 CHF 0.53 million) granted as share awards to Mr. Mathers, to comply with regulatory requirements given that he was categorized as UK PRA MRT during 2019 and 2018.

5 The fair value of the LTI awards as of the date of grant is determined using a probabilistic valuation method applied by one of the major international accounting firms.

6 For the total compensation awarded to the members of the Executive Board, the Group made payments of CHF 3.3 million in 2019 (for 2018 CHF 3.2 million) to cover the mandatory employer social security contributions as required under the social security laws applicable to the individual Executive Board members based on their domicile and employment status. These contributions do not form part of the Executive Board members' compensation.

7 No guaranteed bonuses, sign-on or replacement awards were paid to Executive Board members for 2019 and 2018.

8 Variable compensation ranged from 37% to 82% of total compensation in 2019 and from 52% to 81% in 2018.

Former Executive Board members (audited)

For 2019, no compensation payments were made to former Executive Board members who left Credit Suisse, which was also the case for 2018. Further, no payments were made to former Executive Board members pursuant to non-compete arrangements. Certain former Executive Board members assumed other roles within Credit Suisse after stepping down from the Executive Board. Some former members of the Group's most senior executive body who no longer provide services to the Group are still eligible to receive office infrastructure and secretarial support. These services are based on existing resources and are not used on a regular basis.

Utilization of Executive Board compensation approved at the 2019 AGM

At the 2019 AGM, shareholders approved a maximum aggregate amount of fixed compensation to be paid to members of the Executive Board for the period from the 2019 AGM to the 2020 AGM of CHF 31.0 million. Fixed compensation includes base salaries, role-based allowances, dividend equivalents, pension and other benefits. In line with the Swiss Ordinance Against Excessive Compensation with respect to Listed Stock Corporations (Compensation Ordinance) and as specified in the AoA, if new members join the Executive Board or members of the Executive

Board are promoted during the period for which compensation has already been approved by shareholders, a further 30% of the aggregate amounts already approved may be used for the compensation of such members. Of this additional amount, approximately CHF 0.6 million will be used to fund a portion of the base salary of new Executive Board member André Helfenstein and the increase in base salary of incoming CEO Thomas Gottstein. The detailed amounts will be disclosed in the 2020 Compensation Report. By the time of the 2020 AGM, a total of approximately CHF 31.6 million will have been paid to Executive Board members, of which CHF 27.15 million relates to the individuals who were members of the Executive Board at the time of the 2019 AGM, and CHF 4.4 million relates to individuals who became members of the Executive Board following the 2019 AGM in 2019 and the beginning of 2020.

At the 2019 AGM, shareholders also approved LTI compensation to be granted to members of the Executive Board for the 2019 financial year with a fair value at grant of CHF 30.2 million and a corresponding maximum opportunity of CHF 57.5 million, which was subsequently awarded to the Executive Board members. The amount of the 2019 LTI award earned by each of the Executive Board members can only be determined after the completion of the three-year performance period.

Cash settlement of share awards

The Executive Board members are permitted to elect, subject to minimum shareholding requirements, at a predefined date in advance of settlement, to receive their vested share-based awards in the form of shares, cash or 50% in the form of shares and 50% in cash, in each case based on the Group share price at the time of settlement. An election to receive cash is subject to reversal if at the time of settlement the Group share price is less than 75% of the share price at the time of election. The timing and pricing of settlement will be the same as under the previous award plan and as under the plans of the non-Executive Board population.

Contract lengths, termination and change in control provisions

All members of the Executive Board have employment contracts with the Group that are valid until terminated. The standard notice period for termination of employment by either the Group or the respective Executive Board member is six months. Executive Board members may be held to a non-compete period of up to one year and may be compensated for this period of time by mutual agreement. In the event of termination, there are no contractual provisions that allow for the payment of severance awards to Executive Board members beyond the regular compensation awarded during the notice period. Pre-defined conditions for all employees, including Executive Board members, apply for the payment of outstanding deferred compensation awards, depending on whether the termination of employment was voluntary, involuntary, by mutual agreement or as the result of a change in control. In case of a termination for cause, any deferred compensation and outstanding awards will be forfeited. There are no other contracts, agreements or arrangements with the members of the Executive Board that provide for other types of payments or benefits in connection with termination of employment that are not generally available to other employees of the Group.

In the case of a change in control, the treatment of outstanding awards for all employees, including Executive Board members,

will be determined by the Board upon recommendation of the Compensation Committee with the aim of maximizing shareholder value, subject to circumstances and prevailing market conditions. There are no provisions in the employment contracts of Executive Board members or any other pre-determined arrangements that require the payment of any type of extraordinary benefits, including special severance awards or transaction premia, in the case of a change in control.

Other outstanding awards

As of December 31, 2019, the outstanding cash-based deferred compensation awards granted to certain Executive Board members in prior years comprised of the Capital Opportunity Facility, contingent capital awards (CCA), Deferred Cash Allowance Plan (DCAP) and deferred STI cash awards. The cumulative value of such cash-based awards at their grant dates was CHF 38.8 million compared with CHF 39.8 million as of December 31, 2019. These amounts also include the cash value of dividend equivalents related to unvested share awards at their respective grant dates and at December 31, 2019.

Minimum shareholding requirements

As of December 31, 2019, the CEO and all Executive Board members, except for one member who joined the Executive Board in February 2019, fulfilled the minimum shareholding requirements of 500,000 shares and 300,000 shares, respectively, as measured against the number of shares owned plus the number of unvested awards calculated on the basis of actual achievement level (for awards that have reached the end of their three-year performance period) or maximum opportunity (for awards that have not reached the end of their three-year performance period). The CEO and Executive Board members are not permitted to sell shares until they have met the minimum shareholding requirements, except as necessary to fulfill taxation obligations on the respective shares awarded.

Executive Board holdings and values of deferred share-based awards by individual

end of	Number of owned shares ¹	Number of unvested awards ²	Number of owned shares and unvested awards	Value (CHF) of unvested awards at grant date ³	Value (CHF) of unvested awards at year end (at fair value) ⁴
2019					
Tidjane Thiam	66,422	1,303,823	1,370,245	19,084,599	10,833,091
Romeo Cerutti	323,165	458,513	781,678	6,750,770	3,820,259
Brian Chin	494,030	1,430,886	1,924,916	20,368,149	11,843,258
Thomas P. Gottstein	150,214	672,361	822,575	9,574,478	5,530,279
Lydie Hudson	26,175	295,386	321,561	3,739,373	2,832,024
David R. Mathers	84,360	1,029,891	1,114,251	13,509,668	9,392,954
David Miller	–	734,280	734,280	10,240,437	8,888,164
Antoinette Poschung	123,318	139,024	262,342	1,693,270	1,302,361
Helman Sitohang	264,737	1,007,352	1,272,089	14,683,925	8,198,365
James B. Walker	100,153	317,330	417,483	4,181,205	3,834,492
Lara J. Warner	–	786,568	786,568	11,361,535	6,138,554
Philipp Wehle	21,540	364,059	385,599	4,735,987	3,862,390
Total	1,654,114	8,539,473	10,193,587	119,923,396	76,476,192
2018					
Tidjane Thiam	64,302	990,706	1,055,008	16,430,736	6,923,084
James L. Amine	426,726	1,046,190	1,472,916	17,300,812	7,049,362
Pierre-Olivier Bouée	74,079	512,085	586,164	8,287,028	4,019,900
Romeo Cerutti	269,373	389,685	659,058	6,423,655	2,734,410
Brian Chin	431,274	1,137,731	1,569,005	18,494,683	8,600,260
Peter Goerke	21,953	342,324	364,277	5,655,877	2,438,237
Thomas P. Gottstein	118,976	402,042	521,018	6,752,150	2,831,436
Iqbal Khan	70,060	519,389	589,449	8,757,970	3,530,037
David R. Mathers	84,360	793,632	877,992	13,180,647	5,973,132
Joachim Oechslin	61,092	406,852	467,944	6,771,566	2,779,441
Helman Sitohang	264,737	822,060	1,086,797	13,497,946	5,857,016
Lara J. Warner	2,036	469,641	471,677	7,989,249	3,102,330
Total	1,888,968	7,832,337	9,721,305	129,542,319	55,838,645

¹ Includes shares that were initially granted as deferred compensation and have vested.

² Includes unvested shares originating from LTI opportunities calculated on the basis of maximum opportunity for awards that have not reached the end of their three-year performance period, given that the actual achievement level and associated number of unvested shares cannot be determined until the end of the performance period. For LTI awards that have reached the end of their three-year performance period, the number of unvested shares reflects the actual number of shares earned based on achievement of the performance target levels.

³ Determined based on the number of unvested awards multiplied by the share price at grant.

⁴ Includes the value of unvested LTI opportunities. For LTI awards that have reached the end of their three-year performance period, the value is based on the actual number of shares eligible to vest. For LTI opportunities that have not reached the end of their three-year performance period, this is determined based on the number of shares at fair value at the time of grant, multiplied by the share price at the end of the year.

Executive Board outstanding deferred compensation awards

in / end		Total outstanding end of 2018	Granted in 2019 ¹	Paid out in 2019	Ex post explicit adjustments	Ex post implicit adjustments	Total outstanding end of 2019	% of which exposed to ex post explicit adjustments
Executive Board (CHF million)								
CCAs	Cash-based	7	2	(2)	–	1	8	100%
Deferred cash awards ²	Cash-based	13	13	(3)	(2)	–	21	100%
Share awards ³	Share-based	78	56	(7)	(23)	13	117	100%
Performance share awards	Share-based	8	5	(5)	–	2	10	100%
CCA share awards	Share-based	9	–	(11)	–	2	–	100%
Total		115	76	(28)	(25)	18	156	

¹ Includes awards granted to Executive Board members prior to them joining the Executive Board.

² Includes the deferred cash portion of STI awards.

³ Includes the outstanding 2017, 2018 and 2019 LTI opportunities at maximum opportunity.

Executive Board loans (audited)

The majority of loans outstanding to Executive Board members are mortgages or loans against securities. Such loans are made on the same terms available to employees under the Group's employee benefit plans. Pursuant to the AoA, each Executive Board member may be granted individual credit facilities or loans up to a maximum of CHF 20 million. As of December 31, 2019, 2018 and 2017, outstanding loans to Executive Board members amounted to CHF 32 million, CHF 33 million and CHF 26 million, respectively. The number of individuals with outstanding loans at the beginning and the end of 2019 was 8 and 5, respectively, and the highest loan outstanding was CHF 17 million to Mr. Sitohang.

All mortgage loans to Executive Board members are granted either with variable or fixed interest rates over a certain period. Typically, mortgages are granted for periods of up to ten years. Interest rates

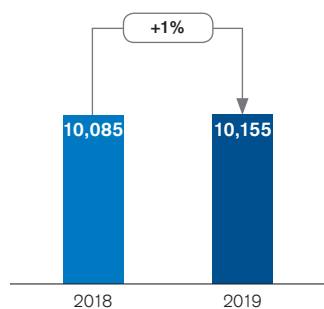
applied are based on refinancing costs plus a margin, and interest rates and other terms are consistent with those applicable to other employees. Loans against securities are granted at interest rates and on terms applicable to such loans granted to other employees. The same credit approval and risk assessment procedures apply to Executive Board members as for other employees. Unless otherwise noted, all loans to Executive Board members were made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and in consideration of the terms which apply to all Group employees. These loans did not involve more than the normal risk of collectability or present other unfavorable features.

→ Refer to "Banking relationships with Board and Executive Board members and related party transactions" in IV – Corporate Governance – Additional information for further information.

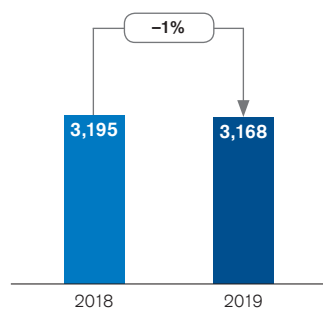
Group compensation

Compensation outcomes for 2019

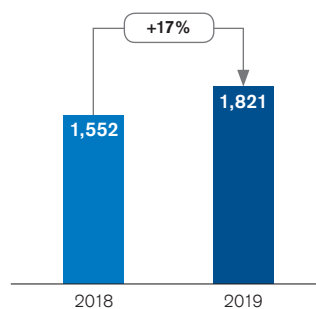
Total compensation awarded
(CHF million)



Variable incentive compensation awarded
(CHF million)



Total compensation awarded to MRTC
(CHF million)



Variable incentive compensation awarded

For 2019, the Compensation Committee proposed an overall Group variable incentive compensation pool of CHF 3,168 million, which was approved by the Board. This amount is lower by 1% compared with the prior year. Although the Group's financial performance has improved substantially since the completion of the restructuring period, the Compensation Committee also considered a range of other factors such as relative performance versus peers and market position and market trends, as well as risk, control, compliance and conduct and ethics considerations. The Compensation Committee also took into account the non-recurring nature of the revenues from the transfer of the InvestLab fund platform to Allfunds Group and the gain related to the revaluation of the Group's equity investment in SIX Group AG. Against the backdrop of a challenging market environment, increasing trade tensions and greater geopolitical uncertainty, the business performed well. Notwithstanding these achievements, the Compensation Committee decided to decrease the Group variable incentive compensation pool by 1% compared with the previous year, to protect returns and profitability, and to achieve a more balanced distribution of profits between shareholders and employees. Approximately 54% of variable incentive compensation awarded is deferred and expensed in future periods, and subject to future

service, performance and malus criteria and other restrictive covenants.

Negative adjustment to outstanding Performance Share Awards

Given the loss before taxes reported by the Investment Banking & Capital Markets division for 2019, the outstanding performance share awards currently held by employees who received those awards while being a member of the Investment Banking & Capital Markets division have been adjusted downward by a total of approximately CHF 7 million.

Compensation awarded to Material Risk Takers and Controllers (MRTCs)

Total compensation awarded to MRTCs for 2019 was CHF 1,821 million, compared with CHF 1,552 million for 2018, mainly as a result of the increase in the number of employees classified as MRTC to 1,444, from 1,030 in 2018. The increase in the number of MRTCs was mainly driven by the inclusion of senior relationship managers in the Wealth Management-related businesses, particularly those in the ultra-high net worth segment or those with cross-border clients.

Total compensation awarded

For	2019			2018		
	Unrestricted	Deferred	Total	Unrestricted	Deferred	Total
Fixed compensation (CHF million)						
Salaries	5,241	108	5,349	5,235	99	5,334
Social security	642	–	642	652	–	652
Other ¹	786	–	786	748	–	748
Total fixed compensation	6,669	108	6,777	6,635	99	6,734
Variable incentive compensation (CHF million)						
Cash	1,433	–	1,433	1,555	–	1,555
Share awards	37	626	663	35	638	673
Performance share awards	–	553	553	–	532	532
Contingent Capital Awards	–	268	268	–	299	299
Deferred cash awards	–	251	251	–	136	136
Total variable incentive compensation	1,470	1,698	3,168	1,590	1,605	3,195
Other variable compensation (CHF million)						
Severance awards	98	–	98	34	–	34
Retention awards	–	40	40	–	25	25
Other ²	19	53	72	23	74	97
Total other variable compensation	117	93	210	57	99	156
Total compensation awarded (CHF million)						
Total compensation awarded	8,256	1,899	10,155	8,282	1,803	10,085
of which guaranteed bonuses	26	34	60	26	33	59

Prior period has been reclassified to conform to the current presentation. Salaries include role-based allowances.

¹ Includes pension and other post-retirement expense of CHF 437 million and CHF 411 million in 2019 and 2018, respectively.

² Includes replacement awards to compensate employees for the equivalent fair value of deferred awards cancelled by previous employers as well as sign-on payments.

Number of employees awarded variable incentive and other compensation

	2019			2018		
	MRTC ¹	Other employees	Total	MRTC ¹	Other employees	Total
Number of employees awarded variable incentive compensation						
Variable incentive compensation	1,398	41,827	43,225	1,003	41,210	42,213
of which Cash	1,211	41,232	42,443	977	40,996	41,973
of which Share awards	1,277	5,796	7,073	944	6,004	6,948
of which Performance share awards	1,297	823	2,120	952	873	1,825
of which Contingent Capital Awards	1,262	4,644	5,906	933	4,843	5,776
of which Deferred cash awards	245	796	1,041	69	431	500
Number of employees awarded other variable compensation						
Severance awards	27	764	791	1	217	218
Retention awards	17	35	52	5	50	55
Guaranteed bonuses	7	123	130	4	129	133
Other ²	34 ³	556	590	29 ³	542	571

Prior period has been reclassified to conform to the current presentation. Excluding Executive Board members who were in office on December 31, 2019 or 2018, respectively.

¹ Excludes individuals who may have been classified as MRTC according to regulatory requirements of jurisdictions outside of Switzerland, particularly US-based revenue producers in Global Markets and Investment Banking & Capital Markets, who were classified as Covered Employees by the US Federal Reserve.

² Includes replacement awards to compensate employees for the equivalent fair value of deferred awards cancelled by previous employers as well as sign-on payments.

³ For 2019 and 2018, sign-on payments were paid to 8 and 5 MRTC, respectively.

Compensation awarded to Material Risk Takers and Controllers

For	2019			2018		
	Unrestricted	Deferred	Total	Unrestricted	Deferred	Total
Fixed compensation (CHF million)						
Total fixed compensation¹	640	57	697	514	58	572
Variable incentive compensation (CHF million)						
Cash	228	–	228	230	–	230
Share awards	37	205	242	35	192	227
Performance share awards	–	357	357	–	328	328
Contingent Capital Awards	–	136	136	–	128	128
Deferred cash awards	–	90	90	–	40	40
Total variable incentive compensation	265	788	1,053	265	688	953
Other variable compensation (CHF million)						
Severance awards	9	–	9	1	–	1
Retention awards	–	37	37	–	6	6
Other ²	2 ³	23	25	4 ³	16	20
Total other variable compensation	11	60	71	5	22	27
Total compensation (CHF million)						
Total compensation	916	905	1,821	784	768	1,552
of which guaranteed bonuses	1	5	6	1	3	4

Prior period has been reclassified to conform to the current presentation. Excluding Executive Board members who were in office on December 31, 2019 or 2018, respectively. Of the total compensation awarded to MRTC for 2019 and 2018, 50% and 49%, respectively, was deferred. Of the total variable incentive compensation awarded to MRTC for 2019 and 2018, 75% and 72%, respectively, was deferred.

¹ The number of MRTCs receiving fixed compensation for 2019 and 2018 was 1,444 and 1,030, respectively.

² Includes replacement awards to compensate employees for the equivalent fair value of deferred awards cancelled by previous employers as well as sign-on payments.

³ For 2019 and 2018, sign-on payments paid to MRTC amounted to CHF 1 million and CHF 1 million, respectively.

Group compensation and benefits expense

Compensation and benefits expenses recognized in the current year income statement include salaries, role-based allowances, variable compensation, benefits and employer taxes on

compensation. Variable compensation expense reflects the variable cash compensation for the current year and amortization of deferred compensation awards granted in prior years.

Group compensation and benefits expense

in	2019			2018		
	Current compensation	Deferred compensation	Total	Current compensation	Deferred compensation	Total
Fixed compensation expense (CHF million)						
Salaries	5,241	102 ¹	5,343	5,235	85 ¹	5,320
Social security ²	642	–	642	652	–	652
Other ³	786	–	786	748	–	748
Total fixed compensation expense	6,669	102	6,771	6,635	85	6,720
Variable incentive compensation expense (CHF million)						
Cash	1,433	–	1,433	1,555	–	1,555
Share awards	37	590 ⁴	627	35	514 ⁴	549
Performance share awards	–	438	438	–	382	382
Contingent Capital Awards	–	308	308	–	154	154
Contingent Capital share awards	–	(1)	(1)	–	2	2
Capital Opportunity Facility awards	–	8	8	–	12	12
Deferred cash awards ⁵	–	310	310	–	136	136
Total variable incentive compensation expense	1,470	1,653	3,123	1,590	1,200	2,790
Other variable compensation expense (CHF million)						
Severance payments	98	–	98	34	–	34
Retention Awards	–	22	22	–	54	54
Other ⁶	22	–	22	22	–	22
Total other variable compensation expense	120	22	142	56	54	110
Total compensation expense (CHF million)						
Total compensation expense	8,259	1,777	10,036	8,281	1,339	9,620

Prior period has been reclassified to conform to the current presentation. Salaries include role-based allowances. Restructuring expenses in connection with the strategic review of the Group were disclosed separately and were not part of the total compensation expenses. In 2018, restructuring expenses included cash severance expenses of CHF 169 million relating to 1,647 employees.

¹ Includes deferred fixed cash compensation expense of CHF 102 million and CHF 85 million related to cash awards for 2019 and 2018, respectively.

² Represents the Group's portion of employees' mandatory social security.

³ Includes pension and other post-retirement expense of CHF 437 million and CHF 411 million in 2019 and 2018, respectively.

⁴ Includes CHF 10 million and CHF 22 million of compensation expense associated with replacement share awards granted in 2019 and 2018, respectively.

⁵ Includes CHF 4 million and CHF 9 million of compensation expense associated with replacement cash awards granted in 2019 and 2018, respectively.

⁶ Includes sign-on payments.

Group estimated unrecognized compensation expense

The following table shows the estimated compensation expense that has not yet been recognized through the income statement for deferred compensation awards granted for 2019 and prior years that were outstanding as of December 31, 2019, with

comparative information for 2018. These estimates are based on the fair value of each award on the grant date, taking into account the current estimated outcome of relevant performance criteria and estimated future forfeitures. No estimate has been included for future mark-to-market adjustments.

Group estimated unrecognized compensation expense

end of	Deferred compensation		2019	Deferred compensation		2018
	For 2019	For prior-year awards		For 2018	For prior-year awards	
Estimated unrecognized compensation expense (CHF million)						
Share awards	596	477 ¹	1,073	629	452 ¹	1,081
Performance share awards	519	193	712	521	167	688
Contingent Capital Awards	257	165	422	273	141	414
Deferred cash awards	251	181 ²	432	136	161 ²	297
Retention awards	–	48	48	–	32	32
Total estimated unrecognized compensation expense	1,623	1,064	2,687	1,559	953	2,512

Prior period has been reclassified to conform to the current presentation.

¹ Includes CHF 28 million and CHF 38 million of estimated unrecognized compensation expense associated with replacement share awards granted to new employees in 2019 and 2018, respectively, not related to prior years.

² Includes CHF 11 million and CHF 13 million of estimated unrecognized compensation expense associated with replacement cash awards granted to new employees in 2019 and 2018, respectively, not related to prior years.

Changes to the value of outstanding deferred awards

Employees experience changes to the value of their deferred compensation awards during the vesting period due to both implicit and explicit value changes. Implicit value changes primarily reflect market-driven effects, such as changes in the Group share price, changes in the value of the CCA and foreign exchange rate movements. Explicit value changes reflect risk adjustments triggered by conditions related to negative performance in the performance share awards, forfeiture, or the malus provisions in all deferred awards. The final value of an award will only be determined at settlement.

→ Refer to "Note 29 – Employee deferred compensation" in VI – Consolidated financial statements – Credit Suisse Group for further information.

The following table provides a comparison of the outstanding deferred compensation awards at the end of 2018 and 2019, indicating the value of changes due to ex post implicit and ex post explicit adjustments. For 2019, the change in value for the outstanding deferred compensation awards was mainly due to implicit adjustments driven primarily by changes in the Group share price, foreign exchange rate movements and changes in the value of CCA.

Outstanding deferred compensation awards

in / end		Total outstanding end of 2018	Granted in 2019	Paid out in 2019	Ex post explicit adjustments	Ex post implicit adjustments	Total outstanding end of 2019	% of which exposed to ex post explicit adjustments
Group (CHF million) ¹								
CCAs	Cash-based	547	286	(170)	(21)	105	747	100%
Deferred cash awards ²	Cash-based	276	103	(132)	(4)	(2)	241	100%
Share awards ²	Share-based	898	811	(491)	(71)	301	1,448	100%
Performance share awards	Share-based	557	534	(306)	(33)	196	948	100%
CCA share awards	Share-based	36	–	(44)	(1)	10	1	100%
Total		2,314	1,734	(1,143)	(130)	610	3,385	
Material Risk Takers and Controllers (CHF million) ³								
CCAs	Cash-based	246	152	(65)	–	21	354	100%
Deferred cash awards ²	Cash-based	87	63	(42)	–	–	108	100%
Share awards ²	Share-based	294	307	(160)	(11)	102	532	100%
Performance share awards	Share-based	315	341	(155)	(5)	118	614	100%
CCA share awards	Share-based	10	–	(12)	–	3	1	100%
Total		952	863	(434)	(16)	244	1,609	

¹ Includes MRTCs and Executive Board members who were in office on December 31, 2019.

² Includes retention awards.

³ Excludes Executive Board members who were in office on December 31, 2019.

Supplementary information

Equal pay opportunity

Credit Suisse does not tolerate any form of discrimination, in particular discrimination based on ethnicity, nationality, gender, sexual orientation, gender identity, religion, age, marital or family status, pregnancy, disability – or any other status that is protected by local law. We recognize and value diversity and inclusion as a driver of success. Our policies and practices support a culture of fairness, where employment-related decisions, including decisions on compensation, are based on an individual's qualifications, performance and behavior, or other legitimate business considerations, such as the profitability of the Group or the division and department of the individual, and the strategic needs of the Group. Consistent with our long-term commitment to fair pay, the Compensation Committee reviews our pay practices on a regular basis to identify potential areas requiring more attention.

Internally, we are committed to developing an inclusive culture, enhancing our existing flexible working opportunities and addressing potential unconscious bias in employee processes. Externally, we are active partners in a number of initiatives to promote gender diversity at more senior levels across industries as well as more career opportunities for women in financial services.

Impact of share-based compensation on shareholders' equity

In general, the income statement expense recognition of share-based awards on a pre-tax basis has a neutral impact on shareholders' equity because the reduction to shareholders' equity from the expense recognition is offset by the obligation to deliver shares, which is recognized as an increase to equity by a corresponding amount. Shareholders' equity includes, as additional paid-in capital, the tax benefits associated with the expensing and subsequent settlement of share-based awards.

Since 2017, the Group has been fulfilling its share delivery obligations by purchasing shares in the market. The Group maintained this practice during 2019 and intends to continue covering future share delivery obligations through market purchases.

Share-based awards outstanding

At the end of 2019, there were 183.0 million share-based awards outstanding, of which 110.5 million were share awards, 72.4 million performance share awards and 0.1 million CCA share awards.

→ Refer to "Note 29 – Employee deferred compensation" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Subsequent activity

In early 2020, the Group granted approximately 57.9 million new share awards and 50.7 million new performance share awards with respect to performance in 2019. Further, the Group awarded CHF 268 million of deferred variable incentive compensation in the form of CCA pursuant to the Group's compensation policy.

In the first half of 2020, the Group plans to settle 71.8 million deferred awards from prior years, of which 44.9 million were share awards, 26.8 million performance share awards and 0.1 million CCA share awards. The Group plans to meet this delivery obligation through market purchases.

→ Refer to "Capital management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for more information.

Group compensation framework

The key elements of our current Group employees' compensation framework and how they applied to various employee categories are described below.

Base salaries

All employees are paid a base salary. Salary levels are based on the skills, qualifications and relevant experience of the individual, the responsibilities required by the role and external market factors.

Role-based allowances

Role-based allowances are a component of fixed compensation awarded to certain employees identified as Prudential Regulation Authority (PRA) Material Risk Taker (MRT) under UK regulatory requirements or material risk-takers under other EU regulatory requirements. These role-based allowances are determined based on the role and organizational responsibility of the individuals. Role-based allowances are deemed to be fixed compensation for the purposes of calculating the cap of variable incentive compensation as required by the Capital Requirements Directive IV (CRD IV) and Capital Requirements Regulation. DCAP is a form of role-based allowance that is used primarily in the Americas.

Variable incentive compensation

For 2019, variable incentive compensation was paid in cash unless the total compensation awarded to an employee for 2019 was greater than or equal to CHF 250,000 or the local currency equivalent or USD 250,000 for employees whose total compensation is denominated in US dollars. In these cases a portion was paid in cash and the balance was deferred, vesting at a later date.

Generally, employees receive the cash portion of their variable incentive compensation at a regular payroll settlement date close to the grant date. To comply with CRD IV requirements, employees who hold material risk-taker roles in respect of certain Group subsidiaries in the EU receive shares for 50% of the non-deferred portion of variable incentive compensation that would have been paid to them in cash. These shares are vested at the time of grant but remain blocked, that is, subject to transfer restrictions, for a period of 12 months.

For 2019 there was one global deferral table with deferral rates that range from 17.5% to 85%. The amount of variable incentive compensation paid in cash for 2019 was capped at CHF 2 million or the local currency equivalent (or USD 2 million for employees whose total compensation is denominated in US dollars) per employee.

Compensation components by employee category

Employee category	Total compensation				
	Fixed compensation	Variable compensation			
		Cash	Deferred compensation ¹		
Base salary			Share awards	Performance share awards	Contingent Capital Awards
Managing directors and directors who are MRTC			30%	50%	20%
Other directors			80%		20%
Other MRTC			50%	50%	
Other employees with total compensation of CHF/USD 250,000 or higher			100%		
Employees with total compensation below CHF/USD 250,000					

¹ Deferred compensation is applicable to employees with total compensation of CHF/USD 250,000 or higher.

Deferred compensation: key features

Award	Delivery ¹	Vesting period ¹	Performance conditions
Share awards	<ul style="list-style-type: none"> One registered share per award Dividend equivalents (payable upon delivery) 	<ul style="list-style-type: none"> 3 years (ratable vesting) 5 years (ratable vesting) for risk managers² 7 years (ratable vesting over five years, starting on the third anniversary) for senior managers³ 	<ul style="list-style-type: none"> No additional performance conditions
Performance share awards	<ul style="list-style-type: none"> One registered share per award Dividend equivalents (payable upon delivery) 	<ul style="list-style-type: none"> 3 years (ratable vesting) 5 years (ratable vesting) for risk managers² 7 years (ratable vesting over five years, starting on the third anniversary) for senior managers³ 	<ul style="list-style-type: none"> Performance conditions apply to full balance of outstanding awards Negative adjustment applies in event of divisional loss⁴ by the division in which the employee worked as of December 31, 2019, or a negative return on equity (RoE) of the Group, whichever results in a larger adjustment For employees in the corporate functions and the Corporate Center, the negative adjustment only applies in the event of a negative RoE of the Group
Contingent Capital Awards	<ul style="list-style-type: none"> At settlement, contingent capital instrument or cash payment based on the fair value of the CCA Prior to settlement, conditional right to receive semi-annual cash payments of interest equivalents Timing and form of distribution upon settlement is subject to approval by the Swiss Financial Market Supervisory Authority FINMA (FINMA) 	<ul style="list-style-type: none"> 3 years (cliff vesting) 5 years (cliff vesting) for risk managers² 7 years (cliff vesting) for senior managers³ 	<p>Prior to settlement, the principal amount would be written down to zero and forfeited if:</p> <ul style="list-style-type: none"> The Group's reported CET1 ratio falls below 7%; or FINMA determines that cancellation of the CCA and other similar contingent capital instruments is necessary, or that the Group requires public sector capital support, in either case to prevent it from becoming insolvent or otherwise failing

¹ Individuals in certain jurisdictions may be subject to conditions other than those outlined here in order to comply with local legal or regulatory requirements.

² Risk managers are a subset of the UK PRA MRT population, defined as individuals identified as having responsibility for managing or supervising risk-taking or significant risk functions for the Group's UK entities.

³ Senior managers are a subset of the UK PRA MRT population, defined as individuals who retain the greatest influence over the strategic direction of the Group's UK business, and who also perform one or more of the PRA and UK Financial Conduct Authority's designated senior management functions and "prescribed responsibilities" for the relevant UK entities.

⁴ Refer to "Potential downward adjustments of performance share awards".

Potential downward adjustments of performance share awards

As described in the following table, performance share awards may be subject to negative adjustments in the event of a divisional loss. The amount of potential negative adjustment is shown in the table below.

Downward adjustment if division incurs a loss

Division loss before taxes (in CHF billion)	Downward adjustment on award balance (in %)
1.00	15
2.00	30
3.00	45
4.00	60
5.00	75
6.00	90
6.67	100

Competitive benchmarking

The assessment of the economic and competitive environment is an important element of the compensation process as the Group strives for market-informed, competitive compensation levels. Internal expertise and the services of compensation consulting firms are used to benchmark compensation levels against relevant peers, taking into account geographical variations. The Compensation Committee is provided with regular reports from an independent compensation adviser on industry and market trends, including competitor performance and pay trends. The core group considered for the purposes of Group peer benchmarking are Bank of America, Barclays, Citigroup, Deutsche Bank, Goldman Sachs, JPMorgan Chase, Morgan Stanley and UBS. Specific benchmarking may include other peers, depending on the business area or geographic location, as appropriate.

For consideration of European and local practices, the Compensation Committee also references a cross-industry peer group of multinational companies headquartered in Europe selected on the basis of comparability to Credit Suisse in size, scale, global scope of operations and economic influence. In addition to the companies already listed previously and those included as part of the Executive Board LTI RTSR peer group, peers considered for Executive Board compensation include: AstraZeneca, Bayer, Commerzbank, Credit Agricole, Danske Bank, GlaxoSmithKline, HSBC, Lloyds Banking Group, Merck KGaA, Natixis, Novartis, Roche and UniCredit.

Focus on risk and control

Risk and control considerations are an integral part of the performance assessment and compensation processes. This ensures that the Group's approach to compensation includes a focus on risk and internal control matters and discourages excessive risk taking. Senior management from the Group's corporate functions, including Risk, Compliance, General Counsel, Human Resources, Internal Audit and Product Control, provide the Compensation Committee with comprehensive feedback on regulatory, audit, disciplinary and risk-related issues or trends across the Group, relevant to the assessment of the Group's risk and control culture. Divisions are assessed against risk and conduct measures for the year, and the consolidated findings are presented to the Compensation Committee and the CEO. Based on these assessments, the Compensation Committee may approve adjustments to the divisional pool levels as proposed by the CEO.

Aside from risk considerations, disciplinary events may also impact compensation decisions. Conduct and Ethics Boards (CEBs) review all disciplinary events and decide on disciplinary sanctions proposed by the recommendation teams, which include representatives from the control functions. CEBs have been established at the Group-wide level, as well as for each business division and the corporate functions overall. The Group CEB meets on a quarterly basis to ensure that sanctions applied are in line with the Group's risk appetite, market practice and regulatory requirements.

Malus and clawback provisions

All deferred compensation awards granted contain malus provisions that enable the Group to reduce or cancel the awards prior to settlement if the participant engages in certain detrimental conduct. Malus provisions were enforced during the course of

2019. All variable incentive compensation granted to UK PRA MRT and employees regulated by the Bank of Italy are subject to clawback. Other EU-regulated employees are also subject to clawback provisions as required by applicable legal or regulatory requirements.

	Application	Scope/Criteria
Malus	<ul style="list-style-type: none"> Reduction or cancellation of outstanding deferred awards prior to settlement Applies to all outstanding deferred awards granted 	<ul style="list-style-type: none"> Impermissible disclosure or misuse of Group information, or willful engagement in conduct that is materially detrimental to an interest of the Group; Conduct that evidences serious misbehavior or serious error; Conduct that causes, could cause or could have caused the Group or any division or region to suffer a significant downturn in financial performance or regulatory capital base; Significant failure of risk management; or Conduct that is reviewed by the Group's disciplinary conduct, ethics or similar committee
Clawback	<ul style="list-style-type: none"> Claim back of deferred and non-deferred variable compensation after vesting and settlement For UK PRA MRT, clawback may be applied up to seven years from grant date (or such longer period as may be required) The Group will apply clawback provisions to the extent permitted under local laws, as required 	<p>For UK PRA MRT, clawback may be applied in certain situations, including:</p> <ul style="list-style-type: none"> Conduct which resulted in significant losses to the Group; Failure to meet appropriate standards of fitness and propriety; Reasonable evidence of misconduct or misbehavior or a material or serious error; The Group or relevant business unit suffers a material failure of risk management; A regulator mandates a significant increase in regulatory capital for the Group or any division or region; or The individual has contributed to any regulatory sanctions imposed on the Group or division or region <p>Similar clawback provisions apply for employees regulated by the Bank of Italy and other EU-regulated employees who are subject to a clawback requirement.</p>

Covered Employees (including Material Risk Takers and Controllers)

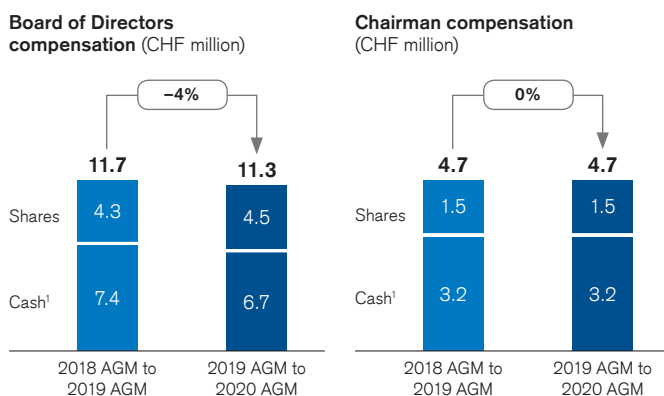
Covered employees are subject to a heightened level of scrutiny over the alignment of their compensation with performance and risk considerations.

Employee categories	Compensation process
Covered Employees <ul style="list-style-type: none"> MRTC US-based revenue producers in Global Markets and Investment Banking & Capital Markets divisions 	Focus on risk assessment <ul style="list-style-type: none"> Covered employees and their managers are required to define role-specific risk objectives and to incorporate risk considerations in their performance evaluations and when setting variable incentive compensation Types of risks considered vary by role (e.g., reputational, credit, market, operational, liquidity, legal and compliance) Both realized and potential risk outcomes are assessed
MRTC <ul style="list-style-type: none"> Members of the Executive Board Employees who report directly to a member of the Executive Board Employees, individually or as part of a group, with the ability to put material amounts of the Group's capital at risk Top 150 paid employees across the Group based on total compensation Any employee identified as taking or controlling material risks on behalf of the Group, as prescribed by EU/UK regulators Senior relationship managers in the Wealth Management-related businesses Other individuals whose roles have been identified as having a potential impact on the market, reputational and operational risk of the Group 	

Board of Directors compensation

Compensation outcomes for 2019

Board of Directors and Chairman compensation



Figures above may contain rounding differences.

¹ Includes pension and other benefits for the period from the 2018 AGM to the 2019 AGM and from the 2019 AGM to the 2020 AGM.

For the period from the 2019 AGM to the 2020 AGM, aggregate compensation to the Board of CHF 11.3 million consisted of CHF 10.8 million related to Group Board memberships and CHF 0.5 million of fees paid to certain Board members for subsidiary board memberships. This compares with the amount of CHF 12.0 million approved prospectively by shareholders at the 2019 AGM. Total Board compensation is 4% lower than the prior period, mainly driven by lower subsidiary board compensation resulting from the chairman of the board of Credit Suisse (Schweiz) AG no longer being a member of the Group Board.

The Board membership and committee fee amounts for the 2019 AGM to 2020 AGM period are consistent with the prior year, except for the new committee fee of CHF 75,000 for the Conduct and Financial Crime Control Committee, which was established in 2019.

→ Refer to the table "Board membership fees: 2019 AGM – 2020 AGM" in Compensation Design for further information.

For the 2020 AGM to 2021 AGM period, the Board intends to leave these fee amounts unchanged except for the following:

- the Audit Committee chair fee will be reduced to CHF 400,000, from CHF 480,000 currently; and
- a new chair fee for the Conduct and Financial Crime Control Committee of CHF 150,000 will be introduced for the incoming chair of this committee. This committee is currently chaired by the Chairman, who does not receive an additional fee for this role.

Compensation of the Chairman

The Chairman's compensation for the 2019 AGM to 2020 AGM period remained unchanged compared with the prior period. His role is a full-time appointment, and he may also receive benefits from, and make contributions to, the Group pension fund in line with local market practice for the Group. The total compensation paid to the Chairman reflects his full-time status and active role

in shaping the Group's strategy, governing the Group's affairs, engaging and maintaining a close working relationship with the CEO and senior management, and providing supervision, counsel and support, where appropriate. The Chairman coordinates the Board's activities, works with the committee chairs to coordinate the tasks of the committees and ensures that Board members are provided with sufficient information to perform their duties. The Chairman drives the Board agenda on key topics such as the strategic development of the Group, corporate culture, succession planning and the structure and organization of the Group. He chairs the Board, the Governance and Nominations Committee, the Conduct and Financial Crime Control Committee and the shareholder meetings. He takes an active role in representing the Group to regulators and supervisors, key shareholders, investors, and other external stakeholders. Moreover, he is a member of the boards of several Swiss and international industry associations on behalf of the Group, including the Swiss Bankers Association, the Swiss Finance Council, the Institute of International Finance and the European Banking Group.

Compensation of the committee chairs

Committee chair fees are paid for the Audit Committee, the Compensation Committee and the Risk Committee. These fees are fixed in advance and are not linked to the Group's financial performance. In addition to the greater time commitment required to prepare and lead the committee work, the chair fees reflect the engagement of these three committee chairs throughout the year with regulators, shareholders, the business divisions and corporate functions and other stakeholders. Regulatory developments in the banking industry in recent years have put increasing demands on the Risk and Audit Committee Chairs, in particular, increasing the frequency of interaction with the Group's main regulators on internal control, risk, capital and other matters under the supervision of these committees. Similarly, the greater focus of shareholders and regulators on compensation has resulted in an increased number of engagements between the Compensation Committee Chair and key shareholders and shareholder proxy advisers, as well as with regulators. The Compensation Committee held 11 meetings and calls, and the Compensation Committee Chair personally attended 44 separate meetings with key shareholders and proxy advisers during 2019. The Audit Committee Chair fee takes into consideration the greater number of meetings required of the Audit Committee for the review and approval of the quarterly financial results and related filings and the Audit Committee Chair's supervisory role over the Internal Audit function. The Audit Committee held 17 meetings and calls during 2019. The Risk Committee Chair fee reflects the regular interaction required between the Risk Committee Chair and the Group chief risk officer and other senior managers in the risk management function, as well as the oversight role over the Credit Risk Review function, which reports directly to the Risk Committee Chair. The Risk Committee held 7 meetings during

2019, and in addition, the Risk Committee Chair held numerous meetings with regulators and other stakeholders.

- Refer to the table "Members of the Board and Board committees" in IV – Corporate Governance – Board of Directors for further information.
- Refer to "Credit risk governance" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management – Credit risk for further information on the Credit Risk Review function.

Compensation of Board members serving on subsidiary boards

A number of Board members also serve as members on the boards of Group subsidiary companies. This practice is consistent with the Group's legal entity governance principles, which aim to foster a close alignment of the Group's governance practices and those of its significant subsidiary companies.

- Refer to the "Governance of Group subsidiaries" and "Biographies of the Board members" in IV – Corporate Governance – Board of Directors for further information.

With the exception of the Chairman, Board members may receive separate fees paid in cash for serving on subsidiary boards, in addition to their Board fees. These fees are approved by the respective subsidiary boards and are subject to ratification by the Board. All subsidiary board fees are included in the total amount of compensation of the members of the Board proposed for approval by shareholders at the AGM. The Chairman does not receive separate fees for board memberships in other Group

companies, as these memberships are considered to be included as part of the Chairman's compensation.

The Board members newly appointed to serve on subsidiary boards receive a flat subsidiary board membership fee of CHF 100,000 (or higher amounts if a Board member serves as the chair of the subsidiary board or a committee). This amount is generally less than that received by other external subsidiary board members, given that Board members are already familiar with the Group's entities and activities. Serving on a subsidiary board is nevertheless a significant additional commitment for these Board members, reflected, for example, in the number of subsidiary board meetings held throughout the year as shown in the following table.

Number of subsidiary board meetings

	Board ¹	Committee ²	Total
Subsidiary			
Credit Suisse (Schweiz) AG	10	16	26
Credit Suisse International (CSI) / Credit Suisse Securities (Europe) Ltd. (CSSEL)	18	11	29
Credit Suisse Holdings (USA), Inc. ³	23	17	40

¹ Includes ad hoc meetings and calls.

² Includes meetings of the respective subsidiary board's audit and risk committees.

³ Board and committee meetings partly held jointly with Credit Suisse (USA) Inc. and Credit Suisse Securities (USA) LLC.

Supplementary information

Board compensation from the 2019 AGM to the 2020 AGM (audited)

	CF				Base board fee	Committee fee	Chair fee	Pension and other benefits	Total	Group	Subsidiaries		Total, including subsidiary boards ³
	GNC	AC	CC	CCC						RC	Of which awarded in Group shares ¹	Subsidiary board fee ²	
CHF													
Urs Rohner, Chairman ⁴	C			C	3,000,000		1,500,000	218,665	4,718,665	1,500,000			4,718,665
Iris Bohnet				M	250,000	100,000			350,000	175,000			350,000
Christian Gellerstad				M	250,000	175,000			425,000	212,500			425,000
Andreas Gottschling	M	M		C	250,000	200,000	400,000		850,000	425,000	100,000		950,000
Alexander Gut		M			250,000	150,000			400,000	200,000	150,000		550,000
Michael Klein				M	250,000	200,000			450,000	225,000			450,000
Shan Li				M	250,000	100,000			350,000	175,000			350,000
Seraina Macia				M	250,000	100,000			350,000	175,000			350,000
Kai S. Nargolwala	M		C	M	250,000	125,000	300,000		675,000	337,500			675,000
Ana Paula Pessoa		M		M	250,000	225,000			475,000	237,500			475,000
Joaquin J. Ribeiro		M			250,000	150,000			400,000	200,000			400,000
Severin Schwan	M			M	250,000	150,000			400,000	200,000			400,000
John Tiner	M	C		M	250,000	225,000	480,000		955,000	477,500	225,000		1,180,000
Total					6,000,000	1,900,000	2,680,000	218,665	10,798,665	4,540,000	475,000	0	11,273,665

GNC = Governance and Nominations Committee; AC = Audit Committee; CC = Compensation Committee; CFCCC = Conduct and Financial Crime Control Committee; RC = Risk Committee; C = Chair; M = Member

- As of December 31, 2019, one-half of the Board member fees to be awarded in Group shares have been delivered to Board members. The applicable Group share price was CHF 12.19. The remaining shares will be delivered to Board members at or around the date of the 2020 AGM and the share price for this second share delivery will be determined at that time. Group shares are subject to a four-year blocking period.
- Subsidiary board fees were awarded for the following subsidiary board roles: i) Mr. Gottschling serves as non-executive director, member of the risk committee and chair of the advisory remuneration committee of the UK subsidiaries Credit Suisse International and Credit Suisse Securities (Europe) Limited and receives annual fees of CHF 100,000 for these roles; ii) Mr. Gut serves as non-executive director and audit committee chair of the Swiss subsidiary Credit Suisse (Schweiz) AG and receives annual fees of CHF 100,000 and CHF 50,000 for these roles respectively; iii) Mr. Tiner serves as non-executive board member of the US subsidiaries Credit Suisse Holdings (USA), Inc., Credit Suisse (USA) Inc. and Credit Suisse Securities (USA) LLC; and in the case of Mr. Tiner, these fees were agreed prior to the cap of CHF 100,000 being adopted for Group Board members serving on subsidiary boards.
- At the 2019 AGM, shareholders approved a maximum amount of total compensation to be awarded to Board members until the 2020 AGM of CHF 12 million. For the total compensation awarded to members of the Board, the Group will make payments of CHF 0.5 million for the 2019 / 2020 Board period to cover the mandatory employer social security contributions as required under the social security laws applicable to the individual Board members based on their domicile and employment status. These contributions do not form part of the Board members' compensation.
- The Chair fee of the Chairman is set at CHF 1.5 million to be awarded as 100% Group shares. The total compensation of the Chairman includes benefits for the period from the 2019 AGM to the 2020 AGM of CHF 218,665, including pension and health insurance benefits.

Board compensation from the 2018 AGM to the 2019 AGM (audited)

	GNC	AC	CC	RC	Base board fee	Committee fee	Chair fee	Pension and other benefits	Total	Group	Subsidiaries		Total, including subsidiary boards ³
										Of which awarded in Group shares ¹	Subsidiary board fee ²	Pension and other benefits	
CHF													
Urs Rohner, Chairman ⁴		C			3,000,000		1,500,000	217,437	4,717,437	1,500,000			4,717,437
Iris Bohnet			M		250,000	100,000			350,000	175,000			350,000
Andreas Gottschling	M	M		C	250,000	200,000	400,000		850,000	425,000	100,000		950,000
Alexander Gut		M			250,000	150,000			400,000	200,000	150,000		550,000
Michael Klein				M	250,000	100,000			350,000	175,000			350,000
Andreas N. Koopmann			M		250,000	100,000			350,000	175,000			350,000
Seraina Macia				M	250,000	100,000			350,000	175,000			350,000
Kai S. Nargolwala	M		C		250,000	50,000	300,000		600,000	300,000			600,000
Ana Paula Pessoa		M			250,000	150,000			400,000	200,000			400,000
Joaquin J. Ribeiro		M			250,000	150,000			400,000	200,000			400,000
Severin Schwan	M			M	250,000	150,000			400,000	200,000			400,000
John Tiner	M	C		M	250,000	150,000	480,000		880,000	440,000	220,500		1,100,500
Alexandre Zeller ⁵	M		M		208,333	125,000			333,333	166,667	666,667	180,993	1,180,993
Total					5,958,333	1,525,000	2,680,000	217,437	10,380,770	4,331,667	1,137,167	180,993	11,698,930

GNC = Governance and Nominations Committee; AC = Audit Committee; CC = Compensation Committee; RC = Risk Committee; C = Chair; M = Member

¹ As of December 31, 2018, one-half of the Board member fees to be awarded in Group shares have been delivered to Board members. The applicable Group share price was CHF 13.03. The remaining shares were delivered to Board members at or around the date of the 2019 AGM and the share price for this second share delivery was determined at that time. Group shares are subject to a four-year blocking period.

² Subsidiary board fees were awarded for the following subsidiary board roles: i) Mr. Gottschling serves as non-executive director and member of the risk committee and advisory remuneration committee of the UK subsidiaries Credit Suisse International and Credit Suisse Securities (Europe) Limited; ii) Mr. Gut serves as non-executive director and audit committee chair of the Swiss subsidiary Credit Suisse (Schweiz) AG; iii) Mr. Tiner serves as non-executive board member of the US subsidiaries Credit Suisse Holdings (USA), Inc. and Credit Suisse Securities (USA) LLC; in the case of Mr. Tiner, these fees were agreed prior to the cap of CHF 100,000 being adopted for Group Board members serving on subsidiary boards; and iv) Mr. Zeller served as non-executive board member and chairman of Credit Suisse (Schweiz) AG.

³ At the 2018 AGM, shareholders approved a maximum amount of total compensation to be awarded to Board members until the 2019 AGM of CHF 12 million. For the total compensation awarded to members of the Board, the Group made payments of CHF 0.6 million for the 2018 / 2019 Board period to cover the mandatory employer social security contributions as required under the social security laws applicable to the individual Board members based on their domicile and employment status. These contributions do not form part of the Board members' compensation.

⁴ The Chair fee of the Chairman is set at CHF 1.5 million to be awarded as 100% Group shares. The total compensation of the Chairman includes benefits for the period from the 2018 AGM to the 2019 AGM of CHF 217,437, including pension and health insurance benefits.

⁵ Mr. Zeller stepped down as Group board member and board member and chairman of the board of directors of the subsidiary Credit Suisse (Schweiz) AG effective February 28, 2019. Accordingly, Mr. Zeller's Board compensation has been pro-rated for the period from the 2018 AGM to February 28, 2019. During this period, Mr. Zeller was eligible for pension and health insurance benefits in connection with his role as chairman and member of the board of Credit Suisse (Schweiz) AG, but not for his role as member of the Group Board.

Board shareholdings

The following table discloses the shareholdings of the Board members, their immediate family and companies in which they have a controlling interest. As of December 31, 2019 and 2018, there were no Board members with outstanding options.

Board shareholdings by individual

end of	2019	2018
December 31 (shares) ¹		
Urs Rohner	298,416	268,250
Iris Bohnet	74,916	61,311
Christian Gellerstad ²	51,716	–
Andreas Gottschling	51,391	19,210
Alexander Gut	51,455	37,707
Michael Klein	22,369	6,713
Shan Li ²	7,178	–
Seraina Macia	63,432	49,827
Kai S. Nargolwala	324,088	299,872
Ana Paula Pessoa	24,758	7,672
Joaquin J. Ribeiro	53,253	37,705
Severin Schwan	145,505	129,957
John Tiner	278,188	244,317
Total	1,446,665	1,162,541 ³

¹ Includes Group shares that are subject to a blocking period of up to four years; includes shareholdings of immediate family members.

² Christian Gellerstad and Shan Li were newly elected at the 2019 AGM.

³ Excludes 131,231 shares held by Andreas Koopmann, who did not stand for re-election to the Board as of April 26, 2019, and 79,763 shares held by Alexandre Zeller, who stepped down from the Board as of February 28, 2019.

Board loans

The majority of loans outstanding to members of the Board are mortgages or loans against securities. Such loans are made to Board members on the same terms available to third-party clients. Pursuant to the AoA, each member of the Board may be granted individual credit facilities or loans up to a maximum of CHF 20 million at market conditions. As of December 31, 2019, 2018 and 2017, outstanding loans to Board members amounted to CHF 9 million, CHF 6 million and CHF 11 million, respectively.

Board members with loans, including the Chairman, do not benefit from employee conditions, but are subject to conditions applied to clients with a comparable credit standing. Unless otherwise noted, all loans to Board members are made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons. Such loans do not involve more than the normal risk of collectability or present other unfavorable features. In addition to the loans listed below, the Group or any of its banking subsidiaries may enter into financing and other banking agreements with companies in which current Board members have a significant influence as defined by the US Securities and Exchange Commission (SEC). Examples include holding executive and/or board level roles in these companies. Unless otherwise noted, loans extended by the Group to such companies are also made in the ordinary course of business and at prevailing market conditions. As of December 31, 2019, 2018 and 2017, there was no loan exposure to such related party companies that was not made in the ordinary course of business and at prevailing market conditions.

→ Refer to "Banking relationships with Board and Executive Board members and related party transactions" in IV – Corporate Governance – Additional information for further information.

Board loans by individual (audited)

end of	2019	2018
December 31 (CHF)		
Urs Rohner	4,575,000	4,660,000
Christian Gellerstad	3,533,550	–
Alexander Gut	30,000	30,000
Seraina Macia	952,000	960,000
Total	9,090,550	5,650,000 ¹

Includes loans to immediate family members and companies, in which the respective Board member has an ownership stake of 50% or higher.

¹ Excludes a loan of CHF 4,122,750 held by Andreas N. Koopmann, who did not stand for re-election to the Board as of April 26, 2019.

Former members of the Board

One former member of the Board is eligible to receive office infrastructure and secretarial support. These services are based on existing resources and are not used on a regular basis. No additional fees, severance payments or other forms of compensation were paid to former members of the Board or related parties during 2019 and 2018.

Compensation design

Compensation strategy and objectives

Consistent with prior years, our key compensation objectives are to maintain compensation practices that:

- foster a **performance culture** based on merit that differentiates and rewards excellent performance;
- **attract and retain employees**, and motivate them to achieve results with integrity and fairness;
- **balance the mix of fixed and variable** compensation to appropriately reflect the value and responsibility of the role performed, and to influence appropriate behaviors and actions;
- promote **effective risk management** practices that are aligned with the Group's compliance and control cultures;
- create a culture that adheres **to high conduct and ethics standards** through a system of applying both malus and rewards;
- encourage **teamwork and collaboration** across the Group;
- achieve a **balanced distribution of profitability between shareholders and employees** over the long term, subject to Group performance and market conditions; and
- take into account the long-term performance of the Group, in order to **create sustainable value for shareholders**.

What we do

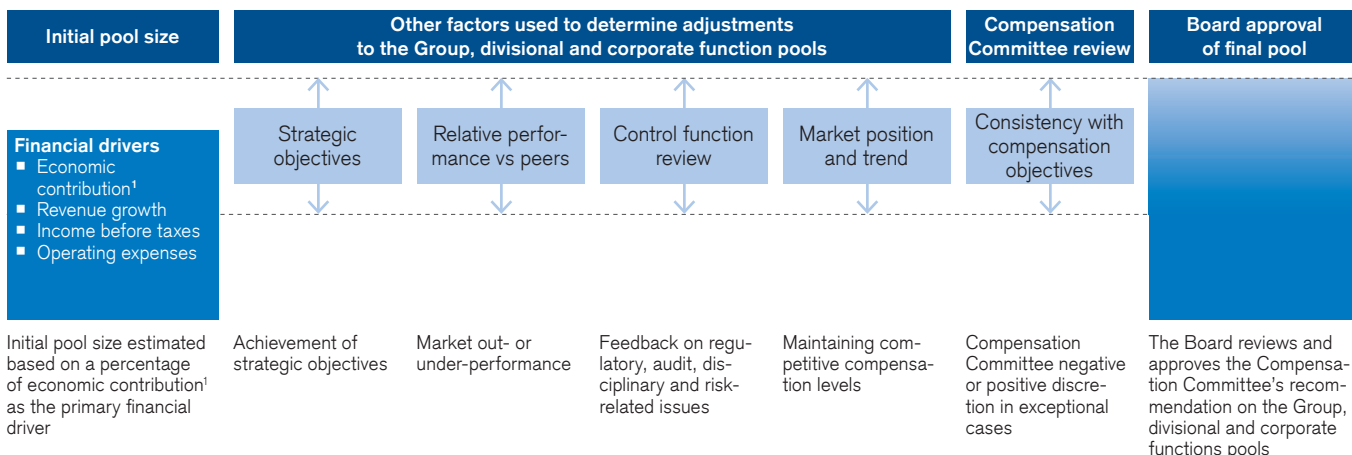
- **Pay for performance alignment** with significant portion of Executive Board and employee compensation "at risk" and determined by the achievement of performance targets linked to Group financial results and shareholder value creation
- **Majority of variable pay in deferred share-based awards** with vesting periods of at least three years
- **Risk, compliance and conduct and ethics** considerations are factored into the compensation decision-making process
- **Minimum shareholding requirements**, with Executive Board members restricted from selling shares, or from receiving share-based awards in the form of cash, until they fulfill the requirements
- **Strong malus provisions** that enable the cancellation or reduction of unsettled awards in the event of certain detrimental conduct
- **Competitive benchmarking** against our peer groups to make informed decisions on pay levels and pay practices
- **Mitigation of equity dilution** of existing shareholders by fulfilling the Group's share delivery obligations through purchasing shares in the market
- **Shareholder engagement** throughout the year to gather feedback on compensation programs and practices and reflect it in our decision-making

What we don't do

- **No "golden parachute" agreements** or any other pre-determined termination agreements including special severance awards for employees
- **No special severance** provisions to Executive Board members beyond the regular compensation awarded during the notice period
- **No hedging** of outstanding share-based awards and **no pledging** of unvested, or vested and undistributed share-based awards
- **No multi-year guaranteed incentive awards**
- **No special executive benefits** that are different from those available to other employees. Executive Board members are part of the same pension plan structure as other employees

Determination of Group variable incentive compensation pool

The Group variable incentive compensation pool for all employees, including the CEO and the other Executive Board members, is determined on an annual basis, with accruals made throughout the year. In determining the Group, divisional and corporate function pools, the Compensation Committee aims to balance the distribution of the Group's profits between shareholders and employees. The factors taken into consideration at the Group level, as well as at the divisional and functional levels, are shown in the illustration below. The primary driver of the initial pool amounts is economic contribution, with non-financial factors taken into consideration to arrive at the final level.

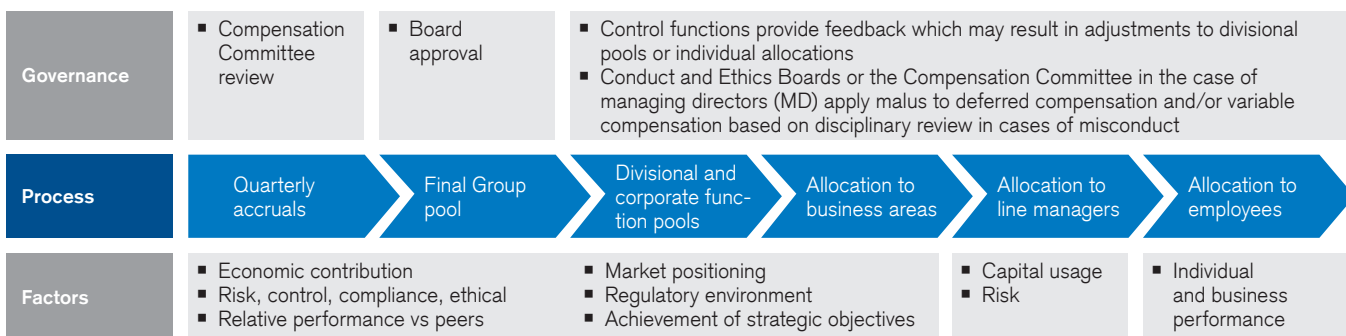


¹ Economic contribution is measured as income before taxes excluding variable incentive compensation expense, after deducting a capital usage charge that is calculated based on regulatory capital. Regulatory capital for compensation purposes was defined for each division as the higher of 10% of average divisional Basel III risk-weighted assets and 3.5% of average divisional leverage exposure. This measure of economic contribution considers the profitability of the divisions and the Group and the capital utilized to achieve this profitability.

The Compensation Committee regularly reviews the accruals and related financial information and applies adjustments in exceptional circumstances to ensure that the overall size of the pools is consistent with the Group's compensation objectives.

The total amount of the variable incentive compensation pool for the corporate functions is not linked to the performance of the particular divisions that employees of the corporate functions support or oversee, but takes into account the Group-wide financial performance, measured in the form of Group economic contribution and non-financial factors. Therefore, employees working in the corporate functions, including those performing control functions, are remunerated independently from the performance of the businesses they oversee and support. As with the business divisions, risk, control, compliance and conduct and ethics considerations and relative performance compared to peers, as well as the market and regulatory environment, are taken into account.

Determination of variable incentive compensation pools



Executive Board compensation framework for 2019: key elements

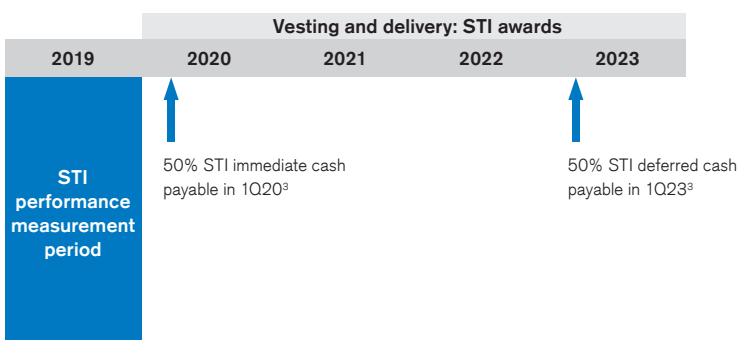
There are two main components of Executive Board compensation: fixed compensation in the form of base salary and pension and benefits (~30-40% of total compensation); and variable compensation in the form of an annual STI award and an LTI opportunity (~60-70% of total compensation). The key features of the STI and LTI are described in the following diagrams, including the performance targets for the 2019 STI awards which are disclosed retrospectively, and those for the LTI which were disclosed prospectively in the 2018 Compensation Report. In setting the threshold, target and maximum performance levels, the Compensation Committee takes into account the Group's internal financial plan, prior-year performance, analyst expectations and any publicly stated ambitions, in order to set performance targets which are challenging and motivating for the Executive Board.

2019 STI awards: key features

- Rewards **achievement of annual objectives** of the Group
- Each Executive Board member has a **maximum opportunity** that takes into account role, market experience and geography:
 - Executive Board members: ranges from 0.33 to 2.50 times base salary
 - CEO: 1.83 times base salary
- The maximum STI award pool equals the sum of all individual maximum opportunities of the Executive Board members. **The award pool amount is determined based on achievement of pre-determined Group financial and non-financial metrics**
- The STI award amount for each Executive Board member is assessed by the CEO based on **individualized balanced scorecards**. Based on this assessment, the Compensation Committee makes proposals to the Board for the approval of final STI award amounts
- Payout levels for the Group financial criteria** (calculated as a linear percentage of the award opportunity between levels):

Below Threshold	Threshold	Target	Maximum
0%	25%	67%	100%

Performance criteria	Weighting	Performance targets		
		Threshold	Target	Maximum
Adjusted income before taxes ¹ (CHF billion)	33 $\frac{1}{3}$ %	4.2	5.2	6.1
RoTE ² (%)	33 $\frac{1}{3}$ %	6.0%	8.5%	10.5%
Non-financial criteria (average)	33 $\frac{1}{3}$ %	See separate description		

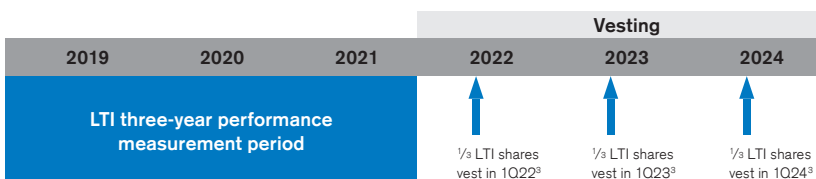
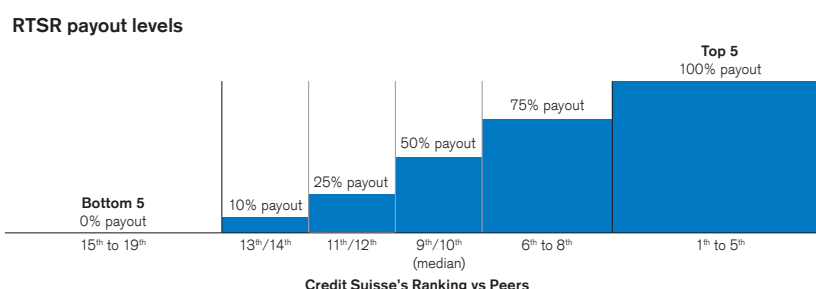


2019 LTI opportunities (2019-2021 performance cycle): key features

- Rewards **achievement of long-term business plan and long-term returns for shareholders**
- Each Executive Board member has a **maximum opportunity** that takes into account role, market experience and geography:
 - Executive Board members: ranges from 0.67 to 4.25 times base salary
 - CEO: 2.50 times base salary
- Payout levels for the Group financial criteria** are determined by average performance over three years (calculated as a linear percentage of the award opportunity between levels):

Below Threshold	Threshold	Target	Maximum
0%	25%	67%	100%
- For the RTSR component, **zero payout for bottom five places** and limited payout below median in line with Swiss market practice
- RTSR peer group of 18 publicly-listed companies, chosen by the Compensation Committee based on size, geographic scope, business mix, and positive share price correlation in terms of reaction to external market conditions. The peer group is unchanged since 2016 when the RTSR criteria was introduced, and consists of Banco Santander, Bank of America, Barclays, BBVA, BNP Paribas, Citigroup, Deutsche Bank, Goldman Sachs, ING Group, Intesa Sanpaolo, JPMorgan Chase, Julius Bär, Morgan Stanley, Nordea Bank, Royal Bank of Scotland, Société Générale, Standard Chartered and UBS

Performance criteria	Weighting	Performance targets		
		Threshold	Target	Maximum
Three-year average RoTE ²	33 $\frac{1}{3}$ %	6.0%	8.5%	11.5%
Three-year average TBVPS (CHF) ⁴	33 $\frac{1}{3}$ %	17.50	18.55	19.60
Relative Total Shareholder Return (RTSR)	33 $\frac{1}{3}$ %	See "RTSR payout levels"		



¹ Adjusted results are non-GAAP financial measures, which exclude certain items included in our reported results.

² RoTE is based on tangible shareholders' equity, a non-GAAP financial measure, which is calculated by deducting goodwill and other intangible assets from total shareholders' equity as presented in our balance sheet.

³ For UK PRA MRT (Material Risk Takers), to comply with regulatory requirements, delivery comprises 20% immediate cash payment, 20% immediate Credit Suisse Group AG registered shares, subject to a blocking period of 12 months, and 30% deferred cash and 30% deferred shares, vesting in five equal tranches on the third to seventh anniversaries of the grant date.

⁴ TBVPS is a non-GAAP financial measure, which is calculated by dividing tangible shareholders' equity by total number of shares outstanding and excludes the impact of any dividends paid during the performance period, own credit movements and foreign exchange rate movements, but includes the impact of share buybacks.

→ Refer to "Executive Board compensation" for further information.

Group employees compensation framework for 2019: key elements

The compensation structure for employees not on the Executive Board consists of fixed compensation in the form of base salary and pension and benefits, and variable compensation in the form of cash, share awards, performance share awards and contingent capital awards, as shown in the diagram below.

Features	Vesting (year)					Design	
	2019	2020	2021	2022	2023		
Fixed	Base Salary						<ul style="list-style-type: none"> Based on skills, qualifications, relevant experience, responsibilities and external market factors Role-based allowances apply to certain MRTC
	Pension and Benefits						<ul style="list-style-type: none"> Pension and benefits consistent with local market practice
Variable	Cash Award						<ul style="list-style-type: none"> Employees with total compensation below CHF/USD 250,000 receive their full amount of variable compensation in the form of an immediate cash award
	Share Awards			1/3	1/3	1/3	For total compensation of CHF/USD 250,000 or higher: <ul style="list-style-type: none"> Deferred share awards with no additional performance conditions Managing Directors (MD) and MRTC receive deferred share awards with performance conditions as part of their deferred compensation MD and Directors receive loss-absorbing contingent capital awards
	Performance Share Awards			1/3	1/3	1/3	
	CCA					1/3	

Note: Individuals in certain jurisdictions may be subject to conditions other than those outlined above in order to comply with local legal or regulatory requirements.

→ Refer to "Group compensation" for further information.

Board of Directors compensation framework for 2019: key elements

The Board compensation framework for 2019 continues to be based on a fixed fee structure for the period from one AGM to the next with pre-defined fees for Board membership, committee membership and chairing a committee. In line with industry practice, Board fees are not linked to the financial performance of the Group. Fees for specific Board leadership roles are reviewed periodically and adjusted as required. Base Board fees have not changed for over 10 years.

Board membership fees: 2019 AGM – 2020 AGM (in CHF)

Role	Board	Governance and Nominations Committee (GNC)	Audit Committee (AC)	Compensation Committee (CC)	Conduct and Financial Crime Control Committee (CFCCC)	Risk Committee (RC)	Form of payment	Timing of payment
Base fee/Committee fee (excluding the Chairman)	250,000	50,000	150,000	100,000	75,000	100,000	50% cash; 50% Group shares blocked and non-transferable for four years	Two equal installments in arrears
Committee Chair fee ¹		– ²	480,000	300,000	– ²	400,000		One installment at end of current board period
Chairman's base fee	3,000,000						Cash	12 monthly payments
Chairman's Chair fee	1,500,000						Group shares blocked and nontransferable for four years	One installment at end of current board period

Note: The Vice-Chair and Lead Independent Director does not receive additional compensation for these roles. The above fees will remain the same for the 2020 AGM to 2021 AGM period, except that the Audit Committee Chair fee will be reduced to CHF 400,000 and a new chair fee of CHF 150,000 will be introduced for the incoming chair of the Conduct and Financial Crime Control Committee.

¹ Committee chairs do not receive committee fees in addition to their chair fees.

² The Chairman does not receive any additional fees for chairing the GNC and the CFCCC.

→ Refer to "Board of Directors compensation" for further information.

Compensation governance

The Compensation Committee

The Compensation Committee is the supervisory and governing body for compensation policies, practices and plans. In designing and setting compensation, the Compensation Committee aims to make decisions in the best interests of the Group and to align the interests of the Group's employees to those of shareholders. The Compensation Committee reviews proposals regarding Group, Executive Board and Board compensation, and makes recommendations to the Board for approval. Total Executive Board compensation and Board compensation are also subject to shareholder approval pursuant to the Compensation Ordinance and the AoA.

The Compensation Committee consists of at least three members of the Board, all of whom must be independent. The members during the 2019 AGM to 2020 AGM term were Kai S. Nargolwala (Chair), Iris Bohnet, Christian Gellerstad and Michael Klein. The Board has applied the independence criteria of the SIX Swiss Exchange Directive on Information relating to Corporate Governance, the FINMA, the Swiss Code of Best Practice for

Corporate Governance, and the listing standards of the New York Stock Exchange (NYSE) and the Nasdaq Stock Market (Nasdaq), in determining that all of these individuals are independent.

→ Refer to "Independence" in IV – Corporate Governance – Board of Directors for more information on how the Group determines the independence of its Board members.

Compensation Committee activities

The Chairman and the CEO may attend the Compensation Committee meetings, and the Compensation Committee Chair determines the attendance of other Board members, Executive Board members, senior management, compensation advisers and external legal counsel, as appropriate. The Chairman, CEO, Executive Board members and senior management do not participate in discussions which relate to their own compensation outcomes.

In addition to the 44 investor and proxy adviser meetings held by the Compensation Committee Chair, during 2019, the Compensation Committee held 11 internal meetings and calls, with an overall attendance rate of 95%. The Compensation Committee's focus areas in 2019 are summarized in the following table:

Compensation Committee activities in 2019

	Jan	Feb	Mar	Apr	Jun	Jul	Aug	Oct	Dec
Compensation governance, design and disclosure									
Review of compensation policy and charter updates					■		■		■
Review of Compensation Report			■	■				■	
Review and refinement of Executive Board compensation design	■		■		■		■	■	■
Review of Group compensation structure and award plans		■	■	■	■		■	■	■
Compensation Committee self-assessment and focus areas	■								
Risk and regulatory									
Review of input from control functions	■	■					■		
Review of any disciplinary events/potential application of malus	■	■		■	■			■	■
Review of regulatory developments					■		■		
Annual compensation review									
Accruals and full year forecast of variable incentive compensation pools	■	■		■		■		■	■
Performance assessment and overall Group pool recommendation	■	■							■
CEO and Executive Board performance objectives and target setting		■	■			■		■	
CEO and Executive Board performance assessment and awards	■	■	■	■	■		■		■
Review of Board fees				■					
External									
Review of shareholder engagement and feedback				■	■			■	■
Review of market trends				■	■		■	■	■
Review of benchmarking data				■				■	■

Advisers to the Compensation Committee

The Compensation Committee is authorized to retain external advisers to provide support as it carries out its responsibilities. Deloitte LLP (Deloitte) has been retained to assist the Compensation Committee in ensuring that the Group's compensation programs remain competitive, responsive to regulatory developments and in line with the compensation policy. Deloitte has appointed a senior consultant to advise the Compensation Committee. Apart from assisting the Compensation Committee, this senior consultant does not provide any other services to the Group. The Compensation Committee also obtained external legal advice during 2019 on various matters relating to compensation policy and design. Prior to appointment, the Compensation Committee conducted an independence assessment of its advisers pursuant to the rules of the SEC and the listing standards of the NYSE and the Nasdaq.

Other aspects of compensation governance

Compensation policy

The compensation policy applies to all employees and compensation plans of the Group. It contains a detailed description of the Group's compensation principles and objectives as well as the compensation programs. It also sets out the standards and processes relating to the development, management, implementation and governance of compensation. The compensation policy is available at credit-suisse.com/compensationpolicy.

Approval authority

The approval authorities for setting the compensation policy and compensation for different groups of employees are defined in the Group's Organizational Guidelines and Regulations and the Compensation Committee charter available at credit-suisse.com/governance.

Action	Compensation Committee	Board
Establish or change the Group's compensation policy	R	A
Establish or change compensation plans	R	A
Set variable incentive compensation pools for the Group and the divisions	R	A
Determine Executive Board compensation, including for the CEO	R	A ¹
Determine Board compensation, including for the Chairman	R	A ¹
Determine compensation for the Head of Internal Audit	A ²	n/a
Determine compensation for MRTC and other selected members of management	A	n/a

R = recommendation; A = approval

¹ Subject to shareholder approval requirement pursuant to the Compensation Ordinance and the AoA.

² In consultation with the Audit Committee Chair.

Risk and control considerations

During its annual review of the Group's performance, the Compensation Committee considers input from the Risk Committee Chair with respect to risk considerations, and the Audit Committee Chair with respect to internal control considerations. The Compensation Committee also considers input from various corporate functions including Risk, Compliance, General Counsel, Human Resources, Internal Audit and Product Control, regarding control and compliance issues and any breaches of relevant rules and regulations or the Group's Code of Conduct.

To meet regulatory guidelines regarding employees engaged in risk-taking activities, the Compensation Committee reviews and approves the compensation for employees identified as MRTC. The Risk Committee is involved in the review process for MRTC compensation.

→ Refer to "Focus on risk and control" in Group compensation for further information.



Report of the Statutory Auditor

To the General Meeting of Shareholders of Credit Suisse Group AG, Zurich

We have audited the accompanying compensation report dated March 25, 2020 of Credit Suisse Group AG (the "Group") for the year ended December 31, 2019. The audit was limited to the information according to articles 14-16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (the "Ordinance") contained in the sections marked with (audited) on pages 232 to 249 of the compensation report.

Responsibility of the Board of Directors

The Board of Directors is responsible for the preparation and overall fair presentation of the compensation report in accordance with Swiss law and the Ordinance. The Board of Directors is also responsible for designing the compensation system and defining individual compensation packages.

Auditor's Responsibility

Our responsibility is to express an opinion on the accompanying compensation report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the compensation report complies with Swiss law and articles 14 – 16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the compensation report with regard to compensation, loans and credits in accordance with articles 14 – 16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the compensation report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of compensation, as well as assessing the overall presentation of the compensation report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the compensation report for the year ended December 31, 2019 of the Group complies with Swiss law and articles 14 – 16 of the Ordinance.

KPMG AG

Nicholas Edmonds
Licensed Audit Expert
Auditor in Charge

Shaun Kendrigan
Licensed Audit Expert
Global Audit Partner

Zurich, Switzerland
March 25, 2020

KPMG AG, R ffelstrasse 28, PO Box, CH-8036 Zurich

KPMG AG is a subsidiary of KPMG Holding AG, which is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss legal entity. All rights reserved.

VI – Consolidated financial statements – Credit Suisse Group

Report of the Statutory Auditor	259
Consolidated financial statements	261
Notes to the consolidated financial statements	268
Controls and procedures	402
Report of the Independent Registered Public Accounting Firm	403

Notes to the consolidated financial statements

1	Summary of significant accounting policies	268
2	Recently issued accounting standards.....	277
3	Business developments, significant shareholders and subsequent events	279
4	Segment information	280
5	Net interest income	282
6	Commissions and fees.....	282
7	Trading revenues.....	282
8	Other revenues	283
9	Provision for credit losses	283
10	Compensation and benefits	283
11	General and administrative expenses	283
12	Restructuring expenses	283
13	Earnings per share	284
14	Revenue from contracts with customers	285
15	Securities borrowed, lent and subject to repurchase agreements	287
16	Trading assets and liabilities	287
17	Investment securities.....	288
18	Other investments.....	289
19	Loans, allowance for loan losses and credit quality	289
20	Goodwill	297
21	Other intangible assets.....	298
22	Other assets and other liabilities.....	299
23	Leases	300
24	Deposits.....	302
25	Long-term debt	302
26	Accumulated other comprehensive income and additional share information	304
27	Offsetting of financial assets and financial liabilities	306
28	Tax	310
29	Employee deferred compensation.....	314
30	Related parties.....	318
31	Pension and other post-retirement benefits	320
32	Derivatives and hedging activities	329
33	Guarantees and commitments	335
34	Transfers of financial assets and variable interest entities	339
35	Financial instruments.....	347
36	Assets pledged and collateral.....	373
37	Capital adequacy	374
38	Assets under management	375
39	Litigation	376
40	Significant subsidiaries and equity method investments.....	387
41	Subsidiary guarantee information	390
42	Credit Suisse Group parent company.....	398
43	Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view).....	399



Report of the Statutory Auditor

To the General Meeting of Credit Suisse Group AG, Zurich

Report of the Statutory Auditor on the Consolidated Financial Statements

Opinion

As statutory auditor, we have audited the accompanying consolidated financial statements of Credit Suisse Group AG and subsidiaries (the "Group"), which comprise the consolidated balance sheets as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes. In our opinion, the consolidated financial statements give a true and fair view of the financial position as of December 31, 2019 and 2018, and the results of operations and the cash flows for each of the years in the three-year period ended December 31, 2019, in accordance with U.S. Generally Accepted Accounting Principles, and comply with Swiss law.

Board of Directors' Responsibility

The Board of Directors is responsible for the preparation of the consolidated financial statements in accordance with U.S. Generally Accepted Accounting Principles and the requirements of Swiss law. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm and are required to be independent with respect to the Group. We conducted our audits in accordance with Swiss law and Swiss Auditing Standards and the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement whether due to fraud or error.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Critical Audit Matters



Assessment of the fair value measurement of financial instruments with unobservable or judgmental inputs



Evaluation of the impairment assessment of goodwill for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units



Evaluation of the recoverability of the net deferred tax assets in the U.S.



Evaluation of provisions for litigation and regulatory actions



Assessment of the allowance for loan losses

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.



Assessment of the fair value measurement of financial instruments with unobservable or judgmental inputs

Critical Audit Matter

How the matter was addressed

The Group recorded financial assets reported at fair value of CHF 307.8 billion and financial liabilities reported at fair value of CHF 182.3 billion as of December 31, 2019. The fair value of the majority of the Group's financial instruments is based on quoted prices in active markets or observable inputs. In addition, the Group holds financial instruments for which no quoted prices are available or which have little or no observable inputs. For these instruments, the determination of fair value requires subjective assessment and judgment depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument.

We identified the assessment of fair value measurement of financial instruments with unobservable or judgmental inputs as a critical audit matter due to the subjective auditor judgment involved in evaluating the application of valuation techniques and assumptions. Specifically, subjective auditor judgment was required to evaluate the valuation pricing inputs such as market indices and discount rates, modeling assumptions that were used in the determination of fair value, and certain valuation adjustments such as credit and debit valuation adjustments.

The primary procedures we performed to address this critical audit matter, with the assistance of valuation professionals with specialized skills and knowledge, included the following:

- We tested certain internal controls over the Group's process for determining the fair value measurement of financial instruments with unobservable or judgmental inputs, which included controls over independent price verification, valuation model approval and the calculation, approval and recording of certain valuation adjustments.
- For a sample of financial instruments, we examined and challenged the assumptions and models used or developed an independent valuation assessment. This included comparison of significant valuation pricing inputs such as market indices and discount rates, against independent and externally available data sources. Where such information was not available, we developed an independent valuation assessment and compared that to the Group's value.
- We evaluated the methodology and inputs used in determining key judgmental valuation adjustments (including credit and debit valuation adjustments) by examining and challenging these assumptions and models, and performing recalculations for a sample of these adjustments.



For further information on the valuation of financial instruments reported at fair value refer to the following:

- Note 1 Summary of significant accounting policies, “Fair value measurement and option”, “Trading assets and liabilities”
- Note 35 Financial instruments



Evaluation of the impairment assessment of goodwill for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units

Critical Audit Matter

How the matter was addressed

The Group recorded goodwill totaling CHF 4.7 billion as of December 31, 2019. Goodwill is allocated to reporting units and the carrying value is primarily supported by the projected cash flows of the underlying businesses. In estimating the fair value of its reporting units, the Group applies a combination of the market approach and the income approach. In determining the estimated fair value, the Group utilized its latest five-year strategic business plan, and other assumptions such as discount rates and projected growth rates, which require significant assumptions and estimates. During 2019, the Group determined that goodwill triggering events occurred for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units. Based on the goodwill impairment assessment performed as of December 31, 2019, the Group concluded no impairment was necessary.

We identified the evaluation of the impairment assessment of goodwill for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units as a critical audit matter due to the subjective auditor judgment necessary to evaluate the projected cash flows and other assumptions such as discount rates and projected growth rates, used in determining the fair value of these reporting units.

For further information on goodwill refer to the following:

- Note 1 Summary of significant accounting policies, “Goodwill and other intangible assets”
- Note 20 Goodwill

The primary procedures we performed to address this critical audit matter included the following.

- We tested certain internal controls over the Group’s process for the impairment assessment of goodwill, which included controls over the assumptions used in determining the fair value of each of these reporting units, the development and approval of the five-year strategic business plan, and the Group’s annual comparison of the five-year strategic business plan to past performance.
- We evaluated key assumptions in the fair value calculation for these reporting units, such as projected cash flows, discount rates, and projected growth rates, and compared these key assumptions to externally available industry, economic and financial data and the Group’s own historical data and performance.
- We involved valuation professionals with specialized skills and knowledge, who assisted in examining and challenging the assumptions and methodologies used to calculate fair value of the reporting units.



Evaluation of the recoverability of the net deferred tax assets in the U.S.

Critical Audit Matter

How the matter was addressed

The Group recorded net deferred tax assets totaling CHF 3.9 billion as of December 31, 2019. The most significant net deferred tax assets arise in the U.S. In evaluating the recoverability of the net deferred tax assets in the U.S., the Group assesses projected future

The primary procedures we performed to address this critical audit matter included the following.

- We tested certain controls over the Group’s process for determining the recoverability of the net deferred tax assets in the U.S. which included controls over the recognition and measurement of deferred tax assets, the



taxable income, the reversal of deferred tax liabilities which can be scheduled, and tax planning strategies.

We identified the recoverability of the net deferred tax assets in the U.S. as a critical audit matter due to the significant auditor judgment required in evaluating the projected future taxable income and tax planning strategies.

approval of projected future taxable income in the U.S., the development and approval of the legal entity plan, and the Group's annual comparison of legal entity plan to past performance.

- We examined the Group's analysis of the recoverability of the net deferred tax assets in the U.S. and evaluated the projected future taxable income against the Group's own historical data and performance. We involved tax professionals with specialized skills and knowledge to assist in evaluating taxation related matters including the Group's tax planning strategies and interpretation of tax law.

- We examined the consistency between the financial plan used for goodwill impairment assessment purposes and the legal entity plan used in the evaluation of the recoverability of the net deferred tax assets.

For further information on the valuation of deferred tax assets refer to the following:

- Note 1 Summary of significant accounting policies, "Income taxes"
- Note 28 Tax



Evaluation of provisions for litigation and regulatory actions

Critical Audit Matter

How the matter was addressed

The Group recorded litigation and regulatory action provisions of CHF 898 million as of December 31, 2019. The Group's estimate of the aggregate range of reasonably possible losses that are not covered by existing provisions for which the Group believes an estimate is possible is zero to CHF 1.3 billion. The Group is involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of its businesses.

We identified the evaluation of provisions for litigation and regulatory actions as a critical audit matter due to the subjective auditor judgment required to evaluate the provisions. Specifically, auditor judgment was required to evaluate the conclusions formed by the Group about the likelihood and amount of liabilities arising from litigation and regulatory claims that were dependent on the future outcome of continuing legal and regulatory processes.

The primary procedures we performed to address this critical audit matter included the following.

- We tested certain internal controls over the Group's provisions for litigation and regulatory actions process, which included controls over the identification and development of the provisions estimate as well as the review and approval of the provisions.

- We evaluated the Group's assessment of the nature and status of litigation and regulatory actions. We considered the legal advice received by the Group from in-house counsel, as well as Group's external counsel, for certain individual cases.

- We examined the Group's conclusions with respect to the evaluation of provisions for certain individual cases, considering the results of information obtained from the Group. For these cases, we obtained correspondence directly from the Group's outside attorneys and, in some cases, performed inquiry of outside counsel to evaluate the judgments made by the Group in determining their litigation provisions and the range of reasonably possible losses.

For further information on provisions for litigation and regulatory actions refer to the following:

- Note 39 Litigation



Assessment of the allowance for loan losses

Critical Audit Matter

The Group recorded gross loans held at amortized cost of CHF 285.2 billion and has recorded an allowance for loan losses of CHF 0.9 billion as of December 31, 2019. The Group calculates the allowance for loan losses estimate using a historical loss methodology based on the probability of default (PD), loss given default (LGD) and exposure at default (EAD) models.

We identified the assessment of the allowance for loan losses as a critical audit matter because it involved complex auditor judgment in the evaluation of the Group's methodologies and assumptions. Specifically, complex auditor judgment was required to evaluate the recoverable amount and the collateral value for loans that are individually evaluated for impairment. Complex auditor judgment was also required to examine the methodology that underpins the allowance for loan losses which have been collectively evaluated for impairment, such as the modeling of PD, LGD, and EAD and related key data inputs to those models such as emergence period, recovery rates and qualitative considerations.

How the matter was addressed

The primary procedures we performed to address this critical audit matter included the following.

- We tested certain internal controls over the Group's allowance for loan losses process. This included controls over loan file reviews, credit monitoring, model approval, validation and approval of key data inputs such as emergence period, recovery rates, and qualitative considerations (such as economic and business conditions) for potential impairment that were not captured by the Group's models.

- For a sample of loan loss allowances evaluated on an individual basis we tested the assumptions underlying the impairment quantification including estimates of future cash flows, valuation of underlying collateral and estimates of recovery on default. We involved real estate professionals with specialized skills and knowledge to assist in evaluating the underlying collateral for a sample of loans.

- For a sample of loan loss allowances evaluated on a collective basis we involved credit risk professionals with specialized skills and knowledge to assist in challenging the Group's allowance methodology and testing of certain PD, LGD and EAD models. We also tested inputs to those models, such as emergence period, recovery rates, and collateral values, by comparing those inputs to external information sources, when available.

For further information on the valuation of allowance for loan losses refer to the following:

- Note 1 Summary of significant accounting policies, "Loans"
- Note 19 Loans, allowance for loan losses and credit quality

Report on Other Legal and Regulatory Requirements

We are a public accounting firm registered with the Swiss Federal Audit Oversight Authority (FAOA) and the PCAOB and we confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA). We are independent of the Group in accordance with Swiss law (article 728 CO and article 11 AOA) and U.S. federal securities laws as well as the applicable rules and regulations of the Swiss audit profession, the U.S. Securities and Exchange Commission and the PCAOB, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

We also have audited, in accordance with the standards of the PCAOB, the Group's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated March 25, 2020 expressed an unqualified opinion on the effectiveness of the Group's internal control over financial reporting.



We have served as the Group's auditor since 1989.

KPMG AG

Nicholas Edmonds
Licensed Audit Expert
Auditor in Charge

Zurich, Switzerland
March 25, 2020

Shaun Kendrigan
Licensed Audit Expert
Global Audit Partner

KPMG AG, Raffelstrasse 28, PO Box, CH-8036 Zurich

KPMG AG is a subsidiary of KPMG Holding AG, which is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss legal entity. All rights reserved.

Consolidated financial statements

Consolidated statements of operations

in	Note	2019	2018	2017
Consolidated statements of operations (CHF million)				
Interest and dividend income	5	20,184	19,613	17,057
Interest expense	5	(13,167)	(12,604)	(10,500)
Net interest income	5	7,017	7,009	6,557
Commissions and fees	6	11,158	11,890	11,817
Trading revenues	7	1,739	624	1,317
Other revenues	8	2,570	1,397	1,209
Net revenues		22,484	20,920	20,900
Provision for credit losses				
Compensation and benefits	10	10,036	9,620	10,367
General and administrative expenses	11	6,128	5,798	6,645
Commission expenses		1,276	1,259	1,430
Restructuring expenses	12	–	626	455
Total other operating expenses		7,404	7,683	8,530
Total operating expenses		17,440	17,303	18,897
Income before taxes		4,720	3,372	1,793
Income tax expense	28	1,295	1,361	2,741
Net income/(loss)		3,425	2,011	(948)
Net income/(loss) attributable to noncontrolling interests		6	(13)	35
Net income/(loss) attributable to shareholders		3,419	2,024	(983)
Earnings/(loss) per share (CHF)				
Basic earnings/(loss) per share	13	1.35	0.79	(0.41)
Diluted earnings/(loss) per share	13	1.32	0.77	(0.41)

Consolidated statements of comprehensive income

in	2019	2018	2017
Comprehensive income/(loss) (CHF million)			
Net income/(loss)	3,425	2,011	(948)
Gains/(losses) on cash flow hedges	100	(10)	(27)
Foreign currency translation	(1,025)	(325)	(1,031)
Unrealized gains/(losses) on securities	20	(17)	(13)
Actuarial gains/(losses)	326	(391)	695
Net prior service credit/(cost)	217	(135)	(121)
Gains/(losses) on liabilities related to credit risk	(1,860)	1,654	(1,976)
Other comprehensive income/(loss), net of tax	(2,222)	776	(2,473)
Comprehensive income/(loss)	1,203	2,787	(3,421)
Comprehensive income/(loss) attributable to noncontrolling interests	8	(15)	28
Comprehensive income/(loss) attributable to shareholders	1,195	2,802	(3,449)

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated balance sheets

end of	Note	2019	2018
Assets (CHF million)			
Cash and due from banks		101,879	100,047
of which reported at fair value		356	115
of which reported from consolidated VIEs		138	173
Interest-bearing deposits with banks		741	1,142
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	15	106,997	117,095
of which reported at fair value		85,556	81,818
Securities received as collateral, at fair value		40,219	41,696
of which encumbered		22,521	25,711
Trading assets, at fair value	16	153,797	133,635
of which encumbered		46,650	32,452
of which reported from consolidated VIEs		2,788	3,048
Investment securities	17	1,006	1,479
of which reported at fair value		1,006	1,479
Other investments	18	5,666	4,890
of which reported at fair value		3,550	2,434
of which reported from consolidated VIEs		1,412	1,505
Net loans	19	296,779	287,581
of which reported at fair value		12,662	14,873
of which encumbered		293	230
of which reported from consolidated VIEs		649	387
allowance for loan losses		(946)	(902)
Goodwill	20	4,663	4,766
Other intangible assets	21	291	219
of which reported at fair value		244	163
Brokerage receivables		35,648	38,907
Other assets	22	39,609	37,459
of which reported at fair value		10,402	7,263
of which encumbered		217	279
of which reported from consolidated VIEs		1,694	2,049
Total assets		787,295	768,916

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated balance sheets (continued)

end of	Note	2019	2018
Liabilities and equity (CHF million)			
Due to banks	24	16,744	15,220
of which reported at fair value		322	406
Customer deposits	24	383,783	363,925
of which reported at fair value		3,339	3,292
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	15	27,533	24,623
of which reported at fair value		10,715	14,828
Obligation to return securities received as collateral, at fair value		40,219	41,696
Trading liabilities, at fair value	16	38,186	42,169
of which reported from consolidated VIEs		8	3
Short-term borrowings		28,385	21,926
of which reported at fair value		11,333	8,068
of which reported from consolidated VIEs		4,885	5,465
Long-term debt	25	152,005	154,308
of which reported at fair value		70,331	63,935
of which reported from consolidated VIEs		1,671	1,764
Brokerage payables		25,683	30,923
Other liabilities	22	31,043	30,107
of which reported at fair value		7,891	9,001
of which reported from consolidated VIEs		297	277
Total liabilities		743,581	724,897
Common shares		102	102
Additional paid-in capital		34,661	34,889
Retained earnings		30,634	26,973
Treasury shares, at cost		(1,484)	(61)
Accumulated other comprehensive income/(loss)	26	(20,269)	(17,981)
Total shareholders' equity		43,644	43,922
Noncontrolling interests		70	97
Total equity		43,714	44,019
Total liabilities and equity		787,295	768,916

end of	Note	2019	2018
Additional share information			
Par value (CHF)		0.04	0.04
Authorized shares ¹		3,209,011,720	3,271,129,950
Common shares issued	26	2,556,011,720	2,556,011,720
Treasury shares	26	(119,761,811)	(5,427,691)
Shares outstanding	26	2,436,249,909	2,550,584,029

¹ Includes issued shares and unissued shares (conditional, conversion and authorized capital).

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of changes in equity

	Attributable to shareholders							Total equity
	Common shares	Additional paid-in capital	Retained earnings	Treasury shares, at cost	AOCI	Total shareholders' equity	Non-controlling interests	
2019 (CHF million)								
Balance at beginning of period	102	34,889	26,973	(61)	(17,981)	43,922	97	44,019
Purchase of subsidiary shares from non-controlling interests, not changing ownership ^{1, 2}	-	-	-	-	-	-	(103)	(103)
Sale of subsidiary shares to noncontrolling interests, not changing ownership ²	-	-	-	-	-	-	74	74
Net income/(loss)	-	-	3,419	-	-	3,419	6	3,425
Cumulative effect of accounting changes, net of tax	-	-	242	-	(64)	178	-	178
Total other comprehensive income/(loss), net of tax	-	-	-	-	(2,224)	(2,224)	2	(2,222)
Sale of treasury shares	-	11	-	9,613	-	9,624	-	9,624
Repurchase of treasury shares	-	-	-	(11,536)	-	(11,536)	-	(11,536)
Share-based compensation, net of tax	-	334	-	500	-	834	-	834
Financial instruments indexed to own shares ³	-	122	-	-	-	122	-	122
Dividends paid	-	(695) ⁴	-	-	-	(695)	(1)	(696)
Changes in scope of consolidation, net	-	-	-	-	-	-	(5)	(5)
Balance at end of period	102	34,661	30,634	(1,484)	(20,269)	43,644	70	43,714
2018 (CHF million)								
Balance at beginning of period	102	35,668	24,973	(103)	(18,738)	41,902	287	42,189
Purchase of subsidiary shares from non-controlling interests, not changing ownership	-	-	-	-	-	-	(69)	(69)
Sale of subsidiary shares to noncontrolling interests, changing ownership	-	2	-	-	-	2	(2)	-
Sale of subsidiary shares to noncontrolling interests, not changing ownership	-	-	-	-	-	-	30	30
Net income/(loss)	-	-	2,024	-	-	2,024	(13)	2,011
Cumulative effect of accounting changes, net of tax	-	-	(24)	-	(21)	(45)	-	(45)
Total other comprehensive income/(loss), net of tax	-	-	-	-	778	778	(2)	776
Sale of treasury shares	-	(28)	-	11,721	-	11,693	-	11,693
Repurchase of treasury shares	-	-	-	(12,441)	-	(12,441)	-	(12,441)
Share-based compensation, net of tax	-	(120)	-	762	-	642	-	642
Financial instruments indexed to own shares	-	28	-	-	-	28	-	28
Dividends paid	-	(661)	-	-	-	(661)	(5)	(666)
Changes in scope of consolidation, net	-	-	-	-	-	-	(129)	(129)
Balance at end of period	102	34,889	26,973	(61)	(17,981)	43,922	97	44,019

¹ Distributions to owners in funds include the return of original capital invested and any related dividends.

² Transactions with and without ownership changes related to fund activity are all displayed under "not changing ownership".

³ Includes certain call options the Group purchased on its own shares to economically hedge share-based compensation awards. In accordance with US GAAP, these call options were designated as equity instruments and, as such, were initially recognized in shareholders' equity at their fair values and not subsequently remeasured.

⁴ Paid out of capital contribution reserves.

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of changes in equity (continued)

	Attributable to shareholders						Non-controlling interests	Total equity
	Common shares	Additional paid-in capital	Retained earnings	Treasury shares, at cost	AOCI	Total shareholders' equity		
2017 (CHF million)								
Balance at beginning of period	84	32,131	25,954	0	(16,272)	41,897	414	42,311
Purchase of subsidiary shares from non-controlling interests, not changing ownership	-	-	-	-	-	-	(163)	(163)
Sale of subsidiary shares to noncontrolling interests, not changing ownership	-	-	-	-	-	-	65	65
Net income/(loss)	-	-	(983)	-	-	(983)	35	(948)
Cumulative effect of accounting changes, net of tax	-	-	2	-	-	2	-	2
Total other comprehensive income/(loss), net of tax	-	-	-	-	(2,466)	(2,466)	(7)	(2,473)
Issuance of common shares	18	5,195	-	-	-	5,213	-	5,213
Sale of treasury shares	-	1	-	12,033	-	12,034	-	12,034
Repurchase of treasury shares	-	-	-	(12,757)	-	(12,757)	-	(12,757)
Share-based compensation, net of tax	-	36	-	621	-	657	-	657
Financial instruments indexed to own shares	-	19	-	-	-	19	-	19
Dividends paid	-	(1,546)	-	-	-	(1,546)	(4)	(1,550)
Changes in scope of consolidation	-	-	-	-	-	-	(41)	(41)
Other	-	(168)	-	-	-	(168)	(12)	(180)
Balance at end of period	102	35,668	24,973	(103)	(18,738)	41,902	287	42,189

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of cash flows

in	2019	2018	2017
Operating activities (CHF million)			
Net income/(loss)	3,425	2,011	(948)
Adjustments to reconcile net income/(loss) to net cash provided by/(used in) operating activities (CHF million)			
Impairment, depreciation and amortization	1,275	936	894
Provision for credit losses	324	245	210
Deferred tax provision/(benefit)	589	800	2,238
Valuation adjustments relating to long-term debt	10,221	(4,743)	1,910
Share of net income/(loss) from equity method investments	(79)	(111)	(153)
Trading assets and liabilities, net	(27,892)	25,536	4,672
(Increase)/decrease in other assets	2,808	3,453	(15,597)
Increase/(decrease) in other liabilities	(6,615)	(14,294)	(1,931)
Other, net	(2,480)	(950)	183
Total adjustments	(21,849)	10,872	(7,574)
Net cash provided by/(used in) operating activities	(18,424)	12,883	(8,522)
Investing activities (CHF million)			
(Increase)/decrease in interest-bearing deposits with banks	411	(427)	40
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	8,386	(1,372)	14,286
Purchase of investment securities	(557)	(683)	(86)
Proceeds from sale of investment securities	6	255	14
Maturities of investment securities	1,007	567	318
Investments in subsidiaries and other investments	(285)	(647)	(1,094)
Proceeds from sale of other investments	1,158	1,772	1,970
(Increase)/decrease in loans	(15,344)	(12,500)	(13,674)
Proceeds from sales of loans	4,612	5,980	9,938
Capital expenditures for premises and equipment and other intangible assets	(1,293)	(1,095)	(1,068)
Proceeds from sale of premises and equipment and other intangible assets	30	30	1
Other, net	543	342	65
Net cash provided by/(used in) investing activities	(1,326)	(7,678)	10,710

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of cash flows (continued)

in	2019	2018	2017
Financing activities (CHF million)			
Increase/(decrease) in due to banks and customer deposits	24,853	1,808	3,423
Increase/(decrease) in short-term borrowings	6,919	(2,990)	5,018
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	3,381	(2,052)	(5,251)
Issuances of long-term debt	34,963	33,172	43,556
Repayments of long-term debt	(46,290)	(43,851)	(62,554)
Issuances of common shares	0	0	4,253
Sale of treasury shares	9,624	11,693	12,034
Repurchase of treasury shares	(11,536)	(12,441)	(12,757)
Dividends paid	(696)	(666)	(590)
Other, net	971	344	161
Net cash provided by/(used in) financing activities	22,189	(14,983)	(12,707)
Effect of exchange rate changes on cash and due from banks (CHF million)			
Effect of exchange rate changes on cash and due from banks	(607)	10	(827)
Net increase/(decrease) in cash and due from banks (CHF million)			
Net increase/(decrease) in cash and due from banks	1,832	(9,768)	(11,346)
Cash and due from banks at beginning of period ¹	100,047	109,815	121,161
Cash and due from banks at end of period ¹	101,879	100,047	109,815

¹ Includes restricted cash.

Supplemental cash flow information

in	2019	2018	2017
Cash paid for income taxes and interest (CHF million)			
Cash paid for income taxes	729	678	540
Cash paid for interest	13,115	12,772	9,961
Assets and liabilities sold in business divestitures (CHF million)			
Assets sold	38	0	1,777
Liabilities sold	8	0	1,658

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Notes to the consolidated financial statements

1 Summary of significant accounting policies

The accompanying consolidated financial statements of Credit Suisse Group AG (the Group) are prepared in accordance with accounting principles generally accepted in the US (US GAAP) and are stated in Swiss francs (CHF). The financial year for the Group ends on December 31. Certain reclassifications have been made to the prior year's consolidated financial statements to conform to the current presentation which had no impact on net income/(loss) or total shareholders' equity.

In preparing the consolidated financial statements, management is required to make estimates and assumptions including, but not limited to, the fair value measurements of certain financial assets and liabilities, the allowance for loan losses, the evaluation of variable interest entities (VIEs), the impairment of assets other than loans, recognition of deferred tax assets, tax uncertainties, pension liabilities and various contingencies. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the dates of the consolidated balance sheets and the reported amounts of revenues and expenses during the reporting period. While management evaluates its estimates and assumptions on an ongoing basis, actual results could differ materially from management's estimates. Market conditions may increase the risk and complexity of the judgments applied in these estimates.

Principles of consolidation

The consolidated financial statements include the financial statements of the Group and its subsidiaries. The Group's subsidiaries are entities in which it holds, directly or indirectly, more than 50% of the voting rights or where it exercises control. The Group consolidates limited partnerships in cases where it is the general partner and the limited partners do not have either substantive kick out rights and/or substantive participating rights or is a limited partner with substantive rights to kick out the general partner or dissolve the partnership and participate in significant decisions made in the ordinary course of business. The Group also consolidates VIEs if the Group is the primary beneficiary in accordance with Accounting Standards Codification (ASC) Topic 810 – Consolidation. The effects of material intercompany transactions and balances have been eliminated.

Where a Group subsidiary is a separate legal entity and determined to be an investment company as defined by ASC Topic 946 – Financial Services – Investment Companies, interests in other entities held by this Group subsidiary are not consolidated and are carried at fair value.

Group entities that qualify as broker-dealer entities as defined by ASC Topic 940 – Financial Services – Brokers and Dealers do not consolidate investments in voting interest entities that would otherwise qualify for consolidation when the investment is held on a temporary basis for trading purposes. In addition, subsidiaries that are strategic components of a broker-dealer's operations are consolidated regardless of holding intent.

Foreign currency translation

Transactions denominated in currencies other than the functional currency of the related entity are recorded by remeasuring them in the functional currency of the related entity using the foreign exchange rate on the date of the transaction. As of the dates of the consolidated balance sheets, monetary assets and liabilities, such as receivables and payables, are reported using the year-end spot foreign exchange rates. Foreign exchange rate differences are recorded in the consolidated statements of operations. Non-monetary assets and liabilities are recorded using the historic exchange rate.

For the purpose of consolidation, the assets and liabilities of Group companies with functional currencies other than the Swiss franc are translated into Swiss franc equivalents using year-end spot foreign exchange rates, whereas revenues and expenses are translated at weighted average foreign exchange rates for the period. Translation adjustments arising from consolidation are included in accumulated other comprehensive income/(loss) (AOCI) within total shareholders' equity. Cumulative translation adjustments are released from AOCI and recorded in the consolidated statements of operations when the Group disposes and loses control of a consolidated foreign subsidiary.

Fair value measurement and option

The fair value measurement guidance establishes a single authoritative definition of fair value and sets out a framework for measuring fair value. The fair value option creates an alternative measurement treatment for certain financial assets and financial liabilities. The fair value option can be elected at initial recognition of the eligible item or at the date when the Group enters into an agreement which gives rise to an eligible item (e.g., a firm commitment or a written loan commitment). If not elected at initial recognition, the fair value option can be applied to an item upon certain triggering events that give rise to a new basis of accounting for that item. The application of the fair value option to a financial asset or a financial liability does not change its classification on the face of the balance sheet and the election is irrevocable. Changes in fair value resulting from the election are recorded in trading revenues.

→ Refer to "Fair value option" in Note 35 – Financial instruments for further information.

Cash and due from banks

Cash and due from banks consists of currency on hand, demand deposits with banks or other financial institutions and cash equivalents. Cash equivalents are defined as short-term, highly liquid instruments with original maturities of three months or less, which are held for cash management purposes.

Reverse repurchase and repurchase agreements

Purchases of securities under agreements to resell (reverse repurchase agreements) and securities sold under agreements to repurchase substantially identical securities (repurchase agreements) do not constitute economic sales and are therefore treated as collateralized financing transactions, which are carried in the consolidated balance sheet at the amount of cash disbursed or received, respectively. Reverse repurchase agreements are recorded as collateralized assets while repurchase agreements are recorded as liabilities, with the underlying securities sold continuing to be recognized in trading assets or investment securities. The fair value of securities to be repurchased and resold is monitored on a daily basis, and additional collateral is obtained as needed to protect against credit exposure.

Assets and liabilities recorded under these agreements are accounted for on one of two bases, the accrual basis or the fair value basis. Under the accrual basis, interest earned on reverse repurchase agreements and interest incurred on repurchase agreements are reported in interest and dividend income and interest expense, respectively. The fair value basis of accounting may be elected pursuant to ASC Topic 825 – Financial Instruments, and any resulting change in fair value is reported in trading revenues. Accrued interest income and expense are recorded in the same manner as under the accrual method. The Group has elected the fair value basis of accounting on selected agreements.

Reverse repurchase and repurchase agreements are netted if they are with the same counterparty, have the same maturity date, settle through the same clearing institution that meets certain criteria and a right of offset exists under an enforceable master netting agreement or a central counterparty's clearing rules.

Securities lending and borrowing transactions

Securities borrowed and securities loaned that are cash-collateralized are included in the consolidated balance sheets at amounts equal to the cash advanced or received. If securities received in a securities lending and borrowing transaction as collateral may be sold or repledged, they are recorded as securities received as collateral in the consolidated balance sheet and a corresponding liability to return the security is recorded. Securities lending transactions against non-cash collateral in which the Group has the right to resell or repledge the collateral received are recorded at the fair value of the collateral initially received. For securities lending transactions, the Group receives cash or securities collateral in an amount generally in excess of the market value of securities lent. The Group monitors the fair value of securities borrowed and loaned on a daily basis with additional collateral obtained as necessary.

Fees and interest received or paid are recorded in interest and dividend income and interest expense, respectively, on an accrual basis. If the fair value basis of accounting is elected, any resulting change in fair value is reported in trading revenues. Accrued

interest income and expense are recorded in the same manner as under the accrual method.

Transfers of financial assets

The Group transfers various financial assets, which may result in the sale of these assets to special purpose entities (SPEs), which in turn issue securities to investors. The Group values its beneficial interests at fair value using quoted market prices, if such positions are traded on an active exchange or financial models that incorporate observable and unobservable inputs.

→ Refer to "Note 34 – Transfers of financial assets and variable interest entities" for further information on the Group's transfer activities.

Trading assets and liabilities

Trading assets and liabilities include debt securities, marketable equity instruments, derivative instruments, certain loans held in broker-dealer entities, commodities and precious metals. Items included in the trading portfolio are carried at fair value and classified as held for trading purposes based on management's intent. Regular-way security transactions are recorded on a trade-date basis. Unrealized and realized gains and losses on trading positions are recorded in trading revenues.

Derivatives

Freestanding derivative contracts are carried at fair value in the consolidated balance sheets regardless of whether these instruments are held for trading or risk management purposes. Commitments to originate mortgage loans that will be held for sale are considered derivatives for accounting purposes. When derivative features embedded in certain contracts that meet the definition of a derivative are not considered clearly and closely related to the host contract, either the embedded feature is accounted for separately at fair value or the entire contract, including the embedded feature, is accounted for at fair value. In both cases, changes in fair value are recorded in the consolidated statements of operations. If separated for measurement purposes, the derivative is recorded in the same line item in the consolidated balance sheets as the host contract.

Derivatives classified as trading assets and liabilities include those held for trading purposes and those used for risk management purposes that do not qualify for hedge accounting. Derivatives held for trading purposes arise from proprietary trading activity and from customer-based activity. Realized gains and losses, changes in unrealized gains and losses and interest flows are included in trading revenues. Derivative contracts designated and qualifying as fair value hedges, cash flow hedges or net investment hedges are reported as other assets or other liabilities.

The fair value of exchange-traded derivatives is typically derived from observable market prices and/or observable market parameters. Fair values for over-the-counter (OTC) derivatives are determined on the basis of proprietary models using various input parameters. Derivative contracts are recorded on a net basis per

counterparty where a right to offset exists under an enforceable master netting agreement or a central counterparty's clearing rules. Where no such rights exist, fair values are recorded on a gross basis.

Where hedge accounting is applied, the Group formally documents all relationships between hedging instruments and hedged items, including the risk management objectives and strategy for undertaking hedge transactions. At inception of a hedge and on an ongoing basis, the hedge relationship is formally assessed to determine whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items attributable to the hedged risk. The Group discontinues hedge accounting prospectively in the following circumstances:

- (i) the derivative is no longer effective in offsetting changes in the fair value or cash flows of a hedged item (including forecasted transactions);
- (ii) the derivative expires or is sold, terminated or exercised;
- (iii) the derivative is no longer designated as a hedging instrument because it is unlikely that the forecasted transaction will occur; or
- (iv) the designation of the derivative as a hedging instrument is otherwise no longer appropriate.

For derivatives that are designated and qualify as fair value hedges, the carrying value of the underlying hedged items is adjusted to fair value for the risk being hedged. Changes in the fair value of these derivatives are recorded in the same line item of the consolidated statements of operations as the change in fair value of the risk being hedged for the hedged assets or liabilities.

When the Group discontinues fair value hedge accounting because it determines that the derivative no longer qualifies as an effective hedge, the derivative will continue to be carried in the consolidated balance sheets at its fair value, and the hedged asset or liability will no longer be adjusted for changes in fair value attributable to the hedged risk. Interest-related fair value adjustments made to the underlying hedged items will be amortized to the consolidated statements of operations over the remaining life of the hedged item. Any unamortized interest-related fair value adjustment is recorded in the consolidated statements of operations upon sale or extinguishment of the hedged asset or liability, respectively. Any other fair value hedge adjustments remain part of the carrying amount of the hedged asset or liability and are recognized in the consolidated statements of operations upon disposition of the hedged item as part of the gain or loss on disposition.

For hedges of the variability of cash flows from forecasted transactions and floating rate assets or liabilities, the change in the fair value of a designated derivative is recorded in AOCI. These amounts are reclassified into the line item in the consolidated statements of operations in which the hedged item is recorded when the variable cash flow from the hedged item impacts earnings (for example, when periodic settlements on a variable rate

asset or liability are recorded in the consolidated statements of operations or when the hedged item is disposed of).

When hedge accounting is discontinued on a cash flow hedge, the net gain or loss will remain in AOCI and be reclassified into the consolidated statements of operations in the same period or periods during which the formerly hedged transaction is reported in the consolidated statements of operations. When the Group discontinues hedge accounting because it is probable that a forecasted transaction will not occur within the specified date or period plus two months, the derivative will continue to be carried in the consolidated balance sheets at its fair value, and gains and losses that were previously recorded in AOCI will be recognized immediately in the consolidated statements of operations.

For hedges of a net investment in a foreign operation, the change in the fair value of the hedging derivative is recorded in AOCI. The Group uses the forward method of determining effectiveness for net investment hedges, which results in the time value portion of a foreign currency forward being reported in AOCI.

Investment securities

Investment securities include debt securities classified as held-to-maturity and debt securities classified as available-for-sale. Regular-way security transactions are recorded on a trade-date basis.

Debt securities where the Group has the positive intent and ability to hold such securities to maturity are classified as such and are carried at amortized cost, net of any unamortized premium or discount.

Debt securities classified as available-for-sale are carried at fair value. Unrealized gains and losses, which represent the difference between fair value and amortized cost, are recorded in AOCI. Amounts reported in AOCI are net of income taxes.

Amortization of premiums or discounts is recorded in interest and dividend income using the effective yield method through the maturity date of the security.

Recognition of an impairment on debt securities is recorded in the consolidated statements of operations if a decline in fair value below amortized cost is considered other-than-temporary, that is, amounts due according to the contractual terms of the security are not considered collectible, typically due to deterioration in the creditworthiness of the issuer. No impairment is recorded in connection with declines resulting from changes in interest rates to the extent the Group does not intend to sell the investments, nor is it more likely than not that the Group will be required to sell the investments before the recovery of their amortized cost bases, which may be maturity.

Recognition of an impairment for debt securities establishes a new cost basis, which is not adjusted for subsequent recoveries.

Unrealized losses on available-for-sale securities are recognized in the consolidated statements of operations when a decision has been made to sell a security.

Other investments

Other investments include equity method investments, equity securities without a readily determinable fair value, such as hedge funds, private equity securities and certain investments in non-marketable mutual funds for which the Group has neither significant influence nor control over the investee, and real estate held-for-investment.

Equity method investments are investments for which the Group has the ability to significantly influence the operating and financial policies. Significant influence is typically characterized by ownership of 20% to 50% of the voting stock or in-substance common stock of a corporation or 5% or more of limited partnership interests. Equity method investments are accounted for under the equity method of accounting or the fair value option. Under the equity method of accounting, the Group's proportionate share of the profit or loss, and any impairment on the investee, if applicable, is reported in other revenues. Under the fair value option, changes in fair value are reported in other revenues. The Group has elected the fair value basis of accounting on some of its equity method investments.

Equity securities without a readily determinable fair value are carried at fair value, net asset value practical expedient to estimate fair value or at cost less impairment, adjusted for observable price changes (measurement alternative). Memberships in exchanges are reported at cost, less impairment. Equity securities without a readily determinable fair value held by the Group's subsidiaries that are determined to be investment companies as defined by ASC Topic 946 – Financial Services – Investment Companies are carried at fair value, with changes in fair value recorded in other revenues.

Equity method investments and equity securities without a readily determinable fair value held by subsidiaries that are within the scope of ASC Topic 940 – Financial Services – Brokers and Dealers are measured at fair value and reported in trading assets when the intent of the broker-dealer entity is to hold the asset temporarily for trading purposes. Changes in fair value are reported in trading revenues. Equity securities without a readily determinable fair value include investments in entities that regularly calculate net asset value per share or its equivalent, with changes in fair value recorded in other revenue.

Real estate held-for-investment purposes is carried at cost less accumulated depreciation and is depreciated over its estimated useful life, generally 40 to 67 years. Land that is classified as real estate held-for-investment purposes is carried at historical cost and is not depreciated. Real estate held-for-investment purposes is tested for impairment annually, or more frequently, if events or changes in circumstances indicate that the carrying amount may not be recoverable. For real estate held-for-investment purposes,

the fair values were measured based on either discounted cash flow analyses or external market appraisals. Recognition of an impairment on such assets establishes a new cost base, which is not adjusted for subsequent recoveries in value.

Loans

Loans held-to-maturity

Loans which the Group intends to hold until maturity are carried at outstanding principal balances plus accrued interest, net of the following items: unamortized premiums, discounts on purchased loans, deferred loan origination fees and direct loan origination costs on originated loans. Interest income is accrued on the unpaid principal balance and net deferred premiums/discounts and fees/costs are amortized as an adjustment to the loan yield over the term of the related loans.

In accordance with Group policies, impaired loans include non-performing loans, non-interest-earning loans, restructured loans and potential problem loans.

→ Refer to "Note 19 – Loans, allowance for loan losses and credit quality" for further information.

Allowance for loan losses on loans held-to-maturity

The allowance for loan losses is composed of the following components: probable credit losses inherent in the portfolio and those losses specifically identified. Changes in the allowance for loan losses are recorded in the consolidated statements of operations in provision for credit losses and in interest income (for provisions on past due interest).

The Group evaluates many factors when estimating the allowance for loan losses, including the volatility of default probabilities, rating changes, the magnitude of potential loss, internal risk ratings, and geographic, industry and other economic factors. The component of the allowance representing probable losses inherent in the portfolio is for loans not specifically identified as impaired and that, on a portfolio basis, are considered to contain probable inherent loss. The estimate of this component of the allowance for the consumer loans portfolio involves applying historical and current default probabilities, historical recovery experience and related current assumptions to homogenous loans based on internal risk rating and product type. To estimate this component of the allowance for the corporate & institutional loans portfolio, the Group segregates loans by risk, industry or country rating. Excluded from this estimate process are consumer and corporate & institutional loans that have been specifically identified as impaired or are held at fair value. For lending-related commitments, a provision for losses is estimated based on historical loss and recovery experience and recorded in other liabilities. Changes in the estimate of losses for lending-related commitments are recorded in the consolidated statements of operations in provision for credit losses.

The estimate of the component of the allowance for specifically identified credit losses on impaired loans is based on a regular and detailed analysis of each loan in the portfolio considering

collateral and counterparty risk. The Group considers a loan impaired when, based on current information and events, it is probable that the Group will be unable to collect the amounts due according to the contractual terms of the loan agreement. For non-collateral-dependent impaired loans, an impairment is measured using the present value of estimated future cash flows, except that as a practical expedient an impairment may be measured based on a loan's observable market price. For collateral-dependent impaired loans, an impairment is measured using the fair value of the collateral.

A loan is classified as non-performing no later than when the contractual payments of principal and/or interest are more than 90 days past due except for subprime residential loans which are classified as non-performing no later than when the contractual payments of principal and/or interest are more than 120 days past due. The additional 30 days ensure that these loans are not incorrectly assessed as non-performing during the time when servicing of them typically is being transferred. However, management may determine that a loan should be classified as non-performing notwithstanding that contractual payments of principal and/or interest are less than 90 days past due or, in the case of subprime residential loans, 120 days past due. For non-performing loans, a provision is recorded in an amount equal to any accrued but unpaid interest at the date the loan is classified as non-performing, resulting in a charge to the consolidated statements of operations. In addition, the Group continues to add accrued interest receivable to the loan's balance for collection purposes; however, a provision is recorded resulting in no interest income recognition. Thereafter, the outstanding principal balance is evaluated at least annually for collectability and a provision is established as necessary.

A loan can be further downgraded to non-interest-earning when the collection of interest is considered so doubtful that further accrual of interest is deemed inappropriate. At that time, and on at least a quarterly basis thereafter depending on various risk factors, the outstanding principal balance, net of provisions previously recorded, is evaluated for collectability and additional provisions are established as required.

Generally, non-performing loans and non-interest-earning loans may be restored to performing status only when delinquent principal and interest are brought up to date in accordance with the terms of the loan agreement and when certain performance criteria are met.

Interest collected on non-performing loans and non-interest-earning loans is accounted for using the cash basis or the cost recovery method or a combination of both.

Loans that were modified in a troubled debt restructuring are reported as restructured loans. Generally, a restructured loan would have been considered impaired and an associated allowance for loan losses would have been established prior to the restructuring. Loans modified in a troubled debt restructuring are reported as restructured loans to the end of the reporting year

in which the loan was modified or for as long as an allowance for loan losses based on the terms specified by the restructuring agreement is associated with the restructured loan or an interest concession made at the time of the restructuring exists. In making the determination of whether an interest rate concession has been made, market interest rates for loans with comparable risk to borrowers of the same credit quality are considered. Loans that have been restructured in a troubled debt restructuring and are performing according to the new terms continue to accrue interest. Loan restructurings may include the receipt of assets in satisfaction of the loan, the modification of loan terms (e.g., reduction of interest rates, extension of maturity dates at a stated interest rate lower than the current market rate for new loans with similar risk, or reduction in principal amounts and/or accrued interest balances) or a combination of both.

Potential problem loans are impaired loans where contractual payments have been received according to schedule, but where doubt exists as to the collection of future contractual payments. Potential problem loans are evaluated for impairment on an individual basis and an allowance for loan losses is established as necessary. Potential problem loans continue to accrue interest.

The amortization of net loan fees or costs on impaired loans is generally discontinued during the periods in which matured and unpaid interest or principal is outstanding. On settlement of a loan, if the loan balance is not collected in full, an allowance is established for the uncollected amount, if necessary, and the loan is then written off, net of any deferred loan fees and costs.

Write-off of a loan occurs when it is considered certain that there is no possibility of recovering the outstanding principal. Recoveries of loans previously written off are recorded based on the cash or estimated fair value of other assets received.

→ Refer to "Impaired loans" in Note 19 – Loans, allowance for loan losses and credit quality for further information on the write-off of a loan and related accounting policies.

Loans held-for-sale

Loans, which the Group intends to sell in the foreseeable future, are considered held-for-sale and are carried at the lower of amortized cost or market value determined on either an individual method basis, or in the aggregate for pools of similar loans if sold or securitized as a pool. Loans held-for-sale are included in other assets. Revaluation losses incurred at the transfer into the held-for-sale category are generally recorded as credit losses. Gains and losses on loans held-for-sale subsequent to the transfer into the held-for-sale category are recorded in other revenues.

Purchased impaired loans

Purchased loans for which it is probable at acquisition that all contractually required payments will not be received are recorded at their net purchase price and no allowances are carried over. The excess of the estimated cash flows to be collected over the amount paid is accreted into interest income over the estimated recovery period when reasonable estimates can be made about the timing and amount of recovery. The Group does not consider

such loans to be impaired at the time of acquisition. Such loans are deemed impaired only if the Group's estimate of cash to be received decreases below the estimate at the time of acquisition. Increases in the estimated expected recovery are recorded as a reversal of allowances, if any, and then recognized as an adjustment of the effective yield of the loan.

Loans held at fair value under the fair value option

Loans and loan commitments for which the fair value option is elected are reported at fair value with changes in fair value reported in trading revenues. The application of the fair value option does not change the loan's classification. Loan commitments carried at fair value are recorded in other assets or other liabilities, respectively.

Goodwill and other intangible assets

Goodwill arises on the acquisition of subsidiaries and equity method investments. It is measured as the excess of the fair value of the consideration transferred, the fair value of any non-controlling interest in the acquiree and the fair value of any previously held equity interest in the acquired subsidiary, over the net of the acquisition-date fair values of the identifiable assets acquired and the liabilities assumed. Goodwill is not amortized; instead it is tested for impairment annually, or more frequently if events or changes in circumstances indicate that goodwill may be impaired. Goodwill is allocated to the Group's reporting units for the purposes of the impairment test.

Other intangible assets may be acquired individually or as part of a group of assets assumed in a business combination. Other intangible assets include but are not limited to: patents, licenses, copyrights, trademarks, branch networks, mortgage servicing rights, customer base and deposit relationships. Acquired intangible assets are initially measured at the amount of cash disbursed or the fair value of other assets distributed. Other intangible assets that have a finite useful life are amortized over that period. Other intangible assets acquired after January 1, 2002 that are determined to have an indefinite useful life are not amortized; instead they are tested for impairment annually, or more frequently if events or changes in circumstances indicate that the indefinite intangible asset may be impaired. Mortgage servicing rights are included in non-amortizing other intangible assets and are carried at fair value, with changes in fair value recognized through earnings in the period in which they occur. Mortgage servicing rights represent the right to perform specified mortgage servicing activities on behalf of third parties. Mortgage servicing rights are either purchased from third parties or retained upon sale of acquired or originated loans.

Recognition of an impairment on non-financial assets

The Group evaluates premises, equipment, right-of-use (ROU) assets and finite intangible assets for impairment at least annually and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Where the carrying

amount of an asset exceeds the recoverable amount, the asset is considered impaired and an impairment is recorded in general and administrative expenses. Recognition of an impairment on such assets establishes a new cost base, which is not adjusted for subsequent recoveries in value.

Income taxes

Deferred tax assets and liabilities are recorded for the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities at the dates of the consolidated balance sheets and their respective tax bases. Deferred tax assets and liabilities are computed using currently enacted tax rates and are recorded in other assets and other liabilities, respectively. Income tax expense or benefit is recorded in income tax expense/(benefit), except to the extent the tax effect relates to transactions recorded directly in total shareholders' equity. Deferred tax assets are reduced by a valuation allowance, if necessary, to the amount that management believes will more likely than not be realized. Deferred tax assets and liabilities are adjusted for the effect of changes in tax laws and rates in the period in which changes are approved by the relevant authority. Deferred tax assets and liabilities are presented on a net basis for the same tax-paying component within the same tax jurisdiction.

The Group follows the guidance in ASC Topic 740 – Income Taxes, which sets out a consistent framework to determine the appropriate level of tax reserves to maintain for uncertain tax positions. The Group determines whether it is more likely than not that an income tax position will be sustained upon examination based on the technical merits of the position. Sustainable income tax positions are then measured to determine the amount of benefit eligible for recognition in the consolidated financial statements. Each such sustainable income tax position is measured at the largest amount of benefit that is more likely than not to be realized upon ultimate settlement.

Brokerage receivables and brokerage payables

The Group recognizes receivables and payables from transactions in financial instruments purchased from and sold to customers, banks and broker-dealers. The Group is exposed to risk of loss resulting from the inability of counterparties to pay for or deliver financial instruments purchased or sold, in which case the Group would have to sell or purchase, respectively, these financial instruments at prevailing market prices. To the extent an exchange or clearing organization acts as counterparty to a transaction, credit risk is generally considered to be limited. The Group establishes credit limits for each customer and requires them to maintain margin collateral in compliance with applicable regulatory and internal guidelines. In order to conduct trades with an exchange or a third-party bank, the Group is required to maintain a margin. This is usually in the form of cash and deposited in a separate margin account with the exchange or broker. If available information indicates that it is probable that a brokerage receivable is impaired, an allowance is established. Write-offs of brokerage receivables occur if the outstanding amounts are considered uncollectible.

Premises and equipment

Premises and equipment (including equipment under operating leases where the Group is the lessor), with the exception of land, are carried at cost less accumulated depreciation.

Buildings are depreciated on a straight-line basis over their estimated useful lives, generally 40 to 67 years, and building improvements are depreciated on a straight-line basis over their estimated useful lives, generally not exceeding five to ten years. Land is carried at historical cost and is not depreciated. Leasehold improvements, such as alterations and improvements to rented premises, are depreciated on a straight-line basis over the shorter of the lease term or estimated useful life, which generally does not exceed ten years. Equipment, such as computers, machinery, furnishings, vehicles and other tangible non-financial assets, is depreciated using the straight-line method over its estimated useful lives, generally three to ten years. Certain leasehold improvements and equipment, such as data center power generators, may have estimated useful lives greater than ten years.

The Group capitalizes costs relating to the acquisition, installation and development of software with a measurable economic benefit, but only if such costs are identifiable and can be reliably measured. The Group depreciates capitalized software costs on a straight-line basis over the estimated useful life of the software, generally not exceeding seven years, taking into consideration the effects of obsolescence, technology, competition and other economic factors.

Leases

For lessee arrangements, the Group recognizes lease liabilities, which are reported as other liabilities or long-term debt, and right-of-use assets, which are reported as other assets. Lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Right-of-use assets are initially measured based on the lease liability, adjusted for any initial direct costs, any lease payments made prior to lease commencement and for any lease incentives.

→ Refer to "Note 22 – Other assets and other liabilities", "Note 23 – Leases" and "Note 25 – Long-term debt" for further information.

Options that permit the Group to extend or terminate a lease are only included in the measurement of right-of-use assets and lease liabilities when it is reasonably certain that the Group would exercise the extension option or would not exercise the termination option. Lease payments, which depend on an index or a referenced rate, are considered unavoidable and are included in the lease liabilities. Other variable lease payments, as well as subsequent changes in an index or referenced rate, are excluded from the lease liabilities. The Group's incremental borrowing rate, which is used in determining the present value of lease payments, is derived from information available at the lease commencement date.

Operating lease costs, which include amortization and an interest component, are recognized over the remaining lease term on a straight-line basis. Operating and variable lease costs are recognized in general and administrative expenses. Right-of-use assets are subject to the same impairment guidance as property and equipment.

For sales-type and direct financing leases under lessor arrangements, which are classified as loans, the Group de-recognizes the underlying assets and recognizes a net investment in the lease. The net investment in the lease is calculated as the lease receivable plus the unguaranteed portion of the estimated residual value. The lease receivable is initially measured at the present value of the sum of the future lease payments receivable over the lease term and any portion of the estimated residual value at the end of the lease term that is guaranteed by either the lessee or an unrelated third party. Lease terms may include options that permit the lessee to extend or renew these leases. Such options are only included in the measurement of lease receivables for sales-type and direct financing leases when it is reasonably certain that the lessee would exercise these options. Subsequently, unearned income is amortized to interest income over the lease term using the effective interest method.

→ Refer to "Note 19 – Loans, allowance for loan losses and credit quality" and "Note 23 – Leases" for further information.

For operating leases under lessor arrangements, the Group continues to recognize the underlying asset and depreciates the asset over its estimated useful life. Lease income is recognized in other income on a straight-line basis over the lease term.

Customer deposits

Customer deposits represent funds held from customers (both retail and commercial) and banks and consist of interest-bearing demand deposits, savings deposits and time deposits. Interest is accrued based on the contractual provisions of the deposit contract.

Long-term debt

Total long-term debt is composed of debt issuances which do not contain derivative features (vanilla debt), as well as hybrid debt instruments with embedded derivatives, which are issued as part of the Group's structured product activities. Long-term debt includes both Swiss franc and foreign currency denominated fixed and variable rate bonds.

The Group actively manages interest rate risk and foreign currency risk on vanilla debt through the use of derivative contracts, primarily interest rate and currency swaps. In particular, fixed rate debt is hedged with receive-fixed, pay-floating interest rate swaps. The Group elected to fair value this fixed rate debt upon implementation of the fair value option on January 1, 2007, with changes in fair value recognized as a component of trading revenues, except for changes in fair value attributed to own credit

risk, which, since 2016, are recorded in other comprehensive income, net of tax, and recycled to trading revenue when the debt is de-recognized. The Group did not elect to apply the fair value option to fixed-rate debt issued by the Group since January 1, 2008 and instead applies hedge accounting per the guidance of ASC Topic 815 – Derivatives and Hedging.

For capital management purposes, the Group issues hybrid capital instruments in the form of low- and high-trigger tier 1 and tier 2 capital notes, with a write-off or contingent share conversion feature. Typically, these instruments have an embedded derivative that is bifurcated for accounting purposes. The embedded derivative is measured separately and changes in fair value are recorded in trading revenue. The host contract is generally accounted for under the amortized cost method unless the fair value option has been elected and the entire instrument is carried at fair value.

The Group's long-term debt also includes various equity-linked and other indexed instruments with embedded derivative features, for which payments and redemption values are linked to commodities, stocks, indices, currencies or other assets. The Group elected to account for substantially all of these instruments at fair value. Changes in the fair value of these instruments are recognized as a component of trading revenues, except for changes in fair value attributed to own credit risk, which is recorded in other comprehensive income (OCI), net of tax, and recycled to trading revenue when the debt is de-recognized.

Guarantees

In cases where the Group acts as a guarantor, the Group recognizes in other liabilities, at the inception of a guarantee, a liability for the fair value of the obligations undertaken in issuing such a guarantee, including its ongoing obligation to perform over the term of the guarantee in the event that certain events or conditions occur.

Pension and other post-retirement benefits

Credit Suisse sponsors a number of post-employment benefit plans for its employees worldwide, which include defined benefit pension plans and other post-employment benefits. The major plans are located in Switzerland, the UK and the US.

The Group uses the projected unit credit actuarial method to determine the present value of its projected benefit obligations (PBO) and the current and past service costs or credits related to its defined benefit and other post-retirement benefit plans. The measurement date used to perform the actuarial valuation is December 31 and is performed by independent qualified actuaries.

Certain key assumptions are used in performing the actuarial valuations. These assumptions must be made concerning the future events that will determine the amount and timing of the benefit payments and thus require significant judgment and estimates by Group management. This includes making assumptions with regard to discount rates, salary increases, interest rate on savings balances, expected long-term rate of return on plan assets and mortality (future life expectancy).

The assumed discount rates reflect the rates at which the pension benefits could be effectively settled. These rates are determined based on yield curves, constructed from high-quality corporate bonds currently available and observable in the market and are expected to be available during the period to maturity of the pension benefits. In countries where there is no deep market in high-quality corporate bonds with longer durations, the best available market information, including governmental bond yields and risk premiums, is used to construct the yield curve.

Salary increases are determined by reviewing historical practice and external market data as well as considering internal projections.

The interest rate on savings balances is applicable only to the Credit Suisse Swiss pension plan (Swiss pension plan). The Board of Trustees of the Swiss pension plan sets the interest rate to be applied on the accumulated savings balance on an annual basis. Credit Suisse estimates the future interest rate on savings balances, taking into consideration actions and rates approved by the Board of Trustees of the Swiss pension plan and expected future changes in the interest rate environment based on the yield curve used for the discount rate.

The expected long-term rate of return on plan assets is determined on a plan-by-plan basis, taking into account asset allocation, historical rate of return, benchmark indices for similar-type pension plan assets, long-term expectations of future returns and investment strategy.

Mortality assumptions are based on standard mortality tables and standard models and methodologies for projecting future improvements to mortality as developed and published by external independent actuarial societies and actuarial organizations.

Health care cost trend rates are determined by reviewing external data and the Group's own historical trends for health care costs.

The funded status of the Group's defined benefit post-retirement and pension plans is recognized in the consolidated balance sheets.

Actuarial gains and losses in excess of 10% of the greater of the PBO or the market value of plan assets and unrecognized prior service costs or credits are amortized to net periodic pension and other post-retirement benefit costs on a straight-line basis over the average remaining service life of active employees expected to receive benefits.

The Group records pension expense for defined contribution plans when the employee renders service to the company, essentially coinciding with the cash contributions to the plans.

Share-based compensation

For all share-based awards granted to employees, compensation expense is measured at grant date or modification date based on the fair value of the number of awards for which the requisite service is expected to be rendered and is recognized in the

consolidated statements of operations over the required service period.

The incremental tax effects of the difference between the compensation expense recorded in the US GAAP accounts and the tax deduction received, are recorded in the income statement at the point in time the deduction for tax purposes is recorded.

Compensation expense for share-based awards that vest in their entirety at the end of the vesting period (cliff vesting) and awards that vest in annual installments (graded vesting), which only contain a service condition that affects vesting, is recognized on a straight-line basis over the service period for the entire award. However, if awards with graded vesting contain a performance condition, then each installment is expensed as if it were a separate award ("front-loaded" expense recognition). Furthermore, recognition of compensation expense is accelerated to the date an employee becomes eligible for retirement.

Performance share awards contain a performance condition. In the event of either a negative return on equity (ROE) of the Group or a divisional loss, any outstanding performance share awards will be subject to a reduction. The amount of compensation expense recorded includes an estimate of any expected reductions. For each reporting period after the grant date, the expected number of shares to be ultimately delivered upon vesting is reassessed and reflected as an adjustment to the cumulative compensation expense recorded in the income statement. The basis for the ROE calculation may vary from year to year, depending on the Compensation Committee's determination for the year in which the performance shares are granted.

Certain employees own equity interests in the form of carried interests in certain funds managed by the Group. Expenses recognized under these ownership interests are reflected in the consolidated statements of operations in compensation and benefits.

Own shares, own bonds and financial instruments on own shares

The Group may buy and sell own shares, own bonds and financial instruments on own shares within its normal trading and market-making activities. In addition, the Group may hold its own shares to satisfy commitments arising from employee share-based compensation awards. Own shares are recorded at cost and reported as treasury shares, resulting in a reduction to total shareholders' equity. Financial instruments on own shares are recorded as assets or liabilities or as equity when the criteria for equity classification are met. Dividends received by subsidiaries on own shares and unrealized and realized gains and losses on own shares classified in total shareholders' equity are excluded from the consolidated statements of operations.

Any holdings of bonds issued by any Group entity are eliminated in the consolidated financial statements.

Net interest income

Interest income and interest expense arising from interest-bearing assets and liabilities other than those carried at fair value or the lower of cost or market are accrued, and any related net deferred premiums, discounts, origination fees or costs are amortized as an adjustment to the yield over the life of the related asset and liability. Interest from debt securities and dividends on equity securities carried as trading assets and trading liabilities are recorded in interest and dividend income.

→ Refer to "Loans" for further information on interest on loans.

Commissions and fees

Commissions and fees include revenue from contracts with customers. The Group recognizes revenue when it satisfies a contractual performance obligation. The Group satisfies a performance obligation when control of the underlying good or services related to the performance obligation is transferred to the customer. Control is the ability to direct the use of, and obtain substantially all of the remaining benefits from, the good or service. The Group must determine whether control of a good or service is transferred over time. If so, the related revenue is recognized over time as the good or service is transferred to the customer. If not, control of the good or service is transferred at a point in time. The performance obligations are typically satisfied as the services in the contract are rendered. Revenue is measured based on the consideration specified in a contract with a customer, and excludes any amounts collected on behalf of third parties. The transaction price can be a fixed amount or can vary because of performance bonuses or other similar items. Variable consideration is only included in the transaction price once it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the amount of variable consideration is subsequently resolved. Generally, no significant judgement is required with respect to recording variable consideration.

When another party is involved in providing goods or services to a customer, the Group must determine whether the nature of its promise is a performance obligation to provide the specified goods or services itself (that is, the Group is a principal) or to arrange for those goods or services to be provided by the other party (that is, the Group is an agent). The Group determines whether it is a principal or an agent for each specified good or service promised to the customer. Gross presentation (revenue on the revenue line and expense on the expense line) is appropriate when the Group acts as principal in a transaction. Conversely, net presentation (revenue and expenses reported net) is appropriate when the Group acts as an agent in the transaction.

Transaction-related expenses are expensed as incurred. Underwriting expenses are deferred and recognized along with the underwriting revenue.

→ Refer to "Note 14 – Revenue from contracts with customers" for further information.

2 Recently issued accounting standards

Recently adopted accounting standards

ASC Topic 220 – Income Statements – Reporting Comprehensive Income

In January 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2018-02, “Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income” (ASU 2018-02), an update to ASC Topic 220 – Income Statement – Reporting Comprehensive Income. The amendments in ASU 2018-02 allowed a reclassification from AOCI to retained earnings for the stranded tax effects resulting from the US Tax Cuts and Jobs Act. ASU 2018-02 was effective for annual reporting periods and interim periods within those periods beginning after December 15, 2018. The adoption of ASU 2018-02 on January 1, 2019 resulted in a net increase in retained earnings of CHF 64 million as a result of the reclassification from AOCI to retained earnings, which was the result of the re-measurement of deferred tax assets and liabilities associated with the change in tax rates.

ASC Topic 350 – Intangibles – Goodwill and Other

In August 2018, the FASB issued ASU 2018-15, “Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract” (ASU 2018-15), an update to ASC Subtopic 350-40 – Intangibles – Goodwill and Other – Internal-Use Software. The amendments in ASU 2018-15 align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. ASU 2018-15 is effective for annual reporting periods beginning after December 15, 2019, including interim periods within those annual reporting periods and can be applied either retrospectively or prospectively. Early adoption, including adoption in an interim period, was permitted. The Group elected to early adopt ASU 2018-15 prospectively on January 1, 2019. The adoption of ASU 2018-15 did not have a material impact on the Group’s financial position, results of operations or cash flows.

ASC Topic 715 – Compensation – Retirement Benefits

In August 2018, the FASB issued ASU 2018-14, “Changes to the Disclosure Requirements for Defined Benefit Plans” (ASU 2018-14), an update to ASC Topic 715 – Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework. ASU 2018-14 modifies the disclosure framework to improve disclosure requirements for employers that sponsor defined benefit pension or other post-retirement plans. ASU 2018-14 is effective for annual reporting periods ending after December 15, 2020, with early adoption permitted. The Group elected to early adopt ASU 2018-14 retrospectively on January 1, 2019. As these amendments relate only to disclosures, there was no impact from the adoption of ASU 2018-14 on the Group’s financial position, results of operations or cash flows.

ASC Topic 815 – Derivatives and Hedging

In August 2017, the FASB issued ASU 2017-12, “Targeted Improvements to Accounting for Hedging Activities” (ASU 2017-12), an update to ASC Topic 815 – Derivatives and Hedging. ASU 2017-12 made changes to the hedge accounting model intended to facilitate financial reporting that more closely reflected an entity’s risk management activities and simplified application of hedge accounting. The amendments in ASU 2017-12 provided more hedging strategies that will be eligible for hedge accounting, eased the documentation and effectiveness assessment requirements and resulted in changes to the presentation and disclosure requirements of hedge accounting activities. ASU 2017-12 was effective for annual reporting periods beginning after December 15, 2018, and for the interim periods within those annual reporting periods. The adoption of ASU 2017-12 on January 1, 2019 did not have a material impact on the Group’s financial position, results of operations and cash flows.

In October 2018, the FASB issued ASU 2018-16, “Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes” (ASU 2018-16), an update to ASC Topic 815 – Derivatives and Hedging. ASU 2018-16 permitted the use of the OIS rate based on the SOFR as a US benchmark interest rate for hedge accounting purposes and was effective for the Group on January 1, 2019. The adoption of ASU 2018-16 on January 1, 2019 did not impact the Group’s existing hedges.

ASC Topic 820 – Fair Value Measurement

In August 2018, the FASB issued ASU 2018-13, “Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement” (ASU 2018-13), an update to ASC Topic 820 – Fair Value Measurement. The amendments in ASU 2018-13 removed, modified and added certain disclosure requirements in ASC Topic 820, Fair Value Measurement. ASU 2018-13 is effective for annual reporting periods beginning after December 15, 2019 and for the interim periods within those annual reporting periods. Early adoption was permitted, including in an interim period, for any eliminated or modified disclosure requirements. The Group early adopted the amendments for removing disclosures and the amendments for certain modifying disclosures upon issuance of ASU 2018-13. The Group adopted the remaining amendments on January 1, 2020. As these amendments related only to disclosures, there was no impact from the adoption of ASU 2018-13 on the Group’s financial position, results of operations or cash flows.

ASC Topic 842 – Leases

In February 2016, the FASB issued ASU 2016-02, “Leases” (ASU 2016-02), creating ASC Topic 842 – Leases and superseding ASC Topic 840 – Leases. ASU 2016-02 set out the principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. ASU 2016-02 also included disclosure requirements to provide more information about the

amount, timing and uncertainty of cash flows arising from leases. Lessor accounting was substantially unchanged compared to the previous accounting guidance. Under the previous lessee accounting model, the Group was required to distinguish between finance leases, which are recognized on the balance sheet, and operating leases, which are not. ASU 2016-02 required lessees to present a right-of-use asset and a corresponding lease liability on the balance sheet irrespective of the lease classification.

The Group adopted ASU 2016-02 and its subsequent amendments on January 1, 2019 using the modified retrospective approach, with a transition adjustment recognized in retained earnings without restating comparatives. The Group elected the use of the package of practical expedients and the practical expedient to use hindsight.

As a result of adoption, the Group recognized lease liabilities and related right-of-use assets of approximately CHF 3.5 billion and CHF 3.3 billion, respectively. In addition, the Group recognized an increase in retained earnings of approximately CHF 0.2 billion, net of tax, which included the release of previously deferred gains on sale lease-back transactions and previously unrecognized impairment losses.

Standards to be adopted in future periods

ASC Topic 326 – Financial Instruments – Credit Losses

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments" (ASU 2016-13), creating ASC Topic 326 – Financial Instruments – Credit Losses. ASU 2016-13 is intended to improve financial reporting by requiring timelier recording of credit losses on financial assets measured at amortized cost basis including, but not limited to loans, net investments in leases and off-balance sheet credit exposures. ASU 2016-13 eliminates the probable initial recognition threshold under the current incurred loss methodology for recognizing credit losses. Instead, ASU 2016-13 requires the measurement of all expected credit losses for financial assets held at the reporting date over the remaining contractual life (considering the effect of prepayments) based on historical experience, current conditions and reasonable and supportable forecasts. The Group will incorporate forward-looking information and macroeconomic factors into its credit loss estimates. ASU 2016-13 requires enhanced disclosures to help investors and other financial statement users to better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization's portfolio.

In May 2019, the FASB issued ASU 2019-05, "Financial Instruments – Credit Losses" (ASC 2019-05), to provide targeted transition relief upon the adoption of ASU 2016-13. The amendment provides an entity with the option to irrevocably elect the fair value option on certain financial assets on transition.

As the Group is a US Securities and Exchange Commission (SEC) filer, ASU 2016-13 and its subsequent amendments are effective for annual reporting periods beginning after December 15, 2019, including interim periods within those annual reporting periods. The Group adopted ASU 2016-13 and its subsequent amendments on January 1, 2020, applying the modified retrospective approach, which resulted in a decrease in retained earnings of less than CHF 0.2 billion, with no significant impact on regulatory capital.

ASC Topic 740 – Income Taxes

In December 2019, the FASB issued ASU 2019-12, "Simplifying the Accounting for Income Taxes" (ASU 2019-12), an update to ASC Topic 740 – Income Taxes. The amendments in ASU 2019-12 eliminate certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the accounting for basis differences when there are changes in foreign ownership. In addition, ASU 2019-12 includes clarification and simplification of other aspects of the accounting for income taxes. The amendments are effective for annual reporting periods beginning after December 15, 2020 and for the interim periods within those annual reporting periods. Early adoption is permitted, including in an interim period. The Group is currently evaluating the impact of the adoption of ASU 2019-12 on the Group's financial position, results of operations and cash flows.

ASC Topic 848 – Reference Rate Reform

In March 2020, the FASB issued ASU 2020-04, "Facilitation of the Effects of Reference Rate Reform on Financial Reporting" (ASU 2020-04), creating ASC Topic 848 – Reference Rate Reform. The amendments in ASU 2020-04 provide optional guidance for a limited period of time to ease the potential burden in accounting for (or recognizing the effects of) reference rate reform on financial reporting. The amendments are elective and apply to contracts, hedging relationships and other transactions that reference the London Interbank Offered Rate or another reference rate expected to be discontinued because of reference rate reform. The Group may elect to apply the amendments as of March 12, 2020 through December 31, 2022. The Group is currently evaluating the impact of the adoption of ASU 2020-04 on the Group's financial position, results of operations and cash flows.

3 Business developments, significant shareholders and subsequent events

Business developments

Credit Suisse InvestLab AG

In September 2019, the Group completed the first closing of the transfer announced in June 2019, which combined its open architecture investment fund platform, Credit Suisse InvestLab AG (InvestLab), with Allfunds Group (Allfunds). The transaction included the transfer of the InvestLab legal entity and its related employees and service agreements to Allfunds. The Group became a minority shareholder in the combined business. The subsequent transfer of the related distribution agreements is expected to be completed in the first quarter of 2020. Other revenues in 2019 included CHF 327 million from this first closing as reflected in net revenues of the Swiss Universal Bank, International Wealth Management and Asia Pacific divisions.

COVID-19

The spread of COVID-19 is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to affect the Group's financial performance, including credit loss estimates, trading revenues, net interest income and potential goodwill assessments.

Significant shareholders

Significant shareholders registered in the share register

The following table includes significant shareholders (including nominees) with holdings in Group shares of at least 5% of the voting rights, which were registered in the share register as of December 31, 2019 and 2018, respectively.

Significant shareholders registered in the share register

end of	2019			2018		
	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)
Direct shareholders ¹						
Chase Nominees Ltd. ²	343	14	13.43	388	16	15.19
Nortrust Nominees Ltd. ²	163	7	6.37	149	6	5.84

¹ As registered in the share register of the Group on December 31 of the reporting period; includes shareholders registered as nominees.

² Nominee holdings exceeding 2% are registered with a right to vote only if the nominee confirms that no individual shareholder holds more than 0.5% of the outstanding share capital or if the nominee discloses the identity of any beneficial owner holding more than 0.5% of the outstanding capital.

Information received from shareholders not registered in the share register

In addition to the shareholdings registered in the share register of the Group, the Group has obtained and reported to the SIX Swiss Exchange information from its shareholders in accordance with the notification requirements of the Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading. These shareholders may hold their shareholdings in Group shares through a nominee. The following shareholder notifications relate to registered voting rights exceeding 5% of all voting rights, which are subject to disclosure in the notes to the financial statements in accordance with the Swiss Code of Obligations.

In a disclosure notification that the Group published on November 9, 2013, the Group was notified that as of November 4, 2013, Harris Associates L.P. held 81.5 million shares, or 5.17% of the voting rights, of the registered Group shares issued as of the date of the notified transaction. No further disclosure

notification has been received from Harris Associates L.P. relating to holdings of registered Group shares since 2013. This position includes the reportable position of Harris Associates Investment Trust (4.97% of the voting rights), as published by the SIX Swiss Exchange on August 1, 2018.

In a disclosure notification that the Group published on September 6, 2018, the Group was notified that as of August 24, 2018, Qatar Holding LLC held 133.2 million shares, or 5.21% of the voting rights, of the registered Group shares issued as of the date of the notified transaction. No further disclosure notification has been received from Qatar Holding LLC relating to holdings of registered Group shares since 2018.

Subsequent event

There were no subsequent events since the balance sheet date of the consolidated financial statements.

4 Segment information

The Group is a global financial services company domiciled in Switzerland and serves its clients through three regionally focused divisions: Swiss Universal Bank, International Wealth Management and Asia Pacific. These regional businesses are supported by two other divisions specialized in investment banking capabilities: Global Markets and Investment Banking & Capital Markets. Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within our Corporate Center.

The segment information reflects the Group's reportable segments and the Corporate Center, which are managed and reported on a pre-tax basis, as follows:

- The **Swiss Universal Bank** division offers comprehensive advice and a wide range of financial solutions to private, corporate and institutional clients primarily domiciled in the Group's home market Switzerland. The Private Clients business has a leading franchise in the Group's home market and serves ultra-high-net-worth individual, high-net-worth individual, affluent and retail clients. The Corporate & Institutional Clients business serves large corporate clients, small and medium-sized enterprises, institutional clients, external asset managers, financial institutions and commodity traders.
- The **International Wealth Management** division through its Private Banking business offers comprehensive advisory services and tailored investment and financing solutions to wealthy private clients and external asset managers in Europe, the Middle East, Africa and Latin America. The Asset Management business offers investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals.
- In the **Asia Pacific** division, the wealth management, financing and underwriting and advisory teams work closely together to deliver integrated advisory services and solutions to target ultra-high-net-worth, entrepreneur and corporate clients. The Wealth Management & Connected business combines activities in wealth management with the financing, underwriting and advisory activities. The Markets business represents the Group's equities and fixed income sales and trading businesses, which support the wealth management activities, but also deals extensively with a broader range of institutional clients.
- The **Global Markets** division offers a broad range of financial products and services to client-driven businesses and also supports the Group's global wealth management businesses

and their clients. The suite of products and services includes global securities sales, trading and execution, prime brokerage and comprehensive investment research. Clients include financial institutions, corporations, governments, institutional investors, such as pension funds and hedge funds, and private individuals around the world.

- The **Investment Banking & Capital Markets** division offers a broad range of investment banking services to corporations, financial institutions, financial sponsors and ultra-high-net-worth individuals and sovereign clients. The range of products and services includes advisory services related to mergers and acquisitions, divestitures, takeover defense mandates, business restructurings and spin-offs. The division also engages in debt and equity underwriting of public securities offerings and private placements.

Corporate Center includes parent company operations such as Group financing, expenses for projects sponsored by the Group and certain expenses and revenues that have not been allocated to the segments. In addition, the Corporate Center includes consolidation and elimination adjustments required to eliminate inter-company revenues and expenses.

Revenue sharing and cost allocation

Responsibility for each product is allocated to a specific segment, which records all related revenues and expenses. Revenue-sharing and service level agreements govern the compensation received by one segment for generating revenue or providing services on behalf of another. These agreements are negotiated periodically by the relevant segments on a product-by-product basis. The aim of revenue-sharing and service level agreements is to reflect the pricing structure of unrelated third-party transactions.

Corporate services and business support in finance, operations, human resources, legal, compliance, risk management and IT are provided by corporate functions, and the related costs are allocated to the segments and Corporate Center based on their requirements and other relevant measures.

Funding

The Group centrally manages its funding activities. New instruments for funding and capital purposes are issued by Credit Suisse Group AG and Credit Suisse AG, the direct bank subsidiary of the Group (the Bank). The Bank lends funds to its operating subsidiaries and affiliates on both a senior and subordinated

basis, as needed, the latter typically to meet capital requirements, or as desired by management to capitalize on opportunities. Capital is distributed to the segments considering factors such as regulatory capital requirements, utilized economic capital and the historic and future potential return on capital.

Transfer pricing, using market rates, is used to record net revenues and expenses in each of the segments for this capital and funding. The Group's funds transfer pricing system is designed to allocate funding costs to its businesses in a way that incentivizes their efficient use of funding. The Group's funds transfer pricing system is an essential tool that allocates to the businesses the short-term and long-term costs of funding their balance sheet usages and off-balance sheet contingencies. The funds transfer pricing framework ensures the full funding costs allocation under normal business conditions, but it is of even greater importance in a stressed capital markets environment where raising funds is more challenging and expensive. Under this framework, the Group's businesses are also credited to the extent they provide long-term stable funding.

Net revenues and income/(loss) before taxes

in	2019	2018	2017
Net revenues (CHF million)			
Swiss Universal Bank	6,020	5,564	5,396
International Wealth Management	5,887	5,414	5,111
Asia Pacific	3,590	3,393	3,504
Global Markets	5,752	4,980	5,551
Investment Banking & Capital Markets	1,666	2,177	2,139
Strategic Resolution Unit ¹	–	(708)	(886)
Corporate Center	(431)	100	85
Net revenues	22,484	20,920	20,900
Income/(loss) before taxes (CHF million)			
Swiss Universal Bank	2,697	2,125	1,765
International Wealth Management	2,138	1,705	1,351
Asia Pacific	902	664	729
Global Markets	956	154	450
Investment Banking & Capital Markets	(162)	344	369
Strategic Resolution Unit ¹	–	(1,381)	(2,135)
Corporate Center	(1,811)	(239)	(736)
Income before taxes	4,720	3,372	1,793

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

Total assets

end of	2019	2018
Total assets (CHF million)		
Swiss Universal Bank	232,729	224,301
International Wealth Management	93,059	91,835
Asia Pacific	107,660	99,809
Global Markets	214,019	211,530
Investment Banking & Capital Markets	17,819	16,156
Strategic Resolution Unit ¹	–	20,874
Corporate Center	122,009	104,411
Total assets	787,295	768,916

¹ Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and is separately disclosed within the Corporate Center.

Net revenues and income/(loss) before taxes by geographical location

in	2019	2018	2017
Net revenues (CHF million)			
Switzerland	8,434	7,646	7,775
EMEA	1,962	1,686	1,231
Americas	9,103	8,731	8,928
Asia Pacific	2,985	2,857	2,966
Net revenues	22,484	20,920	20,900
Income/(loss) before taxes (CHF million)			
Switzerland	2,985	1,924	1,736
EMEA	(1,786)	(2,082)	(2,769)
Americas	3,409	3,452	2,746
Asia Pacific	112	78	80
Income before taxes	4,720	3,372	1,793

The designation of net revenues and income/(loss) before taxes is based on the location of the office recording the transactions. This presentation does not reflect the way the Group is managed.

Total assets by geographical location

end of	2019	2018
Total assets (CHF million)		
Switzerland	242,991	234,291
EMEA	144,888	149,400
Americas	305,328	309,616
Asia Pacific	94,088	75,609
Total assets	787,295	768,916

The designation of total assets by region is based upon customer domicile.

5 Net interest income

in	2019	2018	2017
Net interest income (CHF million)			
Loans	7,179	6,770	5,979
Investment securities	9	80	47
Trading assets	7,340	7,131	6,697
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,926	2,856	2,515
Other	2,730	2,776	1,819
Interest and dividend income	20,184	19,613	17,057
Deposits	(3,055)	(2,287)	(1,354)
Short-term borrowings	(409)	(359)	(166)
Trading liabilities	(3,513)	(3,453)	(3,542)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(1,668)	(1,877)	(1,284)
Long-term debt	(3,412)	(3,816)	(3,722)
Other	(1,110)	(812)	(432)
Interest expense	(13,167)	(12,604)	(10,500)
Net interest income	7,017	7,009	6,557

6 Commissions and fees

in	2019	2018	2017
Commissions and fees (CHF million)			
Lending business	1,687	1,931	1,839
Investment and portfolio management	3,438	3,582	3,494
Other securities business	63	48	46
Fiduciary business	3,501	3,630	3,540
Underwriting	1,564	1,718	1,806
Brokerage	2,893	2,813	3,004
Underwriting and brokerage	4,457	4,531	4,810
Other services	1,513	1,798	1,628
Commissions and fees	11,158	11,890	11,817

7 Trading revenues

in	2019	2018	2017
Trading revenues (CHF million)			
Interest rate products	96	757	3,228
Foreign exchange products	668	367	1,989
Equity/index-related products	1,071	(307)	(2,888)
Credit products	(513)	(97)	(1,096)
Commodity and energy products	144	102	86
Other products	273	(198)	(2)
Trading revenues	1,739	624	1,317

Represents revenues on a product basis which are not representative of business results within segments, as segment results utilize financial instruments across various product types.

Trading revenues include revenues from trading financial assets and liabilities as follows:

- Equities;
- Commodities;
- Listed and OTC derivatives;
- Derivatives linked to funds of hedge funds and providing financing facilities to funds of hedge funds;
- Market making in the government bond and associated OTC derivative swap markets;
- Domestic, corporate and sovereign debt, convertible and non-convertible preferred stock and short-term securities such as floating rate notes and commercial paper (CP);
- Market making and positioning in foreign exchange products;
- Credit derivatives on investment grade and high yield credits;
- Trading and securitizing all forms of securities that are based on underlying pools of assets; and
- Life settlement contracts.

Trading revenues also include changes in the fair value of financial assets and liabilities elected to fair value under US GAAP. The main components include certain instruments from the following categories:

- Central bank funds purchased/sold;
- Securities purchased/sold under resale/repurchase agreements;
- Securities borrowing/lending transactions;
- Loans and loan commitments; and
- Customer deposits, short-term borrowings and long-term debt.

Managing the risks

As a result of the Group's broad involvement in financial products and markets, its trading strategies are correspondingly diverse and exposures are generally spread across a diversified range of risk factors and locations. The Group uses an economic capital limit structure to limit overall risk taking. The level of risk incurred by its divisions is further managed by a variety of factors and specific risk constraints, including consolidated controls over trading exposures. Also, as part of its overall risk management, the Group holds a portfolio of economic hedges. Hedges are impacted by market movements, similar to trading securities, and may result in gains or losses on the hedges which offset losses or gains on the portfolios they were designed to economically hedge. The Group manages its trading risk with regard to both market and credit risk. The Group uses market risk measurement and management methods capable of calculating comparable exposures across its many activities and employs focused tools that can model unique characteristics of certain instruments or portfolios.

The principal risk measurement methodology for trading book exposures is value-at-risk. Macroeconomic and specific hedging strategies are in place to manage and mitigate the market and credit risk in the trading book.

8 Other revenues

in	2019	2018	2017
Other revenues (CHF million)			
Noncontrolling interests without SEI	0	(2)	3
Loans held-for-sale	(14)	(4)	3
Long-lived assets held-for-sale	252	39	(18)
Equity method investments	232	228	233
Other investments	1,141 ¹	337	80
Other	959	799	908
Other revenues	2,570	1,397	1,209

¹ Includes SIX Group AG equity investment revaluation gain. Refer to "Note 18 – Other investments" for further information.

9 Provision for credit losses

in	2019	2018	2017
Provision for credit losses (CHF million)			
Provision for loan losses	284	201	190
Provision for lending-related and other exposures	40	44	20
Provision for credit losses	324	245	210

12 Restructuring expenses

The Group completed the three-year restructuring plan at the end of 2018 in connection with the implementation of the revised strategy. Restructuring expenses primarily included termination costs, expenses in connection with the acceleration of certain deferred compensation awards and real estate contract termination costs.

Restructuring expenses by segment

in	2018	2017
Restructuring expenses by segment (CHF million)		
Swiss Universal Bank	101	59
International Wealth Management	115	70
Asia Pacific	61	63
Global Markets	242	150
Investment Banking & Capital Markets	84	42
Strategic Resolution Unit	21	57
Corporate Center	2	14
Total restructuring expenses	626	455

10 Compensation and benefits

in	2019	2018	2017
Compensation and benefits (CHF million)			
Salaries and variable compensation	8,608	8,220	8,906
Social security	642	652	671
Other ¹	786	748	790
Compensation and benefits	10,036	9,620	10,367

¹ Includes pension-related expenses of CHF 437 million, CHF 411 million and CHF 432 million in 2019, 2018 and 2017, respectively, relating to service costs for defined benefit pension plans and employer contributions for defined contribution plans.

11 General and administrative expenses

in	2019	2018	2017
General and administrative expenses (CHF million)			
Occupancy expenses	1,090	964	1,000
IT, machinery and equipment	1,343	1,174	1,156
Provisions and losses	640	425	698
Travel and entertainment	337	338	321
Professional services	1,712	1,803	2,446
Amortization and impairment of other intangible assets	10	9	9
Other ¹	996	1,085	1,015
General and administrative expenses	6,128	5,798	6,645

¹ Includes pension-related expenses/(credits) of CHF (204) million, CHF (208) million and CHF (190) million in 2019, 2018 and 2017, respectively, relating to certain components of net periodic benefit costs for defined benefit plans.

Restructuring expenses by type

in	2018	2017
Restructuring expenses by type (CHF million)		
Compensation and benefits-related expenses	246	294
of which severance expenses	169	192
of which accelerated deferred compensation	77	102
General and administrative-related expenses	380	161
of which pension expenses	74	49
Total restructuring expenses	626	455

Restructuring provision

in	2019			2018			2017		
	Compen- sation and benefits	General and administrative expenses	Total	Compen- sation and benefits	General and administrative expenses	Total	Compen- sation and benefits	General and administrative expenses	Total
Restructuring provision (CHF million)									
Balance at beginning of period	156	190	346	196	110	306	217	94	311
Net additional charges ¹	–	–	–	169	219	388	192	88	280
Reclassifications	(156) ²	(190) ³	(346)	–	–	–	–	–	–
Utilization	–	–	–	(209)	(139)	(348)	(213)	(72)	(285)
Balance at end of period	0	0	0	156	190	346	196	110	306

¹ The following items for which expense accretion was accelerated in 2018 and 2017 due to the restructuring of the Group are not included in the restructuring provision: unsettled share-based compensation of CHF 56 million and CHF 71 million, respectively, which remain classified as a component of total shareholders' equity; unsettled pension obligations of CHF 74 million and CHF 49 million, respectively, which remain classified as pension liabilities; unsettled cash-based deferred compensation of CHF 21 million and CHF 31 million, respectively, which remain classified as compensation liabilities; and accelerated accumulated depreciation and impairment of CHF 87 million and CHF 24 million, respectively, which remain classified as premises and equipment. The settlement date for the unsettled share-based compensation remains unchanged at three years.

² In 2019, CHF 97 million was transferred to litigation provisions and CHF 59 million was transferred to other liabilities.

³ In 2019, CHF 167 million was transferred to right-of-use assets in accordance with ASU 2016-02 and CHF 23 million to other liabilities.

13 Earnings per share

in	2019	2018	2017
Basic net income/(loss) attributable to shareholders (CHF million)			
Net income/(loss) attributable to shareholders for basic earnings per share	3,419	2,024	(983)
Net income/(loss) attributable to shareholders for diluted earnings per share	3,419	2,024	(983)
Weighted-average shares outstanding (million)			
For basic earnings per share available for common shares	2,524.2	2,574.2	2,413.8
Dilutive share options and warrants	2.7	3.0	0.0
Dilutive share awards	59.9	53.8	0.0
For diluted earnings per share available for common shares ¹	2,586.8	2,631.0	2,413.8 ²
Earnings/(loss) per share available for common shares (CHF)			
Basic earnings/(loss) per share available for common shares	1.35	0.79	(0.41)
Diluted earnings/(loss) per share available for common shares	1.32	0.77	(0.41)

¹ Weighted-average potential common shares relating to instruments that were not dilutive for the respective periods (and therefore not included in the diluted earnings per share calculation above) but could potentially dilute earnings per share in the future were 7.9 million, 8.7 million and 9.8 million for 2019, 2018 and 2017, respectively.

² Due to the net loss in 2017, 2.9 million of weighted-average share options and warrants outstanding and 57.7 million of weighted-average share awards outstanding were excluded from the diluted earnings per share calculation, as the effect would be antidilutive.

14 Revenue from contracts with customers

Revenue is measured based on the consideration specified in a contract with a customer, and excludes any amounts collected on behalf of third parties. Taxes assessed by a governmental authority that are collected by the Group from a customer and both imposed on and concurrent with a specific revenue-producing transaction are excluded from revenue. The Group recognizes revenue when it satisfies a contractual performance obligation. Variable consideration is only included in the transaction price once it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the amount of variable consideration is subsequently resolved. Generally no significant judgement is required with respect to recording variable consideration.

If a fee is a fixed percentage of a variable account value at contract inception, recognition of the fee revenue is constrained as the contractual consideration is highly susceptible to change due to factors outside of the Group's influence. However, at each performance measurement period end (e.g., end-of-day, end-of-month, end-of-quarter), recognition of the cumulative amount of the consideration to which the Group is entitled is no longer constrained because it is calculated based on a known account value and the fee revenue is no longer variable.

Nature of services

The following is a description of the principal activities from which the Group generates its revenues from contracts with customers.

The performance obligations are typically satisfied as the services in the contract are rendered. The contract terms are generally such that they do not result in any contract assets. The contracts generally do not include a significant financing component or obligations for refunds or other similar obligations. Any variable consideration included in the transaction price is only recognized when the uncertainty of the amount is resolved and it is probable that a significant reversal of cumulative revenue recognized will not occur.

Credit Suisse's wealth management businesses provide investment services and solutions for clients, including asset management, investment advisory and investment management, wealth planning, and origination and structuring of sophisticated financing transactions. The Group receives for these services investment advisory and investment management fees which are generally reflected in the line item "Investment and portfolio management" in the table "Contracts with customers and disaggregation of revenues" below. Generally, the fee for the service provided is recognized over the period of time the service is provided.

The wealth management businesses also provide comprehensive advisory services and tailored investment and financing solutions to private, corporate and institutional clients. The nature of the services range from investment and wealth management activities, which are services rendered over a period of time according to the contract with the customer, to more transaction-specific

services such as brokerage and sales and trading services and the offer of client-tailored financing products. The services are provided as requested by Credit Suisse's clients, and the fee for the service requested is recognized once the service is provided.

The Group's asset management businesses offer investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals. Fund managers typically enter into a variety of contracts to provide investment management and other services. A fund manager may satisfy its performance obligation independently or may engage a third party to satisfy some or all of a performance obligation on the fund manager's behalf. Although the fund manager may have engaged a third party to provide inputs to the overall investment management services, the contractual obligation to provide investment management services to a customer remains the primary responsibility of the fund manager. As such, the fund manager is acting as a principal in the transaction. As a fund manager, the Group typically receives base management fees and may additionally receive performance-based management fees which are both recognized as "Investment and portfolio management" revenues in the table "Contracts with customers and disaggregation of revenues" below. Base management fees are generally calculated based on the net asset value (NAV) of the customer's investment, which can change during the performance period. Performance-based management fees are variable consideration received by the Group depending on the financial performance of the underlying fund. As both the base management fees and performance-based management fees are variable, the Group recognizes the fees once it is probable that a significant reversal of the revenue recognized will not occur and when the uncertainty of the amount is resolved. The estimate of these variable fees is constrained until the end of the performance measurement period. Generally, the uncertainty is resolved at the end of the performance measurement period and therefore no significant judgement is necessary when recording variable consideration. Under a clawback obligation provision, a fund manager may be required to return certain distributions received from a fund if a specific performance threshold, i.e., benchmark, is not achieved at the end of the lifetime of the fund. The contractual clawback obligation is an additional factor of uncertainty which is considered in the constraint assessment. If the performance-based management fee is earned but the clawback provision has not lapsed, the clawback obligation is accounted for as a refund liability.

The Group's capital markets businesses underwrite and sell securities on behalf of customers. Typically, the fees in these businesses are recognized at a single point in time once the transaction is complete, i.e., when the securities have been placed with investors, and recognized as underwriting revenue. All expenses incurred in satisfying the performance obligation are deferred and recognized once the transaction is complete. Generally Credit Suisse and other banks form a syndicate group to underwrite and place the securities for a customer. The Group may act as the lead or a participating member in the syndicate group. Each

member of the syndicate group, including the lead and participating underwriters, is acting as principal for their proportionate share of the syndication. As a result, the individual underwriters reflect their proportionate share of underwriting revenue and underwriting costs on a gross basis.

The Group also offers brokerage services in its investment banking businesses, including global securities sales, trading and execution, prime brokerage and investment research. For the services provided, such as the execution of client trades in securities or derivatives, the Group typically earns a brokerage commission when the trade is executed. The Group generally acts as an agent when buying or selling exchange-traded cash securities, exchange-traded derivatives or centrally cleared OTC derivatives on behalf of clients.

Credit Suisse's investment banking businesses provide services that include advisory services to clients in connection with corporate finance activities. The term "advisory" includes any type of service the Group provides in an advisory capacity. For these types of services, the Group typically receives a non-refundable retainer fee and/or a success fee which usually represents a percentage of the transaction proceeds if and when the corporate finance activity is completed. Additionally, the contract may contain a milestone fee such as an "announcement fee" that is payable upon the public announcement of the corporate finance activity. Typically the fees in the investment banking business are recognized at a specific point in time once it is determined that the performance obligation related to the transaction has been completed. A contract liability will be recorded if the Group receives a payment such as a retainer fee or announcement fee for an advisory service prior to satisfying the performance obligation. Advisory fees are recognized ratably over time in scenarios where the contracted service of the Group is to act as an advisor over a specified period not related to or dependent on the successful completion of a transaction. Revenues recognized from these services are reflected in the line item "Other Services" in the table below.

Contracts with customers and disaggregation of revenues

in	2019	2018
Contracts with customers (CHF million)		
Investment and portfolio management	3,438	3,582
Other securities business	63	48
Underwriting	1,564	1,718
Brokerage	2,891	2,829
Other services	1,521	1,902
Total revenues from contracts with customers	9,477	10,079

The table above differs from "Note 6 – Commissions and fees" as it includes only those contracts with customers that are in scope of ASC Topic 606 – Revenue from Contracts with Customers.

Contract balances

end of / in	2019	2018
Contract balances (CHF million)		
Contract receivables	880	791
Contract liabilities	53	56

Contract balances

in	4Q19	3Q19	2Q19	1Q19
Revenue recognized (CHF million)				
Revenue recognized in the reporting period included in the contract liabilities balance at the beginning of period	14	19	10	7

The Group did not recognize any revenues in the reporting period from performance obligations satisfied in previous periods.

There were no material net impairment losses on contract receivables in 2019 or 2018. The Group did not recognize any contract assets during 2019 or 2018.

Capitalized costs

The Group has not incurred costs to obtain a contract nor costs to fulfill a contract that are eligible for capitalization.

Remaining performance obligations

ASC Topic 606's practical expedient allows the Group to exclude from its remaining performance obligations disclosure any performance obligations which are part of a contract with an original expected duration of one year or less. Additionally any variable consideration, for which it is probable that a significant reversal in the amount of cumulative revenue recognized will occur when the uncertainty associated with the variable consideration is subsequently resolved, is not subject to the remaining performance obligations disclosure because such variable consideration is not included in the transaction price (e.g., investment management fees). Upon review, the Group determined that no material remaining performance obligations are in scope of the remaining performance obligations disclosure.

15 Securities borrowed, lent and subject to repurchase agreements

end of	2019	2018
Securities borrowed or purchased under agreements to resell (CHF million)		
Central bank funds sold and securities purchased under resale agreements	78,835	77,770
Deposits paid for securities borrowed	28,162	39,325
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	106,997	117,095
Securities lent or sold under agreements to repurchase (CHF million)		
Central bank funds purchased and securities sold under repurchase agreements	21,741	20,305
Deposits received for securities lent	5,792	4,318
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	27,533	24,623

Repurchase and reverse repurchase agreements represent collateralized financing transactions used to earn net interest income, increase liquidity or facilitate trading activity. These instruments are collateralized principally by government securities, money market instruments and corporate bonds and have terms ranging from overnight to a longer or unspecified period of time.

In the event of counterparty default, the reverse repurchase agreement or securities lending agreement provides the Group with the right to liquidate the collateral held. In the Group's normal course of business, a significant portion of the collateral received that may be sold or repledged has been sold or repledged as of December 31, 2019 and 2018.

16 Trading assets and liabilities

end of	2019	2018	end of	2019	2018
Trading assets (CHF million)			Cash collateral on derivatives instruments – netted (CHF million) ¹		
Debt securities	66,994	63,567 ¹	Cash collateral paid	20,695	20,216
Equity securities	64,542	46,463	Cash collateral received	14,633	13,213
Derivative instruments ²	17,731	18,312	Cash collateral on derivatives instruments – not netted (CHF million) ²		
Other	4,530	5,293	Cash collateral paid	4,570	7,057
Trading assets	153,797	133,635 ¹	Cash collateral received	7,457	6,903
Trading liabilities (CHF million)			1 Recorded as cash collateral netting on derivative instruments in Note 27 – Offsetting of financial assets and financial liabilities.		
Short positions	24,714	26,946	2 Recorded as cash collateral on derivative instruments in Note 22 – Other assets and other liabilities.		
Derivative instruments ²	13,472	15,223			
Trading liabilities	38,186	42,169			

¹ Residential and commercial mortgage-backed securities that were previously reported in investment securities have been reclassified to trading assets as these securities are carried at fair value under the fair value option.

² Amounts shown after counterparty and cash collateral netting.

17 Investment securities

end of		2019	2018 ¹
Investment securities (CHF million)			
Debt securities available-for-sale		1,006	1,479
Total investment securities		1,006	1,479

¹ Previously included residential and commercial mortgage-backed securities which have been reclassified to trading assets as these securities are carried at fair value under the fair value option.

Investment securities by type

	2019				2018			
end of	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Investment securities by type (CHF million)								
Debt securities issued by Swiss federal, cantonal or local governmental entities	2	0	0	2	2	0	0	2
Debt securities issued by foreign governments	163	8	0	171	821	7	0	828
Corporate debt securities	807	28	2	833	649	0	0	649
Debt securities available-for-sale	972	36	2	1,006	1,472	7	0	1,479¹

¹ Previously included residential and commercial mortgage-backed securities which have been reclassified to trading assets as these securities are carried at fair value under the fair value option.

Gross unrealized losses on investment securities and the related fair value

	Less than 12 months		12 months or more		Total	
end of	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses
2019 (CHF million)						
Corporate debt securities	204	2	0	0	204	2
Debt securities available-for-sale	204	2	0	0	204	2

Proceeds from sales, realized gains and realized losses from available-for-sale securities

	2019		2018		2017	
in	Debt securities	Equity securities ¹	Debt securities	Equity securities ¹	Debt securities	Equity securities
Additional information (CHF million)						
Proceeds from sales	6	–	255	–	7	7
Realized gains	0	–	8	–	0	0

¹ As a result of the adoption of ASU 2016-01 equity securities available-for-sale are now recognized in trading assets and no longer in investment securities.

Amortized cost, fair value and average yield of debt securities

	Debt securities available-for-sale		
end of	Amortized cost	Fair value	Average yield (in %)
2019 (CHF million, except where indicated)			
Due within 1 year	168	168	0.36
Due from 1 to 5 years	2	2	3.65
Due from 5 to 10 years	802	836	0.61
Total debt securities	972	1,006	0.57

18 Other investments

end of	2019	2018
Other investments (CHF million)		
Equity method investments	2,367	2,467
Equity securities (without a readily determinable fair value) ¹	2,148	1,207
of which at net asset value	409	530
of which at measurement alternative	274	227
of which at fair value	1,434	208
of which at cost less impairment	31	242
Real estate held-for-investment ²	99	79
Life finance instruments ³	1,052	1,137
Total other investments	5,666	4,890

¹ Includes private equity, hedge funds and restricted stock investments as well as certain investments in non-marketable mutual funds for which the Group has neither significant influence nor control over the investee.

² As of the end of 2019 and 2018, real estate held for investment included foreclosed or repossessed real estate of CHF 24 million and CHF 3 million, respectively, of which CHF 10 million and CHF 3 million, respectively were related to residential real estate.

³ Includes single premium immediate annuity contracts.

No impairments were recorded on real estate held-for-investments in 2019 and 2018, while in 2017, impairments of CHF 22 million were recorded. 2017 has been corrected.

Equity securities at measurement alternative – impairments and adjustments

in / end of	2019	Cumulative	2018
Impairments and adjustments (CHF million)			
Impairments and downward adjustments	(1)	(8)	(7) ¹
Upward adjustments	11	11	0

¹ Prior period has been corrected.

→ Refer to "Note 35 – Financial instruments" for further information on such investments.

In September 2019, we completed the first closing of the transfer announced in June 2019, which combined our open architecture investment fund platform, InvestLab, with Allfunds Group. The transaction included the transfer of the InvestLab legal entity and its related employees and service agreements. Credit Suisse became a minority shareholder in the combined business.

In December 2019, Credit Suisse completed a review of the accounting treatment of the shares that it holds in SIX Group AG and elected fair value accounting under US GAAP in respect of this equity investment.

Accumulated depreciation related to real estate held-for-investment amounted to CHF 34 million, CHF 31 million and CHF 140 million for 2019, 2018 and 2017, respectively.

19 Loans, allowance for loan losses and credit quality

Loans are divided into two portfolio segments, "consumer" and "corporate & institutional". Consumer loans are disaggregated into the classes of mortgages, loans collateralized by securities and consumer finance. Corporate and institutional loans are disaggregated into the classes of real estate, commercial and industrial loans, financial institutions, and governments and public institutions.

For financial reporting purposes, the carrying values of loans and related allowance for loan losses are presented in accordance with US GAAP and are not comparable with the regulatory credit risk exposures presented in our disclosures required under Pillar 3 of the Basel framework.

Loans	2019	2018
end of		
Loans (CHF million)		
Mortgages	109,579	107,845
Loans collateralized by securities	44,364	42,034
Consumer finance	4,401	3,905
Consumer	158,344	153,784
Real estate	29,220	26,727
Commercial and industrial loans	85,648	85,698
Financial institutions	20,367	18,494
Governments and public institutions	4,262	3,893
Corporate & institutional	139,497	134,812
Gross loans	297,841	288,596
of which held at amortized cost	285,179	273,723
of which held at fair value	12,662	14,873
Net (unearned income)/deferred expenses	(116)	(113)
Allowance for loan losses	(946)	(902)
Net loans	296,779	287,581
Gross loans by location		
Switzerland	163,133	160,444
Foreign	134,708	128,152
Gross loans	297,841	288,596
Impaired loans		
Non-performing loans	1,250	1,203
Non-interest-earning loans	260	300
Non-performing and non-interest-earning loans	1,510	1,503
Restructured loans	350	299
Potential problem loans	266	390
Other impaired loans	616	689
Gross impaired loans	2,126	2,192

Allowance for loan losses

	2019			2018			2017		
	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total
Allowance for loan losses (CHF million)									
Balance at beginning of period	187	715	902	220	662	882	216	722	938
Net movements recognized in statements of operations	63	221	284	19	182	201	54	136	190
Gross write-offs	(86)	(213)	(299)	(85)	(184)	(269)	(60)	(242)	(302)
Recoveries	9	16	25	21	37	58	12	41	53
Net write-offs	(77)	(197)	(274)	(64)	(147)	(211)	(48)	(201)	(249)
Provisions for interest	14	28	42	11	19	30	(1)	14	13
Foreign currency translation impact and other adjustments, net	(1)	(7)	(8)	1	(1)	0	(1)	(9)	(10)
Balance at end of period	186	760	946	187	715	902	220	662	882
of which individually evaluated for impairment	145	464	609	146	462	608	179	475	654
of which collectively evaluated for impairment	41	296	337	41	253	294	41	187	228
Gross loans held at amortized cost (CHF million)									
Balance at end of period	158,314	126,865	285,179	153,761	119,962	273,723	152,277	112,553	264,830
of which individually evaluated for impairment ¹	683	1,443	2,126	677	1,515	2,192	632	1,478	2,110
of which collectively evaluated for impairment	157,631	125,422	283,053	153,084	118,447	271,531	151,645	111,075	262,720

¹ Represents gross impaired loans both with and without a specific allowance.

Purchases, reclassifications and sales

in	2019			2018			2017		
	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total
Loans held at amortized cost (CHF million)									
Purchases ¹	18	2,478	2,496	0	2,163	2,163	0	3,381	3,381
Reclassifications from loans held-for-sale ²	0	11	11	0	1	1	0	63	63
Reclassifications to loans held-for-sale ³	0	3,138	3,138	1	2,351	2,352	0	7,407	7,407
Sales ³	0	3,001	3,001	1	2,267	2,268	0	7,051	7,051

¹ Includes drawdowns under purchased loan commitments.

² Includes loans previously reclassified to held-for-sale that were not sold and were reclassified back to loans held-to-maturity.

³ All loans held at amortized cost which are sold are reclassified to loans held-for-sale on or prior to the date of the sale.

Credit quality of loans held at amortized cost

Management monitors the credit quality of loans through its credit risk management processes, which are structured to assess, measure, monitor and manage risk on a consistent basis. This process requires careful consideration of proposed extensions of credit, the setting of specific limits, monitoring during the life of the exposure, active use of credit mitigation tools and a disciplined approach to recognizing credit impairment.

Management evaluates many factors when assessing the credit quality of loans. These factors include the volatility of default probabilities, rating changes, the magnitude of potential loss, internal risk ratings, and geographic, industry and other economic factors. For the purpose of credit quality disclosures, the Group uses detailed internal risk ratings which are aggregated to the credit quality indicators investment grade and non-investment grade.

The Group employs a set of credit ratings for the purpose of internally rating counterparties. Credit ratings are intended to reflect the risk of default of each counterparty. Ratings are assigned based on internally developed rating models and processes, which are subject to governance and internally independent validation procedures.

Internal ratings are assigned to all loans reflecting the Group's internal view of the credit quality of the counterparty. Internal ratings may differ from a counterparty's external ratings, if such ratings are available. Internal ratings are regularly reviewed depending on exposure type, client segment, collateral or event-driven developments. For the calculation of internal risk estimates (e.g., an estimate of expected loss in the event of a counterparty default) and risk-weighted assets, a probability of default (PD), loss given default (LGD) and exposure at default are assigned to each facility. These three parameters are primarily derived from internally developed statistical models that have been backtested against internal experience, validated by a function independent of the model owners on a regular basis and approved by the Group's

main regulators for application in the regulatory capital calculation in the advanced internal ratings-based approach (A-IRB) under the Basel framework. For the majority of clients and counterparties, internal ratings or PDs are calculated directly by proprietary statistical rating models. These models are based on internally compiled data comprising both quantitative factors (e.g., primarily balance sheet information for corporates and loan-to-value ratio and the borrower's income level for mortgage lending) and qualitative factors (e.g., credit histories from credit reporting bureaus) concentrating on economic trends and financial fundamentals. For statistical rating models calculating a PD, an equivalent rating based on the Standard & Poor's rating scale is assigned based on the PD band associated with each rating, which is used for disclosure purposes. For the remaining facilities where statistical rating models are not used, a PD is determined through an internal rating assigned on the basis of a structured expert approach. Credit officers make use of peer analyses, industry comparisons, external ratings and research as well as the judgment of credit experts for the purpose of their analysis. The PD for each internal rating is calibrated to historical default experience using internal data and external data from Standard & Poor's.

Reverse repurchase agreements are fully collateralized and in the event of counterparty default the reverse repurchase agreement provides the Group the right to liquidate the collateral held. Group risk management manages these instruments on the basis of the value of the underlying collateral, as opposed to loans, which are risk-managed on the ability of the counterparty to repay. Therefore the underlying collateral coverage is the most appropriate credit quality indicator for reverse repurchase agreements. As such, reverse repurchase agreements have not been included in the tables of this note.

The following tables present the Group's recorded investment in loans held at amortized cost by aggregated internal counterparty credit ratings investment grade and non-investment grade that are used as credit quality indicators for the purpose of this disclosure, and a related aging analysis.

Gross loans held at amortized cost by internal counterparty rating

end of	Investment grade	Non-investment grade		Total
	AAA to BBB	BB to C	D	
2019 (CHF million)				
Mortgages	99,613	9,604	362	109,579
Loans collateralized by securities	40,060	4,182	122	44,364
Consumer finance	1,527	2,677	167	4,371
Consumer	141,200	16,463	651	158,314
Real estate	20,524	7,674	125	28,323
Commercial and industrial loans	40,860	39,896	1,117	81,873
Financial institutions	13,267	2,122	47	15,436
Governments and public institutions	1,166	67	0	1,233
Corporate & institutional	75,817	49,759	1,289	126,865
Gross loans held at amortized cost	217,017	66,222	1,940	285,179
Value of collateral ¹	200,521	54,543	1,378	256,442
2018 (CHF million)				
Mortgages	97,404	10,046	395	107,845
Loans collateralized by securities	39,281	2,676	77	42,034
Consumer finance	1,465	2,247	170	3,882
Consumer	138,150	14,969	642	153,761
Real estate	19,461	6,494	110	26,065
Commercial and industrial loans	40,872	37,633	1,268	79,773
Financial institutions	10,715	2,138	86	12,939
Governments and public institutions	1,132	53	0	1,185
Corporate & institutional	72,180	46,318	1,464	119,962
Gross loans held at amortized cost	210,330	61,287	2,106	273,723
Value of collateral ¹	192,579	47,999	1,456	242,034

¹ Includes the value of collateral up to the amount of the outstanding related loans. For mortgages, the value of collateral is determined at the time of granting the loan and thereafter regularly reviewed according to the Group's risk management policies and directives, with maximum review periods determined by property type, market liquidity and market transparency.

Value of collateral

In the Group's private banking, corporate and institutional businesses, all collateral values for loans are regularly reviewed according to the Group's risk management policies and directives, with maximum review periods determined by collateral type, market liquidity and market transparency. For example, traded securities are revalued on a daily basis and property values are appraised over a period of more than one year considering the characteristics of the property, current developments in the relevant real estate market and the current level of credit exposure to the borrower. If the credit exposure to a borrower has changed significantly, in volatile markets or in times of increasing general market risk, collateral values may be appraised more frequently. Management judgment is applied in assessing whether markets

are volatile or general market risk has increased to a degree that warrants a more frequent update of collateral values. Movements in monitored risk metrics that are statistically different compared to historical experience are considered in addition to analysis of externally-provided forecasts, scenario techniques and macro-economic research. For impaired loans, the fair value of collateral is determined within 90 days of the date the impairment was identified and thereafter regularly revalued by Group credit risk management within the impairment review process.

In the Group's investment banking businesses, collateral-dependent loans are appraised on at least an annual basis, or when a loan-relevant event occurs.

Gross loans held at amortized cost – aging analysis

end of	Current				Past due		Total	Total
	Up to 30 days	31–60 days	61–90 days	More than 90 days	Total			
2019 (CHF million)								
Mortgages	109,190	83	16	9	281	389	109,579	
Loans collateralized by securities	44,232	79	0	2	51	132	44,364	
Consumer finance	3,826	283	61	43	158	545	4,371	
Consumer	157,248	445	77	54	490	1,066	158,314	
Real estate	28,094	95	10	2	122	229	28,323	
Commercial and industrial loans	80,606	528	62	71	606	1,267	81,873	
Financial institutions	15,300	85	1	3	47	136	15,436	
Governments and public institutions	1,207	26	0	0	0	26	1,233	
Corporate & institutional	125,207	734	73	76	775	1,658	126,865	
Gross loans held at amortized cost	282,455	1,179	150	130	1,265	2,724	285,179	
2018 (CHF million)								
Mortgages	107,364	155	23	10	293	481	107,845	
Loans collateralized by securities	41,936	21	0	0	77	98	42,034	
Consumer finance	3,383	286	35	32	146	499	3,882	
Consumer	152,683	462	58	42	516	1,078	153,761	
Real estate	25,914	63	4	0	84	151	26,065	
Commercial and industrial loans	78,439	378	96	82	778	1,334	79,773	
Financial institutions	12,768	66	19	3	83	171	12,939	
Governments and public institutions	1,172	13	0	0	0	13	1,185	
Corporate & institutional	118,293	520	119	85	945	1,669	119,962	
Gross loans held at amortized cost	270,976	982	177	127	1,461	2,747	273,723	

Impaired loans

Categories of impaired loans

In accordance with Group policies, impaired loans include non-performing loans, non-interest-earning loans, restructured loans and potential problem loans.

→ Refer to "Loans" in Note 1 – Summary of significant accounting policies for further information on categories of impaired loans.

As of December 31, 2019 and 2018, the Group did not have any material commitments to lend additional funds to debtors whose loan terms had been modified in troubled debt restructurings.

Gross impaired loans by category

end of	Non-performing and non-interest-earning loans			Other impaired loans			Total
	Non-performing	Non-interest-earning	Total	Re-structured	Potential problem	Total	
2019 (CHF million)							
Mortgages	329	8	337	25	30	55	392 ¹
Loans collateralized by securities	110	12	122	0	0	0	122
Consumer finance	164	4	168	0	1	1	169
Consumer	603	24	627	25	31	56	683
Real estate	151	4	155	0	2	2	157
Commercial and industrial loans	491	191	682	325	231	556	1,238
Financial institutions	5	41	46	0	2	2	48
Corporate & institutional	647	236	883	325	235	560	1,443
Gross impaired loans	1,250	260	1,510	350	266	616	2,126
2018 (CHF million)							
Mortgages	304	12	316	34	72	106	422 ¹
Loans collateralized by securities	62	13	75	0	3	3	78
Consumer finance	170	6	176	0	1	1	177
Consumer	536	31	567	34	76	110	677
Real estate	80	4	84	0	38	38	122
Commercial and industrial loans	547	223	770	265	272	537	1,307
Financial institutions	40	42	82	0	4	4	86
Corporate & institutional	667	269	936	265	314	579	1,515
Gross impaired loans	1,203	300	1,503	299	390	689	2,192

¹ As of December 31, 2019 and 2018, CHF 208 million and CHF 123 million, respectively, were related to consumer mortgages secured by residential real estate for which formal foreclosure proceedings according to local requirements of the applicable jurisdiction were in process.

Write-off and recovery of loans

Write-off of a loan occurs when it is considered certain that there is no possibility of recovering the outstanding principal. In the Group's investment banking businesses, a loan is written down to its net book value once the loan provision accounts for a substantial part of the loan notional amount, unless repayment of the loan is anticipated to occur within the next two quarters. In the Group's private banking, corporate and institutional businesses, write-offs are made, based on an individual counterparty assessment performed by Group credit risk management, if it is certain that parts of a loan or the entire loan will not be recoverable. For collateralized loans, the collateral is assessed and the unsecured exposure is written off. Write-offs on uncollateralized loans are based on the borrower's ability to pay back the outstanding loan out of free cash flow. The Group evaluates the recoverability of the loans granted, if a borrower is expected to default wholly or

partly on its contractual payment obligations or to meet these only with third-party support. Adjustments are made to reflect the estimated realizable value of the loan or any collateral. Triggers to assess the creditworthiness of a borrower to absorb the adverse developments include i) a default on interest or principal payments by more than 90 days, ii) a waiver of interest or principal by the Group, iii) a downgrade of the loan to non-interest-earning, iv) the collection of the debt through seizure order, bankruptcy proceedings or realization of collateral, or v) the insolvency of the borrower. Based on such assessment, Group credit risk management evaluates the need for write-offs individually and on an ongoing basis.

Recoveries of loans previously written off are recorded based on the cash or estimated fair value of other assets received.

Gross impaired loan details

end of	2019			2018		
	Recorded investment	Unpaid principal balance	Associated specific allowance	Recorded investment	Unpaid principal balance	Associated specific allowance
CHF million						
Mortgages	317	299	30	278	262	21
Loans collateralized by securities	122	108	22	77	63	35
Consumer finance	168	144	93	174	154	90
Consumer	607	551	145	529	479	146
Real estate	120	111	11	82	73	10
Commercial and industrial loans	939	900	416	773	742	401
Financial institutions	48	47	37	86	84	51
Corporate & institutional	1,107	1,058	464	941	899	462
Gross impaired loans with a specific allowance	1,714	1,609	609	1,470	1,378	608
Mortgages	75	75	–	144	144	–
Loans collateralized by securities	0	0	–	1	1	–
Consumer finance	1	1	–	3	3	–
Consumer	76	76	–	148	148	–
Real estate	37	37	–	40	40	–
Commercial and industrial loans	299	299	–	534	534	–
Financial institutions	0	0	–	0	0	–
Corporate & institutional	336	336	–	574	574	–
Gross impaired loans without specific allowance	412	412	–	722	722	–
Gross impaired loans	2,126	2,021	609	2,192	2,100	608
of which consumer	683	627	145	677	627	146
of which corporate & institutional	1,443	1,394	464	1,515	1,473	462

Gross impaired loan details (continued)

in	2019			2018			2017		
	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)
CHF million									
Mortgages	289	3	2	261	2	1	229	2	1
Loans collateralized by securities	76	2	0	92	1	1	116	1	1
Consumer finance	172	2	1	176	2	2	167	5	5
Consumer	537	7	3	529	5	4	512	8	7
Real estate	81	1	1	90	0	0	78	1	0
Commercial and industrial loans	818	22	7	917	14	5	1,163	17	5
Financial institutions	83	1	0	58	1	0	76	1	1
Governments and public institutions	0	0	0	0	0	0	5	0	0
Corporate & institutional	982	24	8	1,065	15	5	1,322	19	6
Gross impaired loans with a specific allowance	1,519	31	11	1,594	20	9	1,834	27	13
Mortgages	114	4	0	91	3	0	83	3	0
Loans collateralized by securities	0	0	0	1	0	0	7	0	0
Consumer finance	2	0	0	3	0	0	3	0	0
Consumer	116	4	0	95	3	0	93	3	0
Real estate	30	0	0	14	1	0	27	1	0
Commercial and industrial loans	395	9	1	292	16	1	271	11	1
Financial institutions	5	0	0	0	0	0	0	0	0
Corporate & institutional	430	9	1	306	17	1	298	12	1
Gross impaired loans without specific allowance	546	13	1	401	20	1	391	15	1
Gross impaired loans	2,065	44	12	1,995	40	10	2,225	42	14
of which consumer	653	11	3	624	8	4	605	11	7
of which corporate & institutional	1,412	33	9	1,371	32	6	1,620	31	7

Allowance for specifically identified credit losses on impaired loans

The Group considers a loan impaired when, based on current information and events, it is probable that the Group will be unable to collect the amounts due according to the contractual terms of the loan agreement. The Group performs an in-depth review and analysis of impaired loans considering factors such as recovery and exit options as well as collateral and counterparty risk. In general, all impaired loans are individually assessed. The trigger to detect an impaired loan is non-payment of interest, principal amounts or other contractual payment obligations. In addition, loans to corporates and institutions managed on the Swiss platform are regularly reviewed depending on exposure type, client segment, collateral or event-driven developments. All other corporate and institutional loans are reviewed at least annually based on the borrower's financial statements and any indications of difficulties they may experience. Loans that are not impaired, but which are of special concern due to changes in covenants, downgrades, negative financial news and other adverse developments, are either transferred to recovery management or included on a watch list. All loans on the watch list are reviewed at least

quarterly to determine whether they should be released, remain on the watch list or be moved to recovery management. For loans in recovery management from the Swiss platform, larger positions are reviewed on a quarterly basis for any event-driven changes. Otherwise, these loans are reviewed at least annually. All other loans in recovery management are reviewed on at least a quarterly basis. If an individual loan specifically identified for evaluation is considered impaired, the allowance is determined as a reasonable estimate of credit losses existing as of the end of the reporting period. Thereafter, the allowance is revalued by credit risk management at least annually or more frequently depending on the risk profile of the borrower or credit relevant events. For non-collateral-dependent impaired loans, an impairment is measured using the present value of estimated future cash flows, except that as a practical expedient an impairment may be measured based on a loan's observable market price. If the present value of estimated future cash flows is used, the impaired loan and related allowance are revalued to reflect the passage of time. For collateral-dependent impaired loans, an impairment is measured using the fair value of the collateral.

Restructured loans held at amortized cost

in	2019			2018			2017		
	Number of contracts	Recorded investment – pre-modification	Recorded investment – post-modification	Number of contracts	Recorded investment – pre-modification	Recorded investment – post-modification	Number of contracts	Recorded investment – pre-modification	Recorded investment – post-modification
CHF million, except where indicated									
Mortgages	1	7	7	5	29	29	0	0	0
Commercial and industrial loans	25	172	161	13	182	160	15	123	119
Total	26	179	168	18	211	189	15	123	119

Restructured loans held at amortized cost that defaulted within 12 months from restructuring

in	2019		2018		2017	
	Number of contracts	Recorded investment	Number of contracts	Recorded investment	Number of contracts	Recorded investment
CHF million, except where indicated						
Mortgages	1	13	1	8	0	0
Commercial and industrial loans	1	2	8	76	1	48
Total	2	15	9	84	1	48

In 2019, the loan modifications of the Group included a waiver of claims, interest rate concessions, extended loan repayment terms including the suspension of amortizations and repayments, the subordination of loans and refinancings at new terms.

20 Goodwill

	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Credit Suisse Group ¹
2019						
Gross amount of goodwill (CHF million)						
Balance at beginning of period	615	1,544	2,278	3,182	1,026	8,657
Foreign currency translation impact	(5)	(22)	(20)	(6)	(9)	(62)
Other	(3)	(28)	(10)	0	0	(41)
Balance at end of period	607	1,494	2,248	3,176	1,017	8,554
Accumulated impairment (CHF million)						
Balance at beginning of period	0	0	772	2,719	388	3,891
Balance at end of period	0	0	772	2,719	388	3,891
Net book value (CHF million)						
Net book value	607	1,494	1,476	457	629	4,663
2018						
Gross amount of goodwill (CHF million)						
Balance at beginning of period	610	1,544	2,268	3,178	1,021	8,633
Foreign currency translation impact	2	8	10	4	5	29
Other	3	(8)	0	0	0	(5)
Balance at end of period	615	1,544	2,278	3,182	1,026	8,657
Accumulated impairment (CHF million)						
Balance at beginning of period	0	0	772	2,719	388	3,891
Balance at end of period	0	0	772	2,719	388	3,891
Net book value (CHF million)						
Net book value	615	1,544	1,506	463	638	4,766

¹ Gross amount of goodwill and accumulated impairment include CHF 12 million related to legacy business transferred to the former Strategic Resolution Unit in 4Q15 and fully written off at the time of transfer, in addition to the divisions disclosed.

In accordance with US GAAP, the Group continually assesses whether or not there has been a triggering event requiring a review of goodwill. The Group determined in 2019 that goodwill triggering events occurred for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units.

Based on its goodwill impairment analysis performed as of December 31, 2019, the Group concluded that there was no impairment necessary for its Investment Banking & Capital Markets and Asia Pacific – Markets reporting units as the estimated fair values of these reporting units exceeded their related carrying values by 9% and 8%, respectively. The goodwill allocated to these reporting units has become more sensitive to an impairment as the valuation of these reporting units is highly correlated with client trading and investing activity. The Group concluded that the estimated fair value for all of its other reporting units with goodwill substantially exceeded their related carrying values and that no impairment was necessary as of December 31, 2019.

The carrying value of each reporting unit for the purpose of the goodwill impairment test is determined by considering the reporting units' risk-weighted assets usage, leverage ratio exposure, deferred tax assets, goodwill and intangible assets. Any residual equity, after considering the total of these elements, is allocated to the reporting units on a pro-rata basis.

In estimating the fair value of its reporting units, the Group applied a combination of the market approach and the income approach. Under the market approach, consideration was given to price to projected earnings multiples or price to book value multiples for similarly traded companies and prices paid in recent transactions that have occurred in its industry or in related industries. Under the income approach, a discount rate was applied that reflects the risk and uncertainty related to the reporting unit's projected cash flows, which were determined from the Group's financial plan.

In determining the estimated fair value, the Group relied upon its latest five-year strategic business plan which included significant management assumptions and estimates based on its view of current and future economic conditions and regulatory changes, and as approved by the Board of Directors.

The Group engaged the services of an independent valuation specialist to assist in the valuation of the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units as of December 31, 2019. The valuations were performed using a combination of the market approach and income approach.

The results of the impairment evaluation of each reporting unit's goodwill would be significantly impacted by adverse changes in the underlying parameters used in the valuation process. If actual

outcomes adversely differ by a significant margin from its best estimates of the key economic assumptions and associated cash flows applied in the valuation of the reporting unit, the Group could potentially incur material impairment charges in the future.

As a result of acquisitions, the Group has recorded goodwill as an asset in its consolidated balance sheets, the most significant component of which arose from the acquisition of Donaldson, Lufkin & Jenrette Inc. in 2000.

21 Other intangible assets

end of	2019			2018		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Other intangible assets (CHF million)						
Trade names/trademarks	27	(26)	1	27	(26)	1
Client relationships	20	(2)	18	43	(20)	23
Other	(3)	4	1	(2)	2	0
Total amortizing other intangible assets	44	(24)	20	68	(44)	24
Non-amortizing other intangible assets	271	–	271	195	–	195
of which mortgage servicing rights, at fair value	244	–	244	163	–	163
Total other intangible assets	315	(24)	291	263	(44)	219

Additional information

in	2019	2018	2017
Aggregate amortization and impairment (CHF million)			
Aggregate amortization	5	8	7
Impairment	5	1	2

Estimated amortization

Estimated amortization (CHF million)	
2020	3
2021	2
2022	2
2023	2
2024	2

22 Other assets and other liabilities

end of	2019	2018	end of	2019	2018
Other assets (CHF million)			Other liabilities (CHF million)		
Cash collateral on derivative instruments	4,570	7,057	Cash collateral on derivative instruments	7,457	6,903
Cash collateral on non-derivative transactions	428	465	Cash collateral on non-derivative transactions	516	514
Derivative instruments used for hedging	183	33	Derivative instruments used for hedging	48	8
Assets held-for-sale	8,971	6,744	Operating leases liabilities	3,213	–
of which loans ¹	8,886	6,630	Provisions	1,179	928
of which real estate ²	38	54	of which off-balance sheet risk	172	151
of which long-lived assets	47	60	Restructuring liabilities	0	346
Premises and equipment and right-of-use assets ³	7,832	4,838	Liabilities held for separate accounts	111	125
Assets held for separate accounts	111	125	Interest and fees payable	5,101	5,159
Interest and fees receivable	4,688	5,055	Current tax liabilities	678	927
Deferred tax assets	4,399	4,943	Deferred tax liabilities	523	438
Prepaid expenses	431	613	Failed sales	936	2,187
of which cloud computing arrangement implementation costs	27	–	Defined benefit pension and post-retirement plan liabilities	455	518
Failed purchases	1,643	1,283	Other	10,826	12,054
Defined benefit pension and post-retirement plan assets	2,878	1,794	Other liabilities	31,043	30,107
Other	3,475	4,509			
Other assets	39,609	37,459			

¹ Included as of December 31, 2019 and 2018 were CHF 800 million and CHF 687 million, respectively, in restricted loans, which represented collateral on secured borrowings.

² As of December 31, 2019 and 2018, real estate held-for-sale included foreclosed or repossessed real estate of CHF 9 million and CHF 13 million, respectively, of which CHF 9 million and CHF 10 million, respectively, were related to residential real estate.

³ Premises and equipment were previously presented separately in the consolidated balance sheet.

Premises, equipment and right-of-use assets

end of	2019	2018
Premises and equipment (CHF million)		
Buildings and improvements	1,436	1,617
Land	294	347
Leasehold improvements	1,855	1,880
Software	6,478	5,909
Equipment	1,887	1,805
Premises and equipment	11,950	11,558
Accumulated depreciation	(7,153)	(6,720)
Total premises and equipment, net	4,797	4,838
Right-of-use assets (CHF million)		
Right-of-use assets-operating leases	3,035	–
Total premises and equipment and right-of-use assets	7,832	4,838

Depreciation, amortization and impairment

end of	2019	2018	2017
CHF million			
Depreciation on premises and equipment	939	830	826
Impairment on premises and equipment	3	8	33
Amortization and impairment on right-of-use assets	324	–	–

→ Refer to "Note 23 Leases" for further information on right-of-use assets.

23 Leases

The Group enters into both lessee and lessor arrangements.

→ Refer to "Note 1 – Summary of significant accounting policies", "Note 2 – Recently issued accounting standards" and "Note 22 – Other assets and other liabilities" for further information.

Lessee arrangements

The Group primarily enters into operating leases. When a real estate lease has both lease and non-lease components, the Group allocates the consideration in the contract based on the relative standalone selling price. For all leases other than real estate leases, the Group does not separate lease and non-lease components. The Group's finance leases are not material.

The Group has entered into leases for real estate, equipment and vehicles.

Certain equipment and real estate have subsequently been sub-leased. Sublease income is recognized in other revenues.

Lease costs

end of	2019
Lease costs (CHF million)	
Operating lease costs	388
Variable lease costs	40
Sublease income	(78)
Net lease costs	350

From time to time, the Group enters into sale-leaseback transactions in which an asset is sold and immediately leased back. If specific criteria are met, the asset is derecognized from the balance sheet and an operating lease is recognized.

During 2019, the Group entered into 4 sale-leaseback transactions with lease terms ranging from 5 to 10 years. During 2018, the Group entered into one sale-leaseback transaction with a lease term of ten years. During 2017, the Group did not enter into any sale-leaseback transactions.

Other information

end of	2019
Other information (CHF million)	
Gains/(losses) on sale and leaseback transactions	274
Cash paid for amounts included in the measurement of operating lease liabilities recorded in operating cash flows	(464)
Right-of-use assets obtained in exchange of new operating lease liabilities ¹	102
Changes to right-of-use assets due to lease modifications for operating leases	221

¹ Includes right-of-use assets relating to changes in classification of scope of variable interest entities.

The weighted average remaining lease terms and discount rates are based on all outstanding operating leases as well as their respective lease terms and remaining lease obligations.

Weighted average remaining lease term and discount rate

end of	2019
Operating leases	
Remaining lease term (years)	12.2
Discount rate (%)	2.8

The following table reflects the undiscounted cash flows from leases for the next five years and thereafter, based on the expected lease term.

Maturities relating to operating lease arrangements

end of	2019
Maturity (CHF million)	
Due within 1 year	468
Due between 1 and 2 years	387
Due between 2 and 3 years	371
Due between 3 and 4 years	336
Due between 4 and 5 years	286
Thereafter	1,963
Operating lease obligations	3,811
Future interest payable	(598)
Operating lease liabilities	3,213

Maturities relating to operating lease commitments

end of	2018
Maturity (CHF million)	
2019	503
2020	484
2021	381
2022	354
2023	320
Thereafter	2,209
Future operating lease commitments	4,251
Less minimum non-cancellable sublease rentals	(190)
Total net future minimum lease commitments	4,061

Upon adoption of ASU 2016-02 and its subsequent amendments on January 1, 2019, the Group revised the future operating lease commitments to reflect the expected term of the leases. Previously, the operating lease commitments were based on the minimum contractual term of the lease.

Lessor arrangements

The Group enters into sales-type, direct financing and operating leases for equipment, vehicles, real estate and residential solar panels. When a real estate lease has both lease and non-lease components, the Group allocates the consideration in the contract based on the relative standalone selling price. For all leases other than real estate leases, the Group does not separate lease and non-lease components.

As of December 31, 2019, the Group had approximately CHF 0.8 billion of residual value guarantees associated with lessor arrangements.

The Group's risk of loss relating to the residual value of leased assets is mitigated through contractual arrangements with manufacturers or suppliers. Leased assets are also monitored through projections of the residual values at lease origination and periodic reviews of residual values.

→ Refer to "Note 19 – Loans, allowance for loan losses and credit quality" for further information.

Net investments

end of 2019	Sales-type leases	Direct financing leases
Net investments (CHF million)		
Lease receivables	526	2,573
Unguaranteed residual values	28	440
Valuation allowances	(3)	(15)
Total net investments	551	2,998

Maturities relating to lessor arrangements

end of 2019	Sales-type leases	Direct financing leases	Operating leases
Maturity (CHF million)			
Due within 1 year	221	917	54
Due between 1 and 2 years	129	689	47
Due between 2 and 3 years	90	550	42
Due between 3 and 4 years	53	391	39
Due between 4 and 5 years	25	136	38
Thereafter	37	110	103
Total	555	2,793	323
Future interest receivable	(29)	(220)	–
Lease receivables	526	2,573	–

The Group elected the practical expedient to not evaluate whether certain sales taxes and other similar taxes are lessor cost or lessee cost and excludes these costs from being reported as lease income with an associated expense.

The Group enters into leases with fixed or variable lease payments, or with lease payments that depend on an index or a referenced rate which are included in the net investment in the lease at lease commencement, as such payments are considered unavoidable. Other variable lease payments, as well as subsequent changes in an index or referenced rate, are excluded from the net investment in the lease. Lease payments are recorded when due and payable by the lessee.

Lease income

end of	2019
Lease income (CHF million)	
Interest income on sales-type leases	13
Interest income on direct financing leases	97
Lease income from operating leases	103
Variable lease income	3
Total lease income	216

Certain leases include i) termination options that allow lessees to terminate the leases within three months of the commencement date, with a notice period of 30 days; ii) termination options that allow the Group to terminate the lease but do not provide the lessee with the same option; iii) termination penalties; iv) options to prepay the payments for the remaining lease term; or v) options that permit the lessee to purchase the leased asset at market value or at the greater of market value and the net present value of the remaining payments.

The Group may enter into vehicle leases as a lessor with members of the Board of Directors or the Executive Board. The terms of such leases with members of the Board of Directors are similar to those with third parties and the terms of such leases with members of the Executive Board reflect standard employee conditions.

24 Deposits

end of	2019			2018		
	Switzerland	Foreign	Total	Switzerland	Foreign	Total
Deposits (CHF million)						
Non-interest-bearing demand deposits	2,665	1,744	4,409	2,713	1,979	4,692
Interest-bearing demand deposits	118,566	30,552	149,118	125,985	27,794	153,779
Savings deposits	64,304	46	64,350	63,924	48	63,972
Time deposits	27,539	155,111	182,650 ¹	31,681	125,021	156,702 ¹
Total deposits	213,074	187,453	400,527²	224,303	154,842	379,145²
of which due to banks	–	–	16,744	–	–	15,220
of which customer deposits	–	–	383,783	–	–	363,925

The designation of deposits in Switzerland versus foreign deposits is based upon the location of the office where the deposit is recorded.

¹ Included CHF 182,036 million and CHF 156,562 million as of December 31, 2019 and 2018, respectively, of the Swiss franc equivalent of individual time deposits greater than USD 100,000 in Switzerland and foreign offices.

² Not included as of December 31, 2019 and 2018 were CHF 116 million and CHF 137 million, respectively, of overdrawn deposits reclassified as loans.

25 Long-term debt

end of	2019	2018
Long-term debt (CHF million)		
Senior	108,667	136,392
Subordinated	41,667	16,152
Non-recourse liabilities from consolidated VIEs	1,671	1,764
Long-term debt	152,005	154,308
of which reported at fair value	70,331	63,935
of which structured notes	49,435	48,064
end of	2019	2018
Structured notes by product (CHF million)		
Equity	31,666	30,698
Fixed income	13,558	13,128
Credit	3,734	3,898
Other	477	340
Total structured notes	49,435	48,064

Total long-term debt includes debt issuances managed by Treasury that do not contain derivative features (vanilla debt), as well as hybrid debt instruments with embedded derivatives, which are issued as part of the Group's structured product activities.

Long-term debt includes both Swiss franc and foreign exchange denominated fixed and variable rate bonds.

The interest rate ranges presented in the table below are based on the contractual terms of the Group's vanilla debt. Interest rate ranges for future coupon payments on structured products for which fair value has been elected are not included in the table below as these coupons are dependent upon the embedded derivative and prevailing market conditions at the time each coupon is paid. In addition, the effects of derivatives used for hedging are not included in the interest rate ranges on the associated debt.

Group-internal funding related to loss-absorbing instruments has been aligned to international standards for internal TLAC instruments and to the new article 126b of the Swiss Capital Adequacy Ordinance, effective January 1, 2020. Due to this alignment, the bail-in debt instruments issued by Credit Suisse AG to Credit Suisse Group Funding (Guernsey) Limited, a non-consolidated funding entity, have been permanently subordinated in 2019. As of December 31, 2019, the carrying value of these newly subordinated notes issued was CHF 22.0 billion.

Long-term debt by maturities

end of	2020	2021	2022	2023	2024	Thereafter	Total
Group parent company (CHF million)							
Senior debt							
Fixed rate	0	0	0	2,661	1,293	13,270	17,224
Variable rate	0	0	54	924	1,861	163	3,002
Interest rate (range in %) ¹	–	–	2.6	0.6–3.6	2.1–4.2	0.7–5.4	–
Subordinated debt							
Fixed rate	0	0	1,553	4,769	3,421	3,928	13,671
Interest rates (range in %) ¹	–	–	7.1	3.9–7.5	3.5–6.3	3.0–7.3	–
Subtotal – Group parent company	0	0	1,607	8,354	6,575	17,361	33,897
Subsidiaries (CHF million)							
Senior debt							
Fixed rate	5,437	8,114	2,998	1,941	3,849	13,049	35,388
Variable rate	12,824	9,588	6,392	2,938	4,346	16,965	53,053
Interest rates (range in %) ¹	0.1–22.5	0.1–9.6	0.1–9.6	0.1–2.2	0.1–3.6	0.0–7.1	–
Subordinated debt							
Fixed rate	5,557	1,461	5,277	5,503	23	8,953	26,774
Variable rate	54	968	195	0	5	0	1,222
Interest rates (range in %) ¹	0.6–7.0	3.2–4.7	0.1–7.5	1.0–6.5	0.4–5.7	0.9–8.0	–
Non-recourse liabilities from consolidated VIEs							
Fixed rate	0	148	233	0	0	0	381
Variable rate	24	18	22	23 ²	2 ²	1,201	1,290
Interest rates (range in %) ¹	7.0	2.2–10.3	2.4–2.9	–	–	0.0–10.7	–
Subtotal – Subsidiaries	23,896	20,297	15,117	10,405	8,225	40,168	118,108
Total long-term debt	23,896	20,297	16,724	18,759	14,800	57,529	152,005
of which structured notes	12,178	8,687	5,222	2,844	4,033	16,471	49,435

The maturity of perpetual debt is based on the earliest callable date. The maturity of all other debt is based on contractual maturity and includes certain structured notes that have mandatory early redemption features based on stipulated movements in markets or the occurrence of a market event. Within this population there are approximately CHF 3.6 billion of such notes with a contractual maturity of greater than one year that have an observable likelihood of redemption occurring within one year based on a modelling assessment.

¹ Excludes structured notes for which fair value has been elected as the related coupons are dependent upon the embedded derivatives and prevailing market conditions at the time each coupon is paid.

² Reflects equity linked notes, where the payout is not fixed.

The Group and the Bank maintain a shelf registration statement with the SEC, which allows each entity to issue, from time to time, senior and subordinated debt securities, warrants and guarantees.

→ Refer to "Note 41 – Subsidiary guarantee information" for further information on subsidiary guarantees.

The Group maintains a euro medium-term note program that allows the Bank to issue senior debt securities and that allows Credit Suisse Group AG to issue securities, which contain certain features that are designed to allow for statutory bail-in by the

Swiss Financial Market Supervisory Authority FINMA (FINMA) under Swiss banking laws and regulations.

The Group maintains two senior debt programs that allow the Group to issue senior debt securities with certain features that are designed to allow for statutory bail-in by FINMA.

The Bank maintains a JPY 500 billion Samurai shelf registration statement that allows it to issue, from time to time, senior and subordinated debt securities.

26 Accumulated other comprehensive income and additional share information

Accumulated other comprehensive income

	Gains/ (losses) on cash flow hedges	Cumulative translation adjustments	Unrealized gains/ (losses) on securities	Actuarial gains/ (losses)	Net prior service credit/ (cost)	Gains/ (losses) on liabilities relating to credit risk	AOCI
2019 (CHF million)							
Balance at beginning of period	(72)	(13,442)	10	(3,974)	387	(890)	(17,981)
Increase/(decrease)	65	(1,015)	20	44	338	(2,053)	(2,601)
Increase/(decrease) due to equity method investments	10	(18)	0	0	0	0	(8)
Reclassification adjustments, included in net income/(loss)	25	6	0	282	(121)	193	385
Cumulative effect of accounting changes, net of tax ¹	0	0	0	(42)	0	(22)	(64)
Total increase/(decrease)	100	(1,027)	20	284	217	(1,882)	(2,288)
Balance at end of period	28	(14,469)	30	(3,690)	604	(2,772)	(20,269)
2018 (CHF million)							
Balance at beginning of period	(62)	(13,119)	48	(3,583)	522	(2,544)	(18,738)
Increase/(decrease)	(114)	(342)	(10)	(710)	(26)	1,605	403
Increase/(decrease) due to equity method investments	(10)	0	0	0	0	0	(10)
Reclassification adjustments, included in net income/(loss)	114	19	(7)	319	(109)	49	385
Cumulative effect of accounting changes, net of tax	0	0	(21)	0	0	0	(21)
Total increase/(decrease)	(10)	(323)	(38)	(391)	(135)	1,654	757
Balance at end of period	(72)	(13,442)	10	(3,974)	387	(890)	(17,981)
2017 (CHF million)							
Balance at beginning of period	(35)	(12,095)	61	(4,278)	643	(568)	(16,272)
Increase/(decrease)	(61)	(1,054)	(13)	337	0	(2,008)	(2,799)
Increase/(decrease) due to equity method investments	1	0	0	0	0	0	1
Reclassification adjustments, included in net income/(loss)	33	30	0	358	(121)	32	332
Total increase/(decrease)	(27)	(1,024)	(13)	695	(121)	(1,976)	(2,466)
Balance at end of period	(62)	(13,119)	48	(3,583)	522	(2,544)	(18,738)

¹ Reflects the reclassification from AOCI to retained earnings as a result of the adoption of ASU 2018-02. Refer to "Note 2 – Recently issued accounting standards" for further information.

→ Refer to "Note 28 – Tax" and "Note 31 – Pension and other post-retirement benefits" for income tax expense/(benefit) on the movements of accumulated other comprehensive income/(loss).

Details of significant reclassification adjustments

in	2019	2018	2017
Reclassification adjustments, included in net income/(loss) (CHF million)			
Cumulative translation adjustments			
Reclassification adjustments ¹	6	19	30
Actuarial gains/(losses)			
Amortization of recognized actuarial losses ²	355	396	444
Tax expense/(benefit)	(73)	(77)	(86)
Net of tax	282	319	358
Net prior service credit/(cost)			
Amortization of recognized prior service credit/(cost) ²	(153)	(138)	(153)
Tax expense/(benefit)	32	29	32
Net of tax	(121)	(109)	(121)

¹ Includes net releases of CHF 21 million on the liquidation of Credit Suisse Securities (Johannesburg) Proprietary Limited in 2018 and net releases of CHF 23 million on the sale of Credit Suisse (Monaco) S.A.M. in 2017. These were reclassified from cumulative translation adjustments and included in net income in other revenues.

² These components are included in the computation of total benefit costs. Refer to "Note 31 – Pension and other post-retirement benefits" for further information.

Additional share information

	2019	2018	2017
Common shares issued			
Balance at beginning of period	2,556,011,720	2,556,011,720	2,089,897,378
Issuance of common shares	0	0	466,114,342
Balance at end of period	2,556,011,720	2,556,011,720	2,556,011,720
Treasury shares			
Balance at beginning of period	(5,427,691)	(5,757,666)	0
Sale of treasury shares	795,576,688	770,559,108	809,307,879
Repurchase of treasury shares	(951,743,509)	(816,841,331)	(857,049,873)
Share-based compensation	41,832,701	46,612,198	41,984,328
Balance at end of period	(119,761,811)	(5,427,691)	(5,757,666)
Common shares outstanding			
Balance at end of period	2,436,249,909 ¹	2,550,584,029 ¹	2,550,254,054

¹ At par value CHF 0.04 each, fully paid. In addition to the treasury shares, a maximum of 653,000,000 unissued shares (conditional, conversion and authorized capital) were available for issuance without further approval of the shareholders. 111,193,477 of these shares were reserved for capital instruments.

27 Offsetting of financial assets and financial liabilities

The disclosures set out in the tables below include derivatives, reverse repurchase and repurchase agreements, and securities lending and borrowing transactions that:

- are offset in the Group's consolidated balance sheets; or
- are subject to an enforceable master netting agreement or similar agreement (enforceable master netting agreements), irrespective of whether they are offset in the Group's consolidated balance sheets.

Similar agreements include derivative clearing agreements, global master repurchase agreements and global master securities lending agreements.

Derivatives

The Group transacts bilateral OTC derivatives (OTC derivatives) mainly under International Swaps and Derivatives Association (ISDA) Master Agreements and Swiss Master Agreements for OTC derivative instruments. These agreements provide for the net settlement of all transactions under the agreement through a single payment in the event of default or termination under the agreement. They allow the Group to offset balances from derivative assets and liabilities as well as the receivables and payables to related cash collateral transacted with the same counterparty. Collateral for OTC derivatives is received and provided in the form of cash and marketable securities. Such collateral may be subject to the standard industry terms of an ISDA Credit Support Annex. The terms of an ISDA Credit Support Annex provide that securities received or provided as collateral may be pledged or sold during the term of the transactions and must be returned upon maturity of the transaction. These terms also give each counterparty the right to terminate the related transactions upon the other counterparty's failure to post collateral. Financial collateral received or pledged for OTC derivatives may also be subject to collateral agreements which restrict the use of financial collateral.

For derivatives transacted with exchanges (exchange-traded derivatives) and central clearing counterparties (OTC-cleared

derivatives), positive and negative replacement values (PRV/NRV) and related cash collateral may be offset if the terms of the rules and regulations governing these exchanges and central clearing counterparties permit such netting and offset.

Where no such agreements or terms exist, fair values are recorded on a gross basis.

Exchange-traded derivatives or OTC-cleared derivatives, which are fully margined and for which the daily margin payments constitute settlement of the outstanding exposure, are not included in the offsetting disclosures because they are not subject to offsetting due to the daily settlement. The daily margin payments, which are not settled until the next settlement cycle is conducted, are presented in brokerage receivables or brokerage payables. The notional amount for these daily settled derivatives is included in the fair value of derivative instruments table in "Note 32 – Derivatives and hedging activities".

Under US GAAP, the Group elected to account for substantially all financial instruments with an embedded derivative that is not considered clearly and closely related to the host contract at fair value. There is an exception for certain bifurcated hybrid debt instruments which the Group did not elect to account for at fair value. However, these bifurcated embedded derivatives are generally not subject to enforceable master netting agreements and are not recorded as derivative instruments under trading assets and liabilities or other assets and other liabilities. Information on bifurcated embedded derivatives has therefore not been included in the offsetting disclosures.

The following table presents the gross amount of derivatives subject to enforceable master netting agreements by contract and transaction type, the amount of offsetting, the amount of derivatives not subject to enforceable master netting agreements and the net amount presented in the consolidated balance sheets.

Offsetting of derivatives

end of	2019		2018	
	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Gross derivatives subject to enforceable master netting agreements (CHF billion)				
OTC-cleared	3.8	3.0	5.5	4.8
OTC	63.7	61.9	63.4	60.6
Exchange-traded	0.3	0.2	0.2	0.3
Interest rate products	67.8	65.1	69.1	65.7
OTC-cleared	0.1	0.2	0.1	0.2
OTC	21.0	25.4	26.9	31.1
Foreign exchange products	21.1	25.6	27.0	31.3
OTC	10.1	10.4	10.2	10.2
Exchange-traded	5.3	5.0	11.8	14.2
Equity/index-related products	15.4	15.4	22.0	24.4
OTC-cleared	2.8	3.0	1.5	1.6
OTC	3.1	4.0	3.8	4.9
Credit derivatives	5.9	7.0	5.3	6.5
OTC	1.2	0.5	1.2	0.4
Exchange-traded	0.0	0.0	0.1	0.3
Other products ¹	1.2	0.5	1.3	0.7
OTC-cleared	6.7	6.2	7.1	6.6
OTC	99.1	102.2	105.5	107.2
Exchange-traded	5.6	5.2	12.1	14.8
Total gross derivatives subject to enforceable master netting agreements	111.4	113.6	124.7	128.6
Offsetting (CHF billion)				
OTC-cleared	(6.0)	(5.3)	(5.9)	(5.8)
OTC	(87.0)	(93.6)	(92.6)	(99.0)
Exchange-traded	(4.9)	(4.9)	(11.6)	(12.5)
Offsetting	(97.9)	(103.8)	(110.1)	(117.3)
of which counterparty netting	(83.2)	(83.2)	(96.9)	(96.9)
of which cash collateral netting	(14.7)	(20.6)	(13.2)	(20.4)
Net derivatives presented in the consolidated balance sheets (CHF billion)				
OTC-cleared	0.7	0.9	1.2	0.8
OTC	12.1	8.6	12.9	8.2
Exchange-traded	0.7	0.3	0.5	2.3
Total net derivatives subject to enforceable master netting agreements	13.5	9.8	14.6	11.3
Total derivatives not subject to enforceable master netting agreements ²	4.4	3.7	3.7	3.9
Total net derivatives presented in the consolidated balance sheets	17.9	13.5	18.3	15.2
of which recorded in trading assets and trading liabilities	17.7	13.5	18.3	15.2
of which recorded in other assets and other liabilities	0.2	0.0	0.0	0.0

¹ Primarily precious metals, commodity and energy products.

² Represents derivatives where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

Reverse repurchase and repurchase agreements and securities lending and borrowing transactions

Reverse repurchase and repurchase agreements are generally covered by global master repurchase agreements. In certain situations, for example, in the event of default, all contracts under the agreements are terminated and are settled net in one single payment. Global master repurchase agreements also include payment or settlement netting provisions in the normal course of business that state that all amounts in the same currency payable by each party to the other under any transaction or otherwise under the global master repurchase agreement on the same date shall be set off.

Transactions under such agreements are netted in the consolidated balance sheets if they are with the same counterparty, have the same maturity date, settle through the same clearing institution and are subject to the same enforceable master netting agreement. The amounts offset are measured on the same basis as the underlying transaction (i.e., on an accrual basis or fair value basis).

Securities lending and borrowing transactions are generally executed under global master securities lending agreements with netting terms similar to ISDA Master Agreements. In certain situations, for example in the event of default, all contracts under the agreement are terminated and are settled net in one single

payment. Transactions under these agreements are netted in the consolidated balance sheets if they meet the same right of offset criteria as for reverse repurchase and repurchase agreements. In general, most securities lending and borrowing transactions do not meet the criterion of having the same settlement date specified at inception of the transaction, and therefore they are not eligible for netting in the consolidated balance sheets. However, securities lending and borrowing transactions with explicit maturity dates may be eligible for netting in the consolidated balance sheets.

Reverse repurchase and repurchase agreements are collateralized principally by government securities, money market instruments and corporate bonds and have terms ranging from overnight to a longer or unspecified period of time. In the event of counterparty default, the reverse repurchase agreement or securities

lending agreement provides the Group with the right to liquidate the collateral held. As is the case in the Group's normal course of business, a significant portion of the collateral received that may be sold or repledged was sold or repledged as of December 31, 2019 and December 31, 2018. In certain circumstances, financial collateral received may be restricted during the term of the agreement (e.g., in tri-party arrangements).

The following table presents the gross amount of securities purchased under resale agreements and securities borrowing transactions subject to enforceable master netting agreements, the amount of offsetting, the amount of securities purchased under resale agreements and securities borrowing transactions not subject to enforceable master netting agreements and the net amount presented in the consolidated balance sheets.

Offsetting of securities purchased under resale agreements and securities borrowing transactions

end of	2019			2018		
	Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
Securities purchased under resale agreements and securities borrowing transactions (CHF billion)						
Securities purchased under resale agreements	80.6	(10.9)	69.7	86.6	(20.9)	65.7
Securities borrowing transactions	12.3	(0.5)	11.8	12.6	(2.2)	10.4
Total subject to enforceable master netting agreements	92.9	(11.4)	81.5	99.2	(23.1)	76.1
Total not subject to enforceable master netting agreements¹	25.5	–	25.5	41.0	–	41.0
Total	118.4	(11.4)	107.0²	140.2	(23.1)	117.1²

¹ Represents securities purchased under resale agreements and securities borrowing transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

² CHF 85,556 million and CHF 81,818 million of the total net amount as of the end of 2019 and 2018, respectively, are reported at fair value.

The following table presents the gross amount of securities sold under repurchase agreements and securities lending transactions subject to enforceable master netting agreements, the amount of offsetting, the amount of securities sold under repurchase

agreements and securities lending transactions not subject to enforceable master netting agreements and the net amount presented in the consolidated balance sheets.

Offsetting of securities sold under repurchase agreements and securities lending transactions

end of	2019			2018		
	Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
Securities sold under repurchase agreements and securities lending transactions (CHF billion)						
Securities sold under repurchase agreements	28.0	(11.4)	16.6	42.3	(22.5)	19.8
Securities lending transactions	5.5	0.0	5.5	4.2	(0.6)	3.6
Obligation to return securities received as collateral, at fair value	39.0	0.0	39.0	39.4	0.0	39.4
Total subject to enforceable master netting agreements	72.5	(11.4)	61.1	85.9	(23.1)	62.8
Total not subject to enforceable master netting agreements¹	2.0	–	2.0	3.5	–	3.5
Total	74.5	(11.4)	63.1	89.4	(23.1)	66.3
of which securities sold under repurchase agreements and securities lending transactions	34.3	(11.4)	22.9 ²	47.7	(23.1)	24.6 ²
of which obligation to return securities received as collateral, at fair value	40.2	0.0	40.2	41.7	0.0	41.7

¹ Represents securities sold under repurchase agreements and securities lending transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

² CHF 10,715 million and CHF 14,828 million of the total net amount as of the end of 2019 and 2018, respectively, are reported at fair value.

The following table presents the net amount presented in the consolidated balance sheets of financial assets and liabilities subject to enforceable master netting agreements and the gross amount of financial instruments and cash collateral not offset in the consolidated balance sheets. The table excludes derivatives, reverse repurchase and repurchase agreements and securities

lending and borrowing transactions not subject to enforceable master netting agreements where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place. Net exposure reflects risk mitigation in the form of collateral.

Amounts not offset in the consolidated balance sheets

end of	2019				2018			
	Net book value	Financial instruments ¹	Cash collateral received/pledged ¹	Net exposure	Net book value	Financial instruments ¹	Cash collateral received/pledged ¹	Net exposure
Financial assets subject to enforceable master netting agreements (CHF billion)								
Derivatives	13.5	4.4	0.0	9.1	14.6	4.5	0.1	10.0
Securities purchased under resale agreements	69.7	69.7	0.0	0.0	65.7	65.7	0.0	0.0
Securities borrowing transactions	11.8	11.2	0.0	0.6	10.4	10.0	0.0	0.4
Total financial assets subject to enforceable master netting agreements	95.0	85.3	0.0	9.7	90.7	80.2	0.1	10.4
Financial liabilities subject to enforceable master netting agreements (CHF billion)								
Derivatives	9.8	1.7	0.0	8.1	11.3	1.4	0.0	9.9
Securities sold under repurchase agreements	16.6	16.6	0.0	0.0	19.8	19.7	0.1	0.0
Securities lending transactions	5.5	4.5	0.0	1.0	3.6	3.2	0.0	0.4
Obligation to return securities received as collateral, at fair value	39.0	33.0	0.0	6.0	39.4	34.3	0.0	5.1
Total financial liabilities subject to enforceable master netting agreements	70.9	55.8	0.0	15.1	74.1	58.6	0.1	15.4

¹ The total amount reported in financial instruments (recognized financial assets and financial liabilities and non-cash financial collateral) and cash collateral is limited to the amount of the related instruments presented in the consolidated balance sheets and therefore any over-collateralization of these positions is not included.

Net exposure is subject to further credit mitigation through the transfer of the exposure to other market counterparties by the use of credit default swaps (CDS) and credit insurance contracts.

Therefore the net exposure presented in the table above is not representative of the Group's counterparty exposure.

28 Tax

Details of current and deferred taxes

in	2019	2018	2017
Current and deferred taxes (CHF million)			
Switzerland	175	135	82
Foreign	531	426	421
Current income tax expense	706	561	503
Switzerland	171	479	244
Foreign	418	321	1,994
Deferred income tax expense	589	800	2,238
Income tax expense	1,295	1,361	2,741
Income tax expense/(benefit) reported in shareholders' equity related to:			
Gains/(losses) on cash flow hedges	13	(28)	(24)
Cumulative translation adjustment	(4)	(7)	1
Unrealized gains/(losses) on securities	7	(5)	1
Actuarial gains/(losses)	99	(102)	172
Net prior service credit/(cost)	58	(33)	(32)
Share-based compensation and treasury shares	(5)	1	3

Reconciliation of taxes computed at the Swiss statutory rate

in	2019	2018	2017
Income/(loss) before taxes (CHF million)			
Switzerland	2,985	1,924	1,736
Foreign	1,735	1,448	57
Income before taxes	4,720	3,372	1,793

Reconciliation of taxes computed at the Swiss statutory rate (CHF million)

Income tax expense/(benefit) computed at the statutory tax rate of 22%	1,038	742	394
Increase/(decrease) in income taxes resulting from			
Foreign tax rate differential	(101)	107	(110)
Non-deductible amortization of other intangible assets and goodwill impairment	1	3	0
Other non-deductible expenses	371	457	354
Additional taxable income	7	5	0
Lower taxed income	(325)	(190)	(276)
(Income)/loss taxable to noncontrolling interests	8	12	7
Changes in tax law and rates	(28)	(2)	2,095
Changes in deferred tax valuation allowance	116	(106)	123
Change in recognition of outside basis difference	4	(32)	(19)
Tax deductible impairments of Swiss subsidiary investments	0	(65)	88
(Windfall tax benefits) /shortfall tax charges on share-based compensation	39	10	91
Other	165	420	(6)
Income tax expense	1,295	1,361	2,741

2019

Foreign tax rate differential of CHF 101 million reflected a foreign tax benefit mainly driven by losses in higher tax jurisdictions, mainly in the UK, and profits incurred in lower tax jurisdictions, mainly in Singapore, partially offset by profits made in higher tax jurisdictions, such as Brazil. The foreign tax rate expense of CHF 949 million comprised not only the foreign tax expense based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 371 million included the impact of CHF 274 million relating to non-deductible interest expenses (including a contingency accrual of CHF 28 million), CHF 56 million relating to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 34 million relating to non-deductible fines and various smaller non-deductible expenses.

Lower taxed income of CHF 325 million included a tax benefit of CHF 160 million related to the transfer of the InvestLab fund platform to Allfunds Group and SIX Group AG equity investment revaluation gain in Switzerland, CHF 73 million related to non-taxable life insurance income, CHF 45 million related to non-taxable dividend income, CHF 26 million related to concessionary and lower taxed income, CHF 14 million related to exempt income and various smaller items.

Changes in deferred tax valuation allowances of CHF 116 million included a tax charge from the increase in valuation allowances on deferred tax assets of CHF 273 million, mainly in respect of three of the Group's operating entities in Japan, the UK and the US. Also included was the net impact of the release of valuation allowances on deferred tax assets of CHF 157 million, mainly in respect of one of the Group's operating entities in the UK.

Other of CHF 165 million included CHF 165 million relating to the US base erosion and anti-abuse tax (BEAT) and CHF 123 million relating to the tax impact of transitional adjustments arising from the adoption of International Financial Reporting Standards (IFRS) 9 for own credit movements. This was partially offset by CHF 58 million from own credit valuation gains, CHF 53 million relating to agreements reached with tax authorities relating to an advanced pricing agreement and the closure of a tax audit and CHF 20 million relating to a prior year adjustment. The remaining balance included various smaller items.

2018

Foreign tax rate differential of CHF 107 million reflected a foreign tax expense mainly driven by profits made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to profits incurred in lower tax jurisdictions, mainly in Singapore. The foreign tax rate expense of CHF 747 million comprised not only the foreign tax expense based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 457 million included the impact of CHF 325 million relating to non-deductible interest expenses (including a contingency accrual of CHF 92 million), CHF 49 million relating to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 15 million relating to non-deductible fines and various smaller non-deductible expenses.

Lower taxed income of CHF 190 million included a tax benefit of CHF 66 million related to non-taxable dividend income, CHF 48 million related to non-taxable life insurance income, CHF 33 million related to concessionary and lower taxed income, CHF 23 million related to exempt income and various smaller items.

Changes in deferred tax valuation allowances of CHF 106 million included a tax benefit from the release of valuation allowances of CHF 191 million, mainly in respect of two of the Group's

operating entities in the UK. Also included was the net impact of the increase in valuation allowances on deferred tax assets of CHF 85 million, mainly in respect of one of the Group's operating entities in Switzerland.

Other of CHF 420 million included CHF 202 million relating to the tax impact of transitional adjustments arising on the first adoption of IFRS 9 for own credit movements, CHF 130 million from own credit valuation gains, CHF 65 million relating to BEAT, CHF 56 million relating to the net re-assessment of deferred tax balances in respect of one of the Group's operating entities in Switzerland, CHF 26 million relating to the increase of tax contingency accruals and other smaller balances. This was partially offset by prior year adjustments of CHF 76 million.

2017

Foreign tax rate differential of CHF 110 million reflected a foreign tax benefit mainly driven by losses made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to losses incurred in lower tax jurisdictions, mainly in Guernsey. The foreign tax rate expense of CHF 2,415 million comprised not only the foreign tax benefit based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 354 million included the impact of CHF 217 million relating to non-deductible interest expenses (including a contingency accrual of CHF 155 million), CHF 57 million related to the non-deductible portion of the litigation provisions and settlement charges, CHF 27 million related to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 10 million related to non-deductible foreign exchange losses and various smaller non-deductible expenses of CHF 43 million.

Lower taxed income of CHF 276 million included a tax benefit of CHF 86 million related to non-taxable life insurance income, CHF 78 million related to non-taxable dividend income, CHF 31 million in respect of income taxed at rates lower than the statutory tax rate, CHF 25 million related to exempt income and various smaller items.

Changes in tax law and rates of CHF 2,095 million mainly reflected the impact of the US tax reform enacted on December 22, 2017 which resulted in a reduction of the federal corporate income tax rate from 35% to 21%, effective as of January 1, 2018. The US tax reform required a re-assessment of the deferred tax assets.

Changes in deferred tax valuation allowances of CHF 123 million included the net impact of the increase in valuation allowances on deferred tax assets of CHF 320 million, mainly in respect of two of the Group's operating entities in the UK. Also included was a tax benefit from the release of valuation allowances of CHF 197 million, mainly in respect of two of the Group's operating entities, one in the UK and one in Switzerland.

Other of CHF 6 million included CHF 105 million from own credit valuation gains, CHF 85 million relating to tax deductibility of previously taken litigation accruals and CHF 49 million from a favorable court decision, offset by CHF 248 million relating to the net re-assessment of deferred tax balances in respect of two of the Group's operating entities in Switzerland reflecting the establishment of Credit Suisse Asset Management & Investor Services (Schweiz) Holding AG, the impact of adverse earnings mix of the current year and changes in forecasted future profitability, CHF 17 million from prior year adjustments and CHF 16 million relating to the increase of tax contingency accruals. The remaining balance included various smaller items.

As of December 31, 2019, the Group had accumulated undistributed earnings from foreign subsidiaries of CHF 17.8 billion compared to CHF 9.6 billion as of December 31, 2018. The increase compared to the end of 2018 reflected a reserve transfer in one of the Group's entities. No deferred tax liability was recorded in respect of those amounts as these earnings are considered indefinitely reinvested. It is not practicable to estimate the amount of unrecognized deferred tax liabilities for these undistributed foreign earnings.

Deferred tax assets and liabilities

end of	2019	2018
Deferred tax assets and liabilities (CHF million)		
Compensation and benefits	956	957
Loans	598	192
Investment securities	1,437	1,986
Provisions	769	582
Leases	439	–
Derivatives	72	62
Real estate	189	285
Net operating loss carry-forwards	5,753	6,227
Goodwill and intangible assets	405	518
Other	78	198
Gross deferred tax assets before valuation allowance	10,696	11,007
Less valuation allowance	(4,136)	(4,021)
Gross deferred tax assets net of valuation allowance	6,560	6,986
Compensation and benefits	(650)	(426)
Loans	(348)	(87)
Investment securities	(503)	(1,170)
Provisions	(337)	(369)
Business combinations	0	(1)
Leases	(405)	–
Derivatives	(224)	(214)
Real estate	(35)	(60)
Other	(182)	(154)
Gross deferred tax liabilities	(2,684)	(2,481)
Net deferred tax assets	3,876	4,505
of which deferred tax assets	4,399	4,943
of which net operating losses	1,465	1,647
of which deductible temporary differences	2,934	3,296
of which deferred tax liabilities	(523)	(438)

The decrease in net deferred tax assets from 2018 to 2019 of CHF 629 million was primarily due to the impact of CHF 502 million related to current year earnings, CHF 87 million from the re-assessment of deferred tax balances in Japan and foreign exchange translation losses of CHF 64 million, which are included within the currency translation adjustments recorded in AOCI. These decreases were partially offset by the tax impacts directly recorded in equity and other comprehensive income of CHF 24 million, mainly related to own credit movements, partially offset by a pension plan re-measurement.

The most significant net deferred tax assets arise in the US and Switzerland, which decreased from CHF 4,175 million, net of a valuation allowance of CHF 584 million as of the end of 2018, to CHF 3,855 million, net of a valuation allowance of CHF 606 million as of the end of 2019.

Due to uncertainty concerning its ability to generate the necessary amount and mix of taxable income in future periods, the Group recorded a valuation allowance against deferred tax assets in the amount of CHF 4.1 billion as of December 31, 2019 compared to CHF 4.0 billion as of December 31, 2018.

Amounts and expiration dates of net operating loss carry-forwards

end of 2019	Total
Net operating loss carry-forwards (CHF million)	
Due to expire within 1 year	10
Due to expire within 2 to 5 years	7,348
Due to expire within 6 to 10 years	3,754
Due to expire within 11 to 20 years	6,172
Amount due to expire	17,284
Amount not due to expire	17,637
Total net operating loss carry-forwards	34,921

Movements in the valuation allowance

in	2019	2018	2017
Movements (CHF million)			
Balance at beginning of period	4,021	4,279	4,188
Net changes	115	(258)	91
Balance at end of period	4,136	4,021	4,279

As part of its normal practice, the Group conducted a detailed evaluation of its expected future results. This evaluation was dependent on management estimates and assumptions in developing the expected future results, which were based on a strategic business planning process influenced by current economic conditions and assumptions of future economic conditions that are subject to change. This evaluation took into account both positive and negative evidence related to expected future taxable income and also considered stress scenarios. This evaluation has indicated the expected future results that are likely to be earned in jurisdictions where the Group has significant gross deferred tax assets, primarily in the US, Switzerland and the UK. The Group

then compared those expected future results with the applicable law governing the utilization of deferred tax assets. US tax law allowed for a 20-year carry-forward period for existing net operating losses as of the end of 2017 and any new net operating losses will have an unlimited carry-forward period. Swiss tax law allows for a seven-year carry-forward period for net operating losses and UK tax law allows for an unlimited carry-forward period for net operating losses.

Tax benefits associated with share-based compensation

in	2019	2018	2017
Tax benefits (CHF million)			
Tax benefits recorded in the consolidated statements of operations ¹	263	242	314

¹ Calculated at the statutory tax rate before valuation allowance considerations.

→ Refer to "Note 29 – Employee deferred compensation" for further information on share-based compensation.

If, upon settlement of share-based compensation, the tax deduction exceeds the cumulative compensation cost that the Group has recognized in the consolidated financial statements, the

utilized tax benefit associated with any excess deduction is considered a "windfall" and recognized in the consolidated statements of operations and reflected as an operating cash inflow in the consolidated statements of cash flows. If, upon settlement, the tax deduction is lower than the cumulative compensation cost that the Group has recognized in the consolidated financial statements, the tax charge associated with the lower deduction is considered a "shortfall". Tax charges arising on shortfalls are recognized in the consolidated statements of operations.

Uncertain tax positions

US GAAP requires a two-step process in evaluating uncertain income tax positions. In the first step, an enterprise determines whether it is more likely than not that an income tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. Income tax positions meeting the more-likely-than-not recognition threshold are then measured to determine the amount of benefit eligible for recognition in the consolidated financial statements. Each income tax position is measured at the largest amount of tax benefit that is more likely than not to be realized upon ultimate settlement.

Reconciliation of gross unrecognized tax benefits

	2019	2018	2017
Movements in gross unrecognized tax benefits (CHF million)			
Balance at beginning of period	574	481	410
Increases in unrecognized tax benefits as a result of tax positions taken during a prior period	27	10	131
Decreases in unrecognized tax benefits as a result of tax positions taken during a prior period	(64)	(2)	(104)
Increases in unrecognized tax benefits as a result of tax positions taken during the current period	105	112	117
Decreases in unrecognized tax benefits relating to settlements with tax authorities	0	0	(73)
Reductions to unrecognized tax benefits as a result of a lapse of the applicable statute of limitations	(35)	(4)	(3)
Other (including foreign currency translation)	(12)	(23)	3
Balance at end of period	595	574	481
of which, if recognized, would affect the effective tax rate	595	574	481

Interest and penalties

in	2019	2018	2017
Interest and penalties (CHF million)			
Interest and penalties recognized in the consolidated statements of operations	(10)	(28)	29
Interest and penalties recognized in the consolidated balance sheets	77	87	115

Interest and penalties are reported as tax expense. The Group is currently subject to ongoing tax audits, inquiries and litigation with the tax authorities in a number of jurisdictions, including Brazil,

the Netherlands, the US, the UK and Switzerland. Although the timing of completion is uncertain, it is reasonably possible that some of these will be resolved within 12 months of the reporting date. It is reasonably possible that there will be a decrease of between zero and CHF 303 million in unrecognized tax benefits within 12 months of the reporting date.

The Group remains open to examination from federal, state, provincial or similar local jurisdictions from the following years onward in these major countries: Brazil – 2014; the UK – 2012; Switzerland – 2011; the US – 2010; and the Netherlands – 2006.

29 Employee deferred compensation

Payment of deferred compensation to employees is determined by the nature of the business, role, location and performance of the employee. Unless there is a contractual obligation, granting deferred compensation is solely at the discretion of the Compensation Committee and senior management. Special deferred compensation granted as part of a contractual obligation is typically used to compensate new senior employees for forfeited awards from previous employers upon joining the Group. It is the Group's policy not to make multi-year guarantees.

Compensation expense recognized in the consolidated statement of operations for share-based and other awards that were granted as deferred compensation is recognized in accordance with the specific terms and conditions of each respective award and is primarily recognized over the future requisite service and vesting period, which is determined by the plan, retirement eligibility of employees and certain other terms. All deferred compensation plans are subject to restrictive covenants, which generally include non-compete and non-solicit provisions. Compensation expense for share-based and other awards that were granted as deferred compensation also includes the current estimated outcome of applicable performance criteria, estimated future forfeitures and mark-to-market adjustments for certain cash awards that are still outstanding.

The following tables show the compensation expense for deferred compensation awards granted in 2019 and prior years that was recognized in the consolidated statements of operations during 2019, 2018 and 2017, the total shares delivered, the estimated unrecognized compensation expense for deferred compensation awards granted in 2019 and prior years outstanding as of December 31, 2019 and the remaining requisite service period over which the estimated unrecognized compensation expense will be recognized. The estimated unrecognized compensation expense was based on the fair value of each award on the grant date and included the current estimated outcome of relevant performance criteria and estimated future forfeitures but no estimate for future mark-to-market adjustments. The recognition of compensation expense for the deferred compensation awards granted in February 2020 began in 2020 and thus had no impact on the 2019 consolidated financial statements.

Deferred compensation awards for 2019

In February 2020, the Group granted share awards, performance share awards and Contingent Capital Awards (CCA) as deferred compensation. Deferred compensation was awarded to employees with total compensation of CHF/USD 250,000 or the local currency equivalent or higher.

Deferred compensation expense

in	2019	2018	2017
Deferred compensation expense (CHF million)			
Share awards	590	514	521
Performance share awards	438	382	348
Contingent Capital Awards	308	154	280
Contingent Capital share awards	(1)	2	18
Capital Opportunity Facility awards	8	12	14
2008 Partner Asset Facility awards ¹	–	–	7
Deferred cash awards	412	221	333
Retention awards	22	54	115
Total deferred compensation expense	1,777	1,339	1,636

Total shares delivered (million)

Total shares delivered	41.8	46.6	42.0
------------------------	------	------	------

Prior periods have been reclassified to conform to the current presentation.

¹ Compensation expense mainly includes the change in the underlying fair value of the indexed assets during the period.

Estimated unrecognized deferred compensation

end of	2019
Estimated unrecognized compensation expense (CHF million)	
Share awards	477
Performance share awards	193
Contingent Capital Awards	165
Deferred cash awards	181
Retention awards	48
Total	1,064

Aggregate remaining weighted-average requisite service period (years)

Aggregate remaining weighted-average requisite service period	1.3
---	-----

Does not include the estimated unrecognized compensation expense relating to grants made in 2020 for 2019.

Share awards

Share awards granted in February 2020 are similar to those granted in February 2019. Each share award granted entitles the holder of the award to receive one Group share, subject to service conditions. Share awards vest over three years with one third of the share awards vesting on each of the three anniversaries of the grant date (ratable vesting), with the exception of awards granted to individuals classified as risk managers or senior managers under the UK PRA Remuneration Code or similar regulations in other jurisdictions. Share awards granted to risk managers vest over five years with one fifth of the award vesting on each of the five anniversaries of the grant date, while share awards granted to senior managers vest over five years commencing on the third anniversary of the grant date, with one fifth of the award vesting on each of the third to seventh anniversaries of the grant

date. Share awards are expensed over the service period of the awards. The value of the share awards is solely dependent on the Group share price at the time of delivery.

The Group's share awards include other awards, such as blocked shares and special awards, which may be granted to new employees. Other share awards entitle the holder to receive one Group share and are generally subject to continued employment with the Group, contain restrictive covenants and cancellation provisions and generally vest between zero and five years.

On February 28, 2020, the Group granted 57.9 million share awards with a total value of CHF 626 million. The number of share awards granted to employees was generally determined by dividing the deferred component of variable compensation being granted as share awards by the average price of a Group share over the five consecutive trading days ended March 5, 2020. The fair value of each share award was CHF 10.81, the Group share price on the grant date. The majority of share awards granted include the right to receive dividend equivalents on vested shares. The estimated unrecognized compensation expense of CHF 596 million was determined based on the fair value of the awards on the grant date, includes the current estimated future forfeitures and will be recognized over the vesting period, subject to early retirement rules.

Share awards granted for previous years

For compensation year	2019	2018	2017
Shares awarded (million)	57.9	55.6	34.1
Value of shares awarded (CHF million)	626	638	613
Fair value of each share awarded (CHF) ¹	10.81	11.75	17.22

¹ Based on the Group's share price on the grant date.

In order to comply with Capital Requirements Directive IV requirements, employees who hold key roles in respect of certain Group subsidiaries receive shares that are subject to transfer restrictions for 50% of the amount that would have been paid to them in cash. These shares are vested at the time of grant but remain blocked, that is, subject to transfer restrictions, for six months to three years from the date of grant, depending on the location.

On February 28, 2020, the Group granted 3.2 million blocked shares with a total value of CHF 37 million that vested immediately upon grant, have no future service requirements and were attributed to services performed in 2019.

Blocked share awards granted for previous years

For compensation year	2019	2018	2017
Blocked shares awarded (million)	3.2	3.0	2.1
Value of shares awarded (CHF million)	37	35	38

Share award activities

	2019		2018		2017	
	Number of share awards in million	Weighted-average grant-date fair value in CHF	Number of share awards in million	Weighted-average grant-date fair value in CHF	Number of share awards in million	Weighted-average grant-date fair value in CHF
Share awards						
Balance at beginning of period	83.2	16.15	84.9	15.73	73.2	18.77
Granted	69.3	11.68	43.8	16.91	54.3 ¹	14.53
Settled	(36.9)	16.15	(40.7)	16.09	(38.2)	19.74
Forfeited	(5.1)	13.83	(4.8)	16.24	(4.4)	16.47
Balance at end of period	110.5	13.46	83.2	16.15	84.9	15.73
of which vested	11.9	–	8.6	–	8.5	–
of which unvested	98.6	–	74.6	–	76.4	–

¹ Includes an adjustment for share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional shares granted.

Performance share awards

Managing directors and all material risk takers and controllers (employees whose activities are considered to have a potentially material impact on the Group's risk profile) received a portion of their deferred variable compensation in the form of performance share awards. Performance share awards are similar to share awards, except that the full balance of outstanding performance share awards, including those awarded in prior years, are subject to performance-based malus provisions.

Performance share awards are subject to a negative adjustment in the event of a divisional loss by the division in which the employees worked as of December 31, 2019, or a negative ROE of the Group, whichever results in a larger adjustment. For employees in corporate functions and the Asset Resolution Unit, the negative adjustment only applies in the event of a negative ROE of the Group and is not linked to the performance of the divisions. Given the pre-tax loss in the Investment Banking & Capital Markets division for 2019, a negative adjustment has been applied to performance share awards held by employees in that division. The basis for the ROE calculation may vary from year to year, depending on the Compensation Committee's determination for the year in which the performance shares are granted.

On February 28, 2020, the Group granted 50.7 million performance share awards with a total value of CHF 553 million. The number of performance share awards granted to employees was generally determined by dividing the deferred component of variable compensation being granted as performance share awards by the average price of a Group share over the five consecutive trading days ended March 5, 2020. The fair value of each performance share award was CHF 10.81, the Group share price on the grant date. The majority of performance share awards granted include the right to receive dividend equivalents on vested shares. The estimated unrecognized compensation expense of CHF 519 million was determined based on the fair value of the awards on the grant date, includes the current estimated outcome of the relevant performance criteria and estimated future forfeitures and will be recognized over the vesting period, subject to early retirement rules.

Performance share awards granted for previous years

For compensation year	2019	2018	2017
Performance shares awarded (million)	50.7	46.1	26.5
Value of performance shares awarded (CHF million)	553	532	478
Fair value of each performance share awarded (CHF) ¹	10.81	11.75	17.22

¹ Based on the Group's share price on the grant date.

Performance share award activities

	2019		2018		2017	
	Number of performance share awards in million	Weighted-average grant-date fair value in CHF	Number of performance share awards in million	Weighted-average grant-date fair value in CHF	Number of performance share awards in million	Weighted-average grant-date fair value in CHF
Performance share awards						
Balance at beginning of period	51.7	16.33	54.2	15.88	48.4	19.11
Granted	45.4	11.60	26.5	16.98	31.8 ¹	14.41
Settled	(22.8)	16.51	(26.3)	16.07	(23.9)	20.41
Forfeited	(1.9)	13.67	(2.7)	16.26	(2.1)	16.38
Balance at end of period	72.4	13.38	51.7	16.33	54.2	15.88
of which vested	6.7	–	5.4	–	6.7	–
of which unvested	65.7	–	46.3	–	47.5	–

¹ Includes an adjustment for performance share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional performance shares granted.

Contingent Capital Awards

CCA were granted in February 2020, 2019 and 2018 to managing directors and directors as part of the 2019, 2018 and 2017 deferred variable compensation and have rights and risks similar to those of certain contingent capital instruments issued by the Group in the market. CCA are scheduled to vest on the third anniversary of the grant date, other than those granted to individuals classified as risk managers or senior managers under the UK PRA Remuneration Code or similar regulations in other jurisdictions, where CCA vest on the fifth and seventh anniversaries of the grant date, respectively, and will be expensed over the vesting period. CCA generally provide a conditional right to receive semi-annual cash payments of interest equivalents until settled, with rates being dependent upon the vesting period and currency of denomination. CCA granted in 2020, 2019 and 2018 that vest five or seven years from the date of grant are not eligible for semi-annual cash payments of interest equivalents.

- CCA granted in 2020, 2019 and 2018 that are denominated in US dollars and vest three years from the date of grant receive interest equivalents at a rate of 3.77%, 4.46% and 3.05%, respectively, per annum over the six-month US dollar London Interbank Offered Rate (LIBOR); and
- CCA granted in 2020, 2019 and 2018 that are denominated in Swiss francs and vest three years from the date of grant receive interest equivalents at a rate of 3.29%, 3.73% and 2.24%, respectively, per annum over the six-month Swiss franc LIBOR.

The rates were set in line with market conditions at the time of grant and existing high-trigger and low-trigger contingent capital instruments that the Group has issued. For CCA granted in February 2020, employees who received compensation in Swiss francs received CCA denominated in Swiss francs and all other employees received CCA denominated in US dollars.

As CCA qualify as going concern loss-absorbing capital of the Group, the timing and form of distribution upon settlement is subject to approval by FINMA. At settlement, employees will receive either a contingent capital instrument or a cash payment based on the fair value of the CCA. The fair value will be determined by the Group. In the case of a cash settlement, the CCA award will be converted into the local currency of each respective employee.

CCA have loss-absorbing features such that prior to settlement, the principal amount of the CCA would be written down to zero and forfeited if any of the following trigger events were to occur:

- the Group's reported common equity tier 1 (CET1) ratio falls below 7%; or
- FINMA determines that cancellation of the CCA and other similar contingent capital instruments is necessary, or that the Group requires public sector capital support, in either case to prevent it from becoming insolvent or otherwise failing.

On February 28, 2020, the Group awarded CHF 268 million of CCA that will be expensed over the vesting period. The estimated unrecognized compensation expense of CHF 257 million was

determined based on the fair value of the awards on the grant date and includes the current estimated outcome of the relevant performance criteria, the estimated future forfeitures and the expected semi-annual cash payments of interest equivalents and will be recognized over the vesting period.

Contingent Capital Awards granted for previous years

For compensation year	2019	2018	2017
CCA awarded (CHF million)	268	299	241

Contingent Capital share awards

In March 2016, the Group executed a voluntary exchange offer, under which employees had the right to voluntarily convert all or a portion of their respective CCA into Contingent Capital share awards. Each Contingent Capital share award had a grant-date fair value of CHF 14.45 and contains the same contractual term, vesting period, performance criteria and other terms and conditions as the original CCA.

Contingent Capital share award activities

	2019	2018	2017
Contingent Capital share awards (million)			
Balance at beginning of period	3.4	8.4	13.5
Granted	0.0	0.0	0.3 ¹
Settled	(3.3)	(4.9)	(5.0)
Forfeited	0.0	(0.1)	(0.4)
Balance at end of period	0.1	3.4	8.4
of which vested	0.0	0.7	1.3
of which unvested	0.1	2.7	7.1

¹ Includes an adjustment for Contingent Capital share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional Contingent Capital shares granted.

Capital Opportunity Facility awards

As part of the 2011 annual compensation process, the Group awarded a portion of deferred variable compensation for senior employees in the form of 2011 Partner Asset Facility (PAF2) units. PAF2 units were essentially fixed income structured notes that are exposed to a portion of the credit risk that arises in the Group's derivative activities, including both current and possible future swaps and other derivative transactions.

PAF2 awards were linked to a portfolio of the Group's credit exposures, providing risk offset and capital relief. Due to regulatory changes, this capital relief would no longer be available. As a result, the Group restructured the awards, requiring PAF2 holders to reallocate the exposure of their awards from the pool of counterparty credit risks in the original PAF2 structure to one of the following options, or a combination thereof:

- i) Capital Opportunity Facility (COF): participants elected for their award to be referenced to a COF. The COF is a seven-year facility that is linked to the performance of a portfolio of risk-transfer and capital mitigation transactions to be entered into with the Group chosen by a COF management team. The value of the COF awards will be reduced if there are losses from the COF portfolio, up to the full amount of the award. Participants who elect the COF will receive semi-annual US dollar cash distributions of 6.5% per annum until settlement in cash in 2021, and such semi-annual distributions will reduce the cash settlement amount payable in 2021; and
- ii) CCA: participants elected to receive CCA, with similar terms to the instruments granted as part of the 2013 compensation awards.

Deferred cash awards

Deferred cash awards include certain special awards as well as voluntary deferred compensation plans and employee investment plans. For certain special awards, compensation expense was primarily driven by their vesting schedule; for other deferred cash awards, compensation expense was driven by mark to market and performance adjustments, as the majority of the awards are fully vested.

Deferred fixed cash awards

The Group granted deferred fixed cash compensation during 2019, 2018 and 2017 of CHF 108 million, CHF 98 million and CHF 90 million, respectively, to certain employees in the Americas. This compensation has been expensed in Global Markets, Investment Banking & Capital Markets and International Wealth Management over a three-year vesting period from the grant date. Amortization of this compensation in 2019 totaled CHF 102

million, of which CHF 58 million was related to awards granted in 2019.

Upfront cash awards

In February 2020, certain managing directors and directors in Investment Banking & Capital Markets and Asia Pacific were granted CHF 146 million of upfront cash awards as part of the cash component of their 2019 variable compensation. In 2019, certain managing directors and directors in the Asia Pacific division were granted CHF 47 million of upfront cash awards. These awards are subject to repayment (clawback) by the employee in the event of voluntary resignation, termination for cause or in connection with other specified events or conditions within three years of the award grant. The amount subject to repayment is reduced in equal monthly installments during the three-year period following the grant date. The expense recognition will occur over the three-year vesting period, subject to service conditions. Amortization of this compensation in 2019 totaled CHF 21 million.

Retention awards

The Group granted deferred cash and stock retention awards during 2019, 2018 and 2017 of CHF 40 million, CHF 25 million and CHF 65 million, respectively. These awards are expensed over the applicable vesting period from the grant date. Amortization of these awards totaled CHF 22 million in 2019.

Delivered shares

The Group fully covered its share delivery obligations through market purchases in 2019, 2018 and 2017.

30 Related parties

Parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operational decisions, or if another party controls both. The Group's related parties include key management personnel, close family members of key management personnel and entities that are controlled, significantly influenced, or for which significant voting power is held, by key management personnel or their close family members. Key management personnel are those individuals having authority and responsibility for planning, directing and controlling the activities of the Group, that is, members of the Executive Board and the Board of Directors.

Banking relationships

The Group is a global financial services provider. Many of the members of the Executive Board and the Board of Directors, their close family members or companies associated with them maintain banking relationships with the Group. The Group or any of its banking subsidiaries may from time to time enter into financing and other banking agreements with companies in which current members of the Executive Board or the Board of Directors have a significant influence as defined by the SEC, such as holding executive and/or board level roles in these companies. With the exception of the transactions described below, relationships with

members of the Executive Board or the Board of Directors and such companies are in the ordinary course of business and are entered into on an arm's length basis. Also, unless otherwise noted, all loans to members of the Executive Board, members of the Board of Directors, their close family members or companies associated with them were made in the ordinary course of business, were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and did not involve more than the normal risk of collectability or present other unfavorable features. As of December 31, 2019, 2018 and 2017, there were no loan exposures to such related parties that were not made in the ordinary course of business and at prevailing market conditions.

Related party loans

Executive Board and Board of Directors loans

The majority of loans outstanding to members of the Executive Board and the Board of Directors are mortgages or loans against securities.

All mortgage loans to members of the Executive Board are granted either with variable or fixed interest rates over a certain period. Typically, mortgages are granted for periods of up to ten years. Interest rates applied are based on refinancing costs plus a margin, and interest rates and other terms are consistent with those applicable to other employees. Loans against securities are granted at interest rates and on terms applicable to such loans granted to other employees. The same credit approval and risk assessment procedures apply to members of the Executive Board as for other employees. Unless otherwise noted, all loans to members of the Executive Board were made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and in consideration of the terms which apply to all Group employees. These loans did not involve more than the normal risk of collectability or present other unfavorable features. The highest loan outstanding to an Executive Board member was CHF 17 million to Helman Sitohang as of December 31, 2019.

Members of the Board of Directors with loans, including the Chairman of the Board of Directors, do not benefit from employee conditions, but are subject to conditions applied to clients with a comparable credit standing. Unless otherwise noted, all loans to members of the Board of Directors were made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons. Such loans did not involve more than the normal risk of collectability or present other unfavorable features.

Executive Board and Board of Directors loans

in	2019	2018	2017
Executive Board loans (CHF million)			
Balance at beginning of period	33¹	26	25
Additions	13	8	3
Reductions	(14)	(1)	(2)
Balance at end of period	32¹	33	26
Board of Directors loans (CHF million)			
Balance at beginning of period	10²	11	10
Additions	3	0	1
Reductions	(4)	(1)	0
Balance at end of period	9²	10	11

¹ The number of individuals with outstanding loans was eight at the beginning of the year and five at the end of the year.

² The number of individuals with outstanding loans was four at the beginning and the end of the year.

Equity method investees loans

The Group or its subsidiaries grant loans to equity method investees in the normal course of business.

→ Refer to "Note 40 – Significant subsidiaries and equity method investments" for a list of equity method investments.

Loans made by the Group or any subsidiaries to equity method investees

in	2019	2018	2017
Loans to equity method investees (CHF million)			
Balance at beginning of period	253	173	173
Net borrowings/(repayments)	46	80 ¹	0
Balance at end of period	299	253¹	173

¹ Prior period balance has been corrected.

Other related party transaction

In December 2018, a subsidiary of the Group executed a transaction with an affiliate to sell a minority interest in a trading platform for a gain of approximately USD 80 million.

Liabilities due to own pension plans

Liabilities due to the Group's own defined benefit pension plans as of December 31, 2019 and 2018 of CHF 703 million and CHF 735 million, respectively, were reflected in various liability accounts in the Group's consolidated balance sheets.

31 Pension and other post-retirement benefits

The Group sponsors defined contribution pension plans, defined benefit pension plans and other post-retirement defined benefit plans.

Defined contribution pension plans

Defined contribution plans provide each participant with an individual account. The benefits to be provided to a participant are solely based on the contributions made to that employee's account and are affected by income, expenses and gains and losses allocated to the account. As such, there are no stipulations of a defined annuity benefit at retirement and the participants bear the full actuarial as well as investment risk.

The Group contributes to various defined contribution pension plans primarily in the US and the UK as well as other countries throughout the world. During 2019, 2018 and 2017, the Group contributed to these plans and recognized as expense CHF 167 million, CHF 153 million and CHF 165 million, respectively.

Defined benefit pension and other post-retirement defined benefit plans

Defined benefit pension plans

Defined benefit pension plans are pension plans that define specific benefits for an employee upon that employee's retirement. These benefits are usually determined by taking into account the employee's salary, years of service and age of retirement. Retirees bear neither the actuarial risk (for example, the risk that the retirees of the plan live longer than expected), nor the investment risk (that is, that plan assets invested and associated returns will be insufficient to meet the expected benefits due to low or negative returns on contributions). The Group's funding policy for these plans is in accordance with local laws and tax requirements.

Swiss pension plan

The Group's most significant defined benefit pension plan, the Credit Suisse Swiss Pension Plan (Swiss pension plan), is located and covers its employees in Switzerland and is set up as a trust domiciled in Zurich. The Swiss pension plan provides benefits in the event of retirement, death and disability and meets or exceeds the minimum benefits required under the Swiss Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG). Benefits in the Swiss pension plan are determined on the basis of the accumulated employer and employee contributions and accumulated interest credited. Although the Swiss pension plan is largely defined contribution in nature, it is treated as a defined benefit plan under US GAAP, mainly due to a guaranteed minimum return on contributions and guaranteed payment of lifetime pensions. As of December 31, 2019 and 2018, the Swiss pension plan comprised 71% and 69%, respectively, of all the Group's employees participating in defined benefit plans, 81% and 82%, respectively, of the fair value of plan assets, and 82% and 83%, respectively, of the pension benefit obligation of the Group's defined benefit plans.

Employee contributions in the savings section depend on their age and are determined as a percentage of the pensionable salary. The employees can select between three different levels of contributions which vary between 5% and 14% depending on their age. The Group's contribution varies between 7.5% and 25% of the pensionable salary depending on the employee's age.

The Swiss Federal council sets the minimum statutory interest rate on savings balances on an annual basis that applies to the BVG minimum pensionable salary (1.0% as of January 1, 2020 and 2019). The statutory interest rate on savings balances does not apply to extra mandatory benefits. The Board of Trustees of the Swiss pension fund sets the interest rate to be applied on the accumulated savings balance on an annual basis.

When employees retire, their savings balance is converted into an annuity and the conversion rate is the percentage used to convert the assets accrued in the Swiss pension plan to an annual lifetime retirement pension. The level of the conversion rate depends on the life expectancy of future retirees and on the long-term potential for returns in the capital markets. The Board of Trustees of the Swiss pension plan has the responsibility to set the conversion rates for the plan. Decisions on conversion rates are to be set for a planning horizon of at least eight years.

In 2019, Credit Suisse announced an amendment to its existing Swiss defined benefit pension plan and the introduction of a new Swiss defined contribution plan. Effective January 1, 2020, savings contributions on gross salary components exceeding a certain threshold will be credited to a new Swiss defined contribution plan and no longer paid into the lump-sum component of the existing Swiss defined benefit pension plan. In the new Swiss defined contribution plan, insured employees can select the investment strategy and will bear the investment risk. These changes resulted in a reduction of the Swiss pension plan liabilities and an increase in the overall funding surplus of the existing Swiss defined benefit pension plan of CHF 428 million (CHF 338 million, net of tax) which was recognized as a prior service credit in the second quarter of 2019. The plan amendment triggered a revaluation of plan assets and liabilities based on the first quarter of 2019 market data, resulting in an actuarial gain and an additional increase in the overall funding surplus of the Swiss defined benefit pension plan of CHF 406 million (CHF 323 million, net of tax). The total increase in the overall funding surplus of the Swiss defined benefit pension plan was reflected in Other assets – defined benefit pension and post-retirement plan assets.

International pension plans

Various defined benefit pension plans cover the Group's employees outside Switzerland. These plans provide benefits in the event of retirement, death, disability or termination of employment. Retirement benefits under the international pension plans depend on age, contributions and salary. The Group's principal defined benefit pension plans outside Switzerland are located in the US and in the UK. Both of these plans are funded, closed to

new participants and have ceased accruing new benefits. Smaller defined benefit pension plans, both funded and unfunded, are operated in other locations.

In 2019, the plan assets and liabilities of the defined benefit pension plan in the UK were transferred from Credit Suisse Securities (Europe) Limited to Credit Suisse International under a flexible apportionment arrangement in accordance with UK law. The transfer triggered an interim re-measurement of the plan assets and liabilities based on year-to-date performance and market data through the end of August 2019, resulting in an actuarial gain and an increase in the overall funding surplus of the defined benefit pension plan in the UK. The total increase in the overall funding surplus of CHF 156 million was reflected in Other assets

– defined benefit pension and post-retirement plan assets and also resulted in an increase in accumulated other comprehensive income in shareholder's equity of CHF 118 million, net of tax.

Other post-retirement defined benefit plan

In the US, the Group has a defined benefit plan that provides post-retirement benefits other than pension benefits that primarily focus on health and welfare benefits for certain retired employees. In exchange for the current services provided by the employee, the Group promises to provide health and welfare benefits after the employee retires. The Group's obligation for that compensation is incurred as employees render the services necessary to earn their post-retirement benefits.

Components of net periodic benefit costs

in	Switzerland			Defined benefit pension plans			Other post-retirement defined benefit plan		
	2019	2018	2017	International			International		
				2019	2018	2017	2019	2018	2017
Net periodic benefit costs (CHF million)									
Service costs on benefit obligation	256	242	243	14	16	22	0	0	0
Interest costs on benefit obligation	52	63	57	90	86	91	6	5	6
Expected return on plan assets	(394)	(483)	(473)	(108)	(114)	(133)	0	0	0
Amortization of recognized prior service cost/(credit)	(155)	(126)	(131)	1	0	0	0	0	0
Amortization of recognized actuarial losses/(gains)	293	306	340	19	47	60	3	8	7
Settlement losses/(gains)	41	35	37	0	0	0	0	0	0
Curtailment losses/(gains)	0	(12)	(23)	0	(1)	(10)	0	0	0
Special termination benefits	14	38	19	0	0	0	0	0	0
Net periodic benefit costs/(credits)	107	63	69	16	34	30	9	13	13

Service costs on benefit obligation are reflected in compensation and benefits. Other components of net periodic benefit costs are reflected in general and administrative expenses or, until the end of 2018, in restructuring expenses.

Net periodic benefit costs of defined benefit plans

The net periodic benefit costs for defined benefit pension and other post-retirement defined benefit plans are the costs of the respective plan for a period during which an employee renders services. The actual amount to be recognized is determined using the standard actuarial methodology which considers, among other factors, current service cost, interest cost, expected return on plan assets and the amortization of both prior service costs/(credits) and actuarial losses/(gains) recognized in AOCI.

Service costs on benefit obligation reflected in compensation and benefits – other for 2019, 2018 and 2017 were CHF 270 million, CHF 258 million and CHF 265 million, respectively.

As part of its strategic plan, the Group has launched a number of cost efficiency measures, including headcount reduction. This resulted in curtailment gains of CHF 12 million and CHF 23 million in 2018 and 2017, respectively, reflecting the immediate recognition of a credit relating to the years of service no longer expected to be rendered. Additional costs of CHF 41 million, CHF 35 million and CHF 37 million in 2019, 2018 and 2017, respectively, related to the settlement of the pension obligation for employees in Switzerland whose employment has effectively

been terminated or who have left the Group due to a sale of their business. Special termination benefit costs of CHF 14 million, CHF 38 million and CHF 19 million have been recognized in 2019, 2018 and 2017, respectively, relating to early retirements in Switzerland in the context of the cost efficiency measures.

Benefit obligation

The benefit obligation is expressed as either accumulated benefit obligation (ABO) or PBO. While the ABO refers to the actuarial present value based on employee services rendered prior to that date and takes into account current and past compensation levels, the PBO also applies an assumption as to future compensation levels.

The "Obligations and funded status of the plans" table shows the changes in the PBO, the ABO, the fair value of plan assets and the amounts recognized in the consolidated balance sheets for the defined benefit pension and other post-retirement defined benefit plans.

US GAAP requires an employer to recognize the funded status of the defined benefit pension and other post-retirement defined benefit plans on the balance sheet. The funded status of these plans is determined as the difference between the fair value of

plan assets and the PBO. The funded status may vary from year to year due to changes in the fair value of plan assets and variations of the PBO following changes in the underlying assumptions and membership data used to determine the PBO. In 2019

and 2018, the curtailments, settlements and special termination benefits in Switzerland, which impacted the PBO, related to the headcount reduction in the context of the cost efficiency measures.

Obligations and funded status of the plans

in / end of	Switzerland		Defined benefit pension plans		Other post-retirement defined benefit plan	
			International		International	
	2019	2018	2019	2018	2019	2018
PBO (CHF million) ¹						
Beginning of the measurement period	15,432	15,885	2,951	3,390	160	173
Plan participant contributions	205	204	0	0	0	0
Service cost	256	242	14	16	0	0
Interest cost	52	63	90	86	6	5
Plan amendments	(428)	20	0	10	0	0
Settlements	(152)	(125)	0	(1)	0	0
Curtailments	0	(8)	0	(1)	0	0
Special termination benefits	14	38	0	1	0	0
Actuarial losses/(gains)	1,262	(58)	410	(229)	13	(9)
Benefit payments	(662)	(829)	(149)	(233)	(12)	(11)
Exchange rate losses/(gains)	0	0	9	(88)	(3)	2
End of the measurement period	15,979	15,432	3,325	2,951	164	160
Fair value of plan assets (CHF million)						
Beginning of the measurement period	16,225	16,996	3,604	4,088	0	0
Actual return on plan assets	1,767	(454)	487	(141)	0	0
Employer contributions	407	433	130	19	12	11
Plan participant contributions	205	204	0	0	0	0
Settlements	(152)	(125)	0	(1)	0	0
Benefit payments	(662)	(829)	(149)	(233)	(12)	(11)
Exchange rate gains/(losses)	0	0	39	(128)	0	0
End of the measurement period	17,790	16,225	4,111	3,604	0	0
Funded status recognized (CHF million)						
Funded status of the plan – overfunded/(underfunded)	1,811	793	786	653	(164)	(160)
Funded status recognized in the consolidated balance sheet as of December 31	1,811	793	786	653	(164)	(160)
Total amount recognized (CHF million)						
Noncurrent assets	1,811	793	1,068	1,001	0	0
Current liabilities	0	0	(6)	(10)	(11)	(11)
Noncurrent liabilities	0	0	(276)	(338)	(153)	(149)
Net amount recognized in the consolidated balance sheet as of December 31	1,811	793	786	653	(164)	(160)
ABO (CHF million) ²						
End of the measurement period	15,459	14,534	3,294	2,921	164	160

¹ Including estimated future salary increases.

² Excluding estimated future salary increases.

The net amount recognized in the consolidated balance sheets as of December 31, 2019 and 2018 for the defined benefit pension plans was an overfunding of CHF 2,597 million and CHF 1,446 million, respectively.

The remeasurement gain on the Swiss pension plan recorded as of December 31, 2019 consisted of gains on the asset portfolio of CHF 1,373 million, partially offset by losses on the PBO of CHF 1,262 million due to changes in financial and demographic assumptions, primarily a decrease in the discount rate

and updates on the membership data. The remeasurement loss on the Swiss pension plan recorded as of December 31, 2018 consisted of losses on the asset portfolio of CHF 937 million, partially offset by gains on the PBO of CHF 58 million due to changes in financial and demographic assumptions, primarily an increase in the discount rate and updates on the membership data.

The remeasurement loss on the international pension plans recorded as of December 31, 2019 consisted of losses on the

PBO of CHF 410 million due to changes in financial and demographic assumptions, primarily a decrease in the discount rate and updates on the membership data, partially offset by gains on the asset portfolio of CHF 379 million. The remeasurement loss on the international pension plans recorded as of December 31, 2018 consisted of losses on the asset portfolio of CHF 255 million, partially offset by gains on the PBO of CHF 229 million due to changes in financial and demographic assumptions, primarily an increase in the discount rate.

In 2019, there was a special cash contribution made to the defined benefit pension plan in Germany of CHF 111 million. In

2020, the Group expects to contribute CHF 290 million to the Swiss pension plan, CHF 11 million to the international defined benefit pension plans and CHF 11 million to other post-retirement defined benefit plans.

PBO or ABO in excess of plan assets

The following table shows the aggregate PBO and ABO, as well as the aggregate fair value of plan assets for those plans with PBO in excess of plan assets and those plans with ABO in excess of plan assets as of December 31, 2019 and 2018, respectively.

Defined benefit pension plans in which PBO or ABO exceeded plan assets

December 31	PBO exceeds fair value of plan assets ¹		International ABO exceeds fair value of plan assets ¹	
	2019	2018	2019	2018
PBO/ABO exceeded plan assets (CHF million)				
PBO	1,455	1,336	1,443	1,325
ABO	1,431	1,312	1,422	1,304
Fair value of plan assets	1,174	989	1,163	978

¹ Includes only those defined benefit pension plans where the PBO/ABO exceeded the fair value of plan assets.

There were no defined benefit pension plans in Switzerland in which the PBO or the ABO exceeded the plan assets.

Amounts recognized in AOCI and OCI

The following table shows the actuarial gains/(losses), the prior service credits/(costs) and the cumulative effect of accounting changes, which were recorded in AOCI and subsequently recognized as components of net periodic benefit costs.

Amounts recognized in AOCI, net of tax

end of	Defined benefit pension plans		Other post-retirement defined benefit plan		Total	
	2019	2018	2019	2018	2019	2018
Amounts recognized in AOCI (CHF million)						
Actuarial gains/(losses)	(3,618)	(3,951)	(30)	(23)	(3,648)	(3,974)
Prior service credits/(costs)	601	384	3	3	604	387
Cumulative effect of accounting changes	(42)	–	0	–	(42)	–
Total	(3,059)	(3,567)	(27)	(20)	(3,086)	(3,587)

The following table shows the changes in OCI due to actuarial gains/(losses), the prior service credits/(costs) recognized in AOCI during 2019 and 2018, the amortization of the aforementioned items as components of net periodic benefit costs for these periods and the cumulative effect of accounting changes.

Amounts recognized in OCI

in	Defined benefit pension plans			Other post-retirement defined benefit plan			Total net
	Gross	Tax	Net	Gross	Tax	Net	
2019 (CHF million)							
Actuarial gains/(losses)	82	(29)	53	(12)	3	(9)	44
Prior service credits/(costs)	428	(90)	338	0	0	0	338
Amortization of actuarial losses/(gains)	312	(65)	247	3	(1)	2	249
Amortization of prior service costs/(credits)	(154)	33	(121)	0	0	0	(121)
Immediate recognition due to curtailment/settlement	41	(8)	33	0	0	0	33
Cumulative effect of accounting changes	0	(42)	(42)	0	0	0	(42)
Total	709	(201)	508	(9)	2	(7)	501
2018 (CHF million)							
Actuarial gains/(losses)	(905)	182	(723)	9	(2)	7	(716)
Prior service credits/(costs)	(30)	4	(26)	0	0	0	(26)
Amortization of actuarial losses/(gains)	353	(68)	285	8	(2)	6	291
Amortization of prior service costs/(credits)	(126)	27	(99)	0	0	0	(99)
Immediate recognition due to curtailment/settlement	30	(6)	24	0	0	0	24
Total	(678)	139	(539)	17	(4)	13	(526)

Assumptions

The measurement of both the net periodic benefit costs and the benefit obligation is determined using explicit assumptions, each

of which individually represents the best estimate of a particular future event.

Weighted-average assumptions used to determine net periodic benefit costs and benefit obligation

December 31	Switzerland			Defined benefit pension plans International			Other post-retirement defined benefit plan International		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
	Net periodic benefit cost (%)								
Discount rate – service costs	1.19	1.02	1.01	3.28	2.96	2.92	4.38	3.86	4.03
Discount rate – interest costs	0.57	0.41	0.37	3.28	2.77	2.79	3.95	3.28	3.48
Salary increases	0.75	0.50	0.50	2.92	2.97	3.55	–	–	–
Interest rate on savings balances	1.03	0.86	0.85	–	–	–	–	–	–
Expected long-term rate of return on plan assets	2.40	3.00	3.00	3.00	3.22	3.88	–	–	–
Benefit obligation (%)									
Discount rate	0.45	1.03	0.86	2.38	3.30	2.83	3.23	4.37	3.70
Salary increases	1.50	0.75	0.50	2.84	2.90	2.97	–	–	–
Interest rate on savings balances	0.45	1.03	0.86	–	–	–	–	–	–

Net periodic benefit cost and benefit obligation assumptions

The assumptions used to determine the benefit obligation as of the measurement date are also used to calculate the net periodic benefit costs for the 12-month period following this date.

The discount rates are determined based on yield curves, constructed from high-quality corporate bonds currently available and observable in the market and are expected to be available during the period to maturity of the pension benefits. In countries where there is no deep market in high-quality corporate bonds with longer durations, the best available market information, including governmental bond yields and risk premiums, is used to construct the yield curve. Credit Suisse uses the spot rate approach for

valuations, whereby individual spot rates on the yield curve are applied to each year's cash flow in measuring the plan's benefit obligation as well as future service costs and interest costs.

The assumption pertaining to salary increases is used to calculate the PBO, which is measured using an assumption as to future compensation levels.

When Credit Suisse estimates the interest rate on savings balances, expected future changes in the interest rate environment are taken into consideration. Specifically, Credit Suisse uses the cash flow weighted average of the yield curve used for the discount rate as the best estimate for the interest rate on savings balances for these long term projections.

The expected long-term rate of return on plan assets assumption is applied to the market-related value of assets to calculate the expected return on plan assets as a component of the net periodic benefit costs. It reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the PBO. In estimating that rate, appropriate consideration is given to the returns being earned by the plan assets and the rates of return expected to be available for reinvestment. The expected long-term rate of return on plan assets is based on total return forecasts, expected volatility and correlation estimates, reflecting interrelationships between and within asset classes held. Where possible, similar, if not related, approaches are followed to forecast returns for the various asset classes.

The expected long-term rate of return on debt securities reflects both accruing interest and price returns. The probable long-term relationship between the total return and certain exogenous variables is used, which links the total return forecasts on debt securities to forecasts of the macroeconomic environment.

The expected long-term rate of ROE securities is based on a two-stage dividend discount model which considers economic

and market forecasts to compute a market-implied equity risk premium. Dividends are estimated using market consensus earnings and the historical payout ratio. A subsequent scenario analysis is used to stress test the level of the return.

The expected long-term rate of return on real estate is based on economic models that reflect both the rental and the capital market side of the direct real estate market. This allows for a replicable and robust forecasting methodology for expected returns on real estate equity, fund and direct market indices.

The expected long-term rate of return on private equity and hedge funds is estimated by determining the key factors in their historical performance using private equity and hedge fund benchmarks and indices. To capture these factors, multiple linear regression models with lagged returns are used.

Mortality assumptions are based on standard mortality tables and standard models and methodologies for projecting future improvements to mortality as developed and published by external independent actuarial societies and actuarial organizations.

Mortality tables and life expectancies for major plans

December 31		Life expectancy at age 65 for a male member currently				Life expectancy at age 65 for a female member currently			
		aged 65		aged 45		aged 65		aged 45	
		2019	2018	2019	2018	2019	2018	2019	2018
Life expectancy (years)									
Switzerland	BVG 2015 tables ¹	21.6	21.6	23.2	23.2	23.6	23.6	25.2	25.1
UK	SAPS S2 light tables ²	23.2	23.7	24.8	25.3	24.3	24.8	26.1	26.5
US	Pri-2012 mortality tables ³	21.1	21.5	22.2	22.7	22.7	23.4	23.8	24.5

¹ The BVG 2015 tables were used, which included final 2016 CMI projections, with a long-term rate of improvement of 1.25% per annum.

² 95% of Self-Administered Pension Scheme (SAPS) S2 light tables were used, which included final CMI projections, with a long-term rate of improvement of 1.5% per annum.

³ The Private retirement plan 2012 (Pri-2012) mortality tables were used, with projections based on the Social Security Administration's intermediate improvement scale.

Under US GAAP, the assumptions used to value the PBO should always represent the best estimate as of the measurement date. Credit Suisse regularly reviews the actuarial assumptions used to value and measure the defined benefit obligation on a periodic basis as required by US GAAP.

Health care cost assumptions

The health care cost trend is used to determine the appropriate other post-retirement defined benefit costs. In determining those costs, an annual weighted-average rate is assumed in the cost of covered health care benefits.

The following table provides an overview of the assumed health care cost trend rates.

Health care cost trend rates

in / end of	2019	2018	2017
Health care cost trend rate (%)			
Annual weighted-average health care cost trend rate ¹	8.0	8.7	8.3

¹ The annual health care cost trend rate is assumed to decrease gradually to achieve the long-term health care cost trend rate of 5% by 2026.

The annual health care cost trend rate used to determine the net periodic defined benefit costs for 2020 is 8.0%.

Plan assets and investment strategy

Plan assets, which are assets that have been segregated and restricted to provide for plan benefits, are measured at their fair value as of the measurement date.

The Group's defined benefit pension plans employ a total return investment approach, whereby a diversified mix of debt and equity securities and alternative investments, specifically hedge funds and private equity, are used to maximize the long-term return of plan assets while incurring a prudent level of risk. The intent of this strategy is to meet or outperform plan liabilities over the long term. Risk tolerance is established through careful consideration of plan liabilities, plan funded status and corporate financial condition. Furthermore, equity securities are diversified across different geographic regions as well as across growth, value and small and large capitalization stocks. Real estate and alternative investments, such as private equity and hedge funds, are used to enhance long-term returns while improving portfolio diversification. Derivatives may be used to hedge or increase market exposure, but are not used to leverage the portfolio beyond the market

value of the underlying investments. Investment risk is measured and monitored on an ongoing basis through periodic asset/liability studies and quarterly investment portfolio reviews. To limit investment risk, the Group pension plans follow defined strategic asset allocation guidelines. At times of major market uncertainties and stress, these guidelines may be further restricted.

As of December 31, 2019 and 2018, the total fair value of Group equity securities and options was CHF 89 million and CHF 76 million, respectively.

Fair value hierarchy of plan assets

→ Refer to "Fair value measurement" in Note 35 – Financial instruments for discussion of the fair value hierarchy.

Fair value of plan assets

The following tables present the plan assets measured at fair value on a recurring basis as of December 31, 2019 and 2018 for the Group's defined benefit pension plans.

Plan assets measured at fair value on a recurring basis

end of	2019					2018				
	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total
Plan assets at fair value (CHF million)										
Cash and cash equivalents	703	0	0	0	703	763	0	0	0	763
Debt securities	6,448	199	0	303	6,950	3,742	150	34	751	4,677
of which corporates	6,448	199	0	303	6,950	3,742	150	34	751	4,677
Equity securities	5,015	0	0	0	5,015	5,113	0	0	0	5,113
Real estate	1,277	0	1,351	0	2,628	875	0	1,345	0	2,220
of which direct	0	0	1,351	0	1,351	0	0	1,297	0	1,297
of which indirect	1,277	0	0	0	1,277	875	0	48	0	923
Alternative investments	0	424	0	2,070	2,494	704	24	0	2,724	3,452
of which private equity	0	0	0	1,561	1,561	0	0	0	1,503	1,503
of which hedge funds	0	385	0	126	511	356	0	0	762	1,118
of which other	0	39	0	383	422	348	24	0	459	831
Switzerland	13,443	623	1,351	2,373	17,790	11,197	174	1,379	3,475	16,225
Cash and cash equivalents	14	104	0	0	118	86	123	0	0	209
Debt securities	2,277	1,016	0	430	3,723	1,889	846	0	328	3,063
of which governments	1,904	9	0	0	1,913	1,574	5	0	0	1,579
of which corporates	373	1,007	0	430	1,810	315	841	0	328	1,484
Equity securities	58	0	0	91	149	52	12	0	74	138
Real estate – indirect	0	0	0	29	29	0	0	0	29	29
Alternative investments	0	(37)	0	45	8	0	19	0	61	80
of which hedge funds	0	0	0	45	45	0	0	0	61	61
of which other	0	(37) ¹	0	0	(37)	0	19 ¹	0	0	19
Other investments	0	84	0	0	84	0	85	0	0	85
International	2,349	1,167	0	595	4,111	2,027	1,085	0	492	3,604
Total plan assets at fair value	15,792	1,790	1,351	2,968	21,901	13,224	1,259	1,379	3,967	19,829

The Swiss pension fund uses exchange-traded futures to manage the economic exposure of the portfolio. Under US GAAP, these futures are not carried at fair value as they are settled on a daily basis and are considered brokerage receivables and payables. Consequently, they are excluded from this table. These futures increased/(decreased) the economic exposure to cash and cash equivalents by CHF (685) million and CHF (86) million in 2019 and 2018, respectively, and (increased)/decreased the economic exposure to equity securities by CHF (685) million and CHF (86) million in 2019 and 2018, respectively.

¹ Primarily related to derivative instruments.

Plan assets measured at fair value on a recurring basis for level 3

	Balance at beginning of period	Transfers in	Transfers out	Actual return on plan assets		Purchases, sales, settlements	Foreign currency translation impact	Balance at end of period
				On assets still held at reporting date	On assets sold during the period			
2019 (CHF million)								
Debt securities – corporates	34	0	(34)	0	0	0	0	0
Real estate	1,345	0	(48)	54	0	0	0	1,351
of which direct	1,297	0	0	54	0	0	0	1,351
of which indirect	48	0	(48)	0	0	0	0	0
Total plan assets at fair value	1,379	0	(82)	54	0	0	0	1,351
of which Switzerland	1,379	0	(82)	54	0	0	0	1,351
2018 (CHF million)								
Debt securities – corporates	37	0	0	0	0	(3)	0	34
Real estate	1,257	0	0	53	0	35	0	1,345
of which direct	1,244	0	0	53	0	0	0	1,297
of which indirect	13	0	0	0	0	35	0	48
Total plan assets at fair value	1,294	0	0	53	0	32	0	1,379
of which Switzerland	1,294	0	0	53	0	32	0	1,379

Qualitative disclosures of valuation techniques used to measure fair value

Cash and cash equivalents

Cash and cash equivalents includes money market instruments such as bankers' acceptances, certificates of deposit, CP, book claims, treasury bills, other rights and commingled funds. Valuations of money market instruments and commingled funds are generally based on observable inputs.

Debt securities

Debt securities include government and corporate bonds which are generally quoted in active markets or as units in mutual funds. Debt securities for which market prices are not available, are valued based on yields reflecting the perceived risk of the issuer and the maturity of the security, recent disposals in the market or other modeling techniques, which may involve judgment. Units in mutual funds which are not directly quoted on a public stock exchange and/or for which a fair value is not readily determinable are measured at fair value using NAV.

Equity securities

Equity securities held include common equity shares, convertible bonds and shares in investment companies and units in mutual funds. The common equity shares are generally traded on public stock exchanges for which quoted prices are regularly available. Convertible bonds are generally valued using observable pricing sources. Shares in investment companies and units in mutual funds, which are not directly quoted on a public stock exchange and/or for which a fair value is not readily determinable, are measured at fair value using NAV.

Real estate

Real estate includes direct real estate as well as investments in real estate investment companies, trusts or mutual funds. Direct

real estate is initially measured at its transaction price, which is the best estimate of fair value. Thereafter, direct real estate is individually measured at fair value based on a number of factors that include any recent rounds of financing involving third-party investors, comparable company transactions, multiple analyses of cash flows or book values, or discounted cash flow analyses. The availability of information used in these modeling techniques is often limited and involves significant judgment in evaluating these different factors over time. Real estate investment companies, trusts and mutual funds which are not directly quoted on a public stock exchange and/or for which a fair value is not readily determinable are measured at fair value using NAV.

Alternative investments

Private equity includes direct investments, investments in partnerships that make private equity and related investments in various portfolio companies and funds and fund of funds partnerships. Private equity consists of both publicly traded securities and private securities. Publicly traded investments that are restricted or that are not quoted in active markets are valued based on publicly available quotes with appropriate adjustments for liquidity or trading restrictions. Private equity is valued taking into account a number of factors, such as the most recent round of financing involving unrelated new investors, earnings multiple analyses using comparable companies or discounted cash flow analyses. Private equity for which a fair value is not readily determinable is measured at fair value using NAV provided by the general partner.

Hedge funds that are not directly quoted on a public stock exchange and/or for which a fair value is not readily determinable are measured at fair value using NAV provided by the fund administrator.

Derivatives

Derivatives include both OTC and exchange-traded derivatives. The fair value of OTC derivatives is determined on the basis of inputs that include those characteristics of the derivative that have a bearing on the economics of the instrument. The determination of the fair value of many derivatives involves only a limited degree of subjectivity since the required inputs are generally observable in the marketplace. Other more complex derivatives may use unobservable inputs. Such inputs include long-dated volatility assumptions on OTC option transactions and recovery rate assumptions for credit derivative transactions. The fair value of exchange-traded derivatives is typically derived from the observable exchange prices and/or observable inputs.

Plan asset allocation

The following table shows the plan asset allocation as of the measurement date calculated based on the fair value at that date including the performance of each asset class.

Plan asset allocation

December 31	Switzerland		International	
	2019	2018	2019	2018
Weighted-average (%)				
Cash and cash equivalents	3.9	4.7	2.9	5.8
Debt securities	39.1	28.8	90.6	85.0
Equity securities	28.2	31.5	3.6	3.8
Real estate	14.8	13.7	0.7	0.8
Alternative investments	14.0	21.3	0.2	2.2
Insurance	0.0	0.0	2.0	2.4
Total	100.0	100.0	100.0	100.0

The following table shows the target plan asset allocation for 2020 in accordance with the Group's investment strategy. The target plan asset allocation is used to determine the expected return on plan assets to be considered in the net periodic benefit costs for 2020.

2020 target plan asset allocation

	Switzerland	International
Weighted-average (%)		
Cash and cash equivalents	5.0	0.3
Debt securities	35.0	93.7
Equity securities	30.0	2.2
Real estate	15.0	0.6
Alternative investments	15.0	1.2
Insurance	0.0	2.0
Total	100.0	100.0

Estimated future benefit payments

The following table shows the estimated future benefit payments for defined benefit pension and other post-retirement defined benefit plans.

Estimated future benefit payments

	Defined benefit pension plans	Other post-retirement defined benefit plan
Payments (CHF million)		
2020	1,025	11
2021	937	12
2022	905	12
2023	907	11
2024	904	11
For five years thereafter	4,431	47

32 Derivatives and hedging activities

Derivatives are generally either privately negotiated OTC contracts or standard contracts transacted through regulated exchanges. The Group's most frequently used freestanding derivative products, entered into for trading and risk management purposes, include interest rate, credit default and cross-currency swaps, interest rate and foreign exchange options, interest rate and foreign exchange forward contracts and foreign exchange and interest rate futures.

The Group also enters into contracts that are not considered derivatives in their entirety but include embedded derivative features. Such transactions primarily include issued and purchased structured debt instruments where the return may be calculated by reference to an equity security, index or third-party credit risk, or that have non-standard interest or foreign exchange terms.

On the date a derivative contract is entered into, the Group designates it as belonging to one of the following categories:

- trading activities;
- a risk management transaction that does not qualify as a hedge under accounting standards (referred to as an economic hedge);
- a hedge of the fair value of a recognized asset or liability;
- a hedge of the variability of cash flows to be received or paid relating to a recognized asset or liability or a forecasted transaction; or
- a hedge of a net investment in a foreign operation.

Trading activities

The Group is active in most of the principal trading markets and transacts in many trading and hedging products. As noted above, this includes the use of swaps, futures, options and structured products, such as custom transactions using combinations of derivatives, in connection with its sales and trading activities. Trading activities include market making, positioning and arbitrage activities. The majority of the Group's derivatives were used for trading activities.

Economic hedges

Economic hedges arise when the Group enters into derivative contracts for its own risk management purposes, but the contracts entered into do not qualify for hedge accounting under US GAAP. These economic hedges include the following types:

- interest rate derivatives to manage net interest rate risk on certain core banking business assets and liabilities;
- foreign exchange derivatives to manage foreign exchange risk on certain core banking business revenue and expense items, as well as on core banking business assets and liabilities;
- credit derivatives to manage credit risk on certain loan portfolios;

- futures to manage risk on equity positions including convertible bonds; and
- equity derivatives to manage equity/index risks on certain structured products.

Derivatives used in economic hedges are included as trading assets or trading liabilities in the consolidated balance sheets.

Hedge accounting

Fair value hedges

The Group designates fair value hedges as part of an overall interest rate risk management strategy that incorporates the use of derivative instruments to minimize fluctuations in earnings that are caused by interest rate volatility. The Group uses derivatives to hedge for changes in fair value as a result of the interest rate risk associated with loans and long-term debt instruments.

Cash flow hedges

The Group hedges the variability in interest cash flows on mortgages and loans by using interest rate swaps to convert variable rate assets to fixed rates. Further, the Group uses foreign currency forwards to hedge the foreign currency risk associated with certain forecasted transactions. As of the end of 2019, the maximum length of time over which the Group hedged its exposure to the variability in future cash flows for forecasted transactions, excluding those forecasted transactions related to the payment of variable interest on existing financial instruments, was 12 months.

Net investment hedges

The Group designates net investment hedges as part of its strategy to hedge selected net investments in foreign operations against adverse movements in foreign exchange rates, typically using forward foreign exchange contracts.

Hedge effectiveness assessment

The Group assesses the effectiveness of hedging relationships both prospectively and retrospectively. The prospective assessment is made both at the inception of a hedging relationship and on an ongoing basis, and requires the Group to justify its expectation that the relationship will be highly effective over future periods. The retrospective assessment is also performed on an ongoing basis and requires the Group to determine whether or not the hedging relationship has actually been effective.

Fair value of derivative instruments

The tables below present gross derivative replacement values by type of contract and whether the derivative is used for trading purposes or in a qualifying hedging relationship. Notional amounts have also been provided as an indication of the volume of derivative activity within the Group.

Information on bifurcated embedded derivatives has not been included in these tables. Under US GAAP, the Group elected to account for substantially all financial instruments with an

embedded derivative that is not considered clearly and closely related to the host contract at fair value.

→ Refer to "Note 35 – Financial instruments" for further information.

Fair value of derivative instruments

end of 2019	Trading			Hedging ¹		
	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	6,226.5	0.9	0.9	0.0	0.0	0.0
Swaps	9,183.5	50.8	48.4	113.2	0.5	0.1
Options bought and sold (OTC)	1,355.4	16.3	16.4	0.0	0.0	0.0
Futures	264.2	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	103.4	0.3	0.2	0.0	0.0	0.0
Interest rate products	17,133.0	68.3	65.9	113.2	0.5	0.1
Forwards	1,073.5	8.0	9.1	14.1	0.1	0.1
Swaps	389.5	10.9	13.7	0.0	0.0	0.0
Options bought and sold (OTC)	270.8	3.0	3.5	0.0	0.0	0.0
Futures	9.1	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	0.1	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	1,743.0	21.9	26.3	14.1	0.1	0.1
Forwards	1.0	0.0	0.0	0.0	0.0	0.0
Swaps	175.2	4.3	4.6	0.0	0.0	0.0
Options bought and sold (OTC)	213.6	7.7	7.3	0.0	0.0	0.0
Futures	41.2	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	427.2	5.4	5.1	0.0	0.0	0.0
Equity/index-related products	858.2	17.4	17.0	0.0	0.0	0.0
Credit derivatives²	538.1	6.2	7.2	0.0	0.0	0.0
Forwards	13.2	0.2	0.1	0.0	0.0	0.0
Swaps	11.6	1.0	0.5	0.0	0.0	0.0
Options bought and sold (OTC)	15.5	0.2	0.1	0.0	0.0	0.0
Futures	14.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.7	0.0	0.0	0.0	0.0	0.0
Other products³	56.8	1.4	0.7	0.0	0.0	0.0
Total derivative instruments	20,329.1	115.2	117.1	127.3	0.6	0.2

The notional amount, PRV and NRV (trading and hedging) was CHF 20,456.4 billion, CHF 115.8 billion and CHF 117.3 billion, respectively, as of December 31, 2019.

¹ Relates to derivative contracts that qualify for hedge accounting under US GAAP.

² Primarily credit default swaps.

³ Primarily precious metals, commodity and energy products.

Fair value of derivative instruments (continued)

end of 2018	Trading			Hedging ¹		
	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	7,477.7	3.6	3.7	0.0	0.0	0.0
Swaps	13,148.6 ²	49.0	45.4	116.5 ²	0.1	0.2
Options bought and sold (OTC)	2,027.6	17.0	17.1	0.0	0.0	0.0
Futures	256.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	111.1	0.3	0.3	0.0	0.0	0.0
Interest rate products	23,021.8²	69.9	66.5	116.5²	0.1	0.2
Forwards	1,124.5	9.5	10.5	12.0	0.1	0.1
Swaps	456.6	14.4	17.4	0.0	0.0	0.0
Options bought and sold (OTC)	313.0	3.9	4.3	0.0	0.0	0.0
Futures	10.7	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.3	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	1,906.1	27.8	32.2	12.0	0.1	0.1
Forwards	0.7	0.2	0.1	0.0	0.0	0.0
Swaps	152.6	4.0	5.1	0.0	0.0	0.0
Options bought and sold (OTC)	211.9	7.3	6.5	0.0	0.0	0.0
Futures	39.2	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	356.7	11.9	14.4	0.0	0.0	0.0
Equity/index-related products	761.1	23.4	26.1	0.0	0.0	0.0
Credit derivatives³	469.4	5.4	6.6	0.0	0.0	0.0
Forwards	8.2	0.1	0.1	0.0	0.0	0.0
Swaps	13.5	1.5	0.6	0.0	0.0	0.0
Options bought and sold (OTC)	9.5	0.1	0.1	0.0	0.0	0.0
Futures	9.3	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.9	0.0	0.0	0.0	0.0	0.0
Other products⁴	42.4	1.7	0.8	0.0	0.0	0.0
Total derivative instruments	26,200.8²	128.2	132.2	128.5²	0.2	0.3

The notional amount, PRV and NRV (trading and hedging) was CHF 26,329.3 billion, CHF 128.4 billion and CHF 132.5 billion, respectively, as of December 31, 2018.

¹ Relates to derivative contracts that qualify for hedge accounting under US GAAP.

² Prior period has been corrected.

³ Primarily credit default swaps.

⁴ Primarily precious metals, commodity and energy products.

Gains or (losses) on fair value hedges

in	2019	2018	2017
	Net interest income	Trading revenues	Trading revenues
Interest rate products (CHF million)			
Hedged items	(1,721)	423	290
Derivatives designated as hedging instruments	1,550	(415)	(285)
Net gains/(losses) on the ineffective portion	–	8	5

As a result of the adoption of ASU 2017-12 on January 1, 2019, the gains/(losses) on interest rate risk hedges are included in net interest income, while in prior periods they were recorded in trading revenue. Additionally, the gains/(losses) on the ineffective portion are no longer separately measured and reported. The accrued interest on fair value hedges is recorded in net interest income and is excluded from this table.

Hedged items in fair value hedges

end of	2019		
	Hedged items		Discontinued hedges ²
	Carrying amount	Hedging adjustments ¹	
Assets and liabilities (CHF billion)			
Net loans	15.2	0.1	0.7
Long-term debt	65.8	1.2	0.3

¹ Relates to cumulative amount of fair value hedging adjustments included in the carrying amount.

² Relates to cumulative amount of fair value hedging adjustments remaining for any hedged items for which hedge accounting has been discontinued.

Cash flow hedges

in	2019	2018	2017
Interest rate products (CHF million)			
Gains/(losses) recognized in AOCI on derivatives	85	(76)	(56)
Gains/(losses) reclassified from AOCI into interest and dividend income	3	(85)	(11)
Foreign exchange products (CHF million)			
Gains/(losses) recognized in AOCI on derivatives	4	(95)	(30)
Trading revenues	(7)	(37)	(17)
Other revenues	(4)	(6)	(7)
Total other operating expenses	(16)	(5)	0
Gains/(losses) reclassified from AOCI into income	(27)	(48)	(24)
Gains/(losses) excluded from the assessment of effectiveness reported in trading revenues ¹	(20)	–	–
Interest rate and foreign exchange products (CHF million)			
Net gains/(losses) on the ineffective portion	–	0	(1) ²

As a result of the adoption of ASU 2017-12 on January 1, 2019 the gains/(losses) on the ineffective portion are no longer separately measured and reported.

¹ Related to the forward points of a foreign currency forward.

² Included in trading revenues.

The net gain associated with cash flow hedges expected to be reclassified from AOCI within the next 12 months was CHF 25 million.

Net investment hedges

in	2019	2018	2017
Foreign exchange products (CHF million)			
Gains/(losses) recognized in the cumulative translation adjustments section of AOCI	(138)	133	(475)
Gains/(losses) reclassified from the cumulative translation adjustments section of AOCI into other revenues	0	(2)	8

The Group includes all derivative instruments not included in hedge accounting relationships in its trading activities.

→ Refer to "Note 7 – Trading revenues" for gains and losses on trading activities by product type.

Disclosures relating to contingent credit risk

Certain of the Group's derivative instruments contain provisions that require it to maintain a specified credit rating from each of the major credit rating agencies. If the ratings fall below the level specified in the contract, the counterparties to the agreements could request payment of additional collateral on those derivative instruments that are in a net liability position. Certain of the derivative contracts also provide for termination of the contract, generally upon a downgrade of either the Group or the counterparty. Such derivative contracts are reflected at close-out costs.

The following table provides the Group's current net exposure from contingent credit risk relating to derivative contracts with bilateral counterparties and SPEs that include credit support agreements, the related collateral posted and the additional collateral required in a one-notch, two-notch and a three-notch downgrade event, respectively. The table also includes derivative contracts with contingent credit risk features without credit support agreements that have accelerated termination event conditions. The current net exposure for derivative contracts with bilateral counterparties and contracts with accelerated termination event conditions is the aggregate fair value of derivative instruments that were in a net liability position. For SPEs, the current net exposure is the contractual amount that is used to determine the collateral payable in the event of a downgrade. The contractual amount could include both the NRV and a percentage of the notional value of the derivative.

Contingent credit risk

end of	2019			2018			Total	
	Bilateral counterparties	Special purpose entities	Accelerated terminations	Bilateral counterparties	Special purpose entities	Accelerated terminations		
Contingent credit risk (CHF billion)								
Current net exposure	3.1	0.0	0.3	3.4	3.6	0.1	0.3	4.0
Collateral posted	2.7	0.1	–	2.8	3.4	0.1	–	3.5
Impact of a one-notch downgrade event	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.2
Impact of a two-notch downgrade event	0.2	0.0	0.0	0.2	0.9	0.0	0.1	1.0
Impact of a three-notch downgrade event	0.7	0.1	0.1	0.9	1.0	0.1	0.2	1.3

The impact of a downgrade event reflects the amount of additional collateral required for bilateral counterparties and special purpose entities and the amount of additional termination expenses for accelerated terminations, respectively.

Credit derivatives

Credit derivatives are contractual agreements in which the buyer generally pays a fee in exchange for a contingent payment by the seller if there is a credit event on the underlying referenced entity or asset. They are generally privately negotiated OTC contracts, with numerous settlement and payment terms, and most are structured so that they specify the occurrence of an identifiable credit event, which can include bankruptcy, insolvency, receivership, material adverse restructuring of debt or failure to meet obligations when due.

The Group enters into credit derivative contracts in the normal course of business, buying and selling protection to facilitate client transactions and as a market maker. This includes providing structured credit products for its clients to enable them to hedge their credit risk. The referenced instruments of these structured credit products are both investment grade and non-investment grade and could include corporate bonds, sovereign debt, ABS and loans. These instruments can be formed as single items (single-named instruments) or combined on a portfolio basis (multi-named instruments). The Group purchases protection to economically hedge various forms of credit exposure, for example, the economic hedging of loan portfolios or other cash positions. Finally, the Group also takes proprietary positions which can take the form of either purchased or sold protection.

The credit derivatives most commonly transacted by the Group are CDS and credit swaptions. CDSs are contractual agreements in which the buyer of the swap pays an upfront and/or a periodic fee in return for a contingent payment by the seller of the swap following a credit event of the referenced entity or asset. Credit swaptions are options with a specified maturity to buy or sell protection under a CDS on a specific referenced credit event.

In addition, to reduce its credit risk, the Group enters into legally enforceable netting agreements with its derivative counterparties. Collateral on these derivative contracts is usually posted on a net counterparty basis and cannot be allocated to a particular derivative contract.

→ Refer to "Note 27 – Offsetting of financial assets and financial liabilities" for further information on netting.

Credit protection sold

Credit protection sold is the maximum potential payout, which is based on the notional value of derivatives and represents the amount of future payments that the Group would be required to make as a result of credit risk-related events. The Group believes that the maximum potential payout is not representative of the actual loss exposure based on historical experience. This amount has not been reduced by the Group's rights to the underlying assets and the related cash flows. In accordance with most credit derivative contracts, should a credit event (or settlement trigger) occur, the Group is usually liable for the difference between the credit protection sold and the recourse it holds in the value of the underlying assets. The maximum potential amount of future payments has not been reduced for any cash collateral paid to a

given counterparty as such payments would be calculated after netting all derivative exposures, including any credit derivatives with that counterparty in accordance with a related master netting agreement. Due to such netting processes, determining the amount of collateral that corresponds to credit derivative exposures only is not possible.

To reflect the quality of the payment risk on credit protection sold, the Group assigns an internally generated rating to those instruments referenced in the contracts. Internal ratings are assigned by experienced credit analysts based on expert judgment that incorporates analysis and evaluation of both quantitative and qualitative factors. The specific factors analyzed, and their relative importance, are dependent on the type of counterparty. The analysis emphasizes a forward-looking approach, concentrating on economic trends and financial fundamentals, and making use of peer analysis, industry comparisons and other quantitative tools. External ratings and market information are also used in the analysis process where available.

Credit protection purchased

Credit protection purchased represents those instruments where the underlying reference instrument is identical to the reference instrument of the credit protection sold. The maximum potential payout amount of credit protection purchased for each individual identical underlying reference instrument may be greater or lower than the notional amount of protection sold.

The Group also considers estimated recoveries that it would receive if the specified credit event occurred, including both the anticipated value of the underlying referenced asset that would, in most instances, be transferred to the Group and the impact of any purchased protection with an identical reference instrument and product type.

Other protection purchased

In the normal course of business, the Group purchases protection to offset the risk of credit protection sold that may have similar, but not identical, reference instruments, and may use similar, but not identical, products, which reduces the total credit derivative exposure. Other protection purchased is based on the notional value of the instruments.

The Group purchases its protection from banks and broker dealers, other financial institutions and other counterparties.

Fair value of credit protection sold

The fair values of the credit protection sold give an indication of the amount of payment risk, as the negative fair values increase when the potential payment under the derivative contracts becomes more probable.

Credit protection sold/purchased

The following tables do not include all credit derivatives and differ from the credit derivatives in the "Fair value of derivative instruments" table. This is due to the exclusion of certain credit derivative instruments under US GAAP, which defines a credit

derivative as a derivative instrument (a) in which one or more of its underlyings are related to the credit risk of a specified entity (or a group of entities) or an index based on the credit risk of a group of entities and (b) that exposes the seller to potential loss from credit risk-related events specified in the contract.

Total return swaps (TRS) of CHF 16.7 billion and CHF 9.7 billion as of December 31, 2019 and 2018, respectively, were also excluded because a TRS does not expose the seller to potential loss from credit risk-related events specified in the contract. A TRS only provides protection against a loss in asset value and not against additional amounts as a result of specific credit events.

Credit protection sold/purchased

end of	2019					2018				
	Credit protection sold	Credit protection purchased ¹	Net credit protection (sold)/purchased	Other protection purchased	Fair value of credit protection sold	Credit protection sold	Credit protection purchased ¹	Net credit protection (sold)/purchased	Other protection purchased	Fair value of credit protection sold
Single-name instruments (CHF billion)										
Investment grade ²	(52.6)	47.9	(4.7)	11.5	0.5	(46.0)	43.1	(2.9)	11.8	0.2
Non-investment grade	(32.1)	29.5	(2.6)	16.1	0.9	(26.2)	24.3	(1.9)	17.7	(0.2)
Total single-name instruments	(84.7)	77.4	(7.3)	27.6	1.4	(72.2)	67.4	(4.8)	29.5	0.0
of which sovereign	(17.2)	15.4	(1.8)	4.1	0.0	(16.4)	15.0	(1.4)	5.5	(0.1)
of which non-sovereign	(67.5)	62.0	(5.5)	23.5	1.4	(55.8)	52.4	(3.4)	24.0	0.1
Multi-name instruments (CHF billion)										
Investment grade ²	(109.5)	108.9	(0.6)	44.0	0.7	(102.9)	102.4	(0.5)	25.1	(0.8)
Non-investment grade	(27.7)	24.5	(3.2)	17.1 ³	1.0	(26.5)	25.3	(1.2)	8.4 ³	0.1
Total multi-name instruments	(137.2)	133.4	(3.8)	61.1	1.7	(129.4)	127.7	(1.7)	33.5	(0.7)
of which sovereign	0.0	0.0	0.0	0.0	0.0	(0.2)	0.2	0.0	0.0	0.0
of which non-sovereign	(137.2)	133.4	(3.8)	61.1	1.7	(129.2)	127.5	(1.7)	33.5	(0.7)
Total instruments (CHF billion)										
Investment grade ²	(162.1)	156.8	(5.3)	55.5	1.2	(148.9)	145.5	(3.4)	36.9	(0.6)
Non-investment grade	(59.8)	54.0	(5.8)	33.2	1.9	(52.7)	49.6	(3.1)	26.1	(0.1)
Total instruments	(221.9)	210.8	(11.1)	88.7	3.1	(201.6)	195.1	(6.5)	63.0	(0.7)
of which sovereign	(17.2)	15.4	(1.8)	4.1	0.0	(16.6)	15.2	(1.4)	5.5	(0.1)
of which non-sovereign	(204.7)	195.4	(9.3)	84.6	3.1	(185.0)	179.9	(5.1)	57.5	(0.6)

¹ Represents credit protection purchased with identical underlyings and recoveries.

² Based on internal ratings of BBB and above.

³ Includes synthetic securitized loan portfolios.

The following table reconciles the notional amount of credit derivatives included in the table "Fair value of derivative instruments" to the table "Credit protection sold/purchased".

Credit derivatives

end of	2019	2018
Credit derivatives (CHF billion)		
Credit protection sold	221.9	201.6
Credit protection purchased	210.8	195.1
Other protection purchased	88.7	63.0
Other instruments ¹	16.7	9.7
Total credit derivatives	538.1	469.4

¹ Consists of total return swaps and other derivative instruments.

The segregation of the future payments by maturity range and underlying risk gives an indication of the current status of the potential for performance under the derivative contracts.

Maturity of credit protection sold

end of	Maturity less than 1 year	Maturity between 1 to 5 years	Maturity greater than 5 years	Total
2019 (CHF billion)				
Single-name instruments	19.2	60.6	4.9	84.7
Multi-name instruments	41.9	79.8	15.5	137.2
Total instruments	61.1	140.4	20.4	221.9
2018 (CHF billion)				
Single-name instruments	13.1	54.9	4.2	72.2
Multi-name instruments	28.8	80.6	20.0	129.4
Total instruments	41.9	135.5	24.2	201.6

33 Guarantees and commitments

Guarantees

In the ordinary course of business, guarantees are provided that contingently obligate the Group to make payments to third parties if the counterparty fails to fulfill its obligation under a borrowing or other contractual arrangement. The total gross amount disclosed within the Guarantees table reflects the maximum potential payment under the guarantees. The carrying value represents the

higher of the initial fair value (generally the related fee received or receivable) less cumulative amortization and the Group's current best estimate of payments that will be required under existing guarantee arrangements.

Guarantees provided by the Group are classified as follows: credit guarantees and similar instruments, performance guarantees and similar instruments, derivatives and other guarantees.

Guarantees

end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount ¹	Carrying value	Collateral received
2019 (CHF million)								
Credit guarantees and similar instruments	2,206	252	185	471	3,114	3,061	10	1,655
Performance guarantees and similar instruments	4,942	3,059	668	188	8,857	7,833	31	2,793
Derivatives ²	13,194	2,665	695	690	17,244	17,244	295	– ³
Other guarantees	4,257	1,386	367	493	6,503	6,457	64	4,003
Total guarantees	24,599	7,362	1,915	1,842	35,718	34,595	400	8,451
2018 (CHF million)								
Credit guarantees and similar instruments	2,228	439	218	398	3,283	3,194	14	1,748
Performance guarantees and similar instruments	5,008	1,344	552	240	7,144	6,278	44	3,153
Derivatives ^{2, 4}	16,228	3,995	1,256	778	22,257	22,257	919	– ³
Other guarantees	4,325	1,405	640	517	6,887	6,814	56	4,169
Total guarantees	27,789	7,183	2,666	1,933	39,571	38,543	1,033	9,070

¹ Total net amount is computed as the gross amount less any participations.

² Excludes derivative contracts with certain active commercial and investment banks and certain other counterparties, as such contracts can be cash settled and the Group had no basis to conclude it was probable that the counterparties held, at inception, the underlying instruments.

³ Collateral for derivatives accounted for as guarantees is not significant.

⁴ Prior period has been corrected.

Credit guarantees and similar instruments

Credit guarantees and similar instruments are contracts that require the Group to make payments should a third party fail to do so under a specified existing credit obligation. The position includes standby letters of credit, commercial and residential mortgage guarantees and other guarantees associated with VIEs.

Standby letters of credit are made in connection with the corporate lending business and other corporate activities, where the Group provides guarantees to counterparties in the form of standby letters of credit, which represent obligations to make payments to third parties if the counterparties fail to fulfill their obligations under a borrowing arrangement or other contractual obligation.

Commercial and residential mortgage guarantees are made in connection with the Group's commercial mortgage activities in the US, where the Group sells certain commercial and residential mortgages to Fannie Mae and agrees to bear a percentage of the losses triggered by the borrowers failing to perform on the mortgage. The Group also issues guarantees that require it to reimburse Fannie Mae for losses on certain whole loans underlying mortgage-backed securities issued by Fannie Mae, which

are triggered by borrowers failing to perform on the underlying mortgages.

The Group also provides guarantees to VIEs and other counterparties under which it may be required to buy assets from such entities upon the occurrence of certain triggering events such as rating downgrades and/or substantial decreases in the fair value of those assets.

Performance guarantees and similar instruments

Performance guarantees and similar instruments are arrangements that require contingent payments to be made when certain performance-related targets or covenants are not met. Such covenants may include a customer's obligation to deliver certain products and services or to perform under a construction contract. Performance guarantees are frequently executed as part of project finance transactions. The position includes private equity fund guarantees and guarantees related to residential mortgage securitization activities.

For private equity fund guarantees, the Group has provided investors in private equity funds sponsored by a Group entity guarantees on potential obligations of certain general partners to return

amounts previously paid as carried interest to those general partners if the performance of the remaining investments declines. To manage its exposure, the Group generally withholds a portion of carried interest distributions to cover any repayment obligations. In addition, pursuant to certain contractual arrangements, the Group is obligated to make cash payments to certain investors in certain private equity funds if specified performance thresholds are not met.

Further, as part of the Group's residential mortgage securitization activities in the US, the Group may guarantee the collection by the servicer and remittance to the securitization trust of prepayment penalties. The Group will have to perform under these guarantees in the event the servicer fails to remit the prepayment penalties.

Derivatives

Derivatives which may also have the characteristics of a guarantee are issued in the ordinary course of business, generally in the form of written put options. Such derivative contracts do not meet the characteristics of a guarantee if they are cash settled and the Group has no basis to conclude it is probable that the counterparties held, at inception, the underlying instruments related to the derivative contracts. The Group has concluded that these conditions were met for certain active commercial and investment banks and certain other counterparties, and accordingly, the Group has reported such contracts as derivatives only.

The Group manages its exposure to these derivatives by engaging in various hedging strategies to reduce its exposure. For some contracts, such as written interest rate caps or foreign exchange options, the maximum payout is not determinable as interest rates or exchange rates could theoretically rise without limit. For these contracts, notional amounts were disclosed in the table above in order to provide an indication of the underlying exposure. In addition, the Group carries all derivatives at fair value in the consolidated balance sheets and has considered the performance triggers and probabilities of payment when determining those fair values. It is more likely than not that written put options that are in-the-money to the counterparty will be exercised, for which the Group's exposure was limited to the carrying value reflected in the table.

Other guarantees

Other guarantees include bankers' acceptances, residual value guarantees, deposit insurance, contingent considerations in business combinations, the minimum value of an investment in mutual funds or private equity funds and all other guarantees that were not allocated to one of the categories above.

Deposit-taking banks and securities dealers in Switzerland and certain other European countries are required to ensure the payout of privileged deposits in case of specified restrictions or compulsory liquidation of a deposit-taking bank. In Switzerland, deposit-taking banks and securities dealers jointly guarantee an amount of up to CHF 6 billion. Upon occurrence of a payout event triggered by a specified restriction of business imposed

by FINMA or by the compulsory liquidation of another deposit-taking bank, the Group's contribution will be calculated based on its share of privileged deposits in proportion to total privileged deposits. Based on FINMA's estimate for the Group's banking subsidiaries in Switzerland, the Group's share in the deposit insurance guarantee program for the period July 1, 2019 to June 30, 2020 is CHF 0.5 billion. These deposit insurance guarantees were reflected in other guarantees.

Representations and warranties on residential mortgage loans sold

In connection with the Global Markets division's sale of US residential mortgage loans, the Group has provided certain representations and warranties relating to the loans sold. The Group has provided these representations and warranties relating to sales of loans to institutional investors, primarily banks, and non-agency, or private label, securitizations. The loans sold are primarily loans that the Group has purchased from other parties. The scope of representations and warranties, if any, depends on the transaction, but can include: ownership of the mortgage loans and legal capacity to sell the loans; loan-to-value ratios and other characteristics of the property, the borrower and the loan; validity of the liens securing the loans and absence of delinquent taxes or related liens; conformity to underwriting standards and completeness of documentation; and origination in compliance with law. If it is determined that representations and warranties were breached, the Group may be required to repurchase the related loans or indemnify the investors to make them whole for losses. Whether the Group will incur a loss in connection with repurchases and make whole payments depends on: the extent to which claims are made; the validity of such claims made within the statute of limitations (including the likelihood and ability to enforce claims); whether the Group can successfully claim against parties that sold loans to the Group and made representations and warranties to the Group; the residential real estate market, including the number of defaults; and whether the obligations of the securitization vehicles were guaranteed or insured by third parties.

Repurchase claims on residential mortgage loans sold that are subject to arbitration or litigation proceedings, or become so during the reporting period, are not included in this Guarantees and commitments disclosure but are addressed in litigation and related loss contingencies and provisions. The Group is involved in litigation relating to representations and warranties on residential mortgages sold.

→ Refer to "Note 39 – Litigation" for further information.

Disposal-related contingencies and other indemnifications

The Group has certain guarantees for which its maximum contingent liability cannot be quantified. These guarantees are not reflected in the "Guarantees" table and are discussed below.

Disposal-related contingencies

In connection with the sale of assets or businesses, the Group sometimes provides the acquirer with certain indemnification provisions. These indemnification provisions vary by counterparty in scope and duration and depend upon the type of assets or businesses sold. They are designed to transfer the potential risk of certain unquantifiable and unknowable loss contingencies, such as litigation, tax and intellectual property matters, from the acquirer to the seller. The Group closely monitors all such contractual agreements in order to ensure that indemnification provisions are adequately provided for in the Group's consolidated financial statements.

Other indemnifications

The Group provides indemnifications to certain counterparties in connection with its normal operating activities for which it is not possible to estimate the maximum amount that it could be obligated to pay. As a normal part of issuing its own securities, the Group typically agrees to reimburse holders for additional tax withholding charges or assessments resulting from changes in applicable tax laws or the interpretation of those laws. Securities that include these agreements to pay additional amounts generally also include a related redemption or call provision if the obligation to pay the additional amounts results from a change in law or its interpretation and the obligation cannot be avoided by the issuer taking reasonable steps to avoid the payment of additional amounts. Since such potential obligations are dependent on future changes in tax laws, the related liabilities the Group may incur as a result of such changes cannot be reasonably estimated. In light of the related call provisions typically included, the Group does not expect any potential liabilities in respect of tax gross-ups to be material.

The Group is a member of numerous securities exchanges and clearing houses and may, as a result of its membership arrangements, be required to perform if another member defaults and available amounts as defined in the relevant exchange's or clearing house's default waterfalls are not sufficient to cover losses of another member's default. The exchange's or clearing house's default management procedures may provide for cash calls to non-defaulting members which may be limited to the amount (or a multiple of the amount) of the Group's contribution to the guarantee fund. However, if these cash calls are not sufficient to cover losses, the default waterfall and default management procedures may foresee further loss allocation. Furthermore, some clearing house arrangements require members to assume a proportionate

share of non-default losses, if such losses exceed the specified resources allocated for such purpose by the clearing house. Non-default losses result from the clearing house's investment of guarantee fund contributions and initial margin or are other losses unrelated to the default of a clearing member. The Group has determined that it is not possible to reasonably estimate the maximum potential amount of future payments due under the membership arrangements. In addition, the Group believes that any potential requirement to make payments under these membership arrangements is remote.

Other commitments

Irrevocable commitments under documentary credits

Irrevocable commitments under documentary credits include exposures from trade finance related to commercial letters of credit under which the Group guarantees payments to exporters against presentation of shipping and other documents.

Irrevocable loan commitments

Irrevocable loan commitments are irrevocable credit facilities extended to clients and include fully or partially undrawn commitments that are legally binding and cannot be unconditionally cancelled by the Group. Commitments to originate mortgage loans that will be held for sale are considered derivatives for accounting purposes and are not included in this disclosure. Such commitments are reflected as derivatives in the consolidated balance sheets.

Forward reverse repurchase agreements

Forward reverse repurchase agreements represent transactions in which the initial cash exchange of the reverse repurchase transactions takes place on specified future dates. The Group enters into forward reverse repurchase agreements with counterparties that may have existing funded reverse repurchase agreements. Depending on the details of the counterparty contract with Credit Suisse, both a counterparty's existing funded reverse repurchase agreement and any forward reverse repurchase agreements under contract with the same counterparty are considered.

Other commitments

Other commitments include private equity commitments, firm commitments in underwriting securities, commitments arising from deferred payment letters of credit and from acceptances in circulation and liabilities for call and put options on shares and other equity instruments.

Other commitments

end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount ¹	Collateral received
2019 (CHF million)							
Irrevocable commitments under documentary credits	4,434	163	0	0	4,597	4,518	3,077
Irrevocable loan commitments ²	27,145	38,974	48,856	10,152	125,127	120,436	60,118
Forward reverse repurchase agreements	41	0	0	0	41	41	41
Other commitments	630	121	121	58	930	930	127
Total other commitments	32,250	39,258	48,977	10,210	130,695	125,925	63,363
2018 (CHF million)							
Irrevocable commitments under documentary credits	5,056	182	0	0	5,238	5,077	3,651
Irrevocable loan commitments ^{2, 3}	26,947	34,188	45,938	11,373	118,446	114,340	59,461
Forward reverse repurchase agreements	31	0	0	0	31	31	31
Other commitments	329	11	119	33	492	492	4
Total other commitments	32,363	34,381	46,057	11,406	124,207	119,940	63,147

¹ Total net amount is computed as the gross amount less any participations.

² Irrevocable loan commitments do not include a total gross amount of CHF 128,294 million and CHF 113,580 million of unused credit limits as of December 31, 2019 and 2018, respectively, which were revocable at the Group's sole discretion upon notice to the client.

³ Prior period has been corrected.

34 Transfers of financial assets and variable interest entities

In the normal course of business, the Group enters into transactions with, and makes use of, SPEs. An SPE is an entity in the form of a trust or other legal structure designed to fulfill a specific limited need of the company that organized it and is generally structured to isolate the SPE's assets from creditors of other entities, including the Group. The principal uses of SPEs are to assist the Group and its clients in securitizing financial assets and creating investment products. The Group also uses SPEs for other client-driven activity, such as to facilitate financings, and for Group tax or regulatory purposes.

Transfers of financial assets

Securitizations

The majority of the Group's securitization activities involve mortgages and mortgage-related securities and are predominantly transacted using SPEs. In a typical securitization, the SPE purchases assets financed by proceeds received from the SPE's issuance of debt and equity instruments, certificates, CP and other notes of indebtedness. These assets and liabilities are recorded on the balance sheet of the SPE and not reflected on the Group's consolidated balance sheet, unless either the Group sold the assets to the entity and the accounting requirements for sale were not met or the Group consolidates the SPE.

The Group purchases commercial and residential mortgages for the purpose of securitization and sells these mortgage loans to SPEs. These SPEs issue commercial mortgage-backed securities (CMBS), residential mortgage-backed securities (RMBS) and ABS that are collateralized by the assets transferred to the SPE and that pay a return based on the returns on those assets. Investors in these mortgage-backed securities or ABS typically have recourse to the assets in the SPEs. Third-party guarantees may further enhance the creditworthiness of the assets. The investors and the SPEs have no recourse to the Group's assets. The Group is typically an underwriter of, and makes a market in, these securities.

The Group also transacts in re-securitizations of previously issued RMBS securities. Typically, certificates issued out of an existing securitization vehicle are sold into a newly created and separate securitization vehicle. Often, these re-securitizations are initiated in order to re-securitize an existing security to give the investor an investment with different risk ratings or characteristics.

The Group also uses SPEs for other asset-backed financings relating to client-driven activity and for Group tax or regulatory purposes. Types of structures included in this category include managed collateralized loan obligations (CLOs), CLOs, leveraged finance, repack and other types of transactions, including life insurance structures, emerging market structures set up for financing, loan participation or loan origination purposes, and other alternative structures created for the purpose of investing in venture capital-like investments. CLOs are collateralized by loans transferred to the CLO vehicle and pay a return based on the returns on the loans. Leveraged finance structures are used to assist in the syndication of certain loans held by the Group, while repack structures are designed to give a client collateralized exposure to specific cash flows or credit risk backed by collateral purchased from the Group. In these asset-backed financing structures, investors typically only have recourse to the collateral of the SPE and do not have recourse to the Group's assets.

When the Group transfers assets into an SPE, it must assess whether that transfer is accounted for as a sale of the assets. Transfers of assets may not meet sale requirements if the assets have not been legally isolated from the Group and/or if the Group's continuing involvement is deemed to give it effective control over the assets. If the transfer is not deemed a sale, it is instead accounted for as a secured borrowing, with the transferred assets as collateral.

Gains and losses on securitization transactions depend, in part, on the carrying values of mortgages and loans involved in the transfer and are allocated between the assets sold and any beneficial interests retained according to the relative fair values at the date of sale.

The Group does not retain material servicing responsibilities from securitization activities.

The following table provides the gains or losses and proceeds from the transfer of assets relating to 2019, 2018 and 2017 securitizations of financial assets that qualify for sale accounting and subsequent derecognition, along with the cash flows between the Group and the SPEs used in any securitizations in which the Group still has continuing involvement, regardless of when the securitization occurred.

Securizations

in	2019	2018	2017
Gains/(losses) and cash flows (CHF million)			
CMBS			
Net gain ¹	10	10	37
Proceeds from transfer of assets	7,757	5,861	6,604
Cash received on interests that continue to be held	162	41	28
RMBS			
Net gain/(loss) ¹	2	(1)	0
Proceeds from transfer of assets	21,566	22,536	14,817
Purchases of previously transferred financial assets or its underlying collateral	(1)	0	(2)
Servicing fees	2	3	3
Cash received on interests that continue to be held	312	576	368
Other asset-backed financings			
Net gain ¹	101	77	31
Proceeds from transfer of assets	11,702	6,422	7,664
Purchases of previously transferred financial assets or its underlying collateral	(763)	(318)	(380)
Fees ²	151	142	135
Cash received on interests that continue to be held	6	3	4

¹ Includes underwriting revenues, deferred origination fees, gains or losses on the sale of collateral to the SPE and gains or losses on the sale of newly issued securities to third parties, but excludes net interest income on assets prior to the securitization. The gains or losses on the sale of the collateral is the difference between the fair value on the day prior to the securitization pricing date and the sale price of the loans.

² Represents management fees and performance fees earned for investment management services provided to managed CLOs.

Continuing involvement in transferred financial assets

The Group may have continuing involvement in the financial assets that are transferred to an SPE, which may take several forms, including, but not limited to, servicing, recourse and guarantee arrangements, agreements to purchase or redeem transferred assets, derivative instruments, pledges of collateral and beneficial interests in the transferred assets. Beneficial interests, which are valued at fair value, include rights to receive all or portions of specified cash inflows received by an SPE, including, but not limited to, senior and subordinated shares of interest, principal, or other cash inflows to be "passed through" or "paid through", premiums due to guarantors, CP obligations, and residual interests, whether in the form of debt or equity.

The Group's exposure resulting from continuing involvement in transferred financial assets is generally limited to beneficial interests typically held by the Group in the form of instruments issued by SPEs that are senior, subordinated or residual tranches. These instruments are held by the Group typically in connection with underwriting or market-making activities and are included in trading assets in the consolidated balance sheets. Any changes in the fair value of these beneficial interests are recognized in the consolidated statements of operations.

Investors usually have recourse to the assets in the SPE and often benefit from other credit enhancements, such as collateral accounts, or from liquidity facilities, such as lines of credit or liquidity put option of asset purchase agreements. The SPE may also enter into a derivative contract in order to convert the yield or currency of the underlying assets to match the needs of the SPE investors, or to limit or change the credit risk of the SPE. The Group may be the provider of certain credit enhancements as well as the counterparty to any related derivative contract.

The following table provides the outstanding principal balance of assets to which the Group continued to be exposed after the transfer of the financial assets to any SPE and the total assets of the SPE as of December 31, 2019 and 2018, regardless of when the transfer of assets occurred.

Principal amounts outstanding and total assets of SPEs resulting from continuing involvement

end of	2019	2018
CHF million		
CMBS		
Principal amount outstanding	21,079	25,330
Total assets of SPE	28,748	35,760
RMBS		
Principal amount outstanding	54,001	40,253
Total assets of SPE	55,595	41,242
Other asset-backed financings		
Principal amount outstanding	27,982	23,036
Total assets of SPE	54,974	47,542

Principal amount outstanding relates to assets transferred from the Group and does not include principal amounts for assets transferred from third parties.

Fair value of beneficial interests

The fair value measurement of the beneficial interests held at the time of transfer and as of the reporting date that result from any continuing involvement is determined using fair value estimation techniques, such as the present value of estimated future cash flows that incorporate assumptions that market participants customarily use in these valuation techniques. The fair value of the assets or liabilities that result from any continuing involvement does not include any benefits from financial instruments that the Group may utilize to hedge the inherent risks.

Key economic assumptions at the time of transfer

→ Refer to "Fair value measurement" in Note 35 – Financial instruments for further information on the fair value hierarchy.

Key economic assumptions used in measuring fair value of beneficial interests at time of transfer

at time of transfer, in	2019		2018		2017	
	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS
CHF million, except where indicated						
Fair value of beneficial interests	549	3,171	662	3,613	445	2,400
of which level 2	455	2,978	640	3,509	444	2,221
of which level 3	94	193	22	103	1	179
Weighted-average life, in years	5.5	5.5	6.6	7.8	10.0	6.0
Prepayment speed assumption (rate per annum), in % ¹	- ²	2.0-37.3	- ²	5.0-13.5	- ²	1.0-22.9
Cash flow discount rate (rate per annum), in % ³	2.5-8.3	1.5-15.7	3.6-9.8	3.0-13.6	2.4-9.0	2.0-29.5
Expected credit losses (rate per annum), in % ⁴	1.3-1.9	1.5-7.6	1.8-3.1	2.3-7.2	0.6-3.4	0.8-6.3

Transfers of assets in which the Group does not have beneficial interests are not included in this table.

1 Prepayment speed assumption (PSA) is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the constant prepayment rate (CPR) assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.

2 To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.

3 The rate is based on the weighted-average yield on the beneficial interests.

4 The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.

Key economic assumptions as of the reporting date

The following table provides the sensitivity analysis of key economic assumptions used in measuring the fair value of beneficial interests held in SPEs as of December 31, 2019 and 2018.

Key economic assumptions used in measuring fair value of beneficial interests held in SPEs

end of	2019			2018		
	CMBS ¹	RMBS	Other asset-backed financing activities ²	CMBS ¹	RMBS	Other asset-backed financing activities ²
CHF million, except where indicated						
Fair value of beneficial interests	399	2,282	751	805	2,006	226
of which non-investment grade	46	711	15	112	307	26
Weighted-average life, in years	6.4	5.7	1.6	5.7	7.9	5.6
Prepayment speed assumption (rate per annum), in % ³	-	3.0-35.7	-	-	2.0-20.0	-
Impact on fair value from 10% adverse change	-	(38.1)	-	-	(22.3)	-
Impact on fair value from 20% adverse change	-	(72.6)	-	-	(43.2)	-
Cash flow discount rate (rate per annum), in % ⁴	2.2-15.2	1.5-36.2	0.7-13.1	3.4-14.3	3.0-21.3	1.0-21.2
Impact on fair value from 10% adverse change	(6.8)	(38.3)	(2.1)	(20.7)	(52.1)	(2.9)
Impact on fair value from 20% adverse change	(13.4)	(74.7)	(4.2)	(37.6)	(101.3)	(5.7)
Expected credit losses (rate per annum), in % ⁵	0.5-8.5	1.1-34.5	0.7-12.8	0.8-4.7	0.6-18.8	1.0-21.2
Impact on fair value from 10% adverse change	(4.1)	(24.1)	(2.0)	(10.2)	(23.8)	(2.4)
Impact on fair value from 20% adverse change	(8.1)	(47.3)	(4.0)	(17.3)	(46.7)	(4.8)

1 To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.

2 CDOs and CLOs within this category are generally structured to be protected from prepayment risk.

3 PSA is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the CPR assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.

4 The rate is based on the weighted-average yield on the beneficial interests.

5 The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.

These sensitivities are hypothetical and do not reflect economic hedging activities. Changes in fair value based on a 10% or 20% variation in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in fair value may not be linear. Also, the effect of a variation in a particular assumption on the fair value of the beneficial

interests is calculated without changing any other assumption. In practice, changes in one assumption may result in changes in other assumptions (for example, increases in market interest rates may result in lower prepayments and increased credit losses), which might magnify or counteract the sensitivities.

Transfers of financial assets where sale treatment was not achieved

The following table provides the carrying amounts of transferred financial assets and the related liabilities where sale treatment was not achieved as of December 31, 2019 and 2018.

→ Refer to "Note 36 – Assets pledged and collateral" for further information.

Carrying amounts of transferred financial assets and liabilities where sale treatment was not achieved

end of	2019	2018
CHF million		
Other asset-backed financings		
Trading assets	279	255
Liability to SPE, included in other liabilities	(279)	(255)

Securities sold under repurchase agreements and securities lending transactions accounted for as secured borrowings

For securities sold under repurchase agreements and securities lending transactions accounted for as secured borrowings, US GAAP requires the disclosure of the collateral pledged and the associated risks to which a transferor continues to be exposed after the transfer. This provides an understanding of the nature and risks of short-term collateralized financing obtained through these types of transactions.

Securities sold under repurchase agreements and securities lending transactions represent collateralized financing transactions used to earn net interest income, increase liquidity or facilitate trading activities. These transactions are collateralized principally by government debt securities, corporate debt securities, asset-backed securities, equity securities and other collateral and have terms ranging from on demand to a longer period of time.

In the event of the Group's default or a decline in fair value of collateral pledged, the repurchase agreement provides the counterparty with the right to liquidate the collateral held or request additional collateral. Similarly, in the event of the Group's default, the securities lending transaction provides the counterparty the right to liquidate the securities borrowed.

The following tables provide the gross obligation relating to securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral by the class of collateral pledged and by remaining contractual maturity as of December 31, 2019 and 2018.

Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by class of collateral pledged

end of	2019	2018
CHF billion		
Government debt securities	14.0	31.1
Corporate debt securities	11.0	9.6
Asset-backed securities	2.5	1.8
Equity securities	0.7	0.0
Other	0.2	0.2
Securities sold under repurchase agreements	28.4	42.7
Government debt securities	0.1	1.4
Corporate debt securities	0.1	0.2
Equity securities	5.4	3.2
Other	0.1	0.2
Securities lending transactions	5.7	5.0
Government debt securities	5.3	3.6
Corporate debt securities	1.8	1.0
Asset-backed securities	0.1	0.1
Equity securities	33.0	37.0
Obligation to return securities received as collateral, at fair value	40.2	41.7
Total	74.3	89.4

Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by remaining contractual maturity

end of	Remaining contractual maturities				Total
	On demand ¹	Up to 30 days ²	31–90 days	More than 90 days	
2019 (CHF billion)					
Securities sold under repurchase agreements	5.2	15.1	5.9	2.2	28.4
Securities lending transactions	5.7	0.0	0.0	0.0	5.7
Obligation to return securities received as collateral, at fair value	40.0	0.1	0.1	0.0	40.2
Total	50.9	15.2	6.0	2.2	74.3
2018 (CHF billion)					
Securities sold under repurchase agreements	7.4	26.3	6.7	2.3	42.7
Securities lending transactions	4.1	0.9	0.0	0.0	5.0
Obligation to return securities received as collateral, at fair value	41.4	0.1	0.2	0.0	41.7
Total	52.9	27.3	6.9	2.3	89.4

¹ Includes contracts with no contractual maturity that may contain termination arrangements subject to a notice period.

² Includes overnight transactions.

→ Refer to "Note 27 – Offsetting of financial assets and financial liabilities" for further information on the gross amount of securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral and the net amounts disclosed in the consolidated balance sheets.

Variable interest entities

As a normal part of its business, the Group engages in various transactions that include entities that are considered VIEs and are grouped into three primary categories: collateralized debt obligations (CDOs)/CLOs, CP conduits and financial intermediation. VIEs are SPEs that typically either lack sufficient equity to finance their activities without additional subordinated financial support or are structured such that the holders of the voting rights do not substantively participate in the gains and losses of the entity. VIEs may be sponsored by the Group or third parties. Such entities are required to be assessed for consolidation, compelling the primary beneficiary to consolidate the VIE. The consolidation assessment requires an entity to determine whether it has the power to direct the activities that most significantly affect the economics of the VIE as well as whether the reporting entity has potentially significant benefits or losses in the VIE. The primary beneficiary assessment must be re-evaluated on an ongoing basis.

Application of the requirements for consolidation of VIEs may require the exercise of significant judgment. In the event consolidation of a VIE is required, the exposure to the Group is limited to that portion of the VIE's assets attributable to any variable interest held by the Group prior to any risk management activities to hedge the Group's net exposure. Any interests held in the VIE by third parties, even though consolidated by the Group, will not typically impact its results of operations.

Transactions with VIEs are generally executed to facilitate securitization activities or to meet specific client needs, such as providing liquidity or investing opportunities, and, as part of these activities, the Group may hold interests in the VIEs. Securitization-related transactions with VIEs involve selling or purchasing assets as well as possibly entering into related derivatives with those VIEs, providing liquidity, credit or other support. Other transactions with VIEs include derivative transactions in the Group's capacity as the prime broker. The Group also enters into lending arrangements with VIEs for the purpose of financing projects or the acquisition of assets. Typically, the VIE's assets are restricted in nature in that they are held primarily to satisfy the obligations of the entity. Further, the Group is involved with VIEs which were formed for the purpose of offering alternative investment solutions to clients. Such VIEs relate primarily to private equity investments, fund-linked vehicles or funds of funds, where the Group acts as structurer, manager, distributor, broker, market maker or liquidity provider.

As a consequence of these activities, the Group holds variable interests in VIEs. Such variable interests consist of financial instruments issued by VIEs and which are held by the Group,

certain derivatives with VIEs or loans to VIEs. Guarantees issued by the Group to or on behalf of VIEs may also qualify as variable interests. For such guarantees, including derivatives that act as guarantees, the notional amount of the respective guarantees is presented to represent the exposure. In general, investors in consolidated VIEs do not have recourse to the Group in the event of a default, except where a guarantee was provided to the investors or where the Group is the counterparty to a derivative transaction involving VIEs.

Total assets of consolidated and non-consolidated VIEs for which the Group has involvement represent the total assets of the VIEs even though the Group's involvement may be significantly less due to interests held by third-party investors. The asset balances for non-consolidated VIEs where the Group has significant involvement represent the most current information available to the Group regarding the remaining principal balance of assets owned. In most cases, the asset balances represent an amortized cost basis without regards to impairments in fair value, unless fair value information is readily available.

The Group's maximum exposure to loss is different from the carrying value of the assets of the VIE. This maximum exposure to loss consists of the carrying value of the Group variable interests held as trading assets, derivatives and loans, the notional amount of guarantees and off-balance sheet commitments to VIEs, rather than the amount of total assets of the VIEs. The maximum exposure to loss does not reflect the Group's risk management activities, including effects from financial instruments that the Group may utilize to economically hedge the risks inherent in these VIEs. The economic risks associated with VIE exposures held by the Group, together with all relevant risk mitigation initiatives, are included in the Group's risk management framework.

The Group has not provided financial or other support to consolidated or non-consolidated VIEs that it was not contractually required to provide.

Collateralized debt and loan obligations

The Group engages in CDO/CLO transactions to meet client and investor needs, earn fees and sell financial assets and, for CLOs, loans. The Group may act as underwriter, placement agent or asset manager and may warehouse assets prior to the closing of a transaction. As part of its structured finance business, the Group purchases loans and other debt obligations from and on behalf of clients for the purpose of securitization. The loans and other debt obligations are sold to VIEs, which in turn issue CDO/CLOs to fund the purchase of assets such as investment grade and high yield corporate debt instruments.

Typically, the collateral manager in a managed CDO/CLO is deemed to be the entity that has the power to direct the activities that most affect the economics of the entity. In a static CDO/CLO this "power" role is more difficult to analyze and may be the sponsor of the entity or the CDS counterparty.

CDO/CLOs provide credit risk exposure to a portfolio of ABS or loans (cash CDO/CLOs) or a reference portfolio of securities or loans (synthetic CDO/CLOs). Cash CDO/CLO transactions hold actual securities or loans whereas synthetic CDO/CLO transactions use CDS to exchange the underlying credit risk instead of using cash assets. The Group may also act as a derivative counterparty to the VIEs, which are typically not variable interests, and may invest in portions of the notes or equity issued by the VIEs. The CDO/CLO entities may have actively managed portfolios or static portfolios.

The securities issued by these VIEs are payable solely from the cash flows of the related collateral, and third-party creditors of these VIEs do not have recourse to the Group in the event of default.

The Group's exposure in CDO/CLO transactions is typically limited to interests retained in connection with its underwriting or market-making activities. Unless the Group has been deemed to have "power" over the entity and these interests are potentially significant, the Group is not the primary beneficiary of the vehicle and does not consolidate the entity. The Group's maximum exposure to loss does not include any effects from financial instruments used to economically hedge the risks of the VIEs.

Commercial paper conduit

The Group acts as the administrator and provider of liquidity and credit enhancement facilities for Alpine Securitization Ltd (Alpine), a multi-seller asset-backed CP conduit used for client and Group financing purposes. Alpine discloses to CP investors certain portfolio and asset data and submits its portfolio to rating agencies for public ratings on its CP. This CP conduit purchases assets such as loans and receivables or enters into reverse repurchase agreements and finances such activities through the issuance of CP backed by these assets. The Group (including Alpine) can enter into liquidity facilities with third-party entities pursuant to which it may be required to purchase assets from these entities to provide them with liquidity and credit support. The financing transactions are structured to provide credit support in the form of over-collateralization and other asset-specific enhancements. Alpine is a separate legal entity that is wholly owned by the Group. However, its assets are available to satisfy only the claims of its creditors. In addition, the Group, as administrator and liquidity facility provider, has significant exposure to and power over the activities of Alpine. Alpine is considered a VIE for accounting purposes and the Group is deemed the primary beneficiary and consolidates this entity.

The overall average maturity of Alpine's outstanding CP was approximately 116 days as of December 31, 2019. Alpine's CP was rated A-1(sf) by Standard & Poor's and P-1(sf) by Moody's and had exposures mainly in reverse repurchase agreements with a Group entity, consumer loans, aircraft loans and leases, car loans and leases, commercial leases and small business loans.

The Group's financial commitment to this CP conduit consists of obligations under liquidity agreements. The liquidity agreements are asset-specific arrangements, which require the Group to provide short-term financing to the CP conduit or to purchase assets from the CP conduit in certain circumstances, including but not limited to, a lack of liquidity in the CP market such that the CP conduit cannot refinance its obligations or a default of an underlying asset. The asset-specific credit enhancements provided by the client seller of the assets remain unchanged as a result of such a purchase. In entering into such agreements, the Group reviews the credit risk associated with these transactions on the same basis that would apply to other extensions of credit.

The Group enters into liquidity facilities with CP conduits administered and sponsored by third parties. These third-party CP conduits are considered to be VIEs for accounting purposes. The Group is not the primary beneficiary and does not consolidate these third-party CP conduits. The Group's financial commitment to these third-party CP conduits consists of obligations under liquidity agreements. The liquidity agreements are asset-specific arrangements, which require the Group to provide short-term financing to the third-party CP conduits or to purchase assets from these CP conduits in certain circumstances, including but not limited to, a lack of liquidity in the CP market such that the CP conduits cannot refinance their obligations or a default of an underlying asset. The asset-specific credit enhancements, if any, provided by the client seller of the assets remain unchanged as a result of such a purchase. In entering into such agreements, the Group reviews the credit risk associated with these transactions on the same basis that would apply to other extensions of credit. In some situations, the Group can enter into liquidity facilities with these third-party CP conduits through Alpine. As of December 31, 2019, the Group's outstanding facilities provided to these third-party conduits through Alpine are not included in the tabular disclosure of non-consolidated VIEs and represent a maximum exposure to loss of CHF 6,159 million and total assets of these non-consolidated VIEs of CHF 13,488 million.

The Group's economic risks associated with the Alpine CP conduit and the third-party CP conduits are included in the Group's risk management framework including counterparty, economic risk capital and scenario analysis.

Financial intermediation

The Group has significant involvement with VIEs in its role as a financial intermediary on behalf of clients.

The Group considers the likelihood of incurring a loss equal to the maximum exposure to be remote because of the Group's risk mitigation efforts, including, but not limited to, economic hedging strategies and collateral arrangements. The Group's economic risks associated with consolidated and non-consolidated VIE exposures arising from financial intermediation, together with all relevant risk mitigation initiatives, are included in the Group's risk management framework.

Financial intermediation consists of securitizations, funds, loans, and other vehicles.

Securitizations

Securitizations are primarily CMBS, RMBS and ABS vehicles. The Group acts as an underwriter, market maker, liquidity provider, derivative counterparty and/or provider of credit enhancements to VIEs related to certain securitization transactions.

The maximum exposure to loss is the carrying value of the loan securities and derivative positions that are variable interests, if any, plus the exposure arising from any credit enhancements the Group provided. The Group's maximum exposure to loss does not include any effects from financial instruments used to economically hedge the risks of the VIEs.

The activities that have the most significant impact on the securitization vehicle are the decisions relating to defaulted loans, which are controlled by the servicer. The party that controls the servicing has the ability to make decisions that significantly affect the result of the activities of the securitization vehicle. If a securitization vehicle has multiple parties that control servicing over specific assets, the Group determines it has power when it has control over the servicing of greater than 50% of the assets in the securitization vehicle. When a servicer or its related party also has an economic interest that has the potential to absorb a significant portion of the gains and/or losses, it will be deemed the primary beneficiary and consolidate the vehicle. If the Group determines that it controls the relevant servicing, it then determines if it has the obligation to absorb losses from, or the right to receive benefits of, the securitization vehicle that could potentially be significant to the vehicle, primarily by evaluating the amount and nature of securities issued by the vehicle that it holds. Factors considered in this analysis include the level of subordination of the securities held as well as the size of the position, based on the percentage of the class of securities and the total deal classes of securities issued. The more subordinated the level of securities held, the more likely it is that the Group will be the primary beneficiary. This consolidation analysis is performed each reporting period based on changes in inventory and the levels of assets remaining in the securitization. The Group typically consolidates securitization vehicles when it is the servicer and has holdings stemming from its role as underwriter. Short-term market making holdings in vehicles are not typically considered to be potentially significant for the purposes of this assessment.

In the case of re-securitizations of previously issued RMBS securities, the re-securitization vehicles are passive in nature and do not have any significant ongoing activities that require management, and decisions relating to the design of the securitization transaction at its inception are the key power relating to the vehicle. Activities at inception include selecting the assets and determining the capital structure. The power over a re-securitization vehicle is typically shared between the Group and the investor(s) involved in the design and creation of the vehicle. The Group concludes that it is the primary beneficiary of a re-securitization

vehicle when it owns substantially all of the bonds issued from the vehicle.

Funds

Funds include investment structures such as mutual funds, funds of funds, private equity funds and fund-linked products where the investors' interest is typically in the form of debt rather than equity, thereby making them VIEs. The Group may have various relationships with such VIEs in the form of structurer, investment advisor, investment manager, administrator, custodian, underwriter, placement agent, market maker and/or as prime broker. These activities include the use of VIEs in structuring fund-linked products, hedge funds of funds or private equity investments to provide clients with investment opportunities in alternative investments. In such transactions, a VIE holds underlying investments and issues securities that provide the investors with a return based on the performance of those investments.

The maximum exposure to loss consists of the fair value of instruments issued by such structures that are held by the Group as a result of underwriting or market-making activities, financing provided to the vehicles and the Group's exposure resulting from principal protection and redemptions features. The investors typically retain the risk of loss on such transactions, but for certain fund types, the Group may provide principal protection on the securities to limit the investors' exposure to downside market risk. The Group's maximum exposure to loss does not include any effects from financial instruments used to economically hedge the risk of the VIEs.

Another model is used to assess funds for consolidation under US GAAP. Rather than the consolidation model which incorporates power and the potential to absorb significant risk and rewards, a previous consolidation model is used which results in the Group being the primary beneficiary and consolidating the funds if it holds more than 50% of their outstanding issuances.

Loans

The Group provides loans to financing vehicles owned or sponsored by clients or third-parties. These tailored lending arrangements are established to purchase, lease or otherwise finance and manage clients' assets and include financing of specified client assets, of an individual single-asset used by the client or business ventures. The respective owner of the assets or manager of the businesses provides the equity in the vehicle.

The maximum exposure to loss is the carrying value of the Group's loan exposure, which is subject to the same credit risk management procedures as loans issued directly to clients. The clients' creditworthiness is carefully reviewed, loan-to-value ratios are strictly set and, in addition, clients provide equity, additional collateral or guarantees, all of which significantly reduce the Group's exposure. The Group considers the likelihood of incurring a loss equal to the maximum exposure to be remote because of the Group's risk mitigation efforts, which includes over-collateralization and effective monitoring to ensure that a sufficient loan-to-value ratio is maintained.

The third-party sponsor of the VIE will typically have control over the assets during the life of the structure and have the potential to absorb significant gains and losses; the Group is typically not the primary beneficiary of these structures and will not have to consolidate them. However, a change in the structure, such as a default of the sponsor, may result in the Group gaining control over the assets. If the Group's lending is significant, it may then be required to consolidate the entity.

Other

Other includes additional vehicles where the Group provides financing and trust preferred issuance vehicles. Trust preferred issuance vehicles are utilized to assist the Group in raising capital-efficient financing. The VIE issues preference shares which are guaranteed by the Group and uses the proceeds to purchase the debt of the Group. The Group's guarantee of its own debt

is not considered a variable interest and, as it has no holdings in these vehicles, the Group has no maximum exposure to loss. Non-consolidated VIEs include only the total assets of trust preferred issuance vehicles, as the Group has no variable interests with these entities.

Consolidated VIEs

The Group has significant involvement with VIEs in its role as a financial intermediary on behalf of clients. The Group consolidates all VIEs related to financial intermediation for which it was the primary beneficiary.

The consolidated VIEs table provides the carrying amounts and classifications of the assets and liabilities of consolidated VIEs as of December 31, 2019 and 2018.

Consolidated VIEs in which the Group was the primary beneficiary

end of	CDO/ CLO	CP Conduit	Financial intermediation				Total
			Securi- tizations	Funds	Loans	Other	
2019 (CHF million)							
Cash and due from banks	6	1	71	11	39	10	138
Trading assets	75	0	1,554	82	1,063	14	2,788
Other investments	0	0	0	113	1,052	247	1,412
Net loans	0	325	53	1	29	241	649
Other assets	1	21	638	4	87	943	1,694
of which loans held-for-sale	0	0	93	0	0	0	93
of which premises and equipment	0	0	0	0	36	8	44
Total assets of consolidated VIEs	82	347	2,316	211	2,270	1,455	6,681
Trading liabilities	0	0	0	0	8	0	8
Short-term borrowings	0	4,885	0	0	0	0	4,885
Long-term debt	7	0	1,614	1	13	36	1,671
Other liabilities	0	54	1	4	92	146	297
Total liabilities of consolidated VIEs	7	4,939	1,615	5	113	182	6,861
2018 (CHF million)							
Cash and due from banks	15	1	68	17	52	20	173
Trading assets	72	0	1,602	418	944	12	3,048
Other investments	0	0	0	153	1,073	279	1,505
Net loans	0	0	119	0	23	245	387
Other assets	57	16	863	4	72	1,037	2,049
of which loans held-for-sale	57	0	107	0	3	0	167
of which premises and equipment	0	0	0	0	39	0	39
Total assets of consolidated VIEs	144	17	2,652	592	2,164	1,593	7,162
Trading liabilities	0	0	0	0	3	0	3
Short-term borrowings	0	5,465	0	0	0	0	5,465
Long-term debt	48	0	1,487	174	26	29	1,764
Other liabilities	0	43	1	8	98	127	277
Total liabilities of consolidated VIEs	48	5,508	1,488	182	127	156	7,509

Non-consolidated VIEs

The non-consolidated VIEs table provides the carrying amounts and classification of the assets of variable interests recorded in the Group's consolidated balance sheets, maximum exposure to loss and total assets of the non-consolidated VIEs.

Total variable interest assets for which the company has involvement represent the carrying value of the variable interests in non-consolidated VIEs that are recorded in the consolidated balance sheet of the Group (for example, direct holdings in investment funds, loans and other receivables).

Maximum exposure to loss represents the carrying value of total variable interest assets in non-consolidated VIEs of the Group and the notional amounts of guarantees and off-balance sheet commitments which are variable interests that have been extended to non-consolidated VIEs. Such amounts, particularly notional amounts of derivatives, guarantees and off-balance sheet commitments, do not represent the anticipated losses in connection with these transactions as they do not take into consideration the effect of collateral, recoveries or the probability of loss. In addition, they exclude the effect of offsetting financial instruments that are held to mitigate these risks and have not been reduced by unrealized losses previously recorded by the Group in connection with guarantees, off-balance sheet commitments or derivatives.

Total assets of non-consolidated VIEs are the assets of the non-consolidated VIEs themselves and are typically unrelated to the exposures the Group has with these entities due to variable interests held by third-party investors. Accordingly, these amounts are not considered for risk management purposes.

Certain VIEs have not been included in the following table, including VIEs structured by third parties in which the Group's interest is in the form of securities held in the Group's inventory, certain repurchase financings to funds and single-asset financing vehicles not sponsored by the Group to which the Group provides financing but has very little risk of loss due to over-collateralization and/or guarantees, failed sales where the Group does not have any other holdings and other entities out of scope.

Non-consolidated VIEs

end of	CDO/ CLO	Financial intermediation			Total	
		Securi- tizations	Funds	Loans		Other
2019 (CHF million)						
Trading assets	230	4,897	962	109	4,311	10,509
Net loans	456	904	1,945	7,930	709	11,944
Other assets	3	26	518	0	380	927
Total variable interest assets	689	5,827	3,425	8,039	5,400	23,380
Maximum exposure to loss	785	7,664	3,430	12,239	5,937	30,055
Total assets of non-consolidated VIEs	8,057	141,608	128,984	25,590	35,998	340,237
2018 (CHF million)						
Trading assets	209	4,527	927	183	3,703	9,549
Net loans	154	1,475	1,591	5,246	430	8,896
Other assets	3	19	120	0	444	586
Total variable interest assets	366	6,021	2,638	5,429	4,577	19,031
Maximum exposure to loss	366	7,637	2,653	8,680	5,150	24,486
Total assets of non-consolidated VIEs	7,033	96,483	68,258	20,804	31,336	223,914

35 Financial instruments

The disclosure of the Group's financial instruments below includes the following sections:

- Concentration of credit risk;
- Fair value measurement (including fair value hierarchy, transfers between levels; level 3 reconciliation; qualitative and quantitative disclosures of valuation techniques and nonrecurring fair value changes);
- Fair value option; and
- Disclosures about fair value of financial instruments not carried at fair value.

Concentrations of credit risk

Credit risk concentrations arise when a number of counterparties are engaged in similar business activities, are located in the same geographic region or when there are similar economic features

that would cause their ability to meet contractual obligations to be similarly impacted by changes in economic conditions.

The Group regularly monitors the credit risk portfolio by counterparty, industry, country and product to ensure that such potential concentrations are identified, using a comprehensive range of quantitative tools and metrics. Credit limits relating to counterparties and products are managed through counterparty limits which set the maximum credit exposures the Group is willing to assume to specific counterparties over specified periods. Country limits are established to avoid any undue country risk concentration.

From an industry point of view, the combined credit exposure of the Group is diversified. A large portion of the credit exposure is with individual clients, particularly through residential mortgages in Switzerland, or relates to transactions with financial institutions. In both cases, the customer base is extensive and the number

and variety of transactions are broad. For transactions with financial institutions, the business is also geographically diverse, with operations focused in the Americas, Europe and, to a lesser extent, Asia Pacific.

Fair value measurement

A significant portion of the Group's financial instruments is carried at fair value. Deterioration of financial markets could significantly impact the fair value of these financial instruments and the results of operations.

The fair value of the majority of the Group's financial instruments is based on quoted prices in active markets or observable inputs. These instruments include government and agency securities, certain short-term borrowings, most investment grade corporate debt, certain high yield debt securities, exchange-traded and certain OTC derivatives and most listed equity securities.

In addition, the Group holds financial instruments for which no prices are available and which have few or no observable inputs. For these instruments, the determination of fair value requires subjective assessment and judgment, depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument. In such circumstances, valuation is determined based on management's own judgments about the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk. These instruments include certain OTC derivatives, including interest rate, foreign exchange, equity and credit derivatives, certain corporate equity-linked securities, mortgage-related securities, private equity investments and certain loans and credit products, including leveraged finance, certain syndicated loans and certain high yield bonds, and life finance instruments. The fair value measurement disclosures exclude derivative transactions that are daily settled.

The fair value of financial instruments is impacted by factors such as benchmark interest rates, prices of financial instruments issued by third parties, commodity prices, foreign exchange rates and index prices or rates. In addition, valuation adjustments are an integral part of the valuation process when market prices are not indicative of the credit quality of a counterparty, and are applied to both OTC derivatives and debt instruments. The impact of changes in a counterparty's credit spreads (known as credit valuation adjustments) is considered when measuring the fair value of assets, and the impact of changes in the Group's own credit spreads (known as debit valuation adjustments) is considered when measuring the fair value of its liabilities. For OTC derivatives, the impact of changes in both the Group's and the counterparty's credit standing is considered when measuring their fair value, based on current CDS prices. The adjustments also take into account contractual factors designed to reduce the Group's credit exposure to a counterparty, such as collateral

held and master netting agreements. For hybrid debt instruments with embedded derivative features, the impact of changes in the Group's credit standing is considered when measuring their fair value, based on current funded debt spreads.

US GAAP permits a reporting entity to measure the fair value of a group of financial assets and financial liabilities on the basis of the price that would be received to sell a net long position or paid to transfer a net short position for a particular risk exposure in an orderly transaction between market participants at the measurement date. As such, the Group continues to apply bid and offer adjustments to net portfolios of cash securities and/or derivative instruments to adjust the value of the net position from a mid-market price to the appropriate bid or offer level that would be realized under normal market conditions for the net long or net short position for a specific market risk. In addition, the Group reflects the net exposure to credit risk for its derivative instruments where the Group has legally enforceable agreements with its counterparties that mitigate credit risk exposure in the event of default.

Valuation adjustments are recorded in a reasonable and consistent manner that results in an allocation to the relevant disclosures in the notes to the financial statements as if the valuation adjustment had been allocated to the individual unit of account.

Fair value hierarchy

The levels of the fair value hierarchy are defined as follows:

- Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group has the ability to access. This level of the fair value hierarchy provides the most reliable evidence of fair value and is used to measure fair value whenever available.
- Level 2: Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly. These inputs include: (i) quoted prices for similar assets or liabilities in active markets; (ii) quoted prices for identical or similar assets or liabilities in markets that are not active, that is, markets in which there are few transactions for the asset or liability, the prices are not current or price quotations vary substantially either over time or among market makers, or in which little information is publicly available; (iii) inputs other than quoted prices that are observable for the asset or liability; or (iv) inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- Level 3: Inputs that are unobservable for the asset or liability. These inputs reflect the Group's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). These inputs are developed based on the best information available in the circumstances, which include the Group's own data. The Group's own data used to develop unobservable inputs is adjusted if information indicates that market participants would use different assumptions.

The Group records net open positions at bid prices if long, or at ask prices if short, unless the Group is a market maker in such positions, in which case mid-pricing is utilized. Fair value measurements are not adjusted for transaction costs.

Qualitative disclosures of valuation techniques

The following information on the valuation techniques and significant unobservable inputs of the various financial instruments and the section "Uncertainty of fair value measurements at the reporting date from the use of significant unobservable inputs" should be read in conjunction with the tables "Assets and liabilities measured at fair value on a recurring basis", "Quantitative information about level 3 assets at fair value" and "Quantitative information about level 3 liabilities at fair value".

Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions

Securities purchased under resale agreements and securities sold under repurchase agreements are measured at fair value using discounted cash flow analysis. Future cash flows are discounted using observable market interest rate repurchase/resale curves for the applicable maturity and underlying collateral of the instruments. As such, the significant majority of both securities purchased under resale agreements and securities sold under repurchase agreements are included in level 2 of the fair value hierarchy. Structured resale and repurchase agreements include embedded derivatives, which are measured using the same techniques as described below for stand-alone derivative contracts held for trading purposes or used in hedge accounting relationships. If the value of the embedded derivative is determined using significant unobservable inputs, those structured resale and repurchase agreements included are classified as level 3 in the fair value hierarchy. The significant unobservable input is funding spread.

Securities purchased under resale agreements are usually fully collateralized or over-collateralized by government securities, money market instruments, corporate bonds, or other debt instruments. In the event of counterparty default, the collateral service agreement provides the Group with the right to liquidate the collateral held.

Debt securities

Foreign governments

Foreign government debt securities typically have quoted prices in active markets and are mainly categorized as level 1 instruments. Valuations of foreign government debt securities for which market prices are not available are based on yields reflecting credit rating, historical performance, delinquencies, loss severity, the maturity of the security, recent transactions in the market or other modeling techniques, which may involve judgment. Those securities where the price or model inputs are observable in the market are categorized as level 2 instruments, while those securities where prices are not observable and significant model inputs are unobservable are categorized as level 3 of the fair value hierarchy.

Corporates

Corporate bonds are priced to reflect current market levels either through recent market transactions or broker or dealer quotes. Where a market price for the particular security is not directly available, valuations are obtained based on yields reflected by other instruments in the specific or similar entity's capital structure and adjusting for differences in seniority and maturity, benchmarking to a comparable security where market data is available (taking into consideration differences in credit, liquidity and maturity), or through the application of cash flow modeling techniques utilizing observable inputs, such as current interest rate curves and observable CDS spreads. Significant unobservable inputs may include correlation and price. For securities using market comparable price, the differentiation between level 2 and level 3 is based upon the relative significance of any yield adjustments as well as the accuracy of the comparison characteristics (i.e., the observable comparable security may be in the same country but a different industry and may have a different seniority level – the lower the comparability the more likely the security will be level 3).

RMBS, CMBS and CDO securities

Fair values of RMBS, CMBS and CDO may be available through quoted prices, which are often based on the prices at which similarly structured and collateralized securities trade between dealers and to and from customers. Fair values of RMBS, CMBS and CDO for which there are significant unobservable inputs are valued using capitalization rate and discount rate. Price may not be observable for fair value measurement purposes for many reasons, such as the length of time since the last executed transaction for the related security, use of a price from a similar instrument, or use of a price from an indicative quote. Fair values determined by market comparable price may include discounted cash flow models using the inputs credit spread, default rate, discount rate, prepayment rate and loss severity. Prices from similar observable instruments are used to calculate implied inputs which are then used to value unobservable instruments using discounted cash flow. The discounted cash flow price is then compared to the unobservable prices and assessed for reasonableness.

For most structured debt securities, determination of fair value requires subjective assessment depending on liquidity, ownership concentration, and the current economic and competitive environment. Valuation is determined based on the Front Office's own assumptions about how market participants would price the asset. Collateralized bond and loan obligations are split into various structured tranches and each tranche is valued based upon its individual rating and the underlying collateral supporting the structure. Valuation models are used to value both cash and synthetic CDOs.

Equity securities

The majority of the Group's positions in equity securities are traded on public stock exchanges for which quoted prices are readily and regularly available and are therefore categorized as level 1 instruments. Level 2 and level 3 equities include fund-linked products, convertible bonds or equity securities with restrictions that are not traded in active markets. Significant

unobservable inputs may include earnings before interest, taxes, depreciation and amortization (EBITDA) multiple and market comparable price.

Derivatives

Derivatives held for trading purposes or used in hedge accounting relationships include both OTC and exchange-traded derivatives. The fair values of exchange-traded derivatives measured using observable exchange prices are included in level 1 of the fair value hierarchy. For exchange-traded derivatives where the volume of trading is low, the observable exchange prices may not be considered executable at the reporting date. These derivatives are valued in the same manner as similar observable OTC derivatives and are included in level 2 of the fair value hierarchy. If the similar OTC derivative used for valuing the exchange-traded derivative is not observable, the exchange-traded derivative is included in level 3 of the fair value hierarchy.

The fair values of OTC derivatives are determined on the basis of either industry standard models or internally developed proprietary models. Both model types use various observable and unobservable inputs in order to determine fair value. The inputs include those characteristics of the derivative that have a bearing on the economics of the instrument. The determination of the fair value of many derivatives involves only a limited degree of subjectivity because the required inputs are observable in the marketplace, while more complex derivatives may use unobservable inputs that rely on specific proprietary modeling assumptions. Where observable inputs (prices from exchanges, dealers, brokers or market consensus data providers) are not available, attempts are made to infer values from observable prices through model calibration (spot and forward rates, mean reversion, benchmark interest rate curves and volatility inputs for commonly traded option products). For inputs that cannot be derived from other sources, estimates from historical data may be made. OTC derivatives where the majority of the value is derived from market observable inputs are categorized as level 2 instruments, while those where the majority of the value is derived from unobservable inputs are categorized as level 3 of the fair value hierarchy.

The valuation of derivatives includes an adjustment for the cost of funding uncollateralized OTC derivatives.

Interest rate derivatives

OTC vanilla interest rate products, such as interest rate swaps, swaptions and caps and floors are valued by discounting the anticipated future cash flows. The future cash flows and discounting are derived from market standard yield curves and industry standard volatility inputs. Where applicable, exchange-traded prices are also used to value exchange-traded futures and options and can be used in yield curve construction. For more complex products, inputs include, but are not limited to basis spread, correlation, credit spread, prepayment rate and volatility skew.

Foreign exchange derivatives

Foreign exchange derivatives include vanilla products such as spot, forward and option contracts where the anticipated

discounted future cash flows are determined from foreign exchange forward curves and industry standard optionality modeling techniques. Where applicable, exchange-traded prices are also used for futures and option prices. For more complex products inputs include, but are not limited to, contingent probability, correlation and prepayment rate.

Equity and index-related derivatives

Equity derivatives include a variety of products ranging from vanilla options and swaps to exotic structures with bespoke payoff profiles. The main inputs in the valuation of equity derivatives may include buyback probability, correlation, gap risk, price and volatility.

Generally, the interrelationship between the correlation and volatility is positively correlated.

Credit derivatives

Credit derivatives include index, single-name and multi-name CDS in addition to more complex structured credit products. Vanilla products are valued using industry standard models and inputs that are generally market observable including credit spread and recovery rate.

Complex structured credit derivatives are valued using proprietary models requiring inputs such as correlation, credit spread, funding spread, loss severity, prepayment rate and recovery rate. These inputs are generally implied from available market observable data.

Other trading assets

Other trading assets primarily include life settlement and premium finance instruments and RMBS loans. Life settlement and premium finance instruments are valued using proprietary models with several inputs. The significant unobservable inputs of the fair value for life settlement and premium finance instruments is the estimate of market implied life expectancy, while for RMBS loans it is market comparable price.

For life settlement and premium finance instruments, individual life expectancy rates are typically obtained by multiplying a base mortality curve for the general insured population provided by a professional actuarial organization together with an individual-specific multiplier. Individual-specific multipliers are determined based on data from third-party life expectancy data providers, which examine the insured individual's medical conditions, family history and other factors to arrive at a life expectancy estimate.

For RMBS loans, the use of market comparable price varies depending upon each specific loan. For some loans, similar to unobservable RMBS securities, prices from similar observable instruments are used to calculate implied inputs which are then used to value unobservable instruments using discounted cash flow. The discounted cash flow price is then compared to the unobservable prices and assessed for reasonableness. For other RMBS loans, the loans are categorized by specific characteristics, such as loan-to-value ratio, average account balance, loan

type (single or multi-family), lien, seasoning, coupon, FICO score, locality, delinquency status, cash flow velocity, roll rates, loan purpose, occupancy, servicers advance agreement type, modification status, Federal Housing Administration insurance, property value and documentation quality. Loans with unobservable prices are put into consistent buckets which are then compared to market observable comparable prices in order to assess the reasonableness of those unobservable prices.

Other investments

Private equity funds, hedge funds and equity method investment funds

Equity method investment funds principally include equity investments in the form of a) direct investments in third-party hedge funds, private equity funds and funds of funds, b) equity method investments where the Group has the ability to significantly influence the operating and financial policies of the investee, and c) direct investments in non-marketable equity securities.

Direct investments in third-party hedge funds, private equity funds and funds of funds are measured at fair value based on their published NAVs as permitted by ASC Topic 820 – Fair Value Measurement. In some cases, NAVs may be adjusted where there is sufficient evidence that the NAV published by the investment manager is not in line with the fund's observable market data, it is probable that the investment will be sold for an amount other than NAV or other circumstances exist that would require an adjustment to the published NAV. Although rarely adjusted, significant judgment is involved in making any adjustments to the published NAVs. The investments for which the fair value is measured using the NAV practical expedient are not categorized within the fair value hierarchy.

Direct investments in non-marketable equity securities consist of both real estate investments and non-real estate investments. Equity-method investments and direct investments in non-marketable equity securities are initially measured at their transaction price, as this is the best estimate of fair value. Thereafter, these investments are individually measured at fair value based upon a number of factors that include any recent rounds of financing involving third-party investors, comparable company transactions, multiple analyses of cash flows or book values, or discounted cash flow analyses. The availability of information used in these modeling techniques is often limited and involves significant judgment in evaluating these different factors over time. As a result, these investments are included in level 3 of the fair value hierarchy.

Life finance instruments

Life finance instruments include single premium immediate annuities (SPIA) and other premium finance instruments. Life finance instruments are valued in a similar manner as described for life settlement and premium finance instruments under the other trading assets section above.

Loans

The Group's loan portfolio which is measured at fair value primarily consists of commercial and industrial loans and loans to financial institutions. Within these categories, loans measured at fair value include commercial loans, real estate loans, corporate loans, leverage finance loans and emerging market loans. Fair value is based on recent transactions and quoted prices, where available. Where recent transactions and quoted prices are not available, fair value may be determined by relative value benchmarking (which includes pricing based upon another position in the same capital structure, other comparable loan issues, generic industry credit spreads, implied credit spreads derived from CDS for the specific borrower, and enterprise valuations) or calculated based on the exit price of the collateral, based on current market conditions.

Both the funded and unfunded portion of revolving credit lines on the corporate lending portfolio are valued using a loan pricing model, which requires estimates of significant inputs including credit conversion factors, credit spreads, recovery rates and weighted average life of the loan. Significant unobservable inputs may include credit spread and price.

The Group's other assets and liabilities include mortgage loans held in conjunction with securitization activities and assets and liabilities of VIEs and mortgage securitizations that do not meet the criteria for sale treatment under US GAAP. The fair value of mortgage loans held in conjunction with securitization activities is determined on a whole-loan basis and is consistent with the valuation of RMBS loans discussed in "Other trading assets" above. Whole-loan valuations are calculated based on the exit price reflecting the current market conditions. The fair value of assets and liabilities of VIEs and mortgage securitizations that do not meet the criteria for sale treatment under US GAAP are determined based on the quoted prices for securitized bonds, where available, or on cash flow analyses for securitized bonds, when quoted prices are not available. The fair value of the consolidated financial assets of RMBS and CMBS securitization vehicles, which qualify as collateralized financing entities, are measured on the basis of the more observable fair value of the VIEs' financial liabilities.

Short-term borrowings and long-term debt

The Group's short-term borrowings and long-term debt include structured notes (hybrid financial instruments that are both bifurcated and non-bifurcated) and vanilla debt. The fair value of structured notes is based on quoted prices, where available. When quoted prices are not available, fair value is determined by using a discounted cash flow model incorporating the Group's credit spreads, the value of derivatives embedded in the debt and the residual term of the issuance based on call options. Derivatives structured into the issued debt are valued consistently with the Group's stand-alone derivative contracts held for trading purposes or used in hedge accounting relationships as discussed above. The fair value of structured debt is heavily influenced by the combined call options and performance of the underlying derivative returns. Significant unobservable inputs for short-term borrowings and long-term debt include buyback probability, correlation, credit spread, gap risk, mean reversion, price, recovery rate and volatility.

Generally, the interrelationships between correlation, credit spread, gap risk and volatility inputs are positively correlated.

Other liabilities

Failed sales

These liabilities represent the financing of assets that did not achieve sale accounting treatment under US GAAP. Failed sales are valued in a manner consistent with the related underlying financial instruments.

Assets and liabilities measured at fair value on a recurring basis

end of 2019	Level 1	Level 2	Level 3	Netting impact ¹	Assets measured at net asset value per share ²	Total
Assets (CHF million)						
Cash and due from banks	0	356	0	–	–	356
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	85,556	0	–	–	85,556
Securities received as collateral	36,438	3,780	1	–	–	40,219
Trading assets	85,559	157,151	7,885	(97,606)	808	153,797
of which debt securities	19,430	45,641	1,923	–	–	66,994
of which foreign governments	19,281	7,484	198	–	–	26,963
of which corporates	16	10,905	1,128	–	–	12,049
of which RMBS	0	23,199	317	–	–	23,516
of which equity securities	60,675	2,862	197	–	808	64,542
of which derivatives	3,539	108,264	3,534	(97,606)	–	17,731
of which interest rate products	1,091	66,764	554	–	–	–
of which foreign exchange products	23	21,754	152	–	–	–
of which equity/index-related products	2,417	13,918	1,040	–	–	–
of which credit derivatives	0	5,336	879	–	–	–
of which other derivatives	5	66	909	–	–	–
of which other trading assets	1,915	384	2,231	–	–	4,530
Investment securities	2	1,004	0	–	–	1,006
Other investments	24	5	2,523	–	998	3,550
of which other equity investments	24	5	1,463	–	589	2,081
of which life finance instruments	0	0	1,052	–	–	1,052
Loans	0	8,945	3,717	–	–	12,662
of which commercial and industrial loans	0	2,491	1,283	–	–	3,774
of which financial institutions	0	3,730	1,201	–	–	4,931
of which government and public institutions	0	2,200	831	–	–	3,031
Other intangible assets (mortgage servicing rights)	0	0	244	–	–	244
Other assets	101	8,902	1,846	(447)	–	10,402
of which loans held-for-sale	0	6,594	1,619	–	–	8,213
Total assets at fair value	122,124	265,699	16,216	(98,053)	1,806	307,792

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2019	Level 1	Level 2	Level 3	Netting impact ¹	Liabilities measured at net asset value per share ²	Total
Liabilities (CHF million)						
Due to banks	0	322	0	–	–	322
Customer deposits	0	2,865	474	–	–	3,339
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	10,715	0	–	–	10,715
Obligation to return securities received as collateral	36,438	3,780	1	–	–	40,219
Trading liabilities	23,010	115,062	3,854	(103,742)	2	38,186
of which debt securities	3,636	5,286	0	–	–	8,922
of which foreign governments	3,544	345	0	–	–	3,889
of which equity securities	15,628	109	53	–	2	15,792
of which derivatives	3,746	109,667	3,801	(103,742)	–	13,472
of which interest rate products	1,101	64,643	167	–	–	–
of which foreign exchange products	31	26,156	98	–	–	–
of which equity/index-related products	2,603	12,518	1,921	–	–	–
of which credit derivatives	0	5,963	1,211	–	–	–
Short-term borrowings	0	10,336	997	–	–	11,333
Long-term debt	0	57,721	12,610	–	–	70,331
of which structured notes over one year and up to two years	0	9,291	891	–	–	10,182
of which structured notes over two years	0	27,626	11,458	–	–	39,084
of which high-trigger instruments	0	7,589	5	–	–	7,594
of which other subordinated bonds	0	5,502	0	–	–	5,502
Other liabilities	0	6,654	1,385	(148)	–	7,891
Total liabilities at fair value	59,448	207,455	19,321	(103,890)	2	182,336

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2018	Level 1	Level 2	Level 3	Netting impact ¹	Assets measured at net asset value per share ²	Total
Assets (CHF million)						
Cash and due from banks	0	115	0	–	–	115
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	81,818	0	–	–	81,818
Securities received as collateral	37,962	3,704	30	–	–	41,696
Trading assets ³	76,124	157,332	8,980	(109,927)	1,126	133,635
of which debt securities	23,726	37,587	2,242	–	12	63,567
of which foreign governments	23,547	4,542	232	–	–	28,321
of which corporates	66	7,984	1,260	–	12	9,322
of which RMBS	0	20,919	432	–	–	21,351
of which equity securities	42,758	2,459	132	–	1,114	46,463
of which derivatives	7,999	116,942	3,298	(109,927)	–	18,312
of which interest rate products	3,557	65,823	507	–	–	–
of which foreign exchange products	25	27,526	258	–	–	–
of which equity/index-related products	4,415	17,967	1,054	–	–	–
of which credit derivatives	0	4,739	673	–	–	–
of which other derivatives	1	633	806	–	–	–
of which other trading assets	1,641	344	3,308	–	–	5,293
Investment securities ³	2	1,477	0	–	–	1,479
Other investments	14	7	1,309	–	1,104	2,434
of which life finance instruments	0	0	1,067	–	–	1,067
Loans	0	10,549	4,324	–	–	14,873
of which commercial and industrial loans	0	3,976	1,949	–	–	5,925
of which financial institutions	0	4,164	1,391	–	–	5,555
of which real estate	0	146	515	–	–	661
Other intangible assets (mortgage servicing rights)	0	0	163	–	–	163
Other assets	117	5,807	1,543	(204)	–	7,263
of which loans held-for-sale	0	4,238	1,235	–	–	5,473
Total assets at fair value	114,219	260,809	16,349	(110,131)	2,230	283,476

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

³ Residential and commercial mortgage-backed securities that were previously reported in investment securities have been reclassified to trading assets as these securities are carried at fair value under the fair value option.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2018	Level 1	Level 2	Level 3	Netting impact ¹	Liabilities measured at net asset value per share ²	Total
Liabilities (CHF million)						
Due to banks	0	406	0	–	–	406
Customer deposits	0	2,839	453	–	–	3,292
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	14,828	0	–	–	14,828
Obligation to return securities received as collateral	37,962	3,704	30	–	–	41,696
Trading liabilities	31,940	123,615	3,589	(116,985)	10	42,169
of which debt securities	4,460	3,511	25	–	–	7,996
of which foreign governments	4,328	255	0	–	–	4,583
of which equity securities	18,785	118	37	–	10	18,950
of which derivatives	8,695	119,986	3,527	(116,985)	–	15,223
of which interest rate products	3,699	62,649	189	–	–	–
of which foreign exchange products	32	31,983	160	–	–	–
of which equity/index-related products	4,961	19,590	1,500	–	–	–
of which credit derivatives	0	5,485	1,140	–	–	–
Short-term borrowings	0	7,284	784	–	–	8,068
Long-term debt	0	51,270	12,665	–	–	63,935
of which structured notes over one year and up to two years	0	7,242	528	–	–	7,770
of which structured notes over two years	0	28,215	11,800	–	–	40,015
Other liabilities	0	7,881	1,341	(221)	–	9,001
Total liabilities at fair value	69,902	211,827	18,862	(117,206)	10	183,395

¹ Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

² In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis for level 3

2019	Balance at beginning of period	Transfers in	Transfers out	Purchases	Sales	Issuances
Assets (CHF million)						
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	0	(12)	0	0	12
Securities received as collateral	30	0	0	2	(31)	0
Trading assets	8,980	1,600	(2,723)	16,544	(17,005)	1,142
of which debt securities	2,242	793	(1,508)	4,037	(3,537)	0
of which foreign governments	232	30	(43)	67	(69)	0
of which corporates	1,260	485	(843)	3,076	(2,768)	0
of which RMBS	432	130	(528)	732	(465)	0
of which equity securities	132	83	(57)	174	(84)	0
of which derivatives	3,298	592	(734)	0	0	1,142
of which interest rate products	507	24	(11)	0	0	72
of which foreign exchange derivatives	258	56	(78)	0	0	16
of which equity/index-related products	1,054	224	(400)	0	0	361
of which credit derivatives	673	282	(244)	0	0	390
of which other derivatives	806	6	(1)	0	0	303
of which other trading assets	3,308	132	(424)	12,333	(13,384)	0
Other investments	1,309	48	(6)	1,184	(195)	0
of which other equity investments	227	48	(6)	1,134	9	0
of which life finance instruments	1,067	0	0	39	(186)	0
Loans	4,324	731	(470)	255	(275)	1,436
of which commercial and industrial loans	1,949	269	(335)	49	(194)	346
of which financial institutions	1,391	414	(76)	5	(81)	524
of which government and public institutions	446	48	(58)	199	0	251
Other intangible assets (mortgage servicing rights)	163	0	0	85	0	0
Other assets	1,543	470	(283)	1,970	(1,913)	703
of which loans held-for-sale	1,235	444	(222)	1,718	(1,693)	703
Total assets at fair value	16,349	2,849	(3,494)	20,040	(19,419)	3,293
Liabilities (CHF million)						
Customer deposits	453	0	0	0	0	6
Obligation to return securities received as collateral	30	0	0	2	(31)	0
Trading liabilities	3,589	743	(723)	874	(891)	2,079
of which equity securities	37	11	(1)	859	(849)	0
of which derivatives	3,527	723	(714)	1	(4)	2,079
of which interest rate derivatives	189	21	(10)	0	0	28
of which foreign exchange derivatives	160	45	(26)	0	0	8
of which equity/index-related derivatives	1,500	344	(405)	0	0	692
of which credit derivatives	1,140	314	(273)	0	0	1,101
Short-term borrowings	784	187	(494)	0	0	1,477
Long-term debt	12,665	2,707	(4,521)	0	0	6,079
of which structured notes over one year and up to two years	528	406	(479)	0	0	1,024
of which structured notes over two years	11,800	2,286	(3,708)	0	0	4,546
of which high-trigger instruments	6	0	0	0	0	(1)
Other liabilities	1,341	51	(80)	80	(131)	114
Total liabilities at fair value	18,862	3,688	(5,818)	956	(1,053)	9,755
Net assets/(liabilities) at fair value	(2,513)	(839)	2,324	19,084	(18,366)	(6,462)

Settlements	Trading revenues		Other revenues		Accumulated other comprehensive income		Foreign currency translation impact	Balance at end of period
	On transfers out	On all other	On transfers out	On all other	On transfers out	On all other		
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1
(1,641)	(80)	1,281	0	0	0	0	(213)	7,885
0	17	(41)	0	0	0	0	(80)	1,923
0	3	(13)	0	0	0	0	(9)	198
0	21	(52)	0	0	0	0	(51)	1,128
0	(4)	34	0	0	0	0	(14)	317
0	(3)	(45)	0	0	0	0	(3)	197
(1,616)	(92)	1,034	0	0	0	0	(90)	3,534
(104)	2	85	0	0	0	0	(21)	554
(28)	(8)	(60)	0	0	0	0	(4)	152
(402)	(80)	316	0	0	0	0	(33)	1,040
(765)	(6)	565	0	0	0	0	(16)	879
(317)	0	128	0	0	0	0	(16)	909
(25)	(2)	333	0	0	0	0	(40)	2,231
0	0	151	0	56	0	0	(24)	2,523
0	0	1	0	56	0	0	(6)	1,463
0	0	150	0	0	0	0	(18)	1,052
(2,170)	4	(64)	0	0	0	0	(54)	3,717
(734)	0	(49)	0	0	0	0	(18)	1,283
(957)	0	(9)	0	0	0	0	(10)	1,201
(28)	2	(9)	0	0	0	0	(20)	831
0	0	0	0	2	0	0	(6)	244
(565)	17	(48)	0	0	0	0	(48)	1,846
(564)	3	36	0	0	0	0	(41)	1,619
(4,376)	(59)	1,320	0	58	0	0	(345)	16,216
(34)	0	23	0	0	0	51	(25)	474
0	0	0	0	0	0	0	0	1
(2,478)	108	626	0	0	0	0	(73)	3,854
0	0	(2)	0	0	0	0	(2)	53
(2,478)	108	631	0	0	0	0	(72)	3,801
(60)	(2)	3	0	0	0	0	(2)	167
(58)	(11)	(20)	0	0	0	0	0	98
(761)	92	500	0	0	0	0	(41)	1,921
(1,327)	28	249	0	0	0	0	(21)	1,211
(1,151)	30	191	0	0	0	0	(27)	997
(5,668)	149	1,301	0	0	13	175	(290)	12,610
(630)	42	20	0	0	0	2	(22)	891
(4,744)	94	1,256	0	0	13	173	(258)	11,458
0	0	0	0	0	0	0	0	5
(383)	(4)	70	0	351	0	0	(24)	1,385
(9,714)	283	2,211	0	351	13	226	(439)	19,321
5,338	(342)	(891)	0	(293)	(13)	(226)	94	(3,105)

Assets and liabilities measured at fair value on a recurring basis for level 3 (continued)

2018	Balance at beginning of period	Transfers in	Transfers out	Purchases	Sales	Issuances
Assets (CHF million)						
Securities received as collateral	46	0	(15)	102	(103)	0
Trading assets ¹	8,796	1,571	(1,723)	40,338	(40,166)	1,394
of which debt securities	2,334	810	(1,025)	3,582	(3,289)	0
of which foreign governments	270	21	(12)	45	(67)	0
of which corporates	1,412	491	(593)	2,582	(2,583)	0
of which RMBS	360	219	(346)	651	(361)	0
of which equity securities	163	132	(95)	51	(185)	0
of which derivatives	3,289	510	(525)	0	0	1,394
of which interest rate products	801	18	(66)	0	0	100
of which foreign exchange derivatives	188	3	(2)	0	0	14
of which equity/index-related products	833	329	(317)	0	0	447
of which credit derivatives	634	160	(141)	0	0	505
of which other derivatives	833	0	1	0	0	328
of which other trading assets	3,010	119	(78)	36,705	(36,692)	0
Other investments	1,601	79	(102)	229	(406)	0
of which life finance instruments	1,301	0	0	151	(299)	0
Loans	4,530	934	(393)	163	(491)	1,563
of which commercial and industrial loans	2,207	348	(29)	1	(226)	783
of which financial institutions	1,480	335	(53)	150	(133)	332
of which real estate	171	196	(81)	0	0	307
Other intangible assets (mortgage servicing rights)	158	0	0	1	0	0
Other assets	1,511	288	(191)	1,610	(1,357)	300
of which loans held-for-sale	1,350	243	(166)	1,447	(1,310)	300
Total assets at fair value	16,642	2,872	(2,424)	42,443	(42,523)	3,257
Liabilities (CHF million)						
Customer deposits	455	0	0	0	0	0
Obligation to return securities received as collateral	46	0	(15)	102	(103)	0
Trading liabilities	3,226	768	(641)	127	(107)	2,573
of which debt securities	2	30	(24)	39	(23)	0
of which equity securities	55	19	(5)	87	(80)	0
of which derivatives	3,169	719	(612)	1	(4)	2,573
of which interest rate derivatives	317	25	(11)	0	0	156
of which foreign exchange derivatives	100	19	(1)	0	0	55
of which equity/index-related derivatives	1,301	429	(364)	0	0	1,306
of which credit derivatives	898	247	(235)	0	0	806
Short-term borrowings	845	335	(242)	0	0	1,090
Long-term debt	12,501	2,988	(3,108)	0	0	5,628
of which structured notes over one year and up to two years	149	452	(296)	0	0	745
of which structured notes over two years	12,259	2,368	(2,800)	0	0	4,761
Other liabilities	1,478	117	(29)	45	(128)	20
Total liabilities at fair value	18,551	4,208	(4,035)	274	(338)	9,311
Net assets/(liabilities) at fair value	(1,909)	(1,336)	1,611	42,169	(42,185)	(6,054)

¹ Residential and commercial mortgage-backed securities that were previously reported in investment securities have been reclassified to trading assets as these securities are carried at fair value under the fair value option.

Settlements	Trading revenues		Other revenues		Accumulated other comprehensive income		Foreign currency translation impact	Balance at end of period
	On transfers out	On all other	On transfers out	On all other	On transfers out	On all other		
0	0	0	0	0	0	0	0	30
(1,682)	(21)	488	0	0	0	0	(15)	8,980
(205)	25	35	0	(3)	0	0	(22)	2,242
0	0	4	0	0	0	0	(29)	232
0	31	(72)	0	(4)	0	0	(4)	1,260
(205)	(3)	111	0	0	0	0	6	432
0	8	55	0	3	0	0	0	132
(1,434)	(56)	144	0	0	0	0	(24)	3,298
(116)	17	(237)	0	0	0	0	(10)	507
(24)	(2)	79	0	0	0	0	2	258
(436)	(77)	300	0	0	0	0	(25)	1,054
(438)	5	(59)	0	0	0	0	7	673
(420)	1	61	0	0	0	0	2	806
(43)	2	254	0	0	0	0	31	3,308
0	0	(93)	0	5	0	0	(4)	1,309
0	0	(96)	0	0	0	0	10	1,067
(1,866)	7	(134)	0	(13)	0	0	24	4,324
(1,057)	0	(83)	0	(5)	0	0	10	1,949
(746)	10	8	0	0	0	0	8	1,391
(64)	2	(8)	0	(8)	0	0	0	515
0	0	0	0	1	0	0	3	163
(540)	22	(32)	0	(1)	0	0	(67)	1,543
(539)	21	(44)	0	0	0	0	(67)	1,235
(4,088)	8	229	0	(8)	0	0	(59)	16,349
0	0	32	0	0	0	(21)	(13)	453
0	0	0	0	0	0	0	0	30
(1,527)	(7)	(839)	0	(3)	0	0	19	3,589
0	0	1	0	0	0	0	0	25
0	(3)	(33)	0	(3)	0	0	0	37
(1,527)	(4)	(807)	0	0	0	0	19	3,527
(145)	16	(171)	0	0	0	0	2	189
(29)	0	15	0	0	0	0	1	160
(548)	(36)	(592)	0	0	0	0	4	1,500
(572)	16	(30)	0	0	0	0	10	1,140
(1,133)	3	(117)	0	(4)	0	0	7	784
(3,656)	(25)	(1,368)	0	0	(2)	(417)	124	12,665
(501)	(10)	(14)	0	0	0	0	3	528
(3,115)	(17)	(1,355)	0	0	(2)	(417)	118	11,800
(420)	(7)	97	0	161	0	0	7	1,341
(6,736)	(36)	(2,195)	0	154	(2)	(438)	144	18,862
2,648	44	2,424	0	(162)	2	438	(203)	(2,513)

Gains and losses on assets and liabilities measured at fair value on a recurring basis (level 3)

in	2019			2018		
	Trading revenues	Other revenues	Total revenues	Trading revenues	Other revenues	Total revenues
Gains and losses on assets and liabilities (CHF million)						
Net realized/unrealized gains/(losses) included in net revenues	(1,233)	(293)	(1,526) ¹	2,468	(162)	2,306 ¹
Whereof:						
Unrealized gains/(losses) relating to assets and liabilities still held as of the reporting date	(1,394)	149	(1,245)	100 ²	(5)	95 ²

¹ Excludes net realized/unrealized gains/(losses) attributable to foreign currency translation impact.

² Prior period has been corrected.

Both observable and unobservable inputs may be used to determine the fair value of positions that have been classified within level 3. As a result, the unrealized gains and losses for assets and liabilities within level 3 presented in the table above may include changes in fair value that were attributable to both observable and unobservable inputs.

The Group employs various economic hedging techniques in order to manage risks, including risks in level 3 positions. Such techniques may include the purchase or sale of financial instruments that are classified in levels 1 and/or 2. The realized and unrealized gains and losses for assets and liabilities in level 3 presented in the table above do not reflect the related realized or unrealized gains and losses arising on economic hedging instruments classified in levels 1 and/or 2.

The Group typically uses nonfinancial assets measured at fair value on a recurring or nonrecurring basis in a manner that reflects their highest and best use.

Transfers in and out of level 3

Transfers into level 3 assets during 2019 were CHF 2,849 million, primarily from trading assets and loans. The transfers were primarily in the credit and financing businesses due to limited observability of pricing data and reduced pricing information from external providers. Transfers out of level 3 assets during 2019 were CHF 3,494 million, primarily in trading assets and loans. The transfers out of level 3 assets were primarily in the credit, financing and equity derivatives businesses due to improved observability of pricing data and increased availability of pricing information from external providers.

Transfers into level 3 assets during 2018 were CHF 2,872 million, primarily from trading assets and loans. The transfers were primarily in the financing and credit businesses due to limited observability of pricing data and reduced pricing information from external providers. Transfers out of level 3 assets during 2018 were CHF 2,424 million, primarily in trading assets and loans. The transfers out of level 3 assets were primarily in the financing and fixed income businesses due to improved observability of pricing data and increased availability of pricing information from external providers.

Uncertainty of fair value measurements at the reporting date from the use of significant unobservable inputs

For level 3 assets with a significant unobservable input of buy-back probability, correlation, funding spread, mortality rate, price, recovery rate, volatility or volatility skew, in general, an increase in the significant unobservable input would increase the fair value. For level 3 assets with a significant unobservable input of credit spread, default rate, discount rate, gap risk, market implied life expectancy (for life settlement and premium finance instruments) and prepayment rate, in general, an increase in the significant unobservable input would decrease the fair value.

For level 3 liabilities, in general, an increase in the related significant unobservable inputs would have the inverse impact on fair value. An increase in the significant unobservable input credit spread, contingent probability, gap risk, market implied life expectancy (for life settlement and premium finance instruments) and recovery rate would increase the fair value. An increase in the significant unobservable input buyback probability, correlation, discount rate, fund gap risk, funding spread, mean reversion, mortality rate, prepayment rate, price and volatility would decrease the fair value.

Interrelationships between significant unobservable inputs

Except as noted above, there are no material interrelationships between the significant unobservable inputs for the financial instruments. As the significant unobservable inputs move independently, generally an increase or decrease in one significant unobservable input will have no impact on the other significant unobservable inputs.

Quantitative disclosures of valuation techniques

The following tables provide the representative range of minimum and maximum values and the associated weighted averages of each significant unobservable input for level 3 assets and liabilities by the related valuation technique most significant to the related financial instrument.

Quantitative information about level 3 assets at fair value

end of 2019	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average ¹
CHF million, except where indicated						
Securities received as collateral	1	–	–	–	–	–
Trading assets	7,885					
of which debt securities	1,923					
of which foreign governments	198	Discounted cash flow	Credit spread, in bp	140	140	140
of which corporates	1,128					
of which	503	Market comparable	Price, in %	0	129	97
of which	913	Option model	Correlation, in %	(60)	100	63
			Gap risk, in %	0	2	0
			Volatility, in %	0	275	27
of which RMBS	317	Discounted cash flow	Default rate, in %	0	12	2
			Discount rate, in %	1	36	13
			Loss severity, in %	0	100	46
			Prepayment rate, in %	2	45	10
of which equity securities	197	Vendor price	Price, in actuals	0	36,760	383
of which derivatives	3,534					
of which interest rate products	554	Option model	Correlation, in %	0	100	69
			Prepayment rate, in %	1	28	10
			Volatility skew, in %	(4)	6	(1)
of which foreign exchange products	152	Option model	Correlation, in %	5	70	30
			Prepayment rate, in %	23	28	25
of which equity/index-related products	1,040	Option model	Buyback probability, in %	50	100	70
			Correlation, in %	(50)	100	64
			Gap risk, in % ²	0	2	0
			Volatility, in %	0	275	30
of which credit derivatives	879					
of which	691	Discounted cash flow	Correlation, in %	97	97	97
			Credit spread, in bp	2	1,033	150
			Default rate, in %	1	20	4
			Discount rate, in %	8	27	16
			Funding spread, in bp	100	115	102
			Loss severity, in %	29	85	69
			Prepayment rate, in %	0	7	4
			Recovery rate, in %	0	40	26
of which	142	Market comparable	Price, in %	86	110	98
of which other derivatives	909	Discounted cash flow	Market implied life expectancy, in years	2	15	6
			Mortality rate, in %	71	134	97
of which other trading assets	2,231					
of which	856	Discounted cash flow	Market implied life expectancy, in years	2	15	7
of which	1,118	Market comparable	Price, in %	0	112	27
of which	233	Option model	Mortality rate, in %	0	70	6

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

Quantitative information about level 3 assets at fair value (continued)

end of 2019	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average ¹
CHF million, except where indicated						
Other investments	2,523					
of which other equity investments	1,463					
of which	398	Discounted cash flow	Discount rate, in %	9	9	9
			Terminal growth rate, in %	3	3	3
of which	147	Market comparable	Price, in %	100	100	100
of which	857	Vendor price	Price, in actuals	1	869	231
of which life finance instruments	1,052	Discounted cash flow	Market implied life expectancy, in years	2	16	6
Loans	3,717					
of which commercial and industrial loans	1,283					
of which	996	Discounted cash flow	Credit spread, in bp	96	1,484	654
			Recovery rate, in %	25	25	25
of which	273	Market comparable	Price, in %	0	99	64
of which financial institutions	1,201					
of which	984	Discounted cash flow	Credit spread, in bp	111	1,261	412
			Recovery rate, in %	25	25	25
of which	135	Market comparable	Price, in %	16	100	36
of which government and public institutions	831					
of which	468	Discounted cash flow	Credit spread, in bp	457	526	500
			Recovery rate, in %	25	40	30
of which	166	Market comparable	Price, in %	62	62	62
Other intangible assets (mortgage servicing rights)	244	–	–	–	–	–
Other assets	1,846					
of which loans held-for-sale	1,619					
of which	501	Discounted cash flow	Credit spread, in bp	117	381	243
			Recovery rate, in %	0	1	1
of which	1,026	Market comparable	Price, in %	0	180	91
Total level 3 assets at fair value	16,216					

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

Quantitative information about level 3 assets at fair value (continued)

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average ¹
CHF million, except where indicated						
Securities received as collateral	30	–	–	–	–	–
Trading assets ²	8,980					
of which debt securities	2,242					
of which foreign governments	232	Discounted cash flow	Credit spread, in bp	140	140	140
of which corporates	1,260					
of which	441	Market comparable	Price, in %	0	118	94
of which	621	Option model	Correlation, in %	(60)	98	68
			Volatility, in %	0	178	30
of which RMBS	432	Discounted cash flow	Default rate, in %	0	11	3
			Discount rate, in %	1	26	7
			Loss severity, in %	0	100	63
			Prepayment rate, in %	1	22	8
of which equity securities	132					
of which	76	Market comparable	EBITDA multiple	2	9	6
			Price, in %	100	100	100
of which	49	Vendor price	Price, in actuals	0	355	1
of which derivatives	3,298					
of which interest rate products	507	Option model	Correlation, in %	0	100	69
			Prepayment rate, in %	1	26	9
			Volatility skew, in %	(4)	0	(2)
of which foreign exchange products	258					
of which	28	Discounted cash flow	Contingent probability, in %	95	95	95
of which	218	Option model	Correlation, in %	(23)	70	24
			Prepayment rate, in %	21	26	23
			Volatility, in %	80	90	85
of which equity/index-related products	1,054	Option model	Buyback probability, in %	50	100	74
			Correlation, in %	(40)	98	80
			Gap risk, in % ³	0	4	1
			Volatility, in %	2	178	34
of which credit derivatives	673	Discounted cash flow	Correlation, in %	97	97	97
			Credit spread, in bp	3	2,147	269
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	15
			Loss severity, in %	16	85	56
			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	68	8
of which other derivatives	806	Discounted cash flow	Market implied life expectancy, in years	2	16	5
			Mortality rate, in %	87	106	101
of which other trading assets	3,308					
of which	870	Discounted cash flow	Market implied life expectancy, in years	3	17	7
of which	2,119	Market comparable	Price, in %	0	110	30
of which	249	Option model	Mortality rate, in %	0	70	6

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Residential and commercial mortgage-backed securities that were previously reported in investment securities have been reclassified to trading assets as these securities are carried at fair value under the fair value option.

³ Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

Quantitative information about level 3 assets at fair value (continued)

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average ¹
CHF million, except where indicated						
Other investments	1,309					
of which life finance instruments	1,067	Discounted cash flow	Market implied life expectancy, in years	2	17	6
Loans	4,324					
of which commercial and industrial loans	1,949					
of which	1,531	Discounted cash flow	Credit spread, in bp	159	1,184	582
of which	306	Market comparable	Price, in %	0	99	65
of which financial institutions	1,391					
of which	1,157	Discounted cash flow	Credit spread, in bp	88	1,071	596
of which	73	Market comparable	Price, in %	1	100	74
of which real estate	515	Discounted cash flow	Credit spread, in bp	200	1,522	612
			Recovery rate, in %	25	40	39
Other intangible assets (mortgage servicing rights)	163	–	–	–	–	–
Other assets	1,543					
of which loans held-for-sale	1,235					
of which	422	Discounted cash flow	Credit spread, in bp	105	2,730	394
			Recovery rate, in %	25	87	56
of which	739	Market comparable	Price, in %	0	130	82
Total level 3 assets at fair value	16,349					

Quantitative information about level 3 liabilities at fair value

end of 2019	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average ¹
CHF million, except where indicated						
Customer deposits	474	Option model	Correlation, in %	0	100	77
			Credit spread, in bp	46	79	71
			Mean reversion, in % ²	10	10	10
Obligation to return securities received as collateral	1	–	–	–	–	–
Trading liabilities	3,854					
of which equity securities	53	Vendor price	Price, in actuals	0	66	2
of which derivatives	3,801					
of which interest rate derivatives	167	Option model	Correlation, in %	0	100	47
			Prepayment rate, in %	1	28	7
of which foreign exchange derivatives	98					
of which	37	Discounted cash flow	Contingent probability, in %	95	95	95
			Credit spread, in bp	47	147	71
of which	12	Market comparable	Price, in %	100	100	100
of which	47	Option model	Correlation, in %	35	70	53
			Prepayment rate, in %	23	28	25
of which equity/index-related derivatives	1,921	Option model	Buyback probability, in % ³	50	100	70
			Correlation, in %	(60)	100	66
			Volatility, in %	0	275	26
of which credit derivatives	1,211					
of which	745	Discounted cash flow	Correlation, in %	38	45	44
			Credit spread, in bp	2	1,041	142
			Default rate, in %	1	20	4
			Discount rate, in %	8	27	15
			Funding spread, in bp	100	154	122
			Loss severity, in %	29	85	69
			Prepayment rate, in %	0	8	5
			Recovery rate, in %	0	40	31
of which	412	Market comparable	Price, in %	89	110	99
of which	23	Option model	Correlation, in %	49	50	49
			Credit spread, in bp	17	1,225	270

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Management's best estimate of the speed at which interest rates will revert to the long-term average.

³ Estimate of probability of structured notes being put back to the Group at the option of the investor over the remaining life of the financial instruments.

Quantitative information about level 3 liabilities at fair value (continued)

end of 2019	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average ¹
CHF million, except where indicated						
Short-term borrowings	997					
of which	56	Discounted cash flow	Credit spread, in bp	(40)	937	138
			Recovery rate, in %	40	40	40
of which	847	Option model	Buyback probability, in %	50	100	70
			Correlation, in %	(50)	100	62
			Fund gap risk, in % ²	0	2	0
			Volatility, in %	1	275	39
Long-term debt	12,610					
of which structured notes over one year and up to two years	891					
of which	78	Discounted cash flow	Credit spread, in bp	(15)	3,206	246
			Recovery rate, in %	25	25	25
of which	813	Option model	Buyback probability, in % ³	50	100	70
			Correlation, in %	(50)	100	64
			Fund gap risk, in % ²	0	2	0
			Volatility, in %	1	275	36
of which structured notes over two years	11,458					
of which	1,141	Discounted cash flow	Credit spread, in bp	(12)	1,260	40
			Recovery rate, in %	25	40	29
of which	22	Market comparable	Price, in %	43	46	43
of which	9,972	Option model	Buyback probability, in % ³	50	100	70
			Correlation, in %	(60)	100	63
			Gap risk, in % ²	0	2	0
			Mean reversion, in % ⁴	(55)	0	(7)
			Volatility, in %	0	275	26
of which high-trigger instruments	5	–	–	–	–	–
Other liabilities	1,385	–	–	–	–	–
Total level 3 liabilities at fair value	19,321					

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

³ Estimate of probability of structured notes being put back to the Group at the option of the investor over the remaining life of the financial instruments.

⁴ Management's best estimate of the speed at which interest rates will revert to the long-term average.

Quantitative information about level 3 liabilities at fair value (continued)

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average ¹
CHF million, except where indicated						
Customer deposits	453	–	–	–	–	–
Obligation to return securities received as collateral	30	–	–	–	–	–
Trading liabilities	3,589					
of which debt securities	25	–	–	–	–	–
of which equity securities	37	Vendor price	Price, in actuals	0	3	0
of which derivatives	3,527					
of which interest rate derivatives	189	Option model	Basis spread, in bp	(20)	147	48
			Correlation, in %	1	100	41
			Prepayment rate, in %	1	26	7
of which foreign exchange derivatives	160					
of which	62	Discounted cash flow	Contingent probability, in %	95	95	95
			Credit spread, in bp	146	535	379
of which	37	Market comparable	Price, in %	100	100	100
of which	57	Option model	Correlation, in %	35	70	53
			Prepayment rate, in %	21	26	23
of which equity/index-related derivatives	1,500	Option model	Buyback probability, in % ²	50	100	74
			Correlation, in %	(60)	98	74
			Volatility, in %	0	178	30
of which credit derivatives	1,140					
of which	566	Discounted cash flow	Correlation, in %	38	82	47
			Credit spread, in bp	3	2,937	262
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	14
			Loss severity, in %	16	95	56
			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	80	14
of which	508	Market comparable	Price, in %	75	104	89
of which	20	Option model	Correlation, in %	50	50	50
			Credit spread, in bp	35	1,156	320
Short-term borrowings	784					
of which	61	Discounted cash flow	Credit spread, in bp	1,018	1,089	1,067
			Recovery rate, in %	40	40	40
of which	644	Option model	Buyback probability, in %	50	100	74
			Correlation, in %	(40)	98	64
			Fund gap risk, in % ³	0	4	1
			Volatility, in %	2	178	32
Long-term debt	12,665					
of which structured notes over one year and up to two years	528					
of which	3	Discounted cash flow	Credit spread, in bp	112	112	112
of which	427	Option model	Correlation, in %	(40)	98	71
			Volatility, in %	2	178	31
of which structured notes over two years	11,800					
of which	1,570	Discounted cash flow	Credit spread, in bp	(11)	1,089	136
of which	43	Market comparable	Price, in %	0	46	30
of which	9,533	Option model	Buyback probability, in % ²	50	100	74
			Correlation, in %	(60)	98	65
			Gap risk, in % ³	0	4	1
			Mean reversion, in % ⁴	(55)	(1)	(7)
			Volatility, in %	0	178	27
Other liabilities	1,341	–	–	–	–	–
Total level 3 liabilities at fair value	18,862					

¹ Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

² Estimate of probability of structured notes being put back to the Group at the option of the investor over the remaining life of the financial instruments.

³ Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

⁴ Management's best estimate of the speed at which interest rates will revert to the long-term average.

Qualitative discussion of the ranges of significant unobservable inputs

The following sections provide further information about the ranges of significant unobservable inputs included in the tables above. The level of aggregation and diversity within the financial instruments disclosed in the tables above results in certain ranges of significant inputs being wide and unevenly distributed across asset and liability categories.

Basis spread

Basis spread is the primary significant unobservable input for non-callable constant maturity treasury-CMS products and is used to determine interest rate risk as a result of differing lending and borrowing rates.

Buyback probability

Buyback probability is the probability assigned to structured notes being unwound prior to their legal maturity.

Contingent probability

Contingent probability is the primary significant unobservable input for contingent foreign exchange forward trades where the delivery or exercise and the premium payment are contingent on an event such as completion of an M&A deal or regulatory approval for a product.

Correlation

There are many different types of correlation inputs, including credit correlation, cross-asset correlation (such as equity-interest rate correlation) and same-asset correlation (such as interest rate-interest rate correlation). Correlation inputs are generally used to value hybrid and exotic instruments. Due to the complex and unique nature of these instruments, the ranges for correlation inputs can vary widely across portfolios.

Credit spread and recovery rate

For financial instruments where credit spread is the significant unobservable input, the wide range represents positions with varying levels of risk. The lower end of the credit spread range typically represents shorter-dated instruments and/or those with better perceived credit risk. The higher end of the range typically comprises longer-dated financial instruments or those referencing non-performing, distressed or impaired reference credits. Similarly, the spread between the reference credit and an index can vary significantly based on the risk of the instrument. The spread will be positive for instruments that have a higher risk of default than the index (which is based on a weighted average of its components) and negative for instruments that have a lower risk of default than the index.

Similarly, recovery rates can vary significantly depending upon the specific assets and terms of each transaction. Transactions with higher seniority or more valuable collateral will have higher recovery rates, while those transactions which are more subordinated or with less valuable collateral will have lower recovery rates.

Default rate and loss severity

For financial instruments backed by residential real estate or other assets, diversity in the portfolio is reflected in a wide range for loss severity due to varying levels of default. The lower end of the range represents high performing or government guaranteed collateral with a low PD or guaranteed timely payment of principal and interest, while the higher end of the range relates to collateral with a greater risk of default.

Discount rate

The discount rate is the rate of interest used to calculate the present value of the expected cash flows of a financial instrument. There are multiple factors that will impact the discount rate for any given financial instrument including the coupon on the instrument, the term and the underlying risk of the expected cash flows. Two instruments of similar term and expected cash flows may have significantly different discount rates because the coupons on the instruments are different.

EBITDA multiple

EBITDA multiple is a primary significant unobservable input for some equity deals which are benchmarked using industry comparables. The EBITDA multiple may be preferred over other measures because it is normalized for differences between the accounting policies of similar companies.

Funding gap risk and gap risk

Gap risk is the primary significant unobservable input for fund-linked Constant Proportion Portfolio Insurance products and structures where the payoff may be sensitive to discontinuity in the hedging portfolio.

Funding spread

Funding spread is the primary significant unobservable input for special purpose vehicle funding facilities. Synthetic funding curves which represent the assets pledged as collateral are used to value structured financing transactions. The curves provide an estimate of where secured funding can be sourced and are expressed as a basis point spread in relation to the referenced benchmark rate.

Market implied life expectancy

Market implied life expectancy is the primary significant unobservable input on such products as life settlement, premium finance and SPIA, and represents the estimated mortality rate for the underlying insured for each contract. This estimate may vary depending upon multiple factors including the age and specific health characteristics of the insured.

Mean reversion

Mean reversion is the primary significant unobservable input for callable constant maturity swap (CMS) spread exotics and represents the idea that prices and returns eventually move back towards the historical average.

Mortality rate

Mortality rate is the primary significant unobservable input for pension swaps. The expected present value of future cash flow

of the trades depend on the mortality of individuals in the pension fund who are grouped into categories such as gender, age, pension amount and other factors. In some cases mortality rates include a “scaler” (also referred to as a loading or multiplier) that align mortality projections with historical experience and calibrate to exit level.

Prepayment rate

Prepayment rates may vary from collateral pool to collateral pool, and are driven by a variety of collateral-specific factors, including the type and location of the underlying borrower, the remaining tenor of the obligation and the level and type (e.g., fixed or floating) of interest rate being paid by the borrower.

Price

Bond equivalent price is a primary significant unobservable input for multiple products. Where market prices are not available for an instrument, benchmarking may be utilized to identify comparable issues (same industry and similar product mixes) while adjustments are considered for differences in deal terms and performance.

Terminal Growth Rate

The terminal growth rate is the rate at which free cash flows are expected to grow in perpetuity as part of an overall firm valuation process. The terminal growth rate typically parallels the historical inflation rate (2-3%) and is applied to the discounted cash flow model to represent mature stage company valuation.

Volatility and volatility skew

Volatility and its skew are both impacted by the underlying risk, term and strike price of the derivative. In the case of interest rate derivatives, volatility may vary significantly between different underlying currencies and expiration dates on the options. Similarly, in the case of equity derivatives, the volatility attributed

to a structure may vary depending upon the underlying reference name on the derivative.

Investment funds measured at NAV per share

Investments in funds held in trading assets and trading liabilities primarily include positions held in equity funds of funds as an economic hedge for structured notes and derivatives issued to clients that reference the same underlying risk and liquidity terms of the fund. A majority of these funds have limitations imposed on the amount of withdrawals from the fund during the redemption period due to illiquidity of the investments. In other instances, the withdrawal amounts may vary depending on the redemption notice period and are usually larger for the longer redemption notice periods. In addition, penalties may apply if redemption is within a certain time period from initial investment.

Investments in funds held in other investments principally involves private equity securities and, to a lesser extent, publicly traded securities and fund of funds. Several of these investments have redemption restrictions subject to the discretion of the board of directors of the fund and/or redemption is permitted without restriction, but is limited to a certain percentage of total assets or only after a certain date.

For those funds held in trading assets and trading liabilities and funds held in other investments that are nonredeemable, the underlying assets of such funds are expected to be liquidated over the life of the fund, which is generally up to ten years.

The following table pertains to investments in certain entities that calculate NAV per share or its equivalent, primarily private equity and hedge funds. These investments do not have a readily determinable fair value and are measured at fair value using NAV.

Fair value, unfunded commitments and term of redemption conditions of investment funds measured at NAV per share

end of	2019		2018		2019		2018	
	Non-redeemable	Redeemable	Total fair value	Unfunded commitments	Non-redeemable	Redeemable	Total fair value	Unfunded commitments
Fair value of investment funds and unfunded commitments (CHF million)								
Debt funds	0	0	0	0	12	0	12	0
Equity funds	58	750 ¹	808	53	103	1,011 ²	1,114	53
Equity funds sold short	0	(2)	(2)	0	(8)	(2)	(10)	0
Funds held in trading assets and trading liabilities	58	748	806	53	107	1,009	1,116	53
Debt funds	1	0	1	49	1	0	1	0
Equity funds	104	0	104	51	130	0	130	43
Real estate funds	183	0	183	36	214	0	214	34
Other private equity funds	35	0	35	25	24	5	29	29
Private equity funds	323	0	323	161	369	5	374	106
Debt funds	12	22	34	0	68	34	102	0
Equity funds	0	35	35	0	14	14	28	0
Other hedge funds	9	8	17	0	2	24	26	0
Hedge funds	21	65 ³	86	0	84	72 ⁴	156	0
Equity method investment funds	187	402	589	14	52	522	574	21
Funds held in other investments	531	467	998	175	505	599	1,104	127
Total fair value of investment funds and unfunded commitments	589⁵	1,215	1,804	228	612⁵	1,608	2,220	180⁶

¹ 61% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 26% is redeemable on a monthly basis with a notice period primarily of less than 30 days and 13% is redeemable on a quarterly basis with a notice period of primarily more than 60 days.

² 46% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 40% is redeemable on a monthly basis with a notice period primarily of more than 30 days, 13% is redeemable on a quarterly basis with a notice period primarily of more than 45 days and 1% is redeemable on an annual basis with a notice period of less than 30 days.

³ 68% of the redeemable fair value amount of hedge funds is redeemable on demand with a notice period primarily of less than 30 days, 20% is redeemable on a quarterly basis with a notice period of more than 60 days and 12% is redeemable on a monthly basis with a notice period of less than 30 days.

⁴ 65% of the redeemable fair value amount of hedge funds is redeemable on a quarterly basis with a notice period primarily of more than 60 days and 35% is redeemable on demand with a notice period primarily of less than 30 days.

⁵ Includes CHF 41 million and CHF 102 million attributable to noncontrolling interests as of the end of 2019 and 2018, respectively.

⁶ Includes CHF 23 million attributable to noncontrolling interests.

Assets measured at fair value on a nonrecurring basis

Certain assets and liabilities are measured at fair value on a non-recurring basis; that is, they are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances, for example, when there is evidence of impairment. Nonrecurring measurements are completed as of the end of the period unless otherwise stated.

There were no material assets measured at fair value on a nonrecurring basis in 2019 and 2018.

Fair value option

The Group has availed itself of the simplification in accounting offered under the fair value option. This has been accomplished generally by electing the fair value option, both at initial adoption and for subsequent transactions, on items impacted by the hedge accounting requirements of US GAAP. For instruments for which hedge accounting could not be achieved but for which the Group is economically hedged, the Group has generally elected the fair value option. Where the Group manages an activity on a fair value basis but previously has been unable to achieve fair value

accounting, the Group has generally utilized the fair value option to align its financial accounting to its risk management reporting.

The Group elected fair value for certain of its financial statement captions as follows:

Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions

The Group has elected to account for structured resale agreements and most matched book resale agreements at fair value. These activities are managed on a fair value basis; thus, fair value accounting is deemed more appropriate for reporting purposes. The Group did not elect the fair value option for firm financing resale agreements as these agreements are generally overnight agreements which approximate fair value, but which are not managed on a fair value basis.

Other investments

The Group has elected to account for certain equity method investments at fair value. These activities are managed on a fair value basis; thus, fair value accounting is deemed more appropriate for reporting purposes.

In December 2019, Credit Suisse completed a review of the accounting treatment of the shares that it holds in SIX Group AG and elected fair value accounting under US GAAP in respect of this equity investment.

Loans

The Group has elected to account for substantially all commercial loans and loan commitments from the investment banking businesses and certain emerging market loans from the investment banking businesses at fair value. These activities are managed on a fair value basis and fair value accounting was deemed more appropriate for reporting purposes. Additionally, recognition on a fair value basis eliminates the mismatch that existed due to the economic hedging the Group employs to manage these loans. Certain similar loans, such as project finance, lease finance, cash collateralized and some bridge loans, which were eligible for the fair value option, were not elected due to the lack of currently available infrastructure to fair value such loans and/or the inability to economically hedge such loans. Additionally, the Group elected not to account for loans granted by its private, corporate and institutional banking businesses at fair value, such as domestic consumer lending, mortgages and corporate loans, as these loans are not managed on a fair value basis.

Other assets

The Group elected the fair value option for loans held-for-sale, due to the short period over which such loans are held and the intention to sell such loans in the near term. Other assets also include assets of VIEs and mortgage securitizations which do not meet the criteria for sale treatment under US GAAP. The Group did elect the fair value option for these types of transactions.

Due to banks and customer deposits

The Group elected the fair value option for certain time deposits associated with its emerging markets activities. The Group's customer deposits include fund-linked deposits. The Group elected the fair value option for these fund-linked deposits. Fund-linked products are managed on a fair value basis and fair value accounting was deemed more appropriate for reporting purposes.

Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions

The Group has elected to account for structured repurchase agreements and most matched book repurchase agreements at fair value. These activities are managed on a fair value basis and fair value accounting was deemed more appropriate for reporting purposes. The Group did not elect the fair value option for firm financing repurchase agreements as these agreements are

generally overnight agreements which approximate fair value, but which are not managed on a fair value basis.

Short-term borrowings

The Group's short-term borrowings include hybrid debt instruments with embedded derivative features. Some of these embedded derivative features create bifurcated debt instruments. The Group elected the fair value option for some of these instruments as of January 1, 2006, in accordance with the provisions of US GAAP. New bifurcated debt instruments which were entered into in 2006 are carried at fair value. Some hybrid debt instruments do not result in bifurcated debt instruments. US GAAP permits the Group to elect fair value accounting for non-bifurcated hybrid debt instruments. With the exception of certain bifurcated hybrid debt instruments which the Group did not elect to account for at fair value, the Group has elected to account for all hybrid debt instruments held as of January 1, 2007, and hybrid debt instruments originated after January 1, 2007, at fair value. These activities are managed on a fair value basis and fair value accounting was deemed appropriate for reporting purposes. There are two main populations of similar instruments for which fair value accounting was not elected. The first relates to the lending business transacted by the Group's private, corporate and institutional banking businesses, which includes structured deposits and similar investment products. These are managed on a bifurcated or accrual basis and fair value accounting was not considered appropriate. The second is where the instruments were or will be maturing in the near term and their fair value will be realized at that time.

Long-term debt

The Group's long-term debt includes hybrid debt instruments with embedded derivative features as described above in short-term borrowings. The Group's long-term debt also includes debt issuances managed by the Treasury department that do not contain derivative features (vanilla debt). The Group actively manages the interest rate risk on these instruments with derivatives. In particular, fixed-rate debt is hedged with receive-fixed, pay-floating interest rate swaps. The Group elected to fair value fixed-rate debt upon implementation of the fair value option on January 1, 2007, with changes in fair value recognized as a component of trading revenues. The Group did not elect to apply the fair value option to fixed-rate debt issued by the Group since January 1, 2008, but instead applies hedge accounting.

Other liabilities

Other liabilities include liabilities of VIEs and mortgage securitizations that do not meet the criteria for sale treatment under US GAAP. The Group elected the fair value option for these types of transactions.

Difference between the aggregate fair value and unpaid principal balances of fair value option-elected financial instruments

end of	2019			2018		
	Aggregate fair value	Aggregate unpaid principal	Difference	Aggregate fair value	Aggregate unpaid principal	Difference
Financial instruments (CHF million)						
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	85,556	85,463	93	81,818	81,637	181
Loans	12,662	13,104	(442)	14,873	15,441	(568)
Other assets ¹	9,710	12,006	(2,296)	6,706	9,240	(2,534)
Due to banks and customer deposits	(582)	(508)	(74)	(859)	(778)	(81)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(10,715)	(10,719)	4	(14,828)	(14,827)	(1)
Short-term borrowings	(11,333)	(11,187)	(146)	(8,068)	(8,647)	579
Long-term debt	(70,331)	(72,126)	1,795	(63,935)	(70,883)	6,948
Other liabilities	(709)	(1,681)	972	(2,068)	(3,125)	1,057
Non-performing and non-interest-earning loans ²	543	3,235	(2,692)	640	3,493	(2,853)

¹ Primarily loans held-for-sale.

² Included in loans or other assets.

Gains and losses on financial instruments

in	2019	2018	2017
	Net gains/(losses)	Net gains/(losses)	Net gains/(losses)
Financial instruments (CHF million)			
Interest-bearing deposits with banks	29 ¹	2 ¹	13 ¹
of which related to credit risk	11	(10)	0
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,696 ¹	2,451 ¹	2,206 ¹
Other investments	268 ²	241 ³	216 ²
of which related to credit risk	2	(1)	(4)
Loans	908 ¹	717 ¹	1,542 ¹
of which related to credit risk	26	(296)	7
Other assets	892 ¹	770 ¹	480 ¹
of which related to credit risk	111	61	96
Due to banks and customer deposits	(29) ²	(39) ²	1 ²
of which related to credit risk	1	(37)	5
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(612) ¹	(890) ¹	(418) ¹
Short-term borrowings	(50) ²	2,807 ²	(512) ²
of which related to credit risk	8	(5)	(23)
Long-term debt	(8,501) ²	4,206 ²	(6,857) ²
of which related to credit risk	(5)	7	(32)
Other liabilities	92 ³	73 ³	183 ³
of which related to credit risk	50	4	83

¹ Primarily recognized in net interest income.

² Primarily recognized in trading revenues.

³ Primarily recognized in other revenues.

The impact of credit risk on assets presented in the table above has been calculated as the component of the total change in fair value, excluding the impact of changes in base or risk-free interest rates. The impact of changes in own credit risk on liabilities presented in the table above has been calculated as the difference between the fair values of those instruments as of the reporting date and the theoretical fair values of those instruments calculated by using the yield curve prevailing at the end of the reporting period, adjusted up or down for changes in the Group's own credit spreads from the transition date to the reporting date.

Interest income and expense, which are calculated based on contractual rates specified in the transactions, are recorded in the consolidated statements of operations depending on the nature of the instrument and its related market convention. When interest is included as a component of the change in the instrument's fair value, it is included in trading revenues. Otherwise, it is included

in interest and dividend income or interest expense. Interest and dividend income is recognized separately from trading revenues.

Gains and losses attributable to changes in instrument-specific credit risk on fair value option elected liabilities

The following table provides additional information regarding the gains and losses attributable to changes in instrument-specific credit risk on fair value option elected liabilities, which have been recorded in AOCI. The table includes both the amount of change during the period and the cumulative amount that were attributable to the changes in instrument-specific credit risk. In addition, the table includes the gains and losses related to instrument-specific credit risk, which were previously recorded in AOCI but have been transferred to net income during the period.

Gains/(losses) attributable to changes in instrument-specific credit risk

in	Gains/(losses) recorded into AOCI ¹		Gains/(losses) recorded in AOCI transferred to net income ¹	
	2019	Cumulative	2018	2018
Financial instruments (CHF million)				
Customer deposits	(51)	(65)	36	(6)
Short-term borrowings	(2)	(56)	6	2
Long-term debt	(2,190)	(2,992)	1,603	53
of which treasury debt over two years	(1,198)	(1,113)	759	0
of which structured notes over two years	(769)	(1,720)	774	53
Total	(2,243)	(3,113)	1,645	49

¹ Amounts are reflected gross of tax.

Financial instruments not carried at fair value

The "Carrying value and fair value of financial instruments not carried at fair value" table provides the carrying value and fair

value of financial instruments which are not carried at fair value in the consolidated balance sheet. The disclosure excludes all non-financial instruments such as lease transactions, real estate, premises and equipment, equity method investments and pension and benefit obligations.

Carrying value and fair value of financial instruments not carried at fair value

end of	Carrying value	Fair value			Total
		Level 1	Level 2	Level 3	
2019 (CHF million)					
Financial assets					
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	21,441	0	21,441	0	21,441
Loans	280,568	0	278,337	11,562	289,899
Other financial assets ¹	114,543	101,600	12,225	720	114,543
Financial liabilities					
Due to banks and customer deposits	396,867	189,419	207,453	0	396,872
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	16,818	0	16,818	0	16,818
Short-term borrowings	17,052	0	17,052	0	17,052
Long-term debt	81,674	0	83,018	1,123	84,141
Other financial liabilities ²	15,867	0	15,705	168	15,873
2018 (CHF million)					
Financial assets					
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	35,277	0	35,243	35	35,278
Loans	269,147	0	269,825	7,047	276,872
Other financial assets ¹	117,353	99,976	16,750	797	117,523
Financial liabilities					
Due to banks and customer deposits	375,403	196,674	178,755	0	375,429
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	9,795	0	9,795	0	9,795
Short-term borrowings	13,857	0	13,859	0	13,859
Long-term debt	90,373	0	89,651	854	90,505
Other financial liabilities ²	16,357	0	16,101	184	16,285

¹ Primarily includes cash and due from banks, interest-bearing deposits with banks, loans held-for-sale, cash collateral on derivative instruments, interest and fee receivables and non-marketable equity securities.

² Primarily includes cash collateral on derivative instruments and interest and fee payables.

36 Assets pledged and collateral

Assets pledged

The Group pledges assets mainly for repurchase agreements and other securities financing. Certain pledged assets may be encumbered, meaning they have the right to be sold or repledged. The encumbered assets are parenthetically disclosed on the consolidated balance sheet.

Assets pledged

end of	2019	2018
CHF million		
Total assets pledged or assigned as collateral	133,333	117,895
of which encumbered	69,681	58,672

Collateral

The Group receives cash and securities in connection with resale agreements, securities borrowing and loans, derivative transactions and margined broker loans. A significant portion of the collateral and securities received by the Group was sold or repledged

in connection with repurchase agreements, securities sold not yet purchased, securities borrowings and loans, pledges to clearing organizations, segregation requirements under securities laws and regulations, derivative transactions and bank loans.

Collateral

end of	2019	2018
CHF million		
Fair value of collateral received with the right to sell or repledge	412,765	406,389
of which sold or repledged	185,935	193,267

Other information

end of	2019	2018
CHF million		
Swiss National Bank required minimum liquidity reserves	2,059	2,042
Other cash and securities restricted under Swiss and foreign regulations for financial institutions	25,568	25,139

37 Capital adequacy

The Group is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements), which include capital, liquidity, leverage and large exposure requirements and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency. The legislation implementing the Basel III framework in Switzerland in respect of capital requirements for systemically relevant banks, including the Group, goes beyond the Basel III minimum standards for systemically relevant banks. The Swiss total loss-absorbing capacity (TLAC) standards were phased in from 2016 through 2019 and became fully effective on January 1, 2020. The Group, which is subject to regulation by FINMA, has based its capital adequacy calculations on US GAAP financial statements, as permitted by FINMA Circular 2013/1.

Under the Capital Adequacy Ordinance, Swiss banks classified as systemically important banks operating internationally, such as the Group, are subject to two different minimum requirements for loss-absorbing capacity: such banks must hold sufficient capital that absorbs losses to ensure continuity of service (going concern requirement), and they must issue sufficient debt instruments to fund an orderly resolution without recourse to public resources (gone concern requirement). Going concern capital and gone concern capital together form the Group's total loss-absorbing capacity. The going concern and gone concern requirements are generally aligned with the Financial Stability Board's total loss-absorbing capacity standard. Both the going concern and the gone concern requirements were subject to phase-in, with gradually increasing requirements as well as grandfathering provisions for certain outstanding instruments, and became fully effective on January 1, 2020. Additionally, there are FINMA decrees that apply to the Group as a systemically important bank operating internationally, including capital adequacy requirements as well as liquidity and risk diversification requirements. Banks that do not maintain the minimum requirements may be limited in their ability to pay dividends and make discretionary bonus payments and other earnings distributions.

The Group's balance sheet positions and off-balance sheet exposures translate into risk-weighted assets, which are categorized as credit, market and operational risk-weighted assets. When assessing risk-weighted assets, it is not the nominal size, but rather the nature (including risk mitigation such as collateral or hedges) of the balance sheet positions or off-balance sheet exposures that determines the risk-weighted assets.

Leverage exposure consists of period-end balance sheet assets and prescribed regulatory adjustments.

Capital ratios measure the Group's capital components against risk-weighted assets and leverage ratios measure them against the end-of-period leverage exposure.

As of December 31, 2019 and 2018, the Group's capital position exceeded its capital requirements under the regulatory provisions outlined under Swiss Requirements.

Broker-dealer operations

Certain of the Group's broker-dealer subsidiaries are also subject to capital adequacy requirements. As of December 31, 2019 and 2018, the Group and its subsidiaries complied with all applicable regulatory capital adequacy requirements.

Swiss metrics

end of	2019	Phase-in 2018
Swiss capital (CHF million)		
Swiss CET1 capital	36,740	35,719
Going concern capital	52,691	49,443
Gone concern capital	38,576	35,678
Total loss-absorbing capacity	91,267	85,121
Swiss risk-weighted assets and leverage exposure (CHF million)		
Swiss risk-weighted assets	291,282	285,193
Leverage exposure	909,994	881,386
Swiss capital ratios (%)		
Swiss CET1 ratio	12.6	12.5
Going concern capital ratio	18.1	17.3
Gone concern capital ratio	13.2	12.5
TLAC ratio	31.3	29.8
Swiss leverage ratios (%)		
Swiss CET1 leverage ratio	4.0	4.1
Going concern leverage ratio	5.8	5.6
Gone concern leverage ratio	4.2	4.0
TLAC leverage ratio	10.0	9.7
Swiss capital ratio requirements (%)		
Swiss CET1 ratio requirement	9.68	9.46
Going concern capital ratio requirement	13.58	12.86
Gone concern capital ratio requirement	11.6	8.9
TLAC ratio requirement	25.18	21.76
Swiss leverage ratio requirements (%)		
Swiss CET1 leverage ratio requirement	3.2	2.9
Going concern leverage ratio requirement	4.5	4.0
Gone concern leverage ratio requirement	4.0	3.0
TLAC leverage ratio requirement	8.5	7.0

Dividend restrictions

Certain of the Group's subsidiaries are subject to legal restrictions governing the amount of dividends they can pay (for example, pursuant to corporate law as defined by the Swiss Code of Obligations).

Under the Swiss Code of Obligations, dividends may be paid out only if and to the extent the corporation has distributable profits from previous business years, or if the free reserves of the corporation are sufficient to allow distribution of a dividend. In addition, at least 5% of the annual net profits must be retained and booked as general legal reserves for so long as these reserves amount to less than 20% of the paid-in share capital. The reserves

currently exceed this 20% threshold. Furthermore, dividends may be paid out only after shareholder approval at the Annual General Meeting.

As of December 31, 2019 and 2018, Credit Suisse Group AG was not subject to restrictions on its ability to pay the proposed dividends.

38 Assets under management

The following disclosure provides information regarding client assets, assets under management and net new assets as regulated by FINMA.

Assets under management

Assets under management include assets for which the Group provides investment advisory or discretionary asset management services, investment fund assets and assets invested in other investment fund-like pooled investment vehicles managed by the Group. The classification of assets under management is conditional upon the nature of the services provided by the Group and the clients' intentions. Assets are individually assessed on the basis of each client's intentions and objectives and the nature of the banking services provided to that client. In order to be classified as assets under management, the Group must currently or in the foreseeable future expect to provide a service where the involvement of the Group's banking or investment expertise (e.g. as asset manager or investment advisor) is not purely executional or custodial in nature.

Assets under custody are client assets held mainly for execution-related or safekeeping/custody purposes only and therefore are not considered assets under management since the Group does not generally provide asset allocation or financial advice.

Assets of corporate clients and public institutions that are used primarily for cash management or transaction executional purposes for which no investment advice is provided are classified as commercial assets or assets under custody and therefore do not qualify as assets under management.

For the purpose of classifying assets under management, clients with multiple accounts are assessed from an overall relationship perspective. Accounts that are clearly separate from the remainder of the client relationship and represent assets held for custody purposes only are not included as assets under management.

The initial classification of the assets may not be permanent as the nature of the client relationship is reassessed on an on-going basis. If changes in client intent or activity warrant reclassification between client asset categories, the required reclassification

adjustments are made immediately when the change in intent or activity occurs. Reclassifications between assets under management and assets held for transaction-related or custodial purposes result in corresponding net asset inflows or outflows. Effective as of January 1, 2019, the Group updated its assets under management policy primarily to introduce more specific criteria to evaluate whether client assets qualify as assets under management. The introduction of this updated policy resulted in a reclassification of CHF 18.8 billion of assets under management to assets under custody which has been reflected as a structural effect in 2019. Following a review in 2019 of the classification of assets under management relating to certain client relationships in our Asia Pacific division, the Group has derecognized an aggregate CHF 4.3 billion of assets under management and related net new assets as of the end of 2019. Prior periods have been reclassified to conform to the current presentation. Changes to the terms of these client relationships may result in the recognition of assets under management in the future.

A portion of the Group's assets under management results from double counting. Double counting arises when assets under management are subject to more than one level of asset management services. Each separate advisory or discretionary service provides additional benefits to the client and represents additional income for the Group. Specifically, double counting primarily results from the investment of assets under management in collective investment instruments managed by the Group. The extent of double counting is disclosed in the following table.

Assets under management

end of	2019	2018
CHF billion		
Assets in collective investment instruments managed by Credit Suisse	212.2	186.4
Assets with discretionary mandates	277.5	256.5
Other assets under management	1,017.5	902.0
Assets under management (including double counting)	1,507.2	1,344.9
of which double counting	51.0	44.2

Prior periods have been reclassified to conform to the current presentation.

Changes in assets under management

	2019	2018
Assets under management (CHF billion)		
Balance at beginning of period ¹	1,344.9	1,376.1
Net new assets/(net asset outflows)	79.3	53.7
Market movements, interest, dividends and foreign exchange	106.8	(67.9)
of which market movements, interest and dividends ²	126.6	(54.7)
of which foreign exchange	(19.8)	(13.2)
Other effects	(23.8)	(17.0)
Balance at end of period	1,507.2	1,344.9

Prior periods have been reclassified to conform to the current presentation.

¹ Including double counting.

² Net of commissions and other expenses and net of interest expenses charged.

Net new assets

Net new assets measure the degree of success in acquiring assets under management or changes in assets under management through warranted reclassifications. The calculation is based on the direct method, taking into account individual cash payments, security deliveries and cash flows resulting from loan increases or repayments.

Interest and dividend income credited to clients and commissions, interest and fees charged for banking services as well as changes in assets under management due to currency and market volatility are not taken into account when calculating net new assets, as such charges or market movements are not directly related to the Group's success in acquiring assets under management. Similarly

other effects mainly relate to asset inflows and outflows due to acquisition or divestiture, exit from businesses or markets or exits due to new regulatory requirements and are not taken into account when calculating net new assets. The Group reviews relevant policies regarding client assets on a regular basis.

Divisional allocation

Assets under management and net new assets for the Private Clients business in Swiss Universal Bank, the Private Banking businesses in International Wealth Management and Asia Pacific, the Corporate & Institutional Banking business in Swiss Universal Bank and, until December 31, 2018, the Strategic Resolution Unit are allocated based on the management areas (business areas) that effectively manage the assets. Beginning in 2019, the Strategic Resolution Unit ceased to exist as a separate division of the Group. The residual assets under management were either transferred to other divisions or no longer qualify as assets under management. The distribution of net new assets resulting from internal referral arrangements is governed under the net new asset referral framework, which includes preset percentages for the allocation of net new assets to the businesses.

The allocation of assets under management and net new assets for Asset Management in the Internal Wealth Management division reflects the location where the investment vehicles are managed and where the costs of managing the funds are incurred.

39 Litigation

The Group is involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of its businesses, including those disclosed below. Some of these proceedings have been brought on behalf of various classes of claimants and seek damages of material and/or indeterminate amounts.

The Group accrues loss contingency litigation provisions and takes a charge to income in connection with certain proceedings when losses, additional losses or ranges of loss are probable and reasonably estimable. The Group also accrues litigation provisions for the estimated fees and expenses of external lawyers and other service providers in relation to such proceedings, including in cases for which it has not accrued a loss contingency provision. The Group accrues these fee and expense litigation provisions and takes a charge to income in connection therewith when such fees and expenses are probable and reasonably estimable. The Group reviews its legal proceedings each quarter to determine the adequacy of its litigation provisions and may increase or release provisions based on management's judgment and the advice of counsel. The establishment of additional provisions or releases of

litigation provisions may be necessary in the future as developments in such proceedings warrant.

The specific matters described below include (a) proceedings where the Group has accrued a loss contingency provision, given that it is probable that a loss may be incurred and such loss is reasonably estimable; and (b) proceedings where the Group has not accrued such a loss contingency provision for various reasons, including, but not limited to, the fact that any related losses are not reasonably estimable. The description of certain of the matters below includes a statement that the Group has established a loss contingency provision and discloses the amount of such provision; for the other matters no such statement is made. With respect to the matters for which no such statement is made, either (a) the Group has not established a loss contingency provision, in which case the matter is treated as a contingent liability under the applicable accounting standard, or (b) the Group has established such a provision but believes that disclosure of that fact would violate confidentiality obligations to which the Group is subject or otherwise compromise attorney-client privilege, work product protection or other protections against disclosure or compromise the Group's management of the matter. The future

outflow of funds in respect of any matter for which the Group has accrued loss contingency provisions cannot be determined with certainty based on currently available information, and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that is reflected on the Group's balance sheet.

It is inherently difficult to determine whether a loss is probable or even reasonably possible or to estimate the amount of any loss or loss range for many of the Group's legal proceedings. Estimates, by their nature, are based on judgment and currently available information and involve a variety of factors, including, but not limited to, the type and nature of the proceeding, the progress of the matter, the advice of counsel, the Group's defenses and its experience in similar matters, as well as its assessment of matters, including settlements, involving other defendants in similar or related cases or proceedings. Factual and legal determinations, many of which are complex, must be made before a loss, additional losses or ranges of loss can be reasonably estimated for any proceeding.

Most matters pending against the Group seek damages of an indeterminate amount. While certain matters specify the damages claimed, such claimed amount may not represent the Group's reasonably possible losses. For certain of the proceedings discussed below the Group has disclosed the amount of damages claimed and certain other quantifiable information that is publicly available.

The following table presents a roll forward of the Group's aggregate litigation provisions.

Litigation provisions	
	2019
CHF million	
Balance at beginning of period	681
Increase in litigation accruals	734
Decrease in litigation accruals	(111)
Decrease for settlements and other cash payments	(495)
Reclassifications	97 ¹
Foreign exchange translation	(8)
Balance at end of period	898

¹ At the end of 2018, the Group completed its three-year restructuring plan, implemented in connection with its revised strategy. In 2019, CHF 97 million was transferred from restructuring provision to litigation provision.

The Group's aggregate litigation provisions include estimates of losses, additional losses or ranges of loss for proceedings for which such losses are probable and can be reasonably estimated. The Group does not believe that it can estimate an aggregate range of reasonably possible losses for certain of its proceedings because of their complexity, the novelty of some of the claims, the early stage of the proceedings, the limited amount of discovery that has occurred and/or other factors. The Group's estimate of the aggregate range of reasonably possible losses that are not covered by existing provisions for the proceedings discussed below for which the Group believes an estimate is possible is zero to CHF 1.3 billion.

After taking into account its litigation provisions, the Group believes, based on currently available information and advice of counsel, that the results of its legal proceedings, in the aggregate, will not have a material adverse effect on the Group's financial condition. However, in light of the inherent uncertainties of such proceedings, including those brought by regulators or other governmental authorities, the ultimate cost to the Group of resolving such proceedings may exceed current litigation provisions and any excess may be material to its operating results for any particular period, depending, in part, upon the operating results for such period.

Enron-related litigation

Credit Suisse Securities (USA) LLC (CSS LLC) and certain of its affiliates, together with Deutsche Bank Securities Inc., Deutsche Bank AG, and Merrill Lynch & Co., Inc., were named as defendants in an Enron-related action, Silvercreek Management Inc. v. Citigroup, Inc., et al., in the US District Court for the Southern District of New York (SDNY). In this action, plaintiffs asserted they relied on Enron's financial statements, and sought to hold the defendants responsible for any inaccuracies in Enron's financial statements. The plaintiffs sought to assert federal and state law claims relating to its alleged USD 280 million in losses relating to its Enron investments. On November 10, 2017, the defendants filed motions for summary judgment. On September 28, 2018, the SDNY granted in part and denied in part the defendants' motions for summary judgment, dismissing certain claims. On December 28, 2018, CSS LLC and its affiliates, together with Deutsche Bank Securities Inc., Deutsche Bank AG, and Merrill Lynch & Co., Inc. executed an agreement with the plaintiffs to settle this litigation. On January 10, 2019, the SDNY entered an order of final judgment dismissing with prejudice all claims against those defendants. This ends the last of CSS LLC and its affiliates' Enron-related litigation.

Mortgage-related matters

Government and regulatory related matters

Various financial institutions, including CSS LLC and certain of its affiliates, have received requests for information from, and/or have been defending civil actions by, certain regulators and/or government entities, including the US Department of Justice (DOJ) and other members of the Residential Mortgage-Backed Securities (RMBS) Working Group of the US Financial Fraud Enforcement Task Force, regarding the origination, purchase, securitization, servicing and trading of subprime and non-subprime residential and commercial mortgages and related issues. CSS LLC and its affiliates are cooperating with such requests for information.

DOJ RMBS settlement

As previously disclosed, on January 18, 2017, CSS LLC and its current and former US subsidiaries and US affiliates reached a settlement with the DOJ related to its legacy RMBS business, a business conducted through 2007. The settlement resolved potential civil claims by the DOJ related to certain of those Credit

Suisse entities' packaging, marketing, structuring, arrangement, underwriting, issuance and sale of RMBS. Pursuant to the terms of the settlement a civil monetary penalty was paid to the DOJ in January 2017. The settlement also required the above-mentioned entities to provide a specified amount of consumer relief measures, including affordable housing payments and loan forgiveness, within five years of the settlement, and the DOJ and Credit Suisse agreed to the appointment of an independent monitor to oversee the completion of the consumer relief requirements of the settlement. The monitor has published reports periodically noting Credit Suisse's cooperation and progress toward satisfaction of the consumer relief requirements.

NJAG litigation

On December 18, 2013, the New Jersey Attorney General (NJAG), on behalf of the State of New Jersey, filed a civil action in the Superior Court of New Jersey, Chancery Division, Mercer County (SCNJ), against CSS LLC and affiliated entities in their roles as issuer, sponsor, depositor and/or underwriter of RMBS transactions prior to 2008. The original complaint, which referenced 13 RMBS issued, sponsored, deposited and underwritten by CSS LLC and its affiliates in 2006 and 2007, alleges that CSS LLC and its affiliates misled investors and engaged in fraud or deceit in connection with the offer and sale of RMBS, and seeks an unspecified amount of damages. On August 21, 2014, the SCNJ dismissed without prejudice the action brought against CSS LLC and its affiliates by the NJAG. On September 4, 2014, the NJAG filed an amended complaint against CSS LLC and its affiliates, asserting additional allegations but not expanding the number of claims or RMBS referenced in the original complaint. On August 21, 2019, the NJAG filed a motion for partial summary judgment. On November 18, 2019, CSS LLC and its affiliates filed a cross-motion for partial summary judgment.

Civil litigation

CSS LLC and/or certain of its affiliates have also been named as defendants in various civil litigation matters related to their roles as issuer, sponsor, depositor, underwriter and/or servicer of RMBS transactions. These cases include or have included class action lawsuits, actions by individual investors in RMBS, actions by monoline insurance companies that guaranteed payments of principal and interest for certain RMBS, and repurchase actions by RMBS trusts, trustees and/or investors. Although the allegations vary by lawsuit, plaintiffs in the class actions and individual investor actions have generally alleged that the offering documents of securities issued by various RMBS securitization trusts contained material misrepresentations and omissions, including statements regarding the underwriting standards pursuant to which the underlying mortgage loans were issued; monoline insurers allege that loans that collateralize RMBS they insured breached representations and warranties made with respect to the loans at the time of securitization and that they were fraudulently induced to enter into the transactions; and repurchase action plaintiffs generally allege breached representations and warranties in respect of mortgage loans and failure to repurchase such mortgage loans as required under the applicable agreements. The amounts disclosed below do not reflect actual realized

plaintiff losses to date or anticipated future litigation exposure. Rather, unless otherwise stated, these amounts reflect the original unpaid principal balance amounts as alleged in these actions and do not include any reduction in principal amounts since issuance. Further, unless otherwise stated, amounts attributable to an "operative pleading" for the individual investor actions are not altered for settlements, dismissals or other occurrences, if any, that may have caused the amounts to change subsequent to the operative pleading. In addition to the mortgage-related actions discussed below, a number of other entities have threatened to assert claims against CSS LLC and/or its affiliates in connection with various RMBS issuances.

Individual investor actions

CSS LLC and, in some instances, its affiliates, as an RMBS issuer, underwriter and/or other participant, along with other defendants, have been named as defendants in: (i) one action brought by the Federal Deposit Insurance Corporation (FDIC), as receiver for Citizens National Bank and Strategic Capital Bank, in the SDNY, in which claims against CSS LLC and its affiliates relate to approximately USD 28 million of the RMBS at issue (approximately 20% of the USD 141 million at issue against all defendants in the operative pleading); on October 18, 2019, the SDNY denied a motion filed in September 2017 by the defendants, including CSS LLC and its affiliates, to dismiss the FDIC's second amended complaint; (ii) one action brought by the FDIC, as receiver for Colonial Bank, in the SDNY, in which claims against CSS LLC relate to approximately USD 92 million of the RMBS at issue (approximately 23% of the USD 394 million at issue against all defendants in the operative pleading); (iii) one action brought by the Federal Home Loan Bank of Seattle (FHLB Seattle) in Washington state court, in which claims against CSS LLC and its affiliates relate to approximately USD 145 million of the RMBS at issue, reduced from approximately USD 249 million of RMBS at issue; on October 3, 2019, the Washington State Supreme Court reversed the trial court's May 4, 2016 summary judgment order, previously affirmed by the Washington State Court of Appeals, dismissing with prejudice FHLB Seattle's claims, and remanded the action for further proceedings before the trial court; trial is scheduled to begin in August 2020; and (iv) one action brought by the Federal Home Loan Bank of Boston in Massachusetts state court, in which claims against CSS LLC and its affiliates relate to approximately USD 333 million of the RMBS at issue, reduced from USD 373 million (approximately 6% of the USD 5.7 billion at issue against all defendants in the operative pleading) following the October 27, 2015 stipulation of voluntary dismissal with prejudice of claims pertaining to a certain RMBS offering on which CSS LLC and its affiliates were sued, and which has a trial scheduled to begin in March 2021. These actions are at various procedural stages.

CSS LLC and certain of its affiliates are the only defendants named in an action brought by IKB Deutsche Industriebank AG and affiliated entities in the Supreme Court for the State of New York, New York County (SCNY), in which claims against CSS LLC and its affiliates relate to approximately USD 97 million of RMBS at issue; this action is at an intermediate procedural stage. CSS LLC and an affiliate were defendants in an action brought

by Royal Park Investments SA/NV (Royal Park) in the SCNY, in which claims against CSS LLC and its affiliate related to approximately USD 360 million of RMBS at issue; on October 9, 2018, the Appellate Division First Department of the SCNY (First Department) affirmed the trial court's dismissal with prejudice of all claims against CSS LLC and its affiliate and, on January 15, 2019, the New York State Court of Appeals denied Royal Park's request to further appeal.

As disclosed in Credit Suisse's second quarter Financial Report of 2019, on May 16, 2019, following a settlement, the Circuit Court of Montgomery County, Alabama presiding in the action brought by the FDIC, as receiver for Colonial Bank, dismissed with prejudice all claims against CSS LLC and its affiliates relating to approximately USD 139 million of RMBS at issue.

Monoline insurer disputes

CSS LLC and certain of its affiliates are defendants in one monoline insurer action pending in the SCNY, commenced by MBIA Insurance Corp. (MBIA) as guarantor for payments of principal and interest related to approximately USD 770 million of RMBS issued in an offering sponsored by the Credit Suisse defendants. One theory of liability advanced by MBIA is that an affiliate of CSS LLC must repurchase certain mortgage loans from the trusts at issue. MBIA claims that the vast majority of the underlying mortgage loans breach certain representations and warranties, and that the affiliate has failed to repurchase the allegedly defective loans. In addition, MBIA brought claims for fraudulent inducement, material misrepresentations, breaches of warranties, repurchase obligations, and reimbursement. MBIA submitted repurchase demands for loans with an original principal balance of approximately USD 549 million. On March 31, 2017, the SCNY granted in part and denied in part both parties' respective summary judgment motions, which resulted, among other things, in the dismissal of MBIA's fraudulent inducement claim with prejudice. On September 13, 2018, the First Department issued a decision that, among other things, affirmed the dismissal of MBIA's fraudulent inducement claim with prejudice. The First Department also ruled in favor of CSS LLC and certain of its affiliates on their cross-appeal, reversing the trial court's interpretation of certain representations and warranties and ruling that their meaning should be decided at trial. Following its decision, the First Department remanded the action to the trial court for further proceedings. On August 2, 2019, the SCNY concluded a two-week bench trial. The parties completed post-trial briefing on November 21, 2019. A decision has not yet been issued.

Repurchase litigations

DLJ Mortgage Capital, Inc. (DLJ) is a defendant in: (i) one action brought by Asset Backed Securities Corporation Home Equity Loan Trust, Series 2006-HE7, in which plaintiff alleges damages of not less than USD 374 million, increased from not less than USD 341 million, in an amended complaint filed on August 19, 2019, which action is proceeding in the SCNY following the resolution of a previously pending appeal; on January 13, 2020, DLJ filed a motion to dismiss this action in its entirety; (ii) one action brought by Home

Equity Asset Trust, Series 2006-8, in which plaintiff alleges damages of not less than USD 436 million; (iii) one action brought by Home Equity Asset Trust 2007-1, in which plaintiff alleges damages of not less than USD 420 million; on December 27, 2018, the SCNY denied DLJ's motion for partial summary judgment in this action, and the First Department affirmed the SCNY's summary judgment order on October 10, 2019; on January 30, 2020, the First Department granted DLJ leave to further appeal its decision to the New York State Court of Appeals; on March 2, 2020, trial in this action, which was scheduled to begin in October 2020, was postponed pending final resolution of DLJ's summary judgment appeal; (iv) one action brought by Home Equity Asset Trust Series 2007-3, in which plaintiff alleges damages of not less than USD 206 million, which was dismissed without prejudice by order of the SCNY on December 21, 2015 with leave to restore within one year and which plaintiff moved to restore on December 20, 2016, which the court granted on March 15, 2017 by restoring the case to active status; (v) one action brought by Home Equity Asset Trust 2007-2, in which plaintiff alleges damages of not less than USD 495 million; and (vi) one action brought by CSMC Asset-Backed Trust 2007-NC1, in which no damages amount is alleged. These actions are brought in the SCNY and are at various procedural stages. DLJ and its affiliate, Select Portfolio Servicing, Inc. (SPS), are defendants in two actions that have been consolidated for certain procedural purposes, including trial, in the SCNY: one action brought by Home Equity Mortgage Trust Series 2006-1, Home Equity Mortgage Trust Series 2006-3 and Home Equity Mortgage Trust Series 2006-4, in which plaintiffs allege damages of not less than USD 730 million, and allege that SPS obstructed the investigation into the full extent of the defects in the mortgage pools by refusing to afford the trustee reasonable access to certain origination files; and one action brought by Home Equity Mortgage Trust Series 2006-5, in which plaintiff alleges damages of not less than USD 500 million, and alleges that SPS likely discovered DLJ's alleged breaches of representations and warranties but did not notify the trustee of such breaches, in alleged violation of its contractual obligations. On January 10, 2019, the SCNY denied DLJ's motion for partial summary judgment in these actions, and the First Department affirmed the SCNY's summary judgment order on September 17, 2019. On December 12, 2019, the First Department granted DLJ leave to further appeal its decision to the New York State Court of Appeals. On December 17, 2019, trial in these actions, which was scheduled to begin in December 2019 and subsequently rescheduled to begin in January 2020, was postponed pending final resolution of DLJ's summary judgment appeal.

As disclosed in Credit Suisse's fourth quarter Financial Report of 2013, the following repurchase actions were dismissed with prejudice in 2013: the three consolidated actions brought by Home Equity Asset Trust 2006-5, Home Equity Asset Trust 2006-6 and Home Equity Asset Trust 2006-7 against DLJ. Those dismissals were upheld by the New York State Court of Appeals on February 19, 2019. On July 8, 2019, the notice of appeal plaintiffs filed before the First Department from the SCNY's April 2017 denial of plaintiffs' request that its 2013 dismissal decision be modified to allow plaintiffs to assert new claims not previously

included in plaintiffs' consolidated complaint was deemed dismissed when plaintiffs declined to further pursue their appeal by a court-ordered deadline. On August 15, 2019, the trustees for Home Equity Asset Trust 2006-5, Home Equity Asset Trust 2006-6 and Home Equity Asset Trust 2006-7 commenced a new repurchase action against DLJ in the SCNY, in which plaintiffs alleged damages of not less than USD 936 million, asserting substantially similar claims against DLJ as those alleged in the three consolidated repurchase actions that were dismissed with prejudice in 2013. On September 20, 2019, DLJ filed a motion to dismiss and on November 25, 2019, the SCNY entered an order dismissing this new action with prejudice. On December 20, 2019, the plaintiffs filed a notice of appeal to the First Department.

Bank loan litigation

CSS LLC and certain of its affiliates are the subject of certain litigation relating to certain real estate developments including Yellowstone Club and Lake Las Vegas as well as other similar real estate developments. Credit Suisse defendants in these matters arranged, and acted as the agent bank for, syndicated loans provided to borrowers affiliated with such real estate developments, and who have since gone through bankruptcy or foreclosure. Such litigation includes two cases brought in Texas and New York state courts by entities related to Highland Capital Management LP (Highland). In the case in Texas state court, a jury trial was held in December 2014 on Highland's claim for fraudulent inducement by affirmative misrepresentation and omission. A verdict was issued for the plaintiff on its claim for fraudulent inducement by affirmative misrepresentation, but the jury rejected its claim that CSS LLC and an affiliate had committed fraudulent inducement by omission. The Texas judge held a bench trial on Highland's remaining claims in May and June 2015, and entered judgment in the amount of USD 287 million (including prejudgment interest) for the plaintiff on September 4, 2015. Both parties appealed and on February 21, 2018 the appeals court affirmed the lower court's decision. On March 7, 2018, the defendants filed a motion for rehearing with the appeals court. On April 2, 2018, the motion for rehearing with the appeals court was denied. On July 18, 2018, the defendants filed a request for review by the Texas Supreme Court. On December 14, 2018, the court issued an order requiring briefs on the merits in the request for review. On October 4, 2019, the Texas Supreme Court granted the request for review. On January 8, 2020, the Texas Supreme Court heard oral argument. A decision has not yet been issued. In the case in New York state court, the court granted in part and denied in part CSS LLC and certain of its affiliates' summary judgment motion. Both parties appealed that decision, but the appellate court affirmed the decision in full. The case is currently in discovery. CSS LLC and certain of its affiliates separately sued Highland-managed funds on related trades and received a favorable judgment awarding both principal owed and prejudgment interest. Highland appealed the portion of the judgment awarding prejudgment interest, however the original decision was affirmed in its entirety. The parties subsequently agreed to settle the amount owed by the Highland-managed funds under the judgment.

Tax and securities law matters

On May 19, 2014, Credit Suisse AG entered into settlement agreements with several US regulators regarding its US cross-border matters. As part of the agreements, Credit Suisse AG, among other things, engaged an independent corporate monitor that reports to the New York State Department of Financial Services. As of July 31, 2018, the monitor has concluded both his review and his assignment. Credit Suisse AG continues to provide periodic updates to certain authorities in respect of implementing the monitor recommendations.

Rates-related matters

Regulatory matters

Regulatory authorities in a number of jurisdictions, including the US, UK, EU and Switzerland, have for an extended period of time been conducting investigations into the setting of LIBOR and other reference rates with respect to a number of currencies, as well as the pricing of certain related derivatives. These ongoing investigations have included information requests from regulators regarding LIBOR-setting practices and reviews of the activities of various financial institutions, including Credit Suisse Group AG, which is a member of three LIBOR rate-setting panels (US Dollar LIBOR, Swiss Franc LIBOR and Euro LIBOR). Credit Suisse is cooperating fully with these investigations. In particular, it has been reported that regulators are investigating whether financial institutions engaged in an effort to manipulate LIBOR, either individually or in concert with other institutions, in order to improve market perception of these institutions' financial health and/or to increase the value of their proprietary trading positions. In response to regulatory inquiries, Credit Suisse commissioned a review of these issues. To date, Credit Suisse has seen no evidence to suggest that it is likely to have any material exposure in connection with these issues.

Regulatory authorities in a number of jurisdictions, including the Swiss Competition Commission (COMCO), the European Commission (Commission), the South African Competition Commission, and the Brazilian Competition Authority have been conducting investigations into the trading activities, information sharing and the setting of benchmark rates in the foreign exchange (including electronic trading) markets.

On March 31, 2014, COMCO announced its formal investigation of numerous Swiss and international financial institutions, including Credit Suisse Group AG, in relation to the setting of exchange rates in foreign exchange trading. Credit Suisse continues to cooperate with this ongoing investigation.

On July 26, 2018, Credit Suisse Group AG and certain affiliates received a Statement of Objections from the Commission, alleging that Credit Suisse entities engaged in anticompetitive practices in connection with their foreign exchange trading business. The Statement of Objections sets out the Commission's preliminary views and does not prejudice the final outcome of its investigation.

The reference rates investigations have also included information requests from regulators concerning supranational, sub-sovereign and agency (SSA) bonds and commodities (including precious metals) markets. Credit Suisse is cooperating fully with these investigations.

On December 20, 2018, Credit Suisse Group AG and Credit Suisse Securities (Europe) Limited received a Statement of Objections from the Commission, alleging that Credit Suisse entities engaged in anticompetitive practices in connection with its SSA bonds trading business. The Statement of Objections sets out the Commission's preliminary views and does not prejudge the final outcome of its investigation.

The investigations are ongoing and it is too soon to predict the final outcome of the investigations.

Civil litigation

USD LIBOR litigation

Beginning in 2011, certain Credit Suisse entities were named in various civil lawsuits filed in the US, alleging banks on the US dollar LIBOR panel manipulated US dollar LIBOR to benefit their reputation and increase profits. All but one of these matters was consolidated for pre-trial purposes into a multi-district litigation in the SDNY. The majority of the actions have been stayed since their outset, while a handful of individual actions and putative class actions have been proceeding. The Credit Suisse entities have been dismissed from all non-stayed putative class actions.

In a series of rulings between 2013 and 2018 on motions to dismiss, the SDNY (i) narrowed the claims against the Credit Suisse entities and the other defendants (dismissing antitrust, Racketeer Influenced and Corrupt Organizations Act (RICO), Commodity Exchange Act, and state law claims), (ii) narrowed the set of plaintiffs who may bring claims, and (iii) narrowed the set of defendants in the LIBOR actions (including the dismissal of several Credit Suisse entities from various cases on personal jurisdiction grounds). The plaintiffs have appealed several of the SDNY's rulings to the United States Court of Appeals for the Second Circuit (Second Circuit). On February 23, 2018, the Second Circuit decided one of the appeals in an individual (non-class) action and largely affirmed the SDNY's rulings, including upholding the dismissal of certain state law and securities law claims as to Credit Suisse Group AG, but vacated certain rulings and remanded the case for further proceedings. Another consolidated Second Circuit appeal is still pending.

Separately, on May 4, 2017, the plaintiffs in the three non-stayed putative class actions moved for class certification. On February 28, 2018, the SDNY denied certification in two of the actions and granted certification over a single antitrust claim in an action brought by over-the-counter purchasers of LIBOR-linked derivatives. In the same decision, the court dismissed Credit Suisse AG, the only remaining Credit Suisse entity in the action, from the over-the-counter action. All parties moved for immediate appellate review of the class-certification decisions, and the Second Circuit denied their petitions for review.

On June 15, 2018, plaintiffs in several non-class actions filed amended complaints or filed for leave to amend their operative complaints. On July 13, 2018, defendants moved to dismiss the amended complaints and opposed leave to amend. On March 25, 2019, the SDNY granted in part and denied in part defendants' motions to dismiss various actions and certain plaintiffs' motions for leave to amend their complaints. The SDNY's decision narrowed the claims in several of the remaining individual investor actions on grounds relating to personal jurisdiction, the statute of limitations and the merits.

In the one matter not consolidated in the multi-district litigation, the SDNY granted the defendants' motion to dismiss on March 31, 2015. On June 1, 2015, plaintiff moved for leave to file a second amended complaint in the SDNY. On March 20, 2018, the SDNY denied the plaintiff's request for leave to file an amended pleading and dismissed the case on the merits. Plaintiff appealed to the Second Circuit. On April 30, 2019, the Second Circuit affirmed the SDNY's March 20, 2018 decision that dismissed the case. On July 29, 2019, plaintiff filed a petition for a writ of certiorari with the Supreme Court of the United States, which was denied on October 7, 2019, leaving no further avenues for appeal.

USD ICE LIBOR litigation

In January 2019, members of the US dollar Intercontinental Exchange (ICE) LIBOR panel, including Credit Suisse Group AG and certain of its affiliates, were named in three civil putative class action lawsuits alleging that panel banks suppressed US dollar ICE LIBOR to benefit defendants' trading positions. These actions have been consolidated in the SDNY. On July 1, 2019, plaintiffs filed a consolidated complaint. On August 30, 2019, defendants filed a motion to dismiss.

CHF LIBOR litigation

In February 2015, various banks that served on the Swiss franc LIBOR panel, including Credit Suisse Group AG, were named in a civil putative class action lawsuit filed in the SDNY, alleging manipulation of Swiss franc LIBOR to benefit defendants' trading positions. On September 25, 2017, the SDNY granted defendants' motion to dismiss all claims, but permitted the plaintiffs to file an amended complaint. Defendants filed motions to dismiss the amended complaint on February 7, 2018. On September 16, 2019, the SDNY granted defendants' motions to dismiss, finding that the court lacked subject matter jurisdiction over the case. On October 16, 2019, plaintiffs filed a notice of appeal.

SIBOR/SOR litigation

In July 2016, various banks that served on the Singapore Interbank Offered Rate (SIBOR) and Singapore Swap Offer Rate (SOR) panels, including Credit Suisse Group AG and affiliates, were named in a civil putative class action lawsuit filed in the SDNY, alleging manipulation of SIBOR and SOR to benefit defendants' trading positions. On August 18, 2017, the SDNY dismissed all claims against Credit Suisse Group AG and affiliates (and various other defendants) but granted the plaintiffs leave to amend their complaint. On October 4, 2018, the SDNY granted in part and

denied in part defendants' motion to dismiss plaintiffs' second amended complaint, upholding antitrust claims against Credit Suisse AG and other panel bank defendants, but narrowing the claims to those related to Singapore Dollar SIBOR and dismissing all but one plaintiff from the action. The court also dismissed the RICO claims without leave to amend. On October 25, 2018, the remaining plaintiff filed a third amended complaint. The remaining defendants moved to dismiss on November 15, 2018. On July 26, 2019, the SDNY granted defendants' motion to dismiss and denied plaintiff's motion for leave to amend, holding that the court lacked subject matter jurisdiction over the action. On August 26, 2019, plaintiff filed a notice of appeal.

Foreign exchange litigation

Credit Suisse Group AG and affiliates as well as other financial institutions are named in five pending civil lawsuits in the SDNY relating to the alleged manipulation of foreign exchange rates.

The first pending matter is a putative consolidated class action. On January 28, 2015, the court denied defendants' motion to dismiss the original consolidated complaint brought by US-based investors and foreign plaintiffs who transacted in the US, but granted their motion to dismiss the claims of foreign-based investors for transactions outside of the US. In July 2015, plaintiffs filed a second consolidated amended complaint, adding additional defendants and asserting additional claims on behalf of a second putative class of exchange investors. On September 20, 2016, the SDNY granted in part and denied in part a motion to dismiss filed by the Group and affiliates, along with other financial institutions, which reduced the size of the putative class, but allowed the primary antitrust and Commodity Exchange Act claims to survive. On May 31, 2018, plaintiffs served a motion for class certification, which the Group and affiliates opposed on October 25, 2018. On September 3, 2019, the SDNY denied plaintiffs' motion for certification of a Rule 23(b)(3) damages class, ruling that proof of both injury and damages must proceed on an individual basis, but granted certification as to two threshold issues concerning the alleged conspiracy. The SDNY also denied plaintiffs' motion for certification of a second proposed class in its entirety.

The second pending matter names Credit Suisse AG and affiliates, as well as other financial institutions in a putative class action filed in the SDNY on June 3, 2015. This action is based on the same alleged conduct as the consolidated class action and alleges violations of the US Employee Retirement Income Security Act of 1974 (ERISA). On August 23, 2016, the SDNY granted a motion to dismiss filed by affiliates of Credit Suisse AG, along with other financial institutions. Plaintiffs appealed that decision, and on July 10, 2018, the Second Circuit issued an order affirming in full the SDNY's decision to dismiss the putative ERISA class action against Credit Suisse AG and affiliates as well as other defendant financial institutions and denying plaintiffs' request for leave to amend their complaint.

The third pending matter originally named Credit Suisse Group AG and affiliates, as well as other financial institutions, in a consolidated putative class action filed in the SDNY, alleging

manipulation of the foreign exchange market on behalf of indirect purchasers of foreign exchange instruments. On March 15, 2018, the court issued a decision granting defendants' joint motion to dismiss and dismissing the consolidated complaint in its entirety. On October 25, 2018, the SDNY granted in substantial part plaintiffs' motion for leave to file a proposed second consolidated class action complaint, which plaintiffs filed on November 28, 2018. On December 20, 2018, the Group, together with other financial institutions, filed a motion to dismiss on the basis of personal jurisdiction. On February 19, 2019, plaintiffs voluntarily dismissed Credit Suisse Group AG.

The fourth pending matter names Credit Suisse Group AG and affiliates in a putative class action filed in the SDNY on July 12, 2017, alleging improper practices in connection with electronic foreign exchange trading. On April 12, 2018, the SDNY granted defendants' motion to compel arbitration.

The fifth pending matter originally named Credit Suisse Group AG and affiliates, as well as other financial institutions, in a civil action filed in the SDNY on November 13, 2018. This action is based on the same alleged conduct as the consolidated class action. On March 1, 2019, plaintiffs filed an amended complaint. On April 1, 2019, defendants filed motions to dismiss. On April 23, 2019, plaintiffs sought leave to file a second amended complaint in lieu of responding to defendants' motions. On April 26, 2019, the SDNY ordered plaintiffs to file their second amended complaint subject to defendants' right to oppose the amendment and to renew their motions to dismiss, and on June 11, 2019, plaintiffs filed a second amended complaint. On June 28, 2019, plaintiffs voluntarily dismissed Credit Suisse Group AG. On July 25, 2019, defendants filed motions to dismiss the second amended complaint. On September 6, 2019, plaintiffs voluntarily dismissed Credit Suisse International. The claims against Credit Suisse AG and CSS LLC remain pending.

Credit Suisse Group AG and certain of its affiliates, together with other financial institutions, have also been named in two Canadian putative class actions, which make allegations similar to the consolidated class action. Further, Credit Suisse Group AG and certain of its affiliates, together with other financial institutions, have also been named in two putative class actions in Israel, which make allegations similar to the consolidated class action.

Treasury markets litigation

CSS LLC, along with over 20 other primary dealers of US treasury securities, has been named in a number of putative civil class action complaints in the US relating to the US treasury markets. These complaints generally allege that defendants colluded to manipulate US treasury auctions, as well as the pricing of US treasury securities in the when-issued market, with impacts upon related futures and options. These actions have been consolidated into a multi-district litigation in the SDNY. On August 23, 2017, the SDNY appointed lead counsel, and on August 25, 2017, three purported class representatives re-filed their complaints as a collective individual action. On November 15, 2017, plaintiffs filed a consolidated amended class action complaint naming CSS LLC, Credit

Suisse Group AG, and Credit Suisse International (CSI), along with a narrower group of other defendants. The consolidated complaint contains previously-asserted allegations as well as new allegations concerning a group boycott to prevent the emergence of anonymous, all-to-all trading in the secondary market for treasury securities. On February 23, 2018, defendants served motions to dismiss on plaintiffs and the SDNY entered a stipulation voluntarily dismissing Credit Suisse Group AG and other defendant holding companies. On March 26, 2018, the SDNY entered a stipulation voluntarily dismissing CSI for lack of personal jurisdiction.

SSA bonds litigation

Credit Suisse Group AG and affiliates, along with other financial institutions and individuals, have been named in several putative class action complaints filed in the SDNY relating to SSA bonds. The complaints generally allege that defendants conspired to fix the prices of SSA bonds sold to and purchased from investors in the secondary market. These actions have been consolidated in the SDNY. On April 7, 2017, plaintiffs filed a consolidated class action complaint. Plaintiffs filed a consolidated amended class action complaint on November 3, 2017, which defendants moved to dismiss on December 12, 2017. On August 24, 2018, the SDNY granted defendants' motion to dismiss for failure to state a claim, but granted plaintiffs leave to amend. On November 6, 2018, plaintiffs filed a second consolidated amended class action complaint, which defendants moved to dismiss on December 21, 2018. On September 30, 2019, the SDNY granted the motion to dismiss for lack of personal jurisdiction and improper venue made by Credit Suisse and certain other defendants. The court indicated that it will further address defendants' motion to dismiss for failure to state a claim.

Separately, on February 7, 2019, Credit Suisse AG and certain of its affiliates, together with other financial institutions and individuals, were named in a putative class action filed in the SDNY, which makes allegations similar to the consolidated class action, but seeks to represent a putative class of indirect purchasers of US dollar SSA bonds where the purchase was made in or connected to New York.

Credit Suisse Group AG and certain of its affiliates, together with other financial institutions, have also been named in two Canadian putative class actions, which make allegations similar to the consolidated class action.

Bank Bill Swap litigation

On August 16, 2016, Credit Suisse Group AG and Credit Suisse AG, along with other financial institutions, were named in a putative class action brought in the SDNY, alleging manipulation of the Australian Bank Bill Swap reference rate. Plaintiffs filed an amended complaint on December 16, 2016, which defendants moved to dismiss on February 24, 2017. On November 26, 2018, the SDNY granted in part and denied in part defendants' motions to dismiss, including dismissing the complaint in its entirety against Credit Suisse Group AG and Credit Suisse AG. On March 4, 2019, plaintiffs were granted leave to file a second amended complaint. On April 3, 2019, plaintiffs filed a second amended

complaint. On May 20, 2019, defendants filed motions to dismiss. On February 13, 2020, the SDNY granted in part and denied in part defendants' motion to dismiss.

Mexican government bonds litigation

Credit Suisse AG and affiliates have been named in multiple putative class actions in US federal court alleging a conspiracy among Credit Suisse entities and other dealer banks to manipulate the Mexican government bond market. These actions have been consolidated in the SDNY and on July 18, 2018, plaintiffs filed their consolidated amended complaint. On September 17, 2018, defendants filed motions to dismiss the consolidated amended complaint. On September 30, 2019, the SDNY granted defendants' motion to dismiss. On December 9, 2019, plaintiffs filed a second consolidated amended complaint that does not name any Credit Suisse entity as a defendant.

Government-sponsored entity bonds litigation

Since February 22, 2019, Credit Suisse AG and CSS LLC, together with other financial institutions, have been named in multiple putative class action complaints filed in the SDNY, alleging a conspiracy among the financial institutions to fix prices for unsecured bonds issued by Freddie Mac, Fannie Mae, the Federal Home Loan Banks and the Federal Farm Credit Banks.

On April 3, 2019, the SDNY consolidated the putative class action complaints. On May 23, 2019, class plaintiffs in the consolidated putative class action filed a consolidated amended complaint that removed Credit Suisse AG as a defendant. On June 13, 2019, defendants filed a motion to dismiss. On July 12, 2019, plaintiffs filed a second consolidated amended complaint. On August 29, 2019, the SDNY granted defendants' motion to dismiss, but granted plaintiffs leave to amend. On September 10, 2019, plaintiffs filed a third consolidated amended complaint. On September 17, 2019, defendants filed a motion to dismiss certain aspects of the complaint, which was denied on October 15, 2019. On December 6, 2019, the parties reached an agreement in principle to settle the putative class action in its entirety. Class plaintiffs filed a motion seeking preliminary approval of the global settlement on December 16, 2019, and the SDNY issued an order preliminarily approving the global settlement on February 3, 2020.

Credit Suisse AG and CSS LLC, along with other financial institutions, have been named in two civil actions in the US District Court for the Middle District of Louisiana, alleging a conspiracy among financial institutions to fix prices for unsecured bonds issued by certain government-sponsored entities: one action brought by the Louisiana Attorney General on behalf of the State of Louisiana on September 23, 2019, and one action brought by the City of Baton Rouge on October 21, 2019.

OTC trading cases

Credit Suisse Group AG and affiliates, along with other financial institutions, have been named in one consolidated putative civil class action complaint and one consolidated complaint filed

by individual plaintiffs relating to interest rate swaps, alleging that dealer defendants conspired with trading platforms to prevent the development of interest rate swap exchanges. The individual lawsuits were brought by TeraExchange LLC, a swap execution facility, and affiliates, and Javelin Capital Markets LLC, a swap execution facility, and an affiliate, which claim to have suffered lost profits as a result of defendants' alleged conspiracy. All interest rate swap actions have been consolidated in a multi-district litigation in the SDNY. Both class and individual plaintiffs filed second amended consolidated complaints on December 9, 2016, which defendants moved to dismiss on January 20, 2017. On July 28, 2017, the SDNY granted in part and denied in part defendants' motions to dismiss. On May 30, 2018, class plaintiffs filed a third amended consolidated class action complaint.

On June 14, 2018, a new direct action complaint was filed by swap execution facility trueEX LLC. On June 20, 2018, the trueEX LLC complaint was added to the existing multi-district litigation. On August 9, 2018, trueEX LLC filed an amended complaint against Credit Suisse Group AG and affiliates, along with other financial institutions, which defendants moved to dismiss on August 28, 2018. On November 20, 2018, the SDNY issued an order granting in part and denying in part defendants' motion to dismiss the trueEX LLC amended complaint.

On February 20, 2019, class plaintiffs in the consolidated multi-district litigation filed a motion for class certification. On March 20, 2019, class plaintiffs filed a fourth amended consolidated class action complaint. On June 18, 2019, defendants filed their opposition to plaintiffs' motion for class certification.

On June 8, 2017, Credit Suisse Group AG and affiliates, along with other financial institutions, were named in a civil action filed in the SDNY by Tera Group, Inc. and related entities (collectively "Tera"), alleging violations of antitrust law in connection with the allegation that credit default swap (CDS) dealers conspired to block Tera's electronic CDS trading platform from successfully entering the market. On September 11, 2017, defendants filed a motion to dismiss. On July 30, 2019, the SDNY granted in part and denied in part defendants' motion to dismiss. On January 30, 2020, plaintiffs filed an amended complaint.

Credit Suisse Group AG and certain of its affiliates, as well as other financial institutions, were originally named in a number of civil lawsuits in the SDNY, certain of which are brought by class action plaintiffs alleging that the defendants conspired to keep stock-loan trading in an over-the-counter market and collectively boycotted certain trading platforms that sought to enter the market, and certain of which are brought by trading platforms that sought to enter the market alleging that the defendants collectively boycotted the platforms. The SDNY denied defendants' motions to dismiss in the putative class action. In each of the lawsuits, the court entered a stipulation voluntarily dismissing Credit Suisse Group AG and other defendant holding companies, although certain Credit Suisse Group AG affiliates remain part of the ongoing action.

On August 6, 2019, in one of the civil actions filed in the SDNY by a purported successor in interest to a trading platform for stock loans that sought to enter the market, the SDNY granted defendants' motion to dismiss and entered judgment in favor of the defendants. On September 3, 2019, plaintiff filed a motion to amend the judgment to permit plaintiff to file an amended complaint or, in the alternative, to dismiss certain claims without prejudice. On September 10, 2019, the SDNY denied in part plaintiff's motion to amend the judgment but ordered additional briefing on whether certain claims should be dismissed without prejudice. On January 6, 2020, the SDNY denied plaintiff's motion to amend the judgment.

ATA litigation

A lawsuit was filed on November 10, 2014 in the US District Court for the Eastern District of New York (EDNY) against a number of banks, including Credit Suisse AG, alleging claims under the United States Anti-Terrorism Act (ATA). The action alleges a conspiracy between Iran and various international financial institutions, including the defendants, in which they agreed to alter, falsify or omit information from payment messages that involved Iranian parties for the express purpose of concealing the Iranian parties' financial activities and transactions from detection by US authorities. The complaint, brought by approximately 200 plaintiffs, alleges that this conspiracy has made it possible for Iran to transfer funds to Hezbollah and other terrorist organizations actively engaged in harming US military personnel and civilians. On July 12, 2016, plaintiffs filed a second amended complaint in the EDNY against a number of banks, including Credit Suisse AG, alleging claims under the ATA. On September 14, 2016, Credit Suisse AG and the other defendants filed motions to dismiss the plaintiffs' second amended complaint in the EDNY. On September 16, 2019, the EDNY granted defendants' motion to dismiss. Plaintiffs moved for partial reconsideration of portions of the dismissal that do not relate to Credit Suisse, which the court denied on October 28, 2019. On November 26, 2019, plaintiffs filed a notice of appeal.

Another lawsuit was filed on November 9, 2017, in the SDNY against a number of banks, including Credit Suisse AG, alleging claims under the ATA. On March 2, 2018, Credit Suisse AG and other defendants filed motions to dismiss the plaintiffs' complaint. On March 28, 2019, the SDNY granted the motion to dismiss. On April 22, 2019, plaintiffs filed a motion for leave to amend their complaint, which defendants opposed on May 20, 2019. On February 25, 2020, the court denied plaintiffs' motion to amend their complaint and dismissed the case with prejudice as to Credit Suisse AG and the other moving bank defendants.

In December 2018, five additional lawsuits were filed in the EDNY or SDNY against a number of banks, including Credit Suisse AG and, in two instances, Credit Suisse AG, New York Branch alleging claims under the ATA and the Justice Against Sponsors of Terrorism Act. These actions similarly allege a conspiracy between Iran and various international financial institutions, including the defendants, in which they agreed to alter, falsify or omit information from payment messages that involved Iranian parties, and that

this conspiracy made it possible for Iran to transfer funds to terrorist organizations actively engaged in harming US military personnel and civilians.

On April 11, 2019, another action alleging claims under the ATA was filed in the EDNY that is related to, and makes allegations materially similar to, the other ATA cases already pending in the EDNY. On January 6, 2020, defendants filed a motion to dismiss two of these cases, which are pending before the same EDNY judge that granted defendants' motion to dismiss.

Other than cases that have been decided or where a motion to dismiss is pending, these cases have been stayed pending the outcome of certain of the decisions described above.

MPS

In late 2014, the Monte dei Paschi di Siena Foundation (Foundation) filed a lawsuit in the Civil Court of Milan, Italy seeking EUR 3 billion in damages jointly from Credit Suisse Securities (Europe) Limited (CSSEL), Banca Leonardo & Co S.p.A. and former members of the Foundation's management committee. The lawsuit relates to the fairness opinions CSSEL and Banca Leonardo & Co S.p.A. delivered to the Foundation in connection with the EUR 9 billion acquisition of Banca Antonveneta S.p.A. by Banca Monte dei Paschi di Siena S.p.A. (BMPS) in 2008. BMPS funded the acquisition by a EUR 5 billion rights offer and the issuance of unredeemable securities convertible into BMPS shares, in which the Foundation invested EUR 2.9 billion and EUR 490 million, respectively. The Foundation alleges that the fairness opinions were issued in the absence of key financial information. CSSEL believes that the claim lacks merit and is not supported by the available evidence. In November 2017, the Civil Court of Milan rejected the Foundation's claims, ruling in favor of CSSEL. In January 2018, the Foundation filed an appeal against this ruling. On June 11, 2019, following a settlement, the Civil Court of Milan dismissed all claims.

Customer account matters

Several clients have claimed that a former relationship manager in Switzerland had exceeded his investment authority in the management of their portfolios, resulting in excessive concentrations of certain exposures and investment losses. Credit Suisse AG is investigating the claims, as well as transactions among the clients. Credit Suisse AG filed a criminal complaint against the former relationship manager with the Geneva Prosecutor's Office upon which the prosecutor initiated a criminal investigation. Several clients of the former relationship manager also filed criminal complaints with the Geneva Prosecutor's Office. On February 9, 2018, the former relationship manager was sentenced to five years in prison by the Geneva criminal court for fraud, forgery and criminal mismanagement and ordered to pay damages of approximately USD 130 million. Several parties have appealed the judgement. On June 26, 2019, the Criminal Court of Appeals of Geneva ruled in the appeal of the judgment against the former relationship manager, upholding the main findings of the Geneva

criminal court. Several parties have appealed the decision to the Swiss Federal Supreme Court. On February 19, 2020, the Swiss Federal Supreme Court rendered its judgment on the appeals, substantially confirming the findings of the Criminal Court of Appeals of Geneva. Civil lawsuits were initiated between August 7, 2017 and August 25, 2017 in the High Court of Singapore, the High Court of New Zealand and the Supreme Court of Bermuda against Credit Suisse AG and certain affiliates, based on the findings established in the criminal proceedings against the former relationship manager. On July 17, 2018, the High Court of New Zealand dismissed the civil lawsuit brought against Credit Suisse AG and stayed the same lawsuit against a New Zealand incorporated affiliate. On August 31, 2018, the civil lawsuit was stayed by an Assistant Registrar of the High Court of Singapore. Plaintiffs in both the New Zealand and Singapore civil proceedings have appealed these decisions. On January 18, 2019 the Singapore High Court dismissed the plaintiffs' appeal and upheld the Assistant Registrar's decision to stay the civil proceedings in Singapore. On April 29, 2019, the plaintiffs appealed the decision of the Singapore High Court only with respect to their action against the Credit Suisse affiliate. On June 21, 2019, the plaintiffs discontinued their action against Credit Suisse AG in the Singapore courts. On May 3, 2019, the plaintiffs filed a notice of abandonment of appeal in the Court of Appeal of New Zealand.

FIFA-related matters

In connection with investigations by US and Swiss government authorities into the involvement of financial institutions in the alleged bribery and corruption surrounding the Fédération Internationale de Football Association (FIFA), Credit Suisse received inquiries from these authorities regarding its banking relationships with certain individuals and entities associated with FIFA, including but not limited to certain persons and entities named and/or described in the May 20, 2015 indictment and the November 25, 2015 superseding indictment filed by the Eastern District of New York US Attorney's Office. The US and Swiss investigations encompassed whether multiple financial institutions, including Credit Suisse, permitted the processing of suspicious or otherwise improper transactions, or failed to observe anti-money laundering laws and regulations, with respect to the accounts of certain persons and entities associated with FIFA. Credit Suisse continues to cooperate with US authorities on this matter. As previously disclosed, the Swiss Financial Market Supervisory Authority FINMA has announced the conclusion of its investigation.

External asset manager matter

Several clients have claimed that an external asset manager based in Geneva misappropriated funds, forged bank statements, transferred assets between client accounts at Credit Suisse AG as custodian to conceal losses and made investments without the authorization of those clients. The Geneva Prosecutor's Office initiated a criminal investigation against representatives of the external asset manager and two former Credit Suisse AG employees. This investigation was expanded in November 2018 to also include one former and one current Credit Suisse AG employee

and Credit Suisse AG itself in order to assess the sufficiency of Credit Suisse AG's controls and supervision. In the third quarter of 2019, Credit Suisse AG entered into a two stage, conditional settlement agreement with affected clients. With the cooperation of the Geneva Prosecutor's Office, the first stage of the settlement was completed in November 2019.

Mossack Fonseca/Israel Desk matters

Credit Suisse, along with many financial institutions, has received inquiries from governmental and regulatory authorities concerning banking relationships between financial institutions, their clients and the Panama-based law firm of Mossack Fonseca. Credit Suisse has also received governmental and regulatory inquiries concerning cross-border services provided by Credit Suisse's Switzerland-based Israel Desk. Credit Suisse is conducting a review of these issues and has been cooperating with the authorities.

Mozambique matter

Credit Suisse is responding to requests from regulatory and enforcement authorities related to certain Credit Suisse entities' arrangement of loan financing to Mozambique state enterprises, ProIndicus S.A. and Empresa Mocambicana de Atum S.A. (EMATUM), a distribution to private investors of loan participation notes (LPN) related to the EMATUM financing in September 2013, and certain Credit Suisse entities' subsequent role in arranging the exchange of those LPNs for Eurobonds issued by the Republic of Mozambique. On January 3, 2019, the United States Attorney for the Eastern District of New York unsealed an indictment against several individuals in connection with the matter, including three former Credit Suisse employees. On May 20, 2019, July 19, 2019 and September 6, 2019, the three former employees pleaded guilty to accepting improper personal benefits in connection with financing transactions carried out with two Mozambique state enterprises. Credit Suisse is cooperating with the authorities on this matter. On February 27, 2019, certain Credit Suisse entities, the same three former employees, and several other unrelated entities were sued in the English High Court by the Republic of Mozambique. On January 21, 2020, Credit Suisse filed its defense. The Republic of Mozambique seeks a declaration that the sovereign guarantee issued in connection with the ProIndicus loan syndication arranged and funded, in part, by a Credit Suisse subsidiary is void and also seeks unspecified damages alleged to have arisen in connection with the transactions involving ProIndicus and EMATUM, and a transaction in which Credit Suisse had no involvement with Mozambique Asset Management S.A.

Cross-border private banking matters

Credit Suisse offices in various locations, including the UK, the Netherlands and France, have been contacted by regulatory and law enforcement authorities that are seeking records and information concerning investigations into our historical private banking services on a cross-border basis and in part through our local

branches and banks. Credit Suisse has conducted a review of these issues and is cooperating with the authorities. Credit Suisse applies a strict zero tolerance policy on tax evasion.

Hiring practices investigation

On May 30, 2018, Credit Suisse (Hong Kong) Limited (CSHKL) entered into a non-prosecution agreement to resolve the investigation of past hiring practices between 2007 and 2013 in the Asia Pacific region by the DOJ, under which CSHKL paid a penalty of USD 47 million. No criminal charges were filed and no monitor was required. As part of the agreement, Credit Suisse AG has ongoing obligations, including cooperating with the DOJ, maintaining prescribed standards in its compliance programs and reporting to the DOJ on the functioning of its enhanced compliance programs. On July 5, 2018, Credit Suisse Group AG reached a settlement with the US Securities and Exchange Commission to resolve the parallel investigation of the same conduct for USD 29.8 million.

Write-downs litigation

On December 22, 2017, Credit Suisse Group AG and certain current and former executives were named in a class action complaint filed in the SDNY on behalf of a putative class of purchasers of Credit Suisse Group AG American Depositary Receipts (ADRs), asserting claims for violations of Sections 10(b) and 20(a) of the US Securities Exchange Act of 1934 and Rule 10b-5 thereunder, alleging that defendants sanctioned increases to trading limits that ultimately led to write-downs in the fourth quarter of 2015 and the first quarter of 2016 and a decline in the market value of the ADRs. On April 18, 2018, plaintiffs filed an amended complaint, which asserts substantially the same claims as the original complaint. On February 19, 2019, the SDNY granted in part and denied in part, defendants' motion to dismiss the amended complaint. The decision narrows the scope of the action to claims related to statements concerning Credit Suisse's risk limits and controls. On May 16, 2019, the SDNY denied defendants' motion for reconsideration. Discovery is ongoing.

ETN-related litigation

Since March 14, 2018, three class action complaints were filed in the SDNY on behalf of a putative class of purchasers of VelocityShares Daily Inverse VIX Short Term Exchange Traded Notes linked to the S&P 500 VIX Short-Term Futures Index due December 4, 2030 (XIV ETNs). On August 20, 2018, plaintiffs filed a consolidated amended class action complaint, naming Credit Suisse Group AG and certain affiliates and executives, along with Janus Index & Calculation Services LLC and affiliates, which asserts claims for violations of Sections 9(a)(4), 9(f), 10(b) and 20(a) of the US Securities Exchange Act of 1934 and Rule 10b-5 thereunder and Sections 11 and 15 of the US Securities Act of 1933 and alleges that the defendants are responsible for losses to investors following a decline in the value of XIV ETNs on February 5, 2018. Defendants moved to dismiss the amended complaint on November 2, 2018. On September 25, 2019, the SDNY

granted defendants' motion to dismiss and dismissed with prejudice all claims against the defendants. On October 18, 2019, plaintiffs filed a notice of appeal.

On April 17, 2018, Credit Suisse AG, along with Janus Index & Calculation Services LLC, was named in an individual civil action in the Northern District of Alabama that makes allegations similar to those alleged in the consolidated New York class action. On August 10, 2018, defendants filed a motion to transfer the action to the SDNY, which was denied on December 17, 2018. On September 26, 2018, defendants filed a motion to dismiss the Alabama complaint. On December 4, 2018, plaintiffs filed an amended complaint, which defendants moved to dismiss on January 11, 2019. On August 22, 2019, the court granted in part and denied in part defendants' motion to dismiss.

On February 4, 2019, Credit Suisse Group AG and certain affiliates and executives, along with Janus Index & Calculation Services LLC and affiliates, were named in a separate individual action brought in the EDNY, which asserts claims substantially similar to those brought in the consolidated class action. On March 29, 2019, plaintiff voluntarily dismissed its action and filed a substantially similar complaint in the SDNY. On May 16, 2019, defendants filed a motion to dismiss. On January 2, 2020, the SDNY granted defendants' motion to dismiss. On February 3, 2020, plaintiff filed a notice of appeal.

On June 3, 2019, Credit Suisse AG, an affiliate and executives were named in a separate individual action brought in the SDNY by a purchaser of XIV ETNs, which asserts claims similar to those brought in the consolidated class action complaint as well as additional claims under New York and Pennsylvania state law. On November 12, 2019, defendants filed a motion to dismiss. Plaintiffs responded to the motion to dismiss by filing an amended complaint in lieu of opposing the motion to dismiss. The action has been stayed pending a resolution of the appeal in the consolidated class action.

On February 4, 2019, Credit Suisse Group AG and certain affiliates and executives, along with Janus Index & Calculation Services LLC and affiliates, were named in a class action complaint filed in the SDNY brought on behalf of a putative class of purchasers of VelocityShares Daily Inverse VIX Medium Term Exchange Traded Notes linked to the S&P 500 VIX Mid-Term Futures Index due December 4, 2030 (ZIV ETNs). The complaint asserts claims for

violations of Sections 9(a)(4), 9(f), 10(b) and 20(a) of the US Securities Exchange Act of 1934 and Rule 10b-5 thereunder and Sections 11 and 15 of the US Securities Act of 1933 and alleges that the defendants are responsible for losses to investors following a decline in the value of ZIV ETNs in February 2018. On August 20, 2019, plaintiffs filed an amended complaint. On October 21, 2019, defendants filed a motion to dismiss.

TWINT

On November 13, 2018, COMCO announced an investigation into several Swiss financial institutions, including UBS Switzerland AG, Credit Suisse (Schweiz) AG, Aduno Holding AG, PostFinance AG, and Swisscard AECS GmbH. According to COMCO, its investigation is focused on whether these institutions entered into an agreement to boycott mobile payment solutions of international providers, including Apple Pay and Samsung Pay, in order to protect TWINT, their own Swiss payment solution.

SWM

CSI is the defendant in a lawsuit brought by the German public utility company Stadtwerke München GmbH (SWM) in a German court, in connection with a series of interest rate swaps entered into between 2008 and 2012. The claimant alleges breach of an advisory duty to provide both investor- and investment-specific advice, including in particular a duty to disclose the initial mark-to-market value of the trades at inception. On March 22, 2019, the trial court (the Regional Court of Frankfurt am Main) dismissed in their entirety claims against CSI. On April 29, 2019, plaintiff filed a notice of appeal and an application for a supplementary judgment. On November 29, 2019, the court ruled on the supplementary judgment application, finding that SWM was entitled to a refund of negative interest from CSI. CSI is appealing this ruling.

Bulgarian former clients matter

Credit Suisse AG has been responding to an investigation by the Swiss Office of the Attorney General concerning the diligence and controls applied to a historical relationship with Bulgarian former clients who are alleged to have laundered funds through Credit Suisse AG accounts. Credit Suisse AG believes its diligence and controls complied with applicable legal requirements, and intends to defend itself vigorously.

40 Significant subsidiaries and equity method investments

The entities presented in the table below generally include subsidiaries with total assets over CHF 100 million or net income attributable to shareholders over CHF 10 million. Also included

are entities which are deemed regionally significant or otherwise relevant from an operational perspective.

Significant subsidiaries

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
End of 2019				
Credit Suisse Group AG				
Credit Suisse AG	Zurich, Switzerland	CHF	4,399.7	100
Credit Suisse Insurance Linked Strategies Ltd	Zurich, Switzerland	CHF	0.2	100
Credit Suisse (Poland) SP. z o.o	Warsaw, Poland	PLN	20.0	100
Credit Suisse Services AG	Zurich, Switzerland	CHF	1.0	100
Credit Suisse Trust AG	Zurich, Switzerland	CHF	5.0	100
Credit Suisse Trust Holdings Limited	St. Peter Port, Guernsey	GBP	2.0	100
CS LP Holding AG	Zug, Switzerland	CHF	0.1	100
Inreska Limited	St. Peter Port, Guernsey	GBP	3.0	100
Savoy Hotel Baur en Ville AG	Zurich, Switzerland	CHF	7.5	88
Credit Suisse AG				
Alpine Securitization LTD	George Town, Cayman Islands	USD	0.0	100
Asset Management Finance LLC	Wilmington, United States	USD	167.0	100
Banco Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	53.6	100
Banco Credit Suisse (Mexico), S.A.	Mexico City, Mexico	MXN	1,716.7	100
Banco de Investimentos Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	164.8	100
Bank-now AG	Horgen, Switzerland	CHF	30.0	100
Boston Re Ltd.	Hamilton, Bermuda	USD	2.0	100
Casa de Bolsa Credit Suisse (Mexico), S.A. de C.V.	Mexico City, Mexico	MXN	274.0	100
Column Financial, Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse (Australia) Limited	Sydney, Australia	AUD	34.1	100
Credit Suisse (Brasil) S.A. Corretora de Titulos e Valores Mobiliarios	São Paulo, Brazil	BRL	98.4	100
Credit Suisse (Deutschland) Aktiengesellschaft	Frankfurt, Germany	EUR	130.0	100
Credit Suisse (Hong Kong) Limited	Hong Kong, China	HKD	13,758.0	100
Credit Suisse (Italy) S.p.A.	Milan, Italy	EUR	170.0	100
Credit Suisse (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	230.9	100
Credit Suisse (Qatar) LLC	Doha, Qatar	USD	29.0	100
Credit Suisse (Schweiz) AG	Zurich, Switzerland	CHF	100.0	100
Credit Suisse (Singapore) Limited	Singapore, Singapore	SGD	743.3	100
Credit Suisse (UK) Limited	London, United Kingdom	GBP	245.2	100
Credit Suisse (USA), Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse Asset Management (UK) Holding Limited	London, United Kingdom	GBP	144.2	100
Credit Suisse Asset Management Immobilien Kapitalanlagegesellschaft mbH	Frankfurt, Germany	EUR	6.1	100
Credit Suisse Asset Management International Holding Ltd	Zurich, Switzerland	CHF	20.0	100
Credit Suisse Asset Management Investments Ltd	Zurich, Switzerland	CHF	0.1	100
Credit Suisse Asset Management Limited	London, United Kingdom	GBP	45.0	100
Credit Suisse Asset Management, LLC	Wilmington, United States	USD	1,106.0	100
Credit Suisse Atlas I Investments (Luxembourg) S.à.r.l.	Luxembourg, Luxembourg	USD	0.0	100
Credit Suisse Brazil (Bahamas) Limited	Nassau, Bahamas	USD	70.0	100
Credit Suisse Business Analytics (India) Private Limited	Mumbai, India	INR	40.0	100
Credit Suisse Capital LLC	Wilmington, United States	USD	1,437.3	100
Credit Suisse Energy LLC	Wilmington, United States	USD	0.0	100
Credit Suisse Entrepreneur Capital AG	Zurich, Switzerland	CHF	15.0	100
Credit Suisse Equities (Australia) Limited	Sydney, Australia	AUD	62.5	100
Credit Suisse Finance (India) Private Limited	Mumbai, India	INR	1,050.1	100
Credit Suisse First Boston (Latam Holdings) LLC	George Town, Cayman Islands	USD	23.8	100
Credit Suisse First Boston Finance B.V.	Amsterdam, The Netherlands	EUR	0.0	100

Significant subsidiaries (continued)

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
Credit Suisse First Boston Mortgage Capital LLC	Wilmington, United States	USD	356.6	100
Credit Suisse First Boston Next Fund, Inc.	Wilmington, United States	USD	10.0	100
Credit Suisse Fund Management S.A.	Luxembourg, Luxembourg	CHF	0.3	100
Credit Suisse Fund Services (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	1.5	100
Credit Suisse Funds AG	Zurich, Switzerland	CHF	7.0	100
Credit Suisse Group Finance (U.S.) Inc.	Wilmington, United States	USD	100.0	100
Credit Suisse Hedging-Griffo Corretora de Valores S.A.	São Paulo, Brazil	BRL	29.6	100
Credit Suisse Holding Europe (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	32.6	100
Credit Suisse Holdings (Australia) Limited	Sydney, Australia	AUD	3.0	100
Credit Suisse Holdings (USA), Inc.	Wilmington, United States	USD	550.0	100
Credit Suisse International	London, United Kingdom	USD	11,366.2	100 ¹
Credit Suisse Istanbul Menkul Degerler A.S.	Istanbul, Turkey	TRY	10.0	100
Credit Suisse Leasing 92A, L.P.	Wilmington, United States	USD	43.9	100
Credit Suisse Life & Pensions AG	Vaduz, Liechtenstein	CHF	15.0	100
Credit Suisse Life (Bermuda) Ltd.	Hamilton, Bermuda	USD	0.5	100
Credit Suisse Loan Funding LLC	Wilmington, United States	USD	1.5	100
Credit Suisse Management LLC	Wilmington, United States	USD	891.4	100
Credit Suisse Prime Securities Services (USA) LLC	Wilmington, United States	USD	113.3	100
Credit Suisse Private Equity, LLC	Wilmington, United States	USD	8.1	100
Credit Suisse PSL GmbH	Zurich, Switzerland	CHF	0.0	100
Credit Suisse Saudi Arabia	Riyadh, Saudi Arabia	SAR	737.5	100
Credit Suisse Securities (Canada), Inc.	Toronto, Canada	CAD	3.4	100
Credit Suisse Securities (Europe) Limited	London, United Kingdom	USD	3,859.3	100
Credit Suisse Securities (Hong Kong) Limited	Hong Kong, China	HKD	2,080.9	100
Credit Suisse Securities (India) Private Limited	Mumbai, India	INR	2,214.7	100
Credit Suisse Securities (Japan) Limited	Tokyo, Japan	JPY	78,100.0	100
Credit Suisse Securities (Johannesburg) Proprietary Limited	Johannesburg, South Africa	ZAR	0.0	100
Credit Suisse Securities (Malaysia) Sdn. Bhd.	Kuala Lumpur, Malaysia	MYR	100.0	100
Credit Suisse Securities (Singapore) Pte Limited	Singapore, Singapore	SGD	30.0	100
Credit Suisse Securities, Sociedad de Valores, S.A.	Spain, Madrid	EUR	4.8	100
Credit Suisse Securities (Thailand) Limited	Bangkok, Thailand	THB	500.0	100
Credit Suisse Securities (USA) LLC	Wilmington, United States	USD	2,887.6	100
Credit Suisse Services (India) Private Limited	Pune, India	INR	0.1	100
Credit Suisse Services (USA) LLC	Wilmington, United States	USD	13.8	100
CS Non-Traditional Products Ltd.	Nassau, Bahamas	USD	0.1	100
CSAM Americas Holding Corp.	Wilmington, United States	USD	0.0	100
DLJ Merchant Banking Funding, Inc	Wilmington, United States	USD	0.0	100
DLJ Mortgage Capital, Inc.	Wilmington, United States	USD	0.0	100
FIDES Treasury Services AG	Zurich, Switzerland	CHF	2.0	100
JSC "Bank Credit Suisse (Moscow)"	Moscow, Russia	USD	37.8	100
Lime Residential, Ltd.	Nassau, Bahamas	USD	100.0	100
LLC "Credit Suisse Securities (Moscow)"	Moscow, Russia	RUB	97.1	100
Merban Equity AG	Zug, Switzerland	CHF	0.1	100
Merchant Holding, LLC	Wilmington, United States	USD	0.0	100
Neue Aargauer Bank AG	Aarau, Switzerland	CHF	134.1	100
Solar Investco II Ltd.	George Town, Cayman Islands	USD	0.0	100
SPS Holding Enterprises Corp.	Wilmington, United States	USD	0.0	100
SR Lease Co VI Ltd.	Cayman Islands	USD	0.0	100
PT Credit Suisse Sekuritas Indonesia	Jakarta, Indonesia	IDR	235,000.0	99
Credit Suisse Hypotheken AG	Zurich, Switzerland	CHF	0.1	98

¹ 98% of voting rights and 98% of equity interest held by Credit Suisse AG.

Significant equity method investments

Company name	Domicile	Equity interest in %
Credit Suisse Group AG		
Credit Suisse Group Finance (Guernsey) Limited	St. Peter Port, Guernsey	100 ¹
Credit Suisse Group Funding (Guernsey) Limited	St. Peter Port, Guernsey	100 ¹
Credit Suisse AG		
Swisscard AECS GmbH	Horgen, Switzerland	50
Credit Suisse Founder Securities Limited	Beijing, China	33
E.L. & C. Baillieu Stockbroking (Holdings) Pty Ltd	Melbourne, Australia	23
ICBC Credit Suisse Asset Management Co., Ltd.	Beijing, China	20
York Capital Management Global Advisors, LLC	New York, United States	5 ²
Holding Verde Empreendimentos e Participações S.A.	São Paulo, Brazil	0 ²

¹ Deconsolidated under US GAAP as the Group is not the primary beneficiary.

² The Group holds a significant noncontrolling interest.

41 Subsidiary guarantee information

Certain wholly owned finance subsidiaries of the Group, including Credit Suisse Group Funding (Guernsey) Limited, which is a Guernsey incorporated non-cellular company limited by shares, have issued securities fully and unconditionally guaranteed by the Group. There are various legal and regulatory requirements, including the satisfaction of a solvency test under Guernsey law for the Guernsey subsidiary, applicable to some of the Group's subsidiaries that may limit their ability to pay dividends or distributions and make loans and advances to the Group.

The Group and the Bank have issued full, unconditional and several guarantees of Credit Suisse (USA), Inc.'s outstanding SEC-registered debt securities. In accordance with the guarantees, if Credit Suisse (USA), Inc. fails to make any timely payment under the agreements governing such debt securities, the holders of the debt securities may demand payment from either the Group or the Bank, without first proceeding against Credit Suisse (USA), Inc. The guarantee from the Group is subordinated to senior liabilities. Credit Suisse (USA), Inc. is an indirect, wholly owned subsidiary of the Group.

Condensed consolidating statements of operations

in 2019	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Condensed consolidating statements of operations (CHF million)						
Interest and dividend income	4,040	16,140	20,180	1,307	(1,303)	20,184
Interest expense	(4,191)	(8,940)	(13,131)	(1,343)	1,307	(13,167)
Net interest income	(151)	7,200	7,049	(36)	4	7,017
Commissions and fees	3,217	7,854	11,071	23	64	11,158
Trading revenues	543	1,230	1,773	(68)	34	1,739
Other revenues	2,058	735	2,793	3,565 ²	(3,788)	2,570
Net revenues	5,667	17,019	22,686	3,484	(3,686)	22,484
Provision for credit losses	14	310	324	0	0	324
Compensation and benefits	2,772	6,333	9,105	101	830	10,036
General and administrative expenses	2,193	5,395	7,588	(37)	(1,423)	6,128
Commission expenses	213	1,063	1,276	1	(1)	1,276
Total other operating expenses	2,406	6,458	8,864	(36)	(1,424)	7,404
Total operating expenses	5,178	12,791	17,969	65	(594)	17,440
Income/(loss) before taxes	475	3,918	4,393	3,419	(3,092)	4,720
Income tax expense/(benefit)	167	1,131	1,298	0	(3)	1,295
Net income/(loss)	308	2,787	3,095	3,419	(3,089)	3,425
Net income/(loss) attributable to noncontrolling interests	5	9	14	0	(8)	6
Net income/(loss) attributable to shareholders	303	2,778	3,081	3,419	(3,081)	3,419

¹ Includes eliminations and consolidation adjustments.

² Primarily consists of revenues from investments in Group companies accounted for under the equity method.

Condensed consolidating statements of comprehensive income

in 2019	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Comprehensive income (CHF million)						
Net income/(loss)	308	2,787	3,095	3,419	(3,089)	3,425
Gains/(losses) on cash flow hedges	0	86	86	14	0	100
Foreign currency translation	(284)	(711)	(995)	(15)	(15)	(1,025)
Unrealized gains/(losses) on securities	0	21	21	0	(1)	20
Actuarial gains/(losses)	(7)	(17)	(24)	0	350	326
Net prior service credit/(cost)	0	1	1	0	216	217
Gains/(losses) on liabilities related to credit risk	(73)	(1,665)	(1,738)	(65)	(57)	(1,860)
Other comprehensive income/(loss), net of tax	(364)	(2,285)	(2,649)	(66)	493	(2,222)
Comprehensive income/(loss)	(56)	502	446	3,353	(2,596)	1,203
Comprehensive income attributable to noncontrolling interests	4	3	7	0	1	8
Comprehensive income/(loss) attributable to shareholders	(60)	499	439	3,353	(2,597)	1,195

¹ Includes eliminations and consolidation adjustments.

Condensed consolidating statements of operations (continued)

in 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Condensed consolidating statements of operations (CHF million)						
Interest and dividend income	4,086	15,537	19,623	932	(942)	19,613
Interest expense	(4,210)	(8,288)	(12,498)	(983)	877	(12,604)
Net interest income	(124)	7,249	7,125	(51)	(65)	7,009
Commissions and fees	3,725	8,017	11,742	26	122	11,890
Trading revenues	474	(18)	456	88	80	624
Other revenues	2,006	(509)	1,497	2,020 ²	(2,120)	1,397
Net revenues	6,081	14,739	20,820	2,083	(1,983)	20,920
Provision for credit losses	(1)	246	245	0	0	245
Compensation and benefits	2,653	6,211	8,864	58	698	9,620
General and administrative expenses	1,944	5,124	7,068	0	(1,270)	5,798
Commission expenses	229	1,030	1,259	0	0	1,259
Restructuring expenses	237	291	528	0	98	626
Total other operating expenses	2,410	6,445	8,855	0	(1,172)	7,683
Total operating expenses	5,063	12,656	17,719	58	(474)	17,303
Income/(loss) before taxes	1,019	1,837	2,856	2,025	(1,509)	3,372
Income tax expense	261	873	1,134	1	226	1,361
Net income/(loss)	758	964	1,722	2,024	(1,735)	2,011
Net income/(loss) attributable to noncontrolling interests	6	(13)	(7)	0	(6)	(13)
Net income/(loss) attributable to shareholders	752	977	1,729	2,024	(1,729)	2,024

¹ Includes eliminations and consolidation adjustments.

² Primarily consists of revenues from investments in Group companies accounted for under the equity method.

Condensed consolidating statements of comprehensive income (continued)

in 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Comprehensive income (CHF million)						
Net income/(loss)	758	964	1,722	2,024	(1,735)	2,011
Gains/(losses) on cash flow hedges	0	(7)	(7)	(3)	0	(10)
Foreign currency translation	142	(463)	(321)	(11)	7	(325)
Unrealized gains/(losses) on securities	0	(18)	(18)	0	1	(17)
Actuarial gains/(losses)	22	9	31	0	(422)	(391)
Net prior service credit/(cost)	0	(10)	(10)	0	(125)	(135)
Gains/(losses) on liabilities related to credit risk	28	1,414	1,442	83	129	1,654
Other comprehensive income/(loss), net of tax	192	925	1,117	69	(410)	776
Comprehensive income/(loss)	950	1,889	2,839	2,093	(2,145)	2,787
Comprehensive income/(loss) attributable to noncontrolling interests	6	(9)	(3)	0	(12)	(15)
Comprehensive income/(loss) attributable to shareholders	944	1,898	2,842	2,093	(2,133)	2,802

¹ Includes eliminations and consolidation adjustments.

Condensed consolidating statements of operations (continued)

in 2017	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Condensed consolidating statements of operations (CHF million)						
Interest and dividend income	5,294	11,767	17,061	577	(581)	17,057
Interest expense	(4,437)	(5,932)	(10,369)	(632)	501	(10,500)
Net interest income	857	5,835	6,692	(55)	(80)	6,557
Commissions and fees	3,756	7,916	11,672	28	117	11,817
Trading revenues	(23)	1,323	1,300	(55)	72	1,317
Other revenues	942	359	1,301	(911) ²	819	1,209
Net revenues	5,532	15,433	20,965	(993)	928	20,900
Provision for credit losses	4	206	210	0	0	210
Compensation and benefits	3,066	6,898	9,964	74	329	10,367
General and administrative expenses	1,929	5,484	7,413	(80)	(688)	6,645
Commission expenses	255	1,174	1,429	3	(2)	1,430
Restructuring expenses	173	223	396	0	59	455
Total other operating expenses	2,357	6,881	9,238	(77)	(631)	8,530
Total operating expenses	5,423	13,779	19,202	(3)	(302)	18,897
Income/(loss) before taxes	105	1,448	1,553	(990)	1,230	1,793
Income tax expense/(benefit)	(42)	2,823	2,781	(7)	(33)	2,741
Net income/(loss)	147	(1,375)	(1,228)	(983)	1,263	(948)
Net income attributable to noncontrolling interests	11	16	27	0	8	35
Net income/(loss) attributable to shareholders	136	(1,391)	(1,255)	(983)	1,255	(983)

¹ Includes eliminations and consolidation adjustments.

² Primarily consists of revenues from investments in Group companies accounted for under the equity method.

Condensed consolidating statements of comprehensive income (continued)

in 2017	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Comprehensive income (CHF million)						
Net income/(loss)	147	(1,375)	(1,228)	(983)	1,263	(948)
Gains/(losses) on cash flow hedges	0	(35)	(35)	8	0	(27)
Foreign currency translation	(756)	(259)	(1,015)	1	(17)	(1,031)
Unrealized gains/(losses) on securities	0	(13)	(13)	0	0	(13)
Actuarial gains/(losses)	(7)	28	21	0	674	695
Net prior service credit/(cost)	0	0	0	0	(121)	(121)
Gains/(losses) on liabilities related to credit risk	(33)	(1,651)	(1,684)	(188)	(104)	(1,976)
Other comprehensive income/(loss), net of tax	(796)	(1,930)	(2,726)	(179)	432	(2,473)
Comprehensive income/(loss)	(649)	(3,305)	(3,954)	(1,162)	1,695	(3,421)
Comprehensive income/(loss) attributable to noncontrolling interests	24	(33)	(9)	0	37	28
Comprehensive income/(loss) attributable to shareholders	(673)	(3,272)	(3,945)	(1,162)	1,658	(3,449)

¹ Includes eliminations and consolidation adjustments.

Condensed consolidating balance sheets

end of 2019	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Assets (CHF million)						
Cash and due from banks	2,642	98,402	101,044	277	558	101,879
Interest-bearing deposits with banks	10	663	673	489	(421)	741
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	26,905	80,092	106,997	0	0	106,997
Securities received as collateral	2,921	37,298	40,219	0	0	40,219
Trading assets	35,339	118,556	153,895	1	(99)	153,797
Investment securities	0	1,004	1,004	32,853	(32,851)	1,006
Other investments	621	5,013	5,634	49,780	(49,748)	5,666
Net loans	11,907	292,118	304,025	0	(7,246)	296,779
Goodwill	715	3,245	3,960	0	703	4,663
Other intangible assets	276	15	291	0	0	291
Brokerage receivables	17,012	18,636	35,648	0	0	35,648
Other assets	12,843	24,226	37,069	625	1,915	39,609
Total assets	111,191	679,268	790,459	84,025	(87,189)	787,295
Liabilities and equity (CHF million)						
Due to banks	63	16,679	16,742	2,287	(2,285)	16,744
Customer deposits	1	384,949	384,950	0	(1,167)	383,783
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	5,799	21,842	27,641	0	(108)	27,533
Obligation to return securities received as collateral	2,921	37,298	40,219	0	0	40,219
Trading liabilities	8,468	29,718	38,186	0	0	38,186
Short-term borrowings	8,720	20,149	28,869	0	(484)	28,385
Long-term debt	43,821	107,179	151,000	37,596	(36,591)	152,005
Brokerage payables	15,213	10,470	25,683	0	0	25,683
Other liabilities	9,414	20,992	30,406	498	139	31,043
Total liabilities	94,420	649,276	743,696	40,381	(40,496)	743,581
Total shareholders' equity	16,713	29,407	46,120	43,644	(46,120)	43,644
Noncontrolling interests	58	585	643	0	(573)	70
Total equity	16,771	29,992	46,763	43,644	(46,693)	43,714
Total liabilities and equity	111,191	679,268	790,459	84,025	(87,189)	787,295

¹ Includes eliminations and consolidation adjustments.

Condensed consolidating balance sheets (continued)

end of 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Assets (CHF million)						
Cash and due from banks	2,540	96,774	99,314	324	409	100,047
Interest-bearing deposits with banks	22	1,052	1,074	498	(430)	1,142
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	35,640	81,455	117,095	0	0	117,095
Securities received as collateral	4,751	36,945	41,696	0	0	41,696
Trading assets ²	29,341	104,518	133,859	0	(224)	133,635
Investment securities ²	0	1,477	1,477	23,456	(23,454)	1,479
Other investments	826	3,998	4,824	48,030	(47,964)	4,890
Net loans	12,263	280,612	292,875	0	(5,294)	287,581
Goodwill	727	3,329	4,056	0	710	4,766
Other intangible assets	200	19	219	0	0	219
Brokerage receivables	20,772	18,135	38,907	0	0	38,907
Other assets ³	12,967	23,706	36,673	547	239	37,459
Total assets	120,049	652,020	772,069	72,855	(76,008)	768,916
Liabilities and equity (CHF million)						
Due to banks	59	15,161	15,220	1,364	(1,364)	15,220
Customer deposits	0	365,263	365,263	0	(1,338)	363,925
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	6,296	18,327	24,623	0	0	24,623
Obligation to return securities received as collateral	4,751	36,945	41,696	0	0	41,696
Trading liabilities	8,693	33,478	42,171	0	(2)	42,169
Short-term borrowings	9,679	12,740	22,419	0	(493)	21,926
Long-term debt	47,074	106,359	153,433	27,112	(26,237)	154,308
Brokerage payables	17,452	13,471	30,923	0	0	30,923
Other liabilities	9,995	20,332	30,327	457	(677)	30,107
Total liabilities	103,999	622,076	726,075	28,933	(30,111)	724,897
Total shareholders' equity	15,971	29,325	45,296	43,922	(45,296)	43,922
Noncontrolling interests	79	619	698	0	(601)	97
Total equity	16,050	29,944	45,994	43,922	(45,897)	44,019
Total liabilities and equity	120,049	652,020	772,069	72,855	(76,008)	768,916

¹ Includes eliminations and consolidation adjustments.

² Residential and commercial mortgage-backed securities that were previously reported in investment securities have been reclassified to trading assets as these securities are carried at fair value under the fair value option.

³ Includes premises and equipment which were previously presented separately in the consolidated balance sheet.

Condensed consolidating statements of cash flows

in 2019	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Operating activities (CHF million)						
Net cash provided by/(used in) operating activities	(4,694)	(13,724)	(18,418)	(141) ²	135	(18,424)
Investing activities (CHF million)						
(Increase)/decrease in interest-bearing deposits with banks	12	399	411	9	(9)	411
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	8,321	65	8,386	0	0	8,386
Purchase of investment securities	0	(557)	(557)	(9,396)	9,396	(557)
Proceeds from sale of investment securities	0	6	6	0	0	6
Maturities of investment securities	0	1,007	1,007	942	(942)	1,007
Investments in subsidiaries and other investments	(34)	(250)	(284)	(10)	9	(285)
Proceeds from sale of other investments	516	617	1,133	48	(23)	1,158
(Increase)/decrease in loans	93	(17,402)	(17,309)	0	1,965	(15,344)
Proceeds from sales of loans	0	4,612	4,612	0	0	4,612
Capital expenditures for premises and equipment and other intangible assets	(397)	(736)	(1,133)	0	(160)	(1,293)
Proceeds from sale of premises and equipment and other intangible assets	0	30	30	0	0	30
Other, net	27	510	537	6	0	543
Net cash provided by/(used in) investing activities	8,538	(11,699)	(3,161)	(8,401)	10,236	(1,326)
Financing activities (CHF million)						
Increase/(decrease) in due to banks and customer deposits	6	24,678	24,684	923	(754)	24,853
Increase/(decrease) in short-term borrowings	(809)	7,720	6,911	0	8	6,919
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(397)	3,888	3,491	0	(110)	3,381
Issuances of long-term debt	206,056	(171,145)	34,911	10,396	(10,344)	34,963
Repayments of long-term debt	(208,631)	162,341	(46,290)	(942)	942	(46,290)
Issuances of common shares	0	0	0	(10)	10	0
Sale of treasury shares	0	0	0	3	9,621	9,624
Repurchase of treasury shares	0	0	0	(1,916)	(9,620)	(11,536)
Dividends paid	(1)	(10)	(11)	(728)	43	(696)
Other, net	75	133	208	768	(5)	971
Net cash provided by/(used in) financing activities	(3,701)	27,605	23,904	8,494	(10,209)	22,189
Effect of exchange rate changes on cash and due from banks (CHF million)						
Effect of exchange rate changes on cash and due from banks	(41)	(554)	(595)	1	(13)	(607)
Net increase/(decrease) in cash and due from banks (CHF million)						
Net increase/(decrease) in cash and due from banks	102	1,628	1,730	(47)	149	1,832
Cash and due from banks at beginning of period ³	2,540	96,774	99,314	324	409	100,047
Cash and due from banks at end of period ³	2,642	98,402	101,044	277	558	101,879

¹ Includes eliminations and consolidation adjustments.

² Consists of dividend payments from Group companies of CHF 10 million and CHF 14 million from bank and non-bank subsidiaries, respectively, and other cash items from parent company operations such as Group financing.

³ Includes restricted cash.

Condensed consolidating statements of cash flows (continued)

in 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Operating activities (CHF million)						
Net cash provided by/(used in) operating activities	(8,326)	20,860	12,534	(215) ²	564	12,883
Investing activities (CHF million)						
(Increase)/decrease in interest-bearing deposits with banks	11	(375)	(364)	(5)	(58)	(427)
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	22,936	(24,308)	(1,372)	0	0	(1,372)
Purchase of investment securities	0	(683)	(683)	(8,793)	8,793	(683)
Proceeds from sale of investment securities	0	255	255	0	0	255
Maturities of investment securities	0	567	567	290	(290)	567
Investments in subsidiaries and other investments	(99)	(447)	(546)	(10)	9	(547)
Proceeds from sale of other investments	540	1,230	1,770	4	(2)	1,772
(Increase)/decrease in loans	310	(14,011)	(13,701)	0	1,201	(12,500)
Proceeds from sales of loans	0	5,981	5,981	0	(1)	5,980
Capital expenditures for premises and equipment and other intangible assets	(307)	(682)	(989)	0	(106)	(1,095)
Proceeds from sale of premises and equipment and other intangible assets	0	80	80	0	(50)	30
Other, net	5	337	342	0	0	342
Net cash provided by/(used in) investing activities	23,396	(32,056)	(8,660)	(8,514)	9,496	(7,678)
Financing activities (CHF million)						
Increase/(decrease) in due to banks and customer deposits	(213)	2,219	2,006	609	(807)	1,808
Increase/(decrease) in short-term borrowings	(1,298)	(1,687)	(2,985)	0	(5)	(2,990)
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(9,127)	7,075	(2,052)	0	0	(2,052)
Issuances of long-term debt	119,547	(86,239)	33,308	8,805	(8,941)	33,172
Repayments of long-term debt	(124,405)	80,547	(43,858)	(290)	297	(43,851)
Sale of treasury shares	0	0	0	0	11,693	11,693
Repurchase of treasury shares	0	0	0	(757)	(11,684)	(12,441)
Dividends paid	(2)	(13)	(15)	(661)	10	(666)
Other, net	(120)	(374)	(494)	829	9	344
Net cash provided by/(used in) financing activities	(15,618)	1,528	(14,090)	8,535	(9,428)	(14,983)
Effect of exchange rate changes on cash and due from banks (CHF million)						
Effect of exchange rate changes on cash and due from banks	30	(10)	20	2	(12)	10
Net increase/(decrease) in cash and due from banks (CHF million)						
Net increase/(decrease) in cash and due from banks	(518)	(9,678)	(10,196)	(192)	620	(9,768)
Cash and due from banks at beginning of period ³	3,058	106,452	109,510	516	(211)	109,815
Cash and due from banks at end of period ³	2,540	96,774	99,314	324	409	100,047

¹ Includes eliminations and consolidation adjustments.

² Consists of dividend payments from Group companies of CHF 10 million and CHF 6 million from bank and non-bank subsidiaries, respectively, and other cash items from parent company operations such as Group financing.

³ Includes restricted cash.

Condensed consolidating statements of cash flows (continued)

in 2017	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries ¹	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Operating activities (CHF million)						
Net cash provided by/(used in) operating activities	7,860	(16,330)	(8,470)	(142) ²	90	(8,522)
Investing activities (CHF million)						
(Increase)/decrease in interest-bearing deposits with banks	0	40	40	(488)	488	40
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	20,626	(6,340)	14,286	0	0	14,286
Purchase of investment securities	0	(86)	(86)	(5,673)	5,673	(86)
Proceeds from sale of investment securities	0	14	14	0	0	14
Maturities of investment securities	0	318	318	0	0	318
Investments in subsidiaries and other investments	(206)	(888)	(1,094)	(4,101)	4,101	(1,094)
Proceeds from sale of other investments	488	1,479	1,967	0	3	1,970
(Increase)/decrease in loans	3,131	(17,910)	(14,779)	(5,336)	6,441	(13,674)
Proceeds from sales of loans	0	9,938	9,938	0	0	9,938
Capital expenditures for premises and equipment and other intangible assets	(295)	(655)	(950)	0	(118)	(1,068)
Proceeds from sale of premises and equipment and other intangible assets	2	58	60	0	(59)	1
Other, net	41	24	65	0	0	65
Net cash provided by/(used in) investing activities	23,787	(14,008)	9,779	(15,598)	16,529	10,710
Financing activities (CHF million)						
Increase/(decrease) in due to banks and customer deposits	191	2,996	3,187	(2,189)	2,425	3,423
Increase/(decrease) in short-term borrowings	(4,113)	9,620	5,507	0	(489)	5,018
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(37,382)	32,131	(5,251)	0	0	(5,251)
Issuances of long-term debt	30,223	13,344	43,567	14,035	(14,046)	43,556
Repayments of long-term debt	(19,174)	(43,470)	(62,644)	0	90	(62,554)
Issuances of common shares	0	0	0	4,253	0	4,253
Sale of treasury shares	0	0	0	0	12,034	12,034
Repurchase of treasury shares	0	0	0	(630)	(12,127)	(12,757)
Dividends paid	(9)	(4)	(13)	(584)	7	(590)
Other, net	(696)	4,315	3,619	433	(3,891)	161
Net cash provided by/(used in) financing activities	(30,960)	18,932	(12,028)	15,318	(15,997)	(12,707)
Effect of exchange rate changes on cash and due from banks (CHF million)						
Effect of exchange rate changes on cash and due from banks	(120)	(717)	(837)	0	10	(827)
Net increase/(decrease) in cash and due from banks (CHF million)						
Net increase/(decrease) in cash and due from banks	567	(12,123)	(11,556)	(422)	632	(11,346)
Cash and due from banks at beginning of period ³	2,491	118,575	121,066	938	(843)	121,161
Cash and due from banks at end of period ³	3,058	106,452	109,510	516	(211)	109,815

¹ Includes eliminations and consolidation adjustments.

² Consists of dividend payments from Group companies of CHF 10 million and CHF 14 million from bank and non-bank subsidiaries, respectively, and other cash items from parent company operations such as Group financing.

³ Includes restricted cash.

42 Credit Suisse Group parent company

→ Refer to "Note 41 – Subsidiary guarantee information" for the condensed Credit Suisse Group parent company financial information.

43 Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view)

The Group's consolidated financial statements have been prepared in accordance with US GAAP.

FINMA requires Swiss-domiciled banks which present their financial statements under either US GAAP or IFRS to provide a narrative explanation of the major differences between Swiss GAAP banking law (true and fair view) and its primary accounting standard.

The principal provisions of the Swiss Ordinance on Banks and Savings Banks (Banking Ordinance) and the FINMA Circular 2015/1, "Accounting – banks", governing financial reporting for banks (Swiss GAAP) differ in certain aspects from US GAAP.

The following are the major differences:

→ Refer to "Note 1 – Summary of significant accounting policies" for a detailed description of the Group's accounting policies.

Scope of consolidation

Under Swiss GAAP, majority-owned subsidiaries that are not considered long-term investments or do not operate in the core business of the Group are either accounted for as financial investments or as equity method investments. US GAAP has no such exception relating to the consolidation of majority-owned subsidiaries.

Foreign currency translations

Under US GAAP, foreign currency translation adjustments resulting from the consolidation of branches with functional currencies other than the Swiss franc are included in AOCI in shareholders' equity. Under Swiss GAAP, foreign currency translation adjustments from the consolidation of foreign branches are recognized in net income/(loss) from trading activities and fair value option.

Under US GAAP, foreign currency measurement adjustments for available-for-sale securities are reported in AOCI, which is part of total shareholder's equity, whereas for Swiss GAAP statutory purposes they are included in the statements of income.

Investments in securities

Under Swiss GAAP, classification and measurement of investments in securities depends on the nature of the investment.

Non-consolidated participations

Under US GAAP, investments in equity securities where a company has the ability to significantly influence the operating and financial policies of an investee are accounted for under the equity method of accounting or the fair value option. Under the equity method of accounting, a company's share of the profit or loss as well as any impairment on the participation are reported in other revenues.

Under Swiss GAAP, investments in equity securities which are held with the intention of a permanent investment or which are investments in financial industry infrastructure are included in participations irrespective of the percentage ownership of voting shares held. Other participations are initially recognized at historical cost and tested for impairment at least annually. The fair value option is not allowed for participations.

Under Swiss GAAP, participations held by a company are tested for impairment on the level of each individual participation. An impairment is recorded if the carrying value of a participation exceeds its fair value. Should the fair value of an impaired participation recover in subsequent periods and such recovery is considered sustainable, the impairment from prior periods can be reversed up to the fair value but not exceeding the historical cost basis. A reversal of an impairment is recorded as extraordinary income in the statements of income.

Available-for-sale debt securities

Under US GAAP, available-for-sale debt securities are valued at fair value. Unrealized gains and losses due to fluctuations in fair value (including foreign exchange) are not recorded in the consolidated statements of operations but included net of tax in AOCI, which is part of total shareholders' equity. Declines in fair value below cost deemed to be other-than-temporary are recognized as impairments in the consolidated statements of operations, except for amounts relating to factors other than credit loss on debt securities with no intent or requirement to sell that continue to be included in AOCI. The new cost basis will not be changed for subsequent recoveries in fair value.

Under Swiss GAAP, available-for-sale securities are accounted for at the lower of amortized cost or market with valuation reductions and recoveries due to market fluctuations recorded in other ordinary expenses and income, respectively. Foreign exchange gains and losses are recognized in net income/(loss) from trading activities and fair value option.

Non-marketable equity securities

Under US GAAP, equity securities which do not have a readily determinable fair value are measured in accordance with the NAV practical expedient by using the measurement alternative or at fair value.

Under Swiss GAAP, non-marketable equity securities are carried at the lower of cost or market.

Impairments on held-to-maturity securities

Under US GAAP, declines in fair value of held-to-maturity securities below cost deemed to be other-than-temporary are recognized as impairments in the consolidated statements of operations except for amounts relating to factors other than credit loss on debt securities held with no intent or requirement to sell that are

included in AOCI. The impairment cannot be reversed in future periods.

Under Swiss GAAP, all impairments are recognized in the consolidated statements of income. Impairments recognized on held-to-maturity securities are reversed up to the amortized cost if the fair value of the instrument subsequently recovers. A reversal is recorded in the consolidated statements of income.

Fair value option

Unlike US GAAP, Swiss GAAP generally does not allow the fair value option concept that creates an optional alternative measurement treatment for certain non-trading financial assets and liabilities, guarantees and commitments. The fair value option permits the use of fair value for initial and subsequent measurement with changes in fair value recorded in the consolidated statements of operations.

For issued structured products that meet certain conditions, fair value measurement can be applied. The related changes in fair value of both the embedded derivative and the host contract are recorded in trading revenues, except for fair value adjustments relating to own credit that cannot be recognized in the consolidated statements of income. Impacts of changes in own credit spreads are recognized in the compensation accounts which are either recorded in other assets or other liabilities.

Derivative financial instruments used for fair value hedging

Under US GAAP, for fair value hedges, the carrying value of the underlying hedged items is adjusted to the change in the fair value of the hedged risk. Changes in the fair value of the related designated derivatives are recorded in the same line item of the consolidated statements of operations as the change in fair value of the hedged risk for the respective assets or liabilities.

Under Swiss GAAP, the carrying value of hedged items is not adjusted. The amount representing the change in fair value of the hedged item with regard to the hedged risk is recorded in the compensation account included in other assets or other liabilities.

Derivative financial instruments used for cash flow hedging

Under US GAAP, the change in the fair value of a designated derivative of a cash flow hedge is reported in AOCI.

Under Swiss GAAP, the change in the fair value of a designated derivative of a cash flow hedge is recorded in the compensation account included in other assets or other liabilities.

Derecognition of financial instruments

Under US GAAP, financial instruments are only derecognized if the transaction meets the following criteria: (i) the financial asset has been legally isolated from the transferor, (ii) the transferee

has the right to repledge or resell the transferred asset, and (iii) the transferor does not maintain effective control over the transferred asset.

Under Swiss GAAP, a financial instrument is derecognized when the economic control has been transferred from the seller to the buyer. A party which has the controlling ability to receive the future returns from the financial instrument and the obligation to absorb the risk of the financial instrument is deemed to have economic control over a financial instrument.

Debt issuance costs

Under US GAAP, debt issuance costs are presented as a direct deduction from the carrying amount of the related debt.

Under Swiss GAAP, debt issuance costs are reported as a balance sheet asset in accrued income and prepaid expenses.

Operating leases – lessee arrangements

Under US GAAP, at commencement of an operating lease, the lessee recognizes a lease liability for future lease payments and a right-of-use asset which reflects the future benefits from the lease contract. The initial lease liability equals the present value of the future lease payments; amounts paid upfront are not included. The right-of-use asset equals the sum of the initial lease liability, initial direct costs and prepaid lease payments, with lease incentives received deducted. Operating lease costs, which include amortization and an interest component, are recognized over the remaining lease term on a straight-line basis. If the reporting entity permanently vacates premises and sub-leases a leased asset to another party at a loss, an impairment is recognized on the right-of-use asset. The impairment is determined as the difference between the carrying value of the right-of-use asset and the present value of the expected sub-lease income over the sub-lease term.

Under Swiss GAAP, at commencement of an operating lease, no right-of-use assets and lease liabilities are recognized on the balance sheet of the lessee. For the calculation of the periodic lease expenses, initial direct costs, lease incentives and prepaid lease payments are considered and the total cost of a lease contract is expensed on a straight-line basis over the lease term. If the reporting entity permanently vacates premises, a provision for future payments under the lease contract is recorded, net of expected sub-lease income.

Goodwill amortization

Under US GAAP, goodwill is not amortized but must be tested for impairment annually or more frequently if an event or change in circumstances indicates that the goodwill may be impaired.

Under Swiss GAAP, goodwill is amortized over its useful life, generally not exceeding five years, except for justified cases where a maximum useful life of up to ten years is acceptable. In addition, goodwill is tested at least annually for impairment.

Amortization of intangible assets

Under US GAAP, intangible assets with indefinite lives are not amortized but are tested for impairment annually or more frequently if an event or change in circumstances indicates that the asset may be impaired.

Under Swiss GAAP, intangible assets are amortized over a useful life, up to a maximum of five years, in justified cases up to a maximum of ten years. In addition, these assets are tested at least annually for impairment.

Guarantees

US GAAP requires all guarantees to be initially recognized at fair value. Upon issuance of a guarantee, the guarantor is required to recognize a liability that reflects the initial fair value; simultaneously, a receivable is recorded to reflect the future guarantee fee income over the entire life of the guarantee.

Under Swiss GAAP, only accrued or prepaid guarantee fees are recorded on the balance sheet. No guarantee liability and receivable for future guarantee fees are recorded upon issuance of a guarantee.

Loan origination fees and costs

US GAAP requires the deferral of fees received upfront and direct costs incurred in connection with the origination of loans not held under the fair value option.

Under Swiss GAAP, only upfront payments or fees that are considered interest-related components are deferred (e.g., premiums and discounts). Fees received from the borrower which are considered service-related fees such as commitment fees, structuring fees and arrangement fees are immediately recognized in commission income.

Extraordinary income and expenses

Unlike US GAAP, Swiss GAAP does report certain expenses or revenues as extraordinary if the recorded income or expense is non-operating and non-recurring.

Pensions and post-retirement benefits

Under US GAAP, the liability and related pension expense is determined based on the projected unit credit actuarial calculation of the benefit obligation.

Under Swiss GAAP, the liability and related pension expense is primarily determined based on the pension plan valuation in accordance with Swiss GAAP FER 26. A pension asset is recorded if a statutory overfunding of a pension plan leads to

a future economic benefit, and a pension liability is recorded if a statutory underfunding of a pension plan leads to a future economic obligation. Employer contribution reserves must be capitalized if they represent a future economic benefit. A future economic benefit exists if the employer can reduce its future statutory annual contribution to the pension plan by releasing employer contribution reserves. Pension expenses include the required contributions defined by Swiss law, any additional contribution mandated by the pension fund trustees and any change in value of the pension asset or liability between two measurement dates as determined on the basis of the annual year-end pension plan valuation.

Discontinued operations

Under US GAAP, the assets and liabilities of a discontinued operation are separated from the ordinary captions of the consolidated balance sheets and are reported as discontinued operations measured at the lower of the carrying value or fair value less cost to sell. Accordingly, income and expense from discontinued operations are reported in a separate line item of the consolidated statements of operations.

Under Swiss GAAP, these positions remain in their initial balance sheet captions until disposed of and continue to be valued according to the respective captions.

Security collateral received in securities lending transactions

Under US GAAP, security collateral received in securities lending transactions are recorded as assets and a corresponding liability to return the collateral is recognized.

Under Swiss GAAP, security collateral received and the obligation to return collateral of securities lending transactions are not recognized on the balance sheet.

Loan commitments

Under US GAAP, loan commitments include all commitments to extend loans, unfunded commitments under commercial lines of credit, revolving credit lines, credit guarantees in the future and overdraft protection agreements, except for commitments that can be revoked by the Group at any time at the Group's sole discretion without prior notice.

Under Swiss GAAP, loan commitments include all commitments to extend loans, unfunded commitments under commercial lines of credit, revolving credit lines, credit guarantees in the future and overdraft protection agreements, except for commitments that can be revoked by the Group at any time at the Group's sole discretion with a notice period not exceeding six weeks.

Controls and procedures

Evaluation of disclosure controls and procedures

The Group has evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of the end of the period covered by this report under the supervision and with the participation of management, including the Group Chief Executive Officer (CEO) and Chief Financial Officer (CFO), pursuant to Rule 13(a)-15(a) under the Securities Exchange Act of 1934 (the Exchange Act). There are inherent limitations to the effectiveness of any system of controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective controls and procedures can only provide reasonable assurance of achieving their control objectives.

The CEO and CFO concluded that, as of December 31, 2019, the design and operation of the Group's disclosure controls and procedures were effective, in all material respects, to ensure that information required to be disclosed in reports filed and submitted under the Exchange Act is recorded, processed, summarized and reported as and when required.

Management report on internal control over financial reporting

The management of the Group is responsible for establishing and maintaining adequate internal control over financial reporting. The Group's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with US GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Management has made an evaluation and assessment of the Group's internal control over financial reporting as of December 31, 2019 using the criteria issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in "Internal Control – Integrated Framework".

Based upon its review and evaluation, management, including the Group CEO and CFO, has concluded that the Group's internal control over financial reporting is effective as of December 31, 2019.

The Group's independent auditors, KPMG AG, have issued an unqualified opinion on the effectiveness of the Group's internal control over financial reporting as of December 31, 2019, as stated in their report, which follows.

Changes in internal control over financial reporting

There were no changes in the Group's internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect, the Group's internal control over financial reporting.



Report of the Independent Registered Public Accounting Firm

To the shareholders and Board of Directors
Credit Suisse Group AG, Zurich

Opinion on Internal Control Over Financial Reporting

We have audited Credit Suisse Group AG and subsidiaries' (the "Group") internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Group as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the "consolidated financial statements"), and our report dated March 25, 2020 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Group's Board of Directors and management are responsible for maintaining effective internal control over financial reporting and the Group's management is responsible for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.



Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

KPMG AG

Nicholas Edmonds
*Licensed Audit Expert
Auditor in Charge*

Zurich, Switzerland
March 25, 2020

Shaun Kendrigan
*Licensed Audit Expert
Global Audit Partner*

KPMG AG, Raffelstrasse 28, PO Box, CH-8036 Zurich

KPMG AG is a subsidiary of KPMG Holding AG, which is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss legal entity. All rights reserved.

VII – Parent company financial statements – Credit Suisse Group

Report of the Statutory Auditor	407
Parent company financial statements	410
Notes to the financial statements	411
Proposed appropriation of retained earnings and capital distribution	421

Notes to the financial statements

1	General information and subsequent events	411
2	Accounting and valuation principles	411
3	Other financial income	412
4	Other operating income	412
5	Financial expenses	412
6	Personnel expenses	412
7	Other operating expenses	412
8	Other short-term receivables	412
9	Accrued income and prepaid expenses	412
10	Financial investments	412
11	Participations	413
12	Short-term interest-bearing liabilities	413
13	Accrued expenses and deferred income	413
14	Long-term interest-bearing liabilities	414
15	Share capital, conditional, conversion and authorized capital	415
16	Credit Suisse Group shares held by subsidiaries	416
17	Purchases and sales of treasury shares	416
18	Significant shareholders	416
19	Assets subject to retention of title	417
20	Contingent liabilities	417
21	Assets and liabilities with related parties	418
22	Subordinated assets and liabilities	418
23	Shareholdings	418



Report of the Statutory Auditor

To the General Meeting of Credit Suisse Group AG, Zurich

Report of the Statutory Auditor on the Financial Statements

As statutory auditor, we have audited the accompanying financial statements of Credit Suisse Group AG, which comprise the balance sheet, statement of income and notes for the year ended December 31, 2019.

Board of Directors' Responsibility

The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and Credit Suisse Group AG's articles of association. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements for the year ended December 31, 2019, comply with Swiss law and Credit Suisse Group AG's articles of association.



Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority



Evaluation of the impairment assessment of participations

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.



Evaluation of the impairment assessment of participations

Key Audit Matter

Our response

Credit Suisse Group AG recorded participations of CHF 52.1 billion as of December 31, 2019. The participations portfolio consists of investments in subsidiary entities mainly operating in the banking and finance industry.

Participations are valued at acquisition cost less impairment. For the purpose of impairment testing, the portfolio valuation method is applied for economically closely related participations. All other participations are valued individually. We identified the evaluation of the impairment assessment of participations as a key audit matter due to the level of sensitivity to the impact of changes to estimates of projected cash flows, used in determining the fair value of these entities, which involves subjective auditor judgment.

The primary procedures we performed to address this key audit matter included the following.

- We tested certain internal controls over Credit Suisse Group AG's process for the impairment assessment of participations, which included controls over the identification and measurement of impairments, the evaluation of the valuation methodology, key inputs and assumptions used in the determination of the participation value, and Credit Suisse Group AG's annual comparison of legal entity plans to past performance.

- For a sample of participations, we evaluated key assumptions applied in performing the valuation. We involved valuation professionals with specialized skills and knowledge, who assisted in examining and challenging the assumptions and methodologies used to calculate fair value.

For further information on participations refer to the following:

- Note 2 Accounting and valuation principles, "Participations"
- Note 11 Participations



Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and Credit Suisse Group AG's articles of association. We recommend that the financial statements submitted to you be approved.

KPMG AG

Nicholas Edmonds
Licensed Audit Expert
Auditor in Charge

Shaun Kendrigan
Licensed Audit Expert
Global Audit Partner

Zurich, Switzerland
March 25, 2020

KPMG AG, Raffelstrasse 28, PO Box, CH-8036 Zurich

KPMG AG is a subsidiary of KPMG Holding AG, which is a member of the KPMG network of independent firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss legal entity. All rights reserved.

Parent company financial statements

Statements of income

in	Note	2019	2018
Statements of income (CHF million)			
Dividend income from participations		30	19
Other financial income	3	1,440	1,132
Other operating income	4	206	147
Total operating income		1,676	1,298
Financial expenses	5	1,445	1,172
Personnel expenses	6	103	57
Other operating expenses	7	106	104
Amortization, depreciation and impairment losses on noncurrent assets		9	0
Total operating expenses		1,663	1,333
Net profit/(loss) before taxes		13	(35)
Direct tax expenses		17	16
Net profit/(loss)		(4)	(51)

Balance sheets

end of	Note	2019	2018
Assets (CHF million)			
Cash and cash equivalents		79	822
Other short-term receivables	8	253	258
Derivative financial instruments		0	89
Accrued income and prepaid expenses	9	593	482
Total current assets		925	1,651
Financial investments	10	31,848	23,906
Participations	11	52,090	52,117
Total noncurrent assets		83,938	76,023
Total assets		84,863	77,674
Liabilities and shareholders' equity (CHF million)			
Short-term interest-bearing liabilities	12	2,331	1,482
Other short-term liabilities		46	6
Accrued expenses and deferred income	13	672	530
Total short-term liabilities		3,049	2,018
Long-term interest-bearing liabilities	14	35,828	27,591
Provisions		311	311
Total long-term liabilities		36,139	27,902
Total liabilities		39,188	29,920
Share capital	15	102	102
Capital contribution reserves		25,659	26,321
Other capital reserves		1,800	1,800
Legal capital reserves		27,459	28,121
Reserves for treasury shares	16	500	3,929
Legal income reserves		500	3,929
Statutory and discretionary reserves		10,500	10,500
Retained earnings		8,538	5,160
Net profit/(loss)		(4)	(51)
Voluntary retained earnings		19,034	15,609
Treasury shares against other capital reserves		(420)	(7)
Treasury shares against voluntary retained earnings		(1,000)	–
Treasury shares	17	(1,420)	(7)
Total shareholders' equity		45,675	47,754
Total liabilities and shareholders' equity		84,863	77,674

Notes to the financial statements

1 General information and subsequent events

Company

Credit Suisse Group AG is a Swiss holding company incorporated as a joint stock corporation (public limited company) with its registered office in Zurich, Switzerland. The financial statements of Credit Suisse Group AG are prepared in accordance with the regulations of the Swiss Code of Obligations and are stated in Swiss francs (CHF). The financial year ends on December 31.

Number of employees

The average number of employees (full-time equivalents) for the current year, as well as for the previous year, did not exceed 50.

COVID-19

The spread of COVID-19 is expected to have a significant impact on the global economy, at least in the first half of 2020, and is likely to affect Credit Suisse Group AG's financial performance.

Subsequent events

There were no subsequent events from the balance sheet date until March 25, 2020, the publishing date of these financial statements.

2 Accounting and valuation principles

These financial statements were prepared in accordance with the provisions of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations).

Cash and cash equivalents

Cash and cash equivalents are carried at nominal value.

Derivative financial instruments

Derivative financial instruments reported in this balance sheet line item are carried at the lower of cost or market. Realized gains are recorded in other financial income, realized and unrealized losses are recognized in financial expenses.

Financial investments

Financial investments include debt securities with a remaining maturity of more than 12 months after the balance sheet date. These securities are carried at cost. No valuation adjustments or impairment losses were required.

Participations

Participations are valued at historical cost less impairment. For the purpose of impairment testing, with a clearly defined sub-portfolio of economically closely related participations, the portfolio valuation method is applied. Impairment is assessed at each balance sheet date or at any point in time when facts and circumstances would indicate that an event has occurred which triggers an impairment review. The amount of impairment, if any, is assessed on the level of this sub-portfolio and not individually for each participation. All other participations are valued individually.

An impairment is recorded if the carrying value exceeds the fair value of the participation sub-portfolio. If the fair value of participations recovers significantly and is considered sustainable, a prior period impairment can be reversed up to the historical cost value of the participations.

Interest-bearing liabilities

Short-term and long-term interest-bearing liabilities are carried at nominal value.

Treasury shares

Own shares are recorded at cost and reported as treasury shares, resulting in a reduction to total shareholders' equity. Realized gains and losses on the sale of own shares are recognized through the statements of income as other financial income or financial expenses.

Revenue recognition

Revenues are recognized when they are realized or realizable, and are earned. Dividend income is recorded in the reporting period in which the dividend is declared.

Foreign currency translations

Assets and liabilities denominated in foreign currencies are translated into Swiss francs at the exchange rates prevailing at year-end, with the exception of non-monetary assets and liabilities, which are maintained in Swiss francs at historical exchange rates. All currency translation effects are recognized in other financial income or financial expenses.

3 Other financial income

in	2019	2018
Other financial income (CHF million)		
Interest income	1,325	942
Gains on sale of treasury shares	69	21
Realized and unrealized gains on derivative financial instruments	45	169
Foreign exchange gains	1	0
Other financial income	1,440	1,132

4 Other operating income

in	2019	2018
Other operating income (CHF million)		
Management fees	98	57
Trademark fees	62	63
Gain on sale of participations	23	0
Guarantee fees	22	26
Other	1	1
Other operating income	206	147

5 Financial expenses

in	2019	2018
Financial expenses (CHF million)		
Interest expense ¹	1,358	988
Realized and unrealized losses on derivative financial instruments	84	172
Losses on sale of treasury shares	2	11
Foreign exchange losses	0	1
Other	1	0
Financial expenses	1,445	1,172

¹ Includes negative interest expense of CHF 14 million in 2019 and CHF 0 million in 2018, respectively.

6 Personnel expenses

in	2019	2018
Personnel expenses (CHF million)		
Salaries	38	34
Variable compensation expenses	55	16
Other	10	7
Personnel expenses	103	57

7 Other operating expenses

in	2019	2018
Other operating expenses (CHF million)		
Branding expenses	62	63
Other general and administrative expenses	44	41
Other operating expenses	106	104

8 Other short-term receivables

end of	2019	2018
Other short-term receivables (CHF million)		
Receivables for trademark fees	234	223
Other	19	35
Other short-term receivables	253	258

9 Accrued income and prepaid expenses

end of	2019	2018
Accrued income and prepaid expenses (CHF million)		
Accrued interest income	412	328
Deferred debt issuance costs	167	139
Unamortized discount on notes issued	8	11
Other	6	4
Accrued income and prepaid expenses	593	482

Credit Suisse Group AG hedges an open interest rate risk exposure from a fixed rate liability with a nominal amount of USD 1.0 billion with a fixed receiver interest rate swap with equivalent notional. This hedge is considered to be highly effective over the entire maturity of the hedge relationship and no replacement values and no valuation changes, i.e. change of clean replacement values, are recorded on the balance sheet and in the statement of income of the company. The interest coupons received and paid from the interest rate swap are recorded in the statement of income as an adjustment to the interest expense of the hedged exposure.

10 Financial investments

end of	2019	2018
Financial investments (CHF million)		
Debt securities ¹	31,847	23,905
Equity securities	1	1
Financial investments	31,848	23,906

¹ Reflects notes issued by Credit Suisse AG.

11 Participations

Direct participations

Company name	Domicile	Currency	Nominal capital in million	Voting interest in %	Equity interest in %
as of December 31, 2019					
Capital Union Bank B.S.C. (closed) (under liquidation)	Manama, Kingdom of Bahrain	USD	50.0	26	26
Credit Suisse AG	Zurich, Switzerland	CHF	4,399.7	100	100
Credit Suisse Group Finance (Guernsey) Limited (in Guernsey members' voluntary liquidation)	St. Peter Port, Guernsey	USD	0.0	100	100
Credit Suisse Group Funding (Guernsey) Limited	St. Peter Port, Guernsey	USD	0.1	100	100
Credit Suisse Insurance Linked Strategies Ltd	Zurich, Switzerland	CHF	0.2	100	100
Credit Suisse International	London, United Kingdom	USD	11,366.2	2 ¹	2 ¹
Credit Suisse IP GmbH	Zurich, Switzerland	CHF	0.0	100	100
Credit Suisse Services AG	Zurich, Switzerland	CHF	1.0	100	100
Credit Suisse Trust AG	Zurich, Switzerland	CHF	5.0	100	100
Credit Suisse Trust Holdings Limited	St. Peter Port, Guernsey	GBP	2.0	100	100
CS LP Holding AG	Zug, Switzerland	CHF	0.1	100	100
Inreska Limited	St. Peter Port, Guernsey	GBP	3.0	100	100
Savoy Hotel Baur en Ville AG	Zurich, Switzerland	CHF	7.5	88	88

¹ 98% held by other group companies.

Indirect participations

The company's principal indirect participations are shown in Note 40 – Significant subsidiaries and equity method investments in VI – Consolidated financial statements – Credit Suisse Group.

12 Short-term interest-bearing liabilities

end of	2019	2018
Short-term interest-bearing liabilities (CHF million)		
Due to banks	2,287	1,364
Cash collateral received	44	118
Short-term interest-bearing liabilities	2,331	1,482

13 Accrued expenses and deferred income

end of	2019	2018
Accrued expenses and deferred income (CHF million)		
Accrued interest expense	415	332
Deferred fees on acquired debt securities	161	130
Accrued personnel and other operating expenses	87	56
Unamortized discount on debt securities	8	11
Other	1	1
Accrued expenses and deferred income	672	530

14 Long-term interest-bearing liabilities

Currency	Notional (million)	Interest rate	Issue date	First call date	Maturity date	2019	2018
						Carrying value (CHF million)	Carrying value (CHF million)
High-trigger tier 1 capital notes							
USD	1,500	7.125% ¹	January 30, 2017	July 29, 2022	Perpetual	1,454	1,479
USD	2,000	7.500% ¹	July 16, 2018	July 17, 2023	Perpetual	1,938	1,973
CHF	200	3.875% ¹	March 22, 2017	September 22, 2023	Perpetual	200	200
SGD	750	5.625% ¹	June 6, 2019	June 6, 2024	Perpetual	540	–
CHF	300	3.500% ¹	September 4, 2018	September 4, 2024	Perpetual	300	300
USD	1,500	7.250% ¹	September 12, 2018	September 12, 2025	Perpetual	1,454	1,479
CHF	525	3.000% ¹	September 11, 2019	November 11, 2025	Perpetual	525	–
USD	1,750	6.375% ¹	August 21, 2019	August 21, 2026	Perpetual	1,696	–
Low-trigger tier 1 capital notes							
USD	2,250	7.500% ¹	December 11, 2013	December 11, 2023	Perpetual	2,180	2,219
USD	2,500	6.250% ¹	June 18, 2014	December 18, 2024	Perpetual	2,423	2,466
Senior unsecured notes							
USD	60	3 Month USD LIBOR +0.55% ²	October 6, 2017	October 6, 2021	October 6, 2022	58	986
USD	1,750	3.574%	January 9, 2017	January 9, 2022	January 9, 2023	1,696	1,726
AUD	185	5.000% ⁵	February 8, 2018	February 8, 2022	February 8, 2038	126	123
USD	100	3 Month USD LIBOR +0.55% ³	April 9, 2019	April 9, 2022	April 9, 2023	97	–
JPY	38,700	0.553% ¹	October 27, 2017	October 27, 2022	October 27, 2023	345	346
USD	1,000	2.997% ¹	September 14, 2017	December 14, 2022	December 14, 2023	969	986
USD	500	3 Month USD LIBOR +1.2%	September 14, 2017	December 14, 2022	December 14, 2023	485	493
AUD	125	3.500% ¹	March 8, 2018	March 8, 2023	March 8, 2024	85	87
AUD	175	3 Month USD BBSW +1.25%	March 8, 2018	March 8, 2023	March 8, 2024	119	122
USD	1,050	3 Month USD LIBOR +0.80% ⁴	March 8, 2019	March 8, 2023	March 8, 2024	1,018	–
USD	319	4.600% ⁵	March 29, 2018	March 29, 2023	March 29, 2048	309	301
USD	1,250	4.207% ¹	June 12, 2018	June 12, 2023	June 12, 2024	1,211	1,233
USD	750	3 Month USD LIBOR +1.24%	June 12, 2018	June 12, 2023	June 12, 2024	727	740
USD	152	5.000% ⁵	June 29, 2018	June 29, 2023	June 29, 2048	148	143
USD	200	5.000% ⁵	August 31, 2018	August 31, 2023	August 31, 2048	193	187
USD	105	5.350% ⁵	October 26, 2018	October 26, 2023	October 26, 2048	102	99
USD	105	5.400% ⁵	December 27, 2018	December 27, 2023	December 27, 2048	102	99
USD	120	5.350% ⁵	January 30, 2019	January 30, 2024	January 30, 2049	116	–
USD	120	5.350% ⁵	January 30, 2019	January 30, 2024	January 30, 2049	116	–
USD	100	5.300% ⁵	January 30, 2019	January 30, 2024	January 30, 2049	97	–
USD	130	4.700% ⁵	May 29, 2019	May 29, 2024	May 29, 2049	126	–
USD	130	4.500% ⁵	June 27, 2019	June 27, 2024	June 27, 2049	126	–
EUR	1,500	1.250% ¹	July 17, 2017	July 17, 2024	July 17, 2025	1,629	1,693
USD	2,000	2.593% ¹	September 11, 2019	September 11, 2024	September 11, 2025	1,938	–
GBP	750	2.125% ¹	September 12, 2017	September 12, 2024	September 12, 2025	954	943
EUR	1,500	1.000% ^{1,7}	June 24, 2019	June 24, 2026	June 24, 2027	1,629	–
JPY	8,300	0.904% ¹	October 27, 2017	October 27, 2026	October 27, 2027	74	74
USD	2,250	4.282%	January 9, 2017	January 9, 2027	January 9, 2028	2,180	2,219
USD	2,000	3.869% ¹	January 12, 2018	January 12, 2028	January 12, 2029	1,938	1,973
EUR	100	2.455%	July 11, 2018	July 11, 2028	July 4, 2034	109	113
EUR	100	1.590% ^{1,6}	June 11, 2019	March 11, 2029	March 11, 2030	109	–
EUR	1,000	0.650%	September 10, 2019	–	September 10, 2029	1,086	–
JPY	10,000	1.269% ¹	October 27, 2017	October 27, 2032	October 27, 2033	89	89
Time deposit							
CHF						3,012	2,700
Total						35,828	27,591

¹ Interest rate reset at first call date and on every reset date thereafter.

² Minimum rate 0.55% / Maximum rate 3.55%. USD 940 million of USD 1,000 million notional was bought back in 2019.

³ Minimum rate of 0.55%.

⁴ Minimum rate of 0.80%.

⁵ The interest rate of these zero coupon annual accreting senior callable notes reflects the yield rate of the notes.

⁶ The interest rate will be 1.19% from March 11, 2020 onwards.

⁷ On July 23, 2019, the offering was re-opened and the aggregate principal amount was increased from EUR 1,000 million to EUR 1,500 million.

The high-trigger and low-trigger tier 1 capital notes issued by Credit Suisse Group AG are perpetual securities and have no fixed or final maturity date. Subject to the satisfaction of certain conditions, they may be redeemed, at the option of the issuer, on the first call date or as specified thereafter in the terms of the note.

The high-trigger tier 1 capital notes mandatorily either convert into ordinary shares of Credit Suisse Group AG or are permanently written-down to zero, as provided in the terms of the respective instrument, upon the occurrence of certain specified triggering events. These events include the Group's consolidated common equity tier 1 (CET1) ratio falling below 7%, or a determination by the Swiss Financial Market Supervisory Authority FINMA (FINMA) that conversion or write-down is necessary, or that Credit Suisse Group AG requires extraordinary public sector capital support, to prevent Credit Suisse Group AG from becoming insolvent, bankrupt or unable to pay a material amount of its debt, or other similar circumstances. Conversion or write-down can only be prevented if FINMA, at Credit Suisse Group AG's request, is satisfied that certain conditions exist and determines that a conversion or write-down is not required. High-trigger instruments are designed to absorb losses before other capital instruments, including the low-trigger capital instruments.

The low-trigger tier 1 capital notes have a write-down feature, which means that interest on the notes shall cease to accrue and the full principal amount of the notes will be permanently written down to zero upon the occurrence of certain specified triggering events, also called write-down events. A write-down event

will occur if the sum of the Group's consolidated CET1 ratio and the Higher Trigger Capital Ratio (i.e., the ratio of Higher Trigger Capital Amount to the aggregate of all risk-weighted assets of the Group) as of any quarterly balance sheet date or interim capital report date is below 5.125%. A write-down event will also occur if FINMA determines that a write-down of the notes is necessary, or that Credit Suisse Group AG requires, extraordinary public sector capital support to prevent Credit Suisse Group AG from becoming insolvent, bankrupt or unable to pay a material part of its debts, or other similar circumstances. Write-down can only be prevented if FINMA, at the Group's request, is satisfied that certain conditions exist and determines that a conversion or write-down is not required.

In addition to the high-trigger and low-trigger tier 1 capital notes, Credit Suisse Group AG has issued senior unsecured notes, which qualify as total loss-absorbing capacity (TLAC). The senior unsecured notes have a fixed maturity date and can be redeemed, at the option of the issuer, at the call date. The senior unsecured notes are bail-in debt instruments that are designed to absorb losses after the cancellation of Credit Suisse Group AG's equity instruments and after the write-down or conversion into equity of regulatory capital (including high-trigger and low-trigger tier 1 capital notes) in restructuring proceedings with respect to Credit Suisse Group AG. Bail-in debt instruments do not feature capital triggers that may lead to a write-down and/or a conversion into equity outside of restructuring, but only begin to bear losses once Credit Suisse Group AG is formally in restructuring proceedings and FINMA orders capital measures (i.e., a write-down and/or a conversion into equity) in the restructuring plan.

15 Share capital, conditional, conversion and authorized capital

	No. of registered shares	Par value in CHF	% of existing share capital	No. of registered shares	Par value in CHF
Share capital as of December 31, 2018				2,556,011,720	102,240,469
Conditional capital					
Warrants and convertible bonds					
Capital as of December 31, 2018	400,000,000	16,000,000			
Capital as of December 31, 2019	400,000,000¹	16,000,000	16		
Conversion capital					
Capital as of December 31, 2018	150,000,000	6,000,000			
Capital as of December 31, 2019	150,000,000²	6,000,000	6		
Authorized capital					
Capital as of December 31, 2018	165,118,230	6,604,729			
Annual General Meeting of April 26, 2019 – decrease	(62,118,230)	(2,484,729)			
Capital as of December 31, 2019	103,000,000	4,120,000	4		
Share capital as of December 31, 2019				2,556,011,720	102,240,469

¹ 72.2 million registered shares reserved for the USD 1,500 million 7.125% high-trigger tier 1 capital notes.

² 39.0 million registered shares reserved for the USD 1,500 million 7.125% high-trigger tier 1 capital notes.

16 Credit Suisse Group shares held by subsidiaries

	2019		2018	
	Share equivalents	Market value (CHF million)	Share equivalents	Market value (CHF million)
Balance at end of financial year				
Physical holdings	4,772,328 ¹	63	5,022,410	54
Holdings, net of pending obligations	1,308,618	17	(1,334,536)	(14)

¹ Representing 0.2% of issued shares as of December 31, 2019.

In 2019, CHF 3,429 million was transferred from reserves for treasury shares to retained earnings.

17 Purchases and sales of treasury shares

	Net gain/(loss) on sale (CHF million)	Treasury shares, at cost (CHF million)	Number of shares	Average price per share (CHF)
2019				
Balance as of December 31, 2018		7	405,281	16.38
Sale of treasury shares ¹	67	(503)	(42,047,920)	13.56
Purchase of treasury shares		1,916	156,632,122	12.23
Change in 2019	67	1,413	114,584,202	
Balance as of December 31, 2019		1,420	114,989,483	12.35
2018				
Balance as of December 31, 2017		12	745,253	15.64
Sale of treasury shares ¹	10	(762)	(46,612,198)	16.55
Purchase of treasury shares		757	46,272,226	16.36
Change in 2018	10	(5)	(339,972)	
Balance as of December 31, 2018		7	405,281	16.38

2019: Highest price CHF 13.65, paid on May 2 and lowest price CHF 10.81, paid on August 15 in a market transaction.

2018: Highest price CHF 18.63, paid on January 24 and lowest price CHF 15.46, paid on April 4 in a market transaction.

¹ Representing share award settlements.

18 Significant shareholders

end of	2019			2018		
	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)
Direct shareholders¹						
Chase Nominees Ltd. ²	343	14	13.43	388	16	15.19
Nortrust Nominees Ltd. ²	163	7	6.37	149	6	5.84

¹ As registered in the share register of the Group on December 31 of the reporting period; includes shareholders registered as nominees.

² Nominee holdings exceeding 2% are registered with a right to vote only if the nominee confirms that no individual shareholder holds more than 0.5% of the outstanding share capital or if the nominee discloses the identity of any beneficial owner holding more than 0.5% of the outstanding capital.

→ Refer to "Note 3 – Business developments, significant shareholders and subsequent events" in VI – Consolidated financial statements – Credit Suisse Group for information received from shareholders not registered in the share register of Credit Suisse Group AG.

19 Assets subject to retention of title

As of December 31, 2019 and 2018, cash and cash equivalents in the amount of CHF 5 million were subject to a retention of title.

20 Contingent liabilities

end of	2019	2018
Contingent liabilities (CHF million)		
Aggregate indemnity liabilities, guarantees and other contingent liabilities (net of exposures recorded as liabilities)	22,766	24,026
of which have been entered into on behalf of subsidiaries ¹	22,766	24,026

¹ Includes senior unsecured notes issued by subsidiaries of CHF 21,785 million and CHF 22,165 million as of December 31, 2019 and 2018, respectively, of which the underlying notional amounts (subject to regulatory adjustments) qualify as TLAC.

Contingent liabilities include guarantees for obligations, performance-related guarantees and letters of comfort issued to third parties. Contingencies with a stated amount are included in the above table. In some instances, however, the exposure of Credit Suisse Group AG is not defined as an amount but relates to specific circumstances such as the solvency of subsidiaries.

Value-added tax

The company belongs to the Swiss value-added tax group of Credit Suisse Group, and thus carries joint liability to the Swiss federal tax authority for value-added tax debts of the entire Group.

Swiss pension plan

The employees of Credit Suisse Group AG are covered by the pension plan of the "Pensionskasse der Credit Suisse Group

(Schweiz)" (the Swiss pension plan). Most of the Swiss subsidiaries of Credit Suisse Group AG and a few companies that have close business and financial ties with Credit Suisse Group AG participate in this plan. The Swiss pension plan is an independent self-insured pension plan set up as a trust and qualifies as a defined contribution plan (savings plan) under Swiss law.

The Swiss pension plan's annual financial statements are prepared in accordance with Swiss GAAP FER 26 based on the full population of covered employees. Individual annual financial statements for each participating company are not prepared. As a multi-employer plan with unrestricted joint liability for all participating companies, the economic interest in the Swiss pension plan's over- or underfunding is allocated to each participating company based on an allocation key determined by the plan.

21 Assets and liabilities with related parties

end of	2019	2018
Assets (CHF million)		
Cash and cash equivalents	74	817
Other short-term receivables	235	243
Derivative financial instruments	0	89
Accrued income and prepaid expenses	417	331 ¹
Total current assets – related parties	726	1,480
Financial investments	31,847	23,905
Participations	52,090	52,117
Total noncurrent assets – related parties	83,937	76,022
Total assets – related parties	84,663	77,502
Liabilities (CHF million)		
Short-term interest-bearing liabilities	2,331	1,482
Other short-term liabilities	2	5
Accrued expenses and deferred income ²	214	170
Total short-term liabilities – related parties	2,547	1,657
Long-term interest-bearing liabilities	3,012	2,700
Total long-term liabilities – related parties	3,012	2,700
Total liabilities – related parties	5,559	4,357

The assets and liabilities represent the amounts due from and due to group companies, except where indicated.

¹ Prior period has been corrected.

² Includes amounts due to management bodies of CHF 44 million at December 31, 2019 and CHF 28 million at December 31, 2018, respectively.

22 Subordinated assets and liabilities

end of	2019	2018
Subordinated assets and liabilities (CHF million)		
Subordinated assets	32,259	9,292
Subordinated liabilities	12,915	10,282

Group-internal funding related to loss-absorbing instruments has been aligned to international standards for internal TLAC instruments and to the new article 126b of the Swiss Capital Adequacy Ordinance, effective January 1, 2020. Due to this alignment,

the bail-in debt instruments issued by Credit Suisse AG to Credit Suisse Group AG have been permanently subordinated in 2019. As of December 31, 2019, the carrying value of these newly subordinated notes held was CHF 20.3 billion.

23 Shareholdings

Executive Board shareholdings

The shareholdings of the Executive Board members, their immediate family and companies in which they have a controlling

interest as well as the value of the unvested share-based compensation awards held by Executive Board members as of December 31, 2019 and 2018, are disclosed in the table below.

Executive Board holdings and values of deferred share-based awards by individual

end of	Number of owned shares ¹	Number of unvested awards ²	Number of owned shares and unvested awards	Value (CHF) of unvested awards at grant date ³	Value (CHF) of unvested awards at year end (at fair value) ⁴
2019					
Tidjane Thiam	66,422	1,303,823	1,370,245	19,084,599	10,833,091
Romeo Cerutti	323,165	458,513	781,678	6,750,770	3,820,259
Brian Chin	494,030	1,430,886	1,924,916	20,368,149	11,843,258
Thomas P. Gottstein	150,214	672,361	822,575	9,574,478	5,530,279
Lydie Hudson	26,175	295,386	321,561	3,739,373	2,832,024
David R. Mathers	84,360	1,029,891	1,114,251	13,509,668	9,392,954
David Miller	–	734,280	734,280	10,240,437	8,888,164
Antoinette Poschung	123,318	139,024	262,342	1,693,270	1,302,361
Helman Sitohang	264,737	1,007,352	1,272,089	14,683,925	8,198,365
James B. Walker	100,153	317,330	417,483	4,181,205	3,834,492
Lara J. Warner	–	786,568	786,568	11,361,535	6,138,554
Philipp Wehle	21,540	364,059	385,599	4,735,987	3,862,390
Total	1,654,114	8,539,473	10,193,587	119,923,396	76,476,192
2018					
Tidjane Thiam	64,302	990,706	1,055,008	16,430,736	6,923,084
James L. Amine	426,726	1,046,190	1,472,916	17,300,812	7,049,362
Pierre-Olivier Bouée	74,079	512,085	586,164	8,287,028	4,019,900
Romeo Cerutti	269,373	389,685	659,058	6,423,655	2,734,410
Brian Chin	431,274	1,137,731	1,569,005	18,494,683	8,600,260
Peter Goerke	21,953	342,324	364,277	5,655,877	2,438,237
Thomas P. Gottstein	118,976	402,042	521,018	6,752,150	2,831,436
Iqbal Khan	70,060	519,389	589,449	8,757,970	3,530,037
David R. Mathers	84,360	793,632	877,992	13,180,647	5,973,132
Joachim Oechsli	61,092	406,852	467,944	6,771,566	2,779,441
Helman Sitohang	264,737	822,060	1,086,797	13,497,946	5,857,016
Lara J. Warner	2,036	469,641	471,677	7,989,249	3,102,330
Total	1,888,968	7,832,337	9,721,305	129,542,319	55,838,645

¹ Includes shares that were initially granted as deferred compensation and have vested.

² Includes unvested shares originating from LTI opportunities calculated on the basis of maximum opportunity for awards that have not reached the end of their three-year performance period, given that the actual achievement level and associated number of unvested shares cannot be determined until the end of the performance period. For LTI awards that have reached the end of their three-year performance period, the number of unvested shares reflects the actual number of shares earned based on achievement of the performance target levels.

³ Determined based on the number of unvested awards multiplied by the share price at grant.

⁴ Includes the value of unvested LTI opportunities. For LTI awards that have reached the end of their three-year performance period, the value is based on the actual number of shares eligible to vest. For LTI opportunities that have not reached the end of their three-year performance period, this is determined based on the number of shares at fair value at the time of grant, multiplied by the share price at the end of the year.

Board of Directors shareholdings

The shareholdings of the Board of Directors members, their immediate family and companies in which they have a controlling interest are disclosed in the table below. As of December 31, 2019 and 2018, there were no Board of Directors members with outstanding options.

Board of Directors shareholdings by individual

end of	2019	2018
December 31 (shares) ¹		
Urs Rohner	298,416	268,250
Iris Bohnet	74,916	61,311
Christian Gellerstad ²	51,716	–
Andreas Gottschling	51,391	19,210
Alexander Gut	51,455	37,707
Michael Klein	22,369	6,713
Shan Li ²	7,178	–
Seraina Macia	63,432	49,827
Kai S. Nargolwala	324,088	299,872
Ana Paula Pessoa	24,758	7,672
Joaquin J. Ribeiro	53,253	37,705
Severin Schwan	145,505	129,957
John Tiner	278,188	244,317
Total	1,446,665	1,162,541 ³

¹ Includes Group shares that are subject to a blocking period of up to four years; includes shareholdings of immediate family members.

² Christian Gellerstad and Shan Li were newly elected at the 2019 AGM.

³ Excludes 131,231 shares held by Andreas Koopmann, who did not stand for re-election to the Board as of April 26, 2019, and 79,763 shares held by Alexandre Zeller, who stepped down from the Board as of February 28, 2019.

Shares awarded

for the year 2019	Number of shares	Value of shares (CHF million)
Shares awarded		
Board of Directors	335,089	4
Executive Board ¹	2,041,167	24
Employees ²	106,275,209	1,192

Includes shares, share awards and performance share awards and for the Executive Board LTI awards granted at fair value.

¹ For the individuals who joined the Executive Board and the individuals who left the Executive Board during 2019, compensation relating to the period during which they were members of the Executive Board and, for leavers, during their respective notice period is included.

² Includes shares awarded to employees of subsidiaries of Credit Suisse Group AG and excludes shares awarded to the Executive Board.

Share awards outstanding

end of	2019		2018	
	Number of share awards outstanding in million	Fair value in CHF million	Number of share awards outstanding in million	Fair value in CHF million
Share awards ¹				
Employees	183	2,397	138	1,490
Total share awards	183	2,397	138	1,490

¹ In the interests of transparency also share awards granted to employees of subsidiaries of Credit Suisse Group AG are considered in this disclosure table.

Proposed appropriation of retained earnings and capital distribution

Proposed appropriation of retained earnings

2019

Retained earnings (CHF million)

Balance at beginning of year	5,109
Transfer from reserves for treasury shares	3,429
Net profit/(loss)	(4)
Balance at end of year	8,534
Proposed distribution of CHF 0.1388 per registered share for the financial year 2019 ¹	(339)
Balance to be carried forward	8,195

¹ 2,441,022,237 registered shares – net of own shares held by the company – as of December 31, 2019. The number of registered shares eligible for distribution may change due to the issuance of new registered shares and transactions in own shares.

Proposed distribution out of capital contribution reserves

2019

Capital contribution reserves (CHF million)

Balance at beginning of year	26,321
Capital distribution for the financial year 2018	(662)
Balance at end of year	25,659
Proposed distribution of CHF 0.1388 per registered share for the financial year 2019 ¹	(339)
Balance after distribution	25,320

Distributions are free of Swiss withholding tax and are not subject to income tax for Swiss resident individuals holding the shares as a private investment.

¹ 2,441,022,237 registered shares – net of own shares held by the company – as of December 31, 2019. The number of registered shares eligible for distribution may change due to the issuance of new registered shares and transactions in own shares.

[this page intentionally left blank]

Appendix

Selected five-year information	A-2
List of abbreviations	A-4
Glossary	A-6
Investor information	A-10
Financial calendar and contacts	A-12

Selected five-year information

Selected information – Group

in / end of	2019	2018	2017	2016	2015
Condensed consolidated statements of operations (CHF million)					
Net revenues	22,484	20,920	20,900	20,323	23,797
Provision for credit losses	324	245	210	252	324
Total operating expenses	17,440	17,303	18,897	22,337	25,895
Income/(loss) before taxes	4,720	3,372	1,793	(2,266)	(2,422)
Income tax expense	1,295	1,361	2,741	441	523
Net income/(loss)	3,425	2,011	(948)	(2,707)	(2,945)
Net income/(loss) attributable to noncontrolling interests	6	(13)	35	3	(1)
Net income/(loss) attributable to shareholders	3,419	2,024	(983)	(2,710)	(2,944)
Earnings per share (CHF)					
Basic earnings/(loss) per share	1.35	0.79	(0.41)	(1.27)	(1.65)
Diluted earnings/(loss) per share	1.32	0.77	(0.41)	(1.27)	(1.65)
Consolidated balance sheet (CHF million)					
Total assets	787,295	768,916	796,289	819,861	820,805
Share capital	102	102	102	84	78
Shareholders' equity	43,644	43,922	41,902	41,897	44,382
Shares outstanding (million)					
Shares outstanding	2,436.2	2,550.6	2,550.3	2,089.9	1,951.5
Dividend per share (CHF)					
Dividend per share	0.2776 ¹	0.2625	0.25	0.70	0.70
Ratios (%)					
Return on assets ²	0.4	0.2	(0.1)	(0.3)	(0.3)
Return on equity	7.7	4.7	(2.3)	(6.1)	(6.8)
Dividend payout ratio	20.6	33.2	-	-	-
Equity to asset ratio	5.5	5.7	5.3	5.1	5.4

¹ Proposal of the Board of Directors to the Annual General Meeting on April 30, 2020.

² Based on amounts attributable to shareholders.

Selected information – Bank

in / end of	2019	2018	2017	2016	2015
Condensed consolidated statements of operations (CHF million)					
Net revenues	22,686	20,820	20,965	20,393	23,811
Provision for credit losses	324	245	210	252	324
Total operating expenses	17,969	17,719	19,202	22,630	26,136
Income/(loss) before taxes	4,393	2,856	1,553	(2,489)	(2,649)
Income tax expense	1,298	1,134	2,781	400	488
Net income/(loss)	3,095	1,722	(1,228)	(2,889)	(3,137)
Net income/(loss) attributable to noncontrolling interests	14	(7)	27	(6)	(7)
Net income/(loss) attributable to shareholder	3,081	1,729	(1,255)	(2,883)	(3,130)
Consolidated balance sheet (CHF million)					
Total assets	790,459	772,069	798,372	822,065	822,736
Share capital	4,400	4,400	4,400	4,400	4,400
Shareholder's equity	46,120	45,296	42,670	42,789	45,412
Number of shares outstanding (million)					
Number of shares outstanding	4,399.7	4,399.7	4,399.7	4,399.7	4,399.7

List of abbreviations

A

ABO	Accumulated benefit obligation
ABS	Asset-backed securities
ADS	American Depositary Shares
AEOI	Automatic Exchange of Information
AES®	Advanced execution services
AGM	Annual General Meeting
AIG	American International Group, Inc.
A-IRB	Advanced internal ratings-based approach
ALM	Asset & Liability Management
AMA	Advanced measurement approach
AMF	Asset Management Finance LLC
AoA	Articles of Association
AOCI	Accumulated other comprehensive income/(loss)
ASC	Accounting Standards Codification
ASU	Accounting Standards Update

B

BA	Bachelor of Arts
BBSW	Bank Bill Swap Rate
BCBS	Basel Committee on Banking Supervision
BEAT	Base Erosion and Anti-abuse Tax
BIS	Bank for International Settlements
Board	Board of Directors
bp	basis points
BS	Bachelor of Science
BVG	Swiss Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans

C

CARMC	Capital Allocation and Risk Management Committee
CCA	Contingent Capital Awards
CCAR	Comprehensive Capital Analysis and Review
CCO	Chief Compliance and Regulatory Affairs Officer
CDO	Collateralized debt obligation
CDS	Credit default swap
CDX	Credit default swap index
CEB	Conduct and Ethics Board
CECL	Current expected credit loss
CET1	Common equity tier 1
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CFTC	Commodity Futures Trading Commission
CLO	Collateralized loan obligation
CMBS	Commercial mortgage-backed securities
CMI	Continuous Mortality Investigation
CMS	Constant maturity swap
COF	Capital Opportunity Facility
COO	Chief Operating Officer
COSO	Committee of Sponsoring Organizations of the Treadway Commission

C (continued)

CP	Commercial paper
CPR	Constant prepayment rate
CRD	Capital Requirements Directive
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CSI	Credit Suisse International
CSSEL	Credit Suisse Securities (Europe) Limited
CVA	Credit valuation adjustment

D

DFS	Department of Financial Services
DOJ	US Department of Justice
DVA	Debit valuation adjustment

E

EAD	Exposure at default
EBITDA	Earnings before interest, taxes, depreciation and amortization
ECB	European Central Bank
EGM	Extraordinary General Meeting
EMEA	Europe, Middle East and Africa
EMIR	European Market Infrastructure Regulation
ERCF	Enterprise risk and control framework
ERISA	US Employee Retirement Income Security Act of 1974
EU	European Union

F

FASB	Financial Accounting Standards Board
FATCA	Foreign Account Tax Compliance Act
FDIC	Federal Deposit Insurance Corporation
Fed	US Federal Reserve
FINMA	Swiss Financial Market Supervisory Authority FINMA
FINRA	Financial Industry Regulatory Authority
FMIA	Swiss Federal Act on Financial Market Infrastructure and Market Conduct in Securities and Derivatives Trading
FSA	UK Financial Services Authority
FSB	Financial Stability Board
FSMA	Financial Services and Markets Act 2000
FTQ Lite	Flight to quality lite

G

G7	Group of seven leading industrial nations
G10	Group of Ten
G20	Group of Twenty Finance Ministers and Central Bank Governors
GAAP	Generally accepted accounting principles
GDP	Gross domestic product
GRI	Global Reporting Initiative
G-SIB	Global Systemically Important Bank

H

HQLA	High quality liquid assets
HNWI	High-net-worth individuals

I

IAF	Impact Advisory and Finance
IBOR	Interbank offered rate
ICE	Intercontinental Exchange
ICS	Internal Control System
IFRS	International Financial Reporting Standards
IHC	US intermediate holding company
IPO	Initial public offering
IPRE	Income producing real estate
IRC	Incremental risk charge
IRS	Internal Revenue Service
ISDA	International Swaps and Derivatives Association, Inc.
IT	Information technology
ITS	International Trading Solutions

J

JD	Juris Doctor
----	--------------

L

LCR	Liquidity coverage ratio
LGD	Loss given default
LIBOR	London Interbank Offered Rate
LLM	Master of laws
LTI	Long-term incentive
LTV	Loan-to-value

M

M&A	Mergers and acquisitions
MA	Master of Arts
MBA	Master of Business Administration
MiFID I	Markets in Financial Instruments Directive
MiFID II	Revised Markets in Financial Instruments Directive
MRTC	Material risk takers and controllers
MSRB	Municipal Securities Rulemaking Board

N

Nasdaq	Nasdaq Stock Market
NAV	Net asset value
NRV	Negative replacement value
NSFR	Net stable funding ratio
NYSE	New York Stock Exchange

O

OCI	Other comprehensive income
OFAC	Office of Foreign Assets Control
OGR	Organizational Guidelines and Regulations
OIS	Overnight Index Swap rate
OPEC	Organization of Petroleum Exporting Countries
OTC	Over-the-counter

P

PAF2	2011 Partner Asset Facility
PBO	Projected benefit obligation
PCR	Position & Client Risk

P (continued)

PD	Probability of default
PFIC	Passive foreign investment company
PRA	Prudential Regulation Authority
PRV	Positive replacement value
PSA	Prepayment speed assumption

R

RMBS	Residential mortgage-backed securities
RNIV	Risk not in VaR
ROE	Return on equity
RoTE	Return on tangible equity
RPSC	Risk Processes & Standards Committee
RRP	Recovery and resolution plan
RRSC	Reputational Risk & Sustainability Committee
RTSR	Relative total shareholder return
RWA	Risk-weighted assets

S

SAPS	Self-administered pension scheme
SEC	US Securities and Exchange Commission
SEI	Significant economic interest
SFTQ	Severe flight to quality
SIBOR	Singapore Interbank Offered Rate
SNB	Swiss National Bank
SOFR	Secured Overnight Financing Rate
SOR	Singapore Swap Offer Rate
SOX	US Sarbanes-Oxley Act of 2002
SPE	Special purpose entity
SPIA	Single premium immediate annuity
SRO	Strategic risk objective
STI	Short-term incentive

T

TBVPS	Tangible book value per share
TCFD	Task Force on Climate-related Financial Disclosures
TLAC	Total loss-absorbing capacity
TRS	Total return swap

U

UHNW	Ultra-high-net-worth
UHNWI	Ultra-high-net-worth individuals
UK	United Kingdom
US	United States of America
US GAAP	US generally accepted accounting principles

V

VaR	Value-at-risk
VARMC	Valuation Risk Management Committee
VIE	Variable interest entity
VIX	Chicago Board of Options Exchange Market Volatility Index

Glossary

A

Advanced execution services® (AES®) AES® is a suite of algorithmic trading strategies, tools and analytics operated by Credit Suisse to facilitate global equity trading. By employing algorithms to execute client orders and limit volatility, AES® helps institutions and hedge funds reduce market impact. Credit Suisse provides access to over 100 trading destinations in over 40 countries and six continents.

Advanced internal ratings-based approach (A-IRB) Under the A-IRB approach, risk weights are determined by using internal risk parameters. We have received approval from FINMA to use, and have fully implemented, the A-IRB approach whereby we provide our own estimates for probability of default (PD), loss given default (LGD) and exposure at default (EAD). We use the A-IRB approach to determine our institutional credit risk and most of our retail credit risk.

Advanced measurement approach (AMA) The AMA is used for measuring operational risk. The methodology is based upon the identification of a number of key risk scenarios that describe the major operational risks we face. Groups of senior staff review each scenario and discuss the likelihood of occurrence and the potential severity of loss. Internal and external loss data, along with certain business environment and internal control factors, such as self-assessment results and key risk indicators, are considered as part of this process. Based on the output from these meetings, we enter the scenario parameters into an operational risk model that generates a loss distribution from which the level of capital required to cover operational risk is determined. We have received approval from FINMA to use an internal model for the calculation of operational risk capital, which is aligned with the requirements of the AMA under the Basel framework.

Affluent and retail clients We define affluent and retail clients as individuals having assets under management below CHF 1 million.

American Depositary Shares (ADS) An ADS, which is evidenced by an American Depositary Receipt, is a negotiable certificate issued by a depositary bank that represents all or part of an underlying share of a foreign-based company held in custody.

B

Backtesting Backtesting is one of the techniques used to assess the accuracy and performance of VaR models. Backtesting is used by regulators to assess the adequacy of regulatory capital held by a bank. It involves comparing of the results produced by the VaR model with the hypothetical trading revenues on the trading book. VaR models that experience less than five exceptions in a rolling 12-month period are considered by regulators to be classified in a defined "green zone". The "green zone" corresponds to backtesting results that do not themselves suggest a problem with the quality or accuracy of a bank's model.

Bank for International Settlements (BIS) The Bank for International Settlements (BIS) serves central banks in their pursuit of monetary and financial stability, fosters international cooperation in those areas and acts as a bank for central banks.

Basel III In December 2010, the Basel Committee on Banking Supervision (BCBS) issued the Basel III framework, which is a comprehensive set of reform measures to strengthen the regulation, supervision and risk management of the banking sector. These measures aim to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, improve risk management and governance and strengthen banks' transparency and disclosures. The phase-in period for Basel III was January 1, 2013 through January 1, 2019.

Basel Committee on Banking Supervision (BCBS) The Basel Committee on Banking Supervision (BCBS) provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance the understanding of key supervisory issues and improve the quality of banking supervision worldwide. It seeks to do so by exchanging information on national supervisory issues, approaches and techniques, with a view to promoting common understanding. At times, the BCBS uses this common understanding to develop guidelines and supervisory standards in areas where they are considered desirable. In this regard, the BCBS is best known for its international standards on capital adequacy, the Core Principles for Effective Banking Supervision and the Concordat on cross-border banking supervision.

Booking center Part of a legal entity of Credit Suisse AG that is registered with a domestic banking license where client assets are administered and booked.

C

CET1 ratio CET1 ratio means the ratio (expressed as a percentage) of CET1 capital divided by risk-weighted assets.

Collateralized debt obligation (CDO) A CDO is a type of structured asset-backed security whose value and payments are derived from a portfolio of underlying fixed-income assets.

Commercial mortgage-backed securities (CMBS) CMBS are a type of mortgage-backed security that is secured by loans on commercial property and can provide liquidity to real estate investors and commercial lenders.

Commercial paper (CP) Commercial paper is an unsecured money-market security with a fixed maturity of 1 to 364 days, issued by large banks and corporations to raise funds to meet short term debt obligations.

Constant prepayment rate (CPR) CPR is a loan prepayment rate that is equal to the proportion of the principal of a pool of loans that is assumed to be paid off prematurely in each period. The calculation of this estimate is based on a number of factors such as historical prepayment rates for previous loans that are similar to ones in the pool and on future economic outlooks.

Credit default swap (CDS) A CDS is a contractual agreement in which the buyer of the swap pays a periodic fee in return for a contingent payment by the seller of the swap following a credit event of a reference entity. A credit event is commonly defined as bankruptcy, insolvency, receivership, material adverse restructuring of debt or failure to meet payment obligations when due.

Credit valuation adjustment (CVA) The CVA represents the market value of counterparty credit risk for uncollateralized OTC derivative instruments.

D

Debit valuation adjustment The debit valuation adjustment represents the market value of our own credit risk for uncollateralized OTC derivative instruments.

Derivatives Derivatives are financial instruments or contracts that meet all of the following three characteristics: (1) their value changes in response to changes in an underlying price, such as interest rate, security price, foreign exchange rate, credit rating/price or index; (2) they require no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors; and (3) their terms require or permit net settlement (US GAAP) or they settle at a future date (IFRS).

E

Exposure at default (EAD) The EAD represents the expected amount of credit exposure in the event of a default and reflects the current drawn exposure and an expectation regarding the future evolution of the credit exposure. For loan exposures, a credit conversion factor is applied to project the additional drawn amount. The credit conversion factor related to traded products such as derivatives is based on a simulation using statistical models.

F

Fair value The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

G

G7 The G7 is a group of finance ministers from seven industrialized nations: the US, UK, France, Germany, Italy, Canada and Japan.

G10 The G10 is a group of 11 countries that have agreed to make resources available to the International Monetary Fund and includes Belgium, Canada, France, Italy, Japan, the Netherlands, the UK, the US, Germany, Sweden and Switzerland.

G20 The G20 is a group of finance ministers and central bank governors from 19 countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the UK and the US) and the EU.

H

Haircut The percentage by which an asset's market value is reduced for the purpose of calculating capital, margin requirements and collateral levels. This is used to provide a cushion when lending against collateral to account for possible adverse movements in the value of the collateral.

Higher Trigger Capital Amount The capital ratio write-down triggers for certain of our outstanding capital instruments take into account the fact that other outstanding capital instruments that contain relatively higher capital ratios as part of their trigger feature are expected to convert into equity or be written down prior to the write-down of such capital instruments. The amount of additional capital that is expected to be contributed by such conversion into equity or write-down is referred to as the Higher Trigger Capital Amount.

High-net-worth individuals (HNWI) We define high-net-worth individuals as individuals having assets under management in excess of CHF 1 million.

I

Incremental risk charge (IRC) The IRC represents an estimate of the issuer default and migration risk of positions in the trading book over a one-year capital horizon at a 99.9% confidence level, taking into account the liquidity horizons of individual positions. This includes sovereign debt, but excludes securitizations and correlation products.

L

Liquidity coverage ratio (LCR) The LCR aims to ensure that banks have a stock of unencumbered high-quality liquid assets available to meet liquidity needs for a 30-day time horizon under a severe stress scenario. The LCR is comprised of two components: the value of the stock of high quality liquid assets in stressed conditions and the total net cash outflows calculated according to specified scenario parameters. The ratio of liquid assets over net cash outflows should be at least 100%.

Lombard loan A loan granted against pledged collateral in the form of securities.

London Interbank Offered Rate (LIBOR) LIBOR is a daily reference rate based on the interest rates at which banks borrow unsecured funds from other banks in the London wholesale money market.

Loss given default (LGD) LGD parameters consider seniority, collateral, counterparty industry and, in certain cases, fair value markdowns. LGD estimates are based on an empirical analysis of historical loss rates and are calibrated to reflect time and cost of recovery as well as economic downturn conditions. For much of the loan portfolio of private banking, corporate and institutional businesses, the LGD is primarily dependent upon the type and amount of collateral pledged. For other retail credit risk, predominantly loans secured by financial collateral, pool LGDs differentiate between standard and higher risks, as well as domestic and foreign transactions. The credit approval and collateral monitoring processes are based on loan-to-value (LTV) limits. For mortgages (residential or commercial), recovery rates are differentiated by type of property.

M

Match funded Match funded balance sheet items consist of assets and liabilities with close to equal liquidity durations and value so that the liquidity and funding generated or required by the positions are substantially equivalent.

Material risk takers and controllers (MRTC) MRTC are employees who, either individually or as a part of a group, are considered to have a potentially material impact on the Group's risk profile.

N

Negative replacement value (NRV) NRV represents the negative fair value of a derivative financial instrument at a given financial reporting date. A negative replacement value reflects the amount payable to the counterparty if the derivative transaction were to be settled at the reporting date, or alternatively, the cost at a given reporting date to close an open derivative position with a fully offsetting transaction.

Net stable funding ratio (NSFR) The NSFR is intended to ensure that banks maintain a structurally sound long-term funding profile beyond one year and is a complementary measure to the LCR. It is structured to ensure that illiquid assets are funded with an appropriate amount of stable long-term funds. The standard is defined as the ratio of available stable funding over the amount of required stable funding. The ratio should always be at least 100%.

N (continued)

Netting agreements Netting agreements are contracts between two parties where under certain circumstances, such as insolvency, bankruptcy or any other credit event, mutual claims from outstanding business transactions can be offset against each other. The inclusion of a legally binding netting agreement reduces the default risk from a gross to a net amount.

O

Over-the-counter (OTC) Over-the-counter securities and derivatives are not traded on an exchange but via private contracts between counterparties.

P

Position risk Component of the economic capital framework, which is used to assess, monitor and report risk exposures throughout the Group. Position risk is the level of unexpected loss in economic value on our portfolio of positions over a one-year horizon which is exceeded with a given small probability (1% for risk management purposes; 0.03% for capital management purposes).

Positive replacement value (PRV) PRV represents the positive fair value of a derivative financial instrument at a given reporting date. A positive replacement value reflects the amount receivable from the counterparty if the derivative transaction were to be settled at the reporting date, or alternatively, the cost at a given reporting date to enter into the exact same transaction for the residual term, if the existing counterparty should default.

Probability of default (PD) PD parameters capture the risk of a counterparty defaulting over a one-year time horizon. PD estimates are based on time-weighted averages of historical default rates by rating grade, with low-default-portfolio estimation techniques applied for higher quality rating grades. Each PD reflects the internal rating for the relevant obligor.

R

Regulatory VaR Regulatory VaR is a version of VaR that uses an exponential weighting technique that automatically increases VaR where recent short-term market volatility is greater than long-term volatility in the two-year dataset. Regulatory VaR uses an expected shortfall calculation based on average losses, and a ten-day holding period. This results in a more responsive VaR model, as the overall increases in market volatility are reflected almost immediately in the regulatory VaR model.

Repurchase agreements Repurchase agreements are securities sold under agreements to repurchase substantially identical securities. These transactions normally do not constitute economic sales and are therefore treated as collateralized financing transactions and are carried in the balance sheet at the amount of cash received (liability) and cash disbursed (asset), respectively.

Residential mortgage-backed securities (RMBS) RMBS are a type of mortgage-backed security composed of a wide array of different non-commercial mortgage debts. They securitize the mortgage payments of non-commercial real estate. Different residential mortgages with varying credit ratings are pooled together and sold in tranches to investors.

R (continued)

Reverse repurchase agreements Reverse repurchase agreements are purchases of securities under agreements to resell substantially identical securities. These transactions normally do not constitute economic sales and are therefore treated as collateralized financing transactions and are carried in the balance sheet at the amount of cash received (liability) and cash disbursed (asset), respectively.

Risk management VaR Risk management VaR is a version of VaR that uses an exponential weighting technique that automatically adjusts VaR where recent short-term market volatility differs from long-term volatility in the two-year dataset. Risk management VaR uses an expected shortfall calculation based on average losses, and a one-day holding period. This results in a more responsive VaR model, as the overall changes in market volatility are reflected almost immediately in the risk management VaR model.

Risk mitigation Risk mitigation refers to measures undertaken by the Group or the Bank to actively manage its risk exposure. For credit risk exposure, such measures would normally include utilizing credit hedges and collateral, such as cash and marketable securities. Credit hedges represent the notional exposure that can be transferred to other market counterparties, generally through the use of credit default swaps. In addition, risk mitigation also includes the active management of a loan portfolio by selling or sub-participating positions.

Risk not in VaR (RNIV) RNIV captures a variety of risks, such as certain basis risks, higher order risks and cross risks between asset classes, not adequately captured by the VaR model for example due to lack of sufficient or accurate risk or historical market data.

Risk-weighted assets (RWA) The value of the Group's assets weighted according to certain identified risks for compliance with regulatory provisions.

S

Stressed VaR Stressed VaR replicates a VaR calculation on the current portfolio of the Group or the Bank, taking into account a one-year observation period relating to significant financial stress; it helps reduce the pro-cyclicality of the minimum capital requirements for market risk.

Swiss Financial Supervisory Authority FINMA (FINMA) FINMA, as an independent supervisory authority, protects creditors, investors and policy holders, ensuring the smooth functioning of the financial markets and preserving their reputation. In its role as state supervisory authority, FINMA acts as an oversight authority of banks, insurance companies, exchanges, securities dealers, collective investment schemes, distributors and insurance intermediaries. It is responsible for combating money laundering and, where necessary, conducts restructuring and bankruptcy proceedings and issues operating licenses for companies in the supervised sectors. Through its supervisory activities, it ensures that supervised institutions comply with the requisite laws, ordinances, directives and regulations and continues to fulfill the licensing requirements. FINMA also acts as a regulatory body; it participates in legislative procedures, issues its own ordinances and circulars where authorized to do so, and is responsible for the recognition of self-regulatory standards.

T

"Too Big to Fail" In 2011, the Swiss Parliament passed legislation relating to big banks. The legislation includes capital and liquidity requirements and rules regarding risk diversification and emergency plans designed to maintain systemically relevant functions even in the event of threatened insolvency.

Total loss-absorbing capacity (TLAC) TLAC is a regulatory requirement designed to ensure that Global Systemically Important Banks (G-SIBs) have the loss-absorbing and recapitalization capacity so that, in an immediately following resolution, critical functions can continue without requiring taxpayer support or threatening financial stability.

Total return swap (TRS) A TRS is a swap agreement in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of an underlying asset, which includes both the income it generates and any capital gains. In total return swaps, the underlying asset, referred to as the reference asset, is usually an equity index, loans or bonds.

U

Ultra-high-net-worth individuals (UHNWI) Ultra-high-net-worth individuals have assets under management in excess of CHF 50 million or total wealth exceeding CHF 250 million.

V

Value-at-risk (VaR) VaR is a technique used to measure the potential loss in fair value of financial instruments based on a statistical analysis of historical price trends and volatilities. VaR as a concept is applicable for all financial risk types with adequate price histories; the use of VaR allows the comparison of risk across different businesses.

Investor information

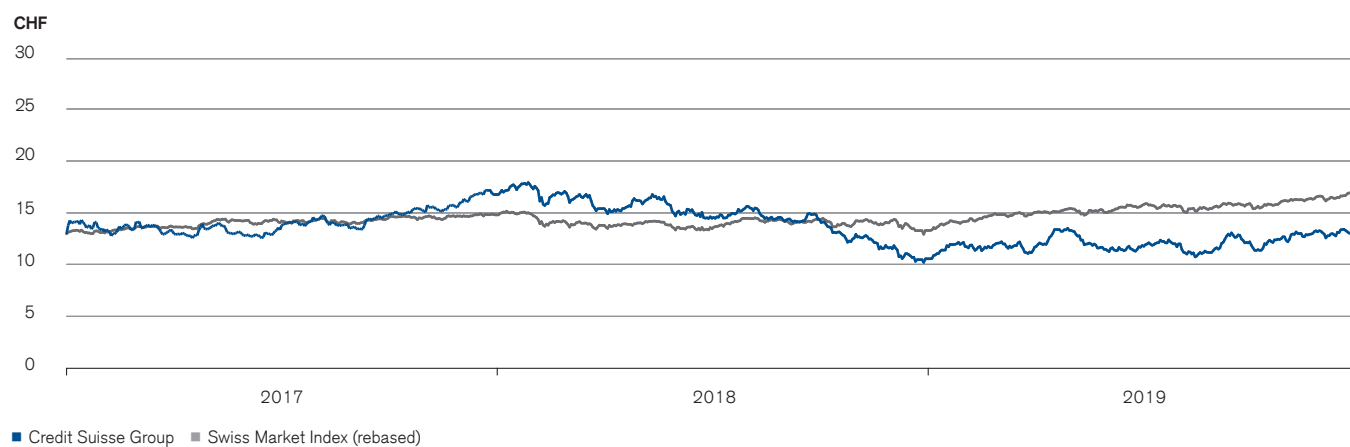
Share data

in / end of	2019	2018	2017
Share price (common shares, CHF)			
Average	12.11	15.17	15.11
Minimum	10.59	10.45	13.04
Maximum	13.54	18.61	17.84
End of period	13.105	10.80	17.40
Share price (American Depositary Shares, USD)			
Average	12.15	15.50	15.35
Minimum	10.74	10.42	13.37
Maximum	13.63	19.98	18.02
End of period	13.45	10.86	17.85
Market capitalization			
Market capitalization (CHF million)	32,451 ¹	27,605	44,475
Dividend per share (CHF)			
Dividend per share	0.2776 ²	0.2625	0.25

¹ Excludes shares held as part of the share repurchase programs.

² Proposal of the Board of Directors to the Annual General Meeting on April 30, 2020. Fifty percent of the distribution will be paid out of capital contribution reserves, and fifty percent will be paid out of retained earnings.

Share performance



Ticker symbols / stock exchange listings

	Common shares	ADS ¹
Ticker symbols		
SIX Financial Information	CSGN	–
New York Stock Exchange	–	CS
Bloomberg	CSGN SW	CS US
Reuters	CSGN.S	CS.N
Stock exchange listings		
Swiss security number	1213853	570660
ISIN number	CH0012138530	US2254011081
CUSIP number	–	225 401 108

¹ One American Depositary Share (ADS) represents one common share.

Credit ratings and outlook

as of March 24, 2020	Short-term debt	Long-term debt	Outlook
Credit Suisse Group AG			
Moody's	–	Baa2	Positive
Standard & Poor's	–	BBB+	Stable
Fitch Ratings	F2	A-	Positive
Rating and Investment Information	–	A	Positive
Credit Suisse AG			
Moody's	P-1	A1	Positive
Standard & Poor's	A-1	A+	Stable
Fitch Ratings	F1	A	Positive

Foreign currency translation rates

	End of			Average in		
	2019	2018	2017	2019	2018	2017
1 USD / 1 CHF	0.97	0.99	0.98	0.99	0.98	0.98
1 EUR / 1 CHF	1.09	1.13	1.17	1.11	1.15	1.11
1 GBP / 1 CHF	1.27	1.26	1.32	1.27	1.30	1.27
100 JPY / 1 CHF	0.89	0.89	0.87	0.91	0.88	0.88

Financial calendar and contacts

Financial calendar

First quarter results 2020	Thursday, April 23, 2020
Annual General Meeting 2020	Thursday, April 30, 2020
Second quarter results 2020	Thursday, July 30, 2020

Investor relations

Phone	+41 44 333 71 49
E-mail	investor.relations@credit-suisse.com
Internet	credit-suisse.com/investors

Media relations

Phone	+41 844 33 88 44
E-mail	media.relations@credit-suisse.com
Internet	credit-suisse.com/news

Financial information and printed copies

Annual reports	credit-suisse.com/annualreporting
Interim reports	credit-suisse.com/interimreporting

US share register and transfer agent

ADS depository bank	The Bank of New York Mellon
Shareholder correspondence address	BNY Mellon Shareowner Services P.O. Box 505000 Louisville, KY 40233-5000
Overnight correspondence address	BNY Mellon Shareowner Services 462 South 4th Street, Suite 1600 Louisville, KY 40202
US and Canada phone	+1 866 886 0788
Phone from outside US and Canada	+1 201 680 6825
E-mail	shrrelations@cpushareownerservices.com

Swiss share register and transfer agent

Address	Credit Suisse Group AG Share Register RXS 8070 Zurich, Switzerland
Phone	+41 44 332 02 02
E-mail	share.register@credit-suisse.com

Main offices

Switzerland

Credit Suisse
Paradeplatz 8
8070 Zurich
Switzerland
Tel. +41 44 333 11 11

Europe, Middle East and Africa

Credit Suisse
One Cabot Square
London E14 4QJ
United Kingdom
Tel. +44 20 7888 8888

Americas

Credit Suisse
Eleven Madison Avenue
New York, NY 10010
United States
Tel. +1 212 325 2000

Credit Suisse
Rua Leopoldo Couto de
Magalhães Jr. 700
São Paulo 04542-000
Brazil
Tel. +55 11 3701 6000

Asia Pacific

Credit Suisse
International Commerce Centre
One Austin Road West
Kowloon
Hong Kong
Tel. +852 2101 6000

Credit Suisse
One Raffles Link
#05-02
Singapore 039393
Singapore
Tel. +65 6212 6000

Credit Suisse
Izumi Garden Tower
6-1, Roppongi 1-Chome
Minato-ku
Tokyo, 106-6024
Japan
Tel. +81 3 4550 9000

Production: Management Digital Data AG

Printer: Neidhart + Schön Print AG

Paper (cover): Nautilus, SuperWhite, matt, 100% Recycling, 350g/m²

Paper (content): Image Impact, HighWhite, matt, FSC-Mix, 100g/m²

Credit Suisse values environmental sustainability. This publication is printed on paper which is FSC certified. FSC promotes the responsible management of forests according to environmental, social and economic criteria. This report was produced using environmentally friendly printing inks that comply with European standard EN 71-3.



Cautionary statement regarding forward-looking information

This report contains statements that constitute forward-looking statements. In addition, in the future we, and others on our behalf, may make statements that constitute forward-looking statements. Such forward-looking statements may include, without limitation, statements relating to the following:

- our plans, targets or goals;
- our future economic performance or prospects;
- the potential effect on our future performance of certain contingencies; and
- assumptions underlying any such statements.

Words such as “believes,” “anticipates,” “expects,” “intends” and “plans” and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. We do not intend to update these forward-looking statements.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that predictions, forecasts, projections and other outcomes described or implied in forward-looking statements will not be achieved. We caution you that a number of important factors could cause results to differ materially from the plans, targets, goals, expectations, estimates and intentions expressed in such forward-looking statements. These factors include:

- the ability to maintain sufficient liquidity and access capital markets;
- market volatility and interest rate fluctuations and developments affecting interest rate levels, including the persistence of a low or negative interest rate environment;
- the strength of the global economy in general and the strength of the economies of the countries in which we conduct our operations, in particular the risk of continued slow economic recovery or downturn in the EU, the US or other developed countries or in emerging markets in 2020 and beyond;
- the emergence of widespread health emergencies, infectious diseases or pandemics, such as COVID-19;
- the direct and indirect impacts of deterioration or slow recovery in residential and commercial real estate markets;
- adverse rating actions by credit rating agencies in respect of us, sovereign issuers, structured credit products or other credit-related exposures;
- the ability to achieve our strategic goals, including those related to our targets, ambitions and financial goals;
- the ability of counterparties to meet their obligations to us and the adequacy of our allowance for credit losses;
- the effects of, and changes in, fiscal, monetary, exchange rate, trade and tax policies, as well as currency fluctuations;

- political, social and environmental developments, including war, civil unrest or terrorist activity and climate change;
- the ability to appropriately address social, environmental and sustainability concerns that may arise from our business activities;
- the effects of, and the uncertainty arising from, the UK’s withdrawal from the EU;
- the possibility of foreign exchange controls, expropriation, nationalization or confiscation of assets in countries in which we conduct our operations;
- operational factors such as systems failure, human error, or the failure to implement procedures properly;
- the risk of cyber attacks, information or security breaches or technology failures on our business or operations;
- the adverse resolution of litigation, regulatory proceedings and other contingencies;
- actions taken by regulators with respect to our business and practices and possible resulting changes to our business organization, practices and policies in countries in which we conduct our operations;
- the effects of changes in laws, regulations or accounting or tax standards, policies or practices in countries in which we conduct our operations;
- the expected discontinuation of LIBOR and other interbank offered rates and the transition to alternative reference rates;
- the potential effects of changes in our legal entity structure;
- competition or changes in our competitive position in geographic and business areas in which we conduct our operations;
- the ability to retain and recruit qualified personnel;
- the ability to maintain our reputation and promote our brand;
- the ability to increase market share and control expenses;
- technological changes instituted by us, our counterparties or competitors;
- the timely development and acceptance of our new products and services and the perceived overall value of these products and services by users;
- acquisitions, including the ability to integrate acquired businesses successfully, and divestitures, including the ability to sell non-core assets; and
- other unforeseen or unexpected events and our success at managing these and the risks involved in the foregoing.

We caution you that the foregoing list of important factors is not exclusive. When evaluating forward-looking statements, you should carefully consider the foregoing factors and other uncertainties and events, including the information set forth in *I – Information on the company – Risk factors*.



CREDIT SUISSE GROUP

Paradeplatz 8

8070 Zurich

Switzerland

credit-suisse.com