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The Success
of Small
Countries

Contents

- 03 Introduction
- 04 The debate
- 06 Success:
 Size, age, trade and heterogeneity
- 12 Intangible infrastructure
- 19 Efficiencies or inefficiencies of scale?
- 26 The break-up of Czechoslovakia
- 28 German re-unification
- 30 Cities and corporations
- 36 References
- 39 Imprint / Disclaimer

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Introduction

Since 1945, the number of UN country members has risen from nearly 50 to 193, a nearly four-fold rise in the number of countries in the world, two-thirds of which could be classified as 'small'. Note that 77% of all of the small states in the world have been formed in the past 70 years. Many of these have been born out of transitions to democracy. In a recent Credit Suisse Research Institute report (*From Spring to Revival*) we noted 87 transitions to democracy since 1952, 46% of which involved small countries such as Georgia, Latvia, the Czech Republic and Slovakia.

There is clearly an important underlying trend at work here, the rise of small states. Does size matter to the economic success of a state? Are smaller states at a disadvantage versus larger ones in an increasingly competitive world? Can breakups lead to better economic outcomes?

Not only is the number of small countries growing, but the global political economy has changed in a way that both enables and challenges small countries. For example, globalization (as measured by global trade as a % of GDP) and the rise in the number of states have grown in tandem. Globalization has driven the growth of small states and separate customs territories (WTO definition) such as Dubai, Hong Kong SAR, Singapore and Ireland. One innovation in this study is our construction of the CS Country Strength index, that helps to identify those small countries that are best placed to weather the pressures placed upon them by globalization.

Recent financial crises have also shone the spotlight on small countries. They were the prominent financial and economic losers in the aftermath of the global financial crisis and the onset of the Eurozone crisis. Peak to trough falls in GDP from 2008 to 2014 have been most dramatic for the Baltic States, Iceland, Ireland, and Portugal. On the other hand, it is worth mentioning that older small countries such as Switzerland and Sweden fared much better.

We fully recognize that economic considerations are just one dimension of many when issues of statehood are at stake. Yet, there is no doubt the Eurozone crisis has brought to the fore the issues of the economic independence, political power and institutional quality of Europe's small states. As small states have been amongst the economic success stories of the past 20 years, we think it is worth exploring this trend in depth.

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The debate

The debate on what would happen if Scotland or Catalonia became independent opens up some very interesting arguments. On one side we have politicians and corporations advocating the “united we stand, divided we fail” view. Their main argument is that a break-up would create a lot of uncertainty on the legal, monetary and fiscal fronts. On the other side, those in favor of independence argue that Scotland and Catalonia are culturally, politically and economically distinct from the “Union”.

We do not seek to add to these arguments but we would like to add another, important dimension to the debate. That is, can small, independent states be successful on their own? The issue is a complex one.

We need to define size and we need to agree on how to measure success (GDP growth, GDP per capita, etc).¹ But other factors might influence the relationship between size and success. Consider trade openness, homogeneity and age for instance. The more open a country is to trade the more the whole world becomes the relevant market for that country. So in a world of free trade, political borders are economically irrelevant and small countries can be as successful as some of the larger ones, that can benefit from a large domestic market.

Homogeneity or heterogeneity is another important issue. As we will see, heterogeneity provides a ceiling to a potential size of a country.

For instance, age or “vintage” has multiple influences: the stability of institutions or infrastructure depends on the country’s age. Older, small countries, notably those in the Alpine and Nordic regions tend to be pinpointed as the ‘model’ for other small nations to follow though many of the factors that have contributed to the success of the Alpine or Nordic countries are not transferrable.

Finally, we consider the lessons and economies of the amicable divorces of the Czech Republic and Slovakia, and the fusion of West and East Germany – clearly recognizing that these are all unique cases with their specific characteristics.

What is new or unexpected?

- The rise of new small states in the context of globalization has been one of the key geo-economic megatrends of the past 30 years. We found a negative correlation between size and GDP per capita. This is particularly true for high income countries.

- If we add education, healthcare or intangible infrastructure as measures of success, we find that small countries do proportionately very well. For example, with respect to UN’s Human Development Index (which combines GNI per capita, education and health metrics), small countries make up over half of the world’s top 30 countries. Scotland and Catalonia show higher HDI scores than the U.K. and Spain, respectively.
- Our Country Strength indicator (which includes other factors such as HDI, Credit Suisse Intangible Infrastructure Index, Credit Suisse Globalization index, etc.) has six small countries in the top 10. In addition, wealth inequality is less pronounced for small than large countries.
- Small countries are more homogeneous and homogeneity plays an important role in determining the success of a country. Cultural, ethnic, religious and linguistic diversity creates a ceiling to the potential size of a country. Homogeneous countries tend to have higher HDI scores.
- We also found that small countries are more open to international trade or have embraced globalization to a higher extent than larger countries. Trade openness is another factor that is statistically relevant in determining the success of a country. Increased specialization helps small countries be more successful in an increasingly competitive environment. However, we also found that small countries tend to experience higher volatility in economic growth.
- In theory, large countries should benefit from economies of scale. We found that there is a weak correlation between government spending as a percentage of GDP and size. The only area where large countries appear to benefit from economies of scale is in public sector salaries, which are probably a good proxy for the relative size of the government. Smaller countries spend more on education and healthcare as a percentage of GDP (where scale should not be a factor), key factors for the long-term success of a country.

¹ We adopt two relatively simple definitions of state size. 1. Population: **Large:** Population > 25 million, **Medium:** 10 million < Population < 25 million, **Small:** Population < 10 million. By this classification, we have 100 small, 34 medium and 47 large countries. 2. We have also overlaid territory size to population as another measure following the work of Alouini & Hubert. For the sake of comparison we have included the likes of Hong Kong, which is a Special Administrative Region of the People’s Republic of China. By this classification (PAC index), we have 109 small, 46 medium and 39 large countries.

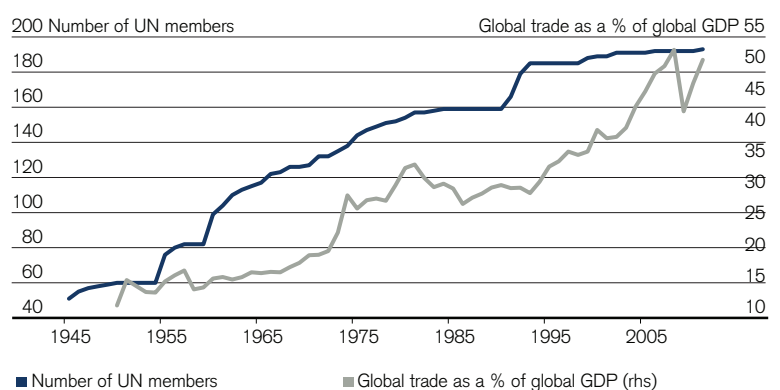


- Contrary to expectations, large countries' economies of scale do not accrue to the population. Our research shows that large countries tend to have higher tax rates for individuals (by 5%). So the cost of funding public services for the individual is higher in larger countries than in small countries. This is true in theory also for corporate rates, which are higher in larger countries. But the ability of corporations and multinationals to minimize their global tax bill is evident when measuring corporate tax collections as a percentage of GDP: it is significantly smaller for larger countries.
- We found a significant difference in economic, social and institutional performance between 'old' small countries and 'new' small countries. In other words, for some new countries where the institutional and legal framework is not yet developed, it might take time to achieve the benefits we uncovered for smaller countries. Institutional quality, rule of law, investment in technology and education are key drivers of the 'path' toward higher output levels.
- As expected, urbanization is a major driver of economic growth. Hong Kong SAR and Singapore show among the world's highest GDP per capita and five city-states are among the top 30 in the HDI metrics. Cities also benefit from significant economies of scale, a higher proportion of services in the economy relative to manufacturing and agriculture, and are completely open to trade.
- Companies are also an important engine for growth. Of the top 500 companies by market capitalization, 86% are based in large countries. However, the contribution of large companies to economic growth accrues to a whole set of countries, not just to the home country. One third of U.S. multinationals' workforce for example is based abroad. In sectors like manufacturing or retail, production often tends to be based in countries different from the "home" country. So, small countries do not need to attempt to attract large corporations to grow at a faster rate, but they need to specialize in areas that provide large corporations with a competitive edge.

Figure 1

Evolution of countries

Source: UN, Credit Suisse



Success: Size, age, trade and heterogeneity

Intangible infrastructure – education, governance, the rule of law – the ability to manage globalization and macro volatility, human development factors drive the success of small countries. Corporate tax receipts, size, democracy and intellectual property are much less important factors.

Table 1

Regression size vs. GDP per capita

Source: World Bank, Credit Suisse

Variable	Coefficient	Standard Error	t-Statistic	Prob.
C	5.26	0.11	47.39	0.00
PCA Index	-0.52	0.04	-12.32	0.00
Trade openness	0.15	0.02	9.33	0.00
Inflation	0.00	0.00	0.15	0.88
Real Interest Rate	-0.00	0.00	-1.22	0.22

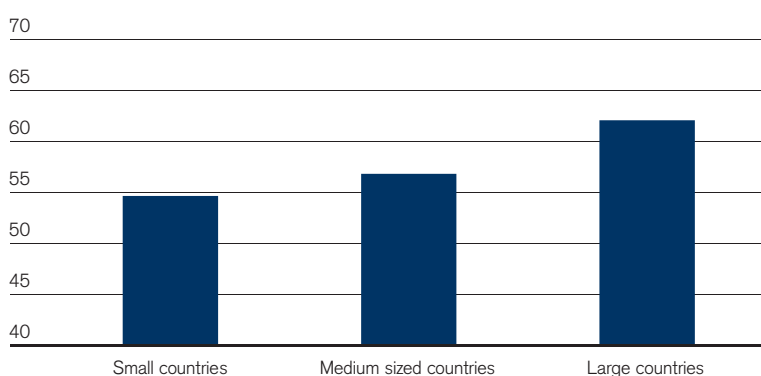
Regression results

R-squared	0.98
Adjusted R-squared	0.98
S.E. of regression	0.07
Sum squared resid	9.37
Log likelihood	2374.74
F-statistic	1202.08
Prob(F-statistic)	0

Figure 2

Wealth held by top 10% of the population

Source: Credit Suisse



In order to measure the influence of size on success, we took a sample of 58 countries for which we analyzed data over a 33-year period (1980-2012) and ran a balanced panel regression. We used GDP per capita as a measure of success and the PCA index as a measure of size. We found a strong negative relationship between size and GDP per capita (see Table 1). In a recent paper, Alouini and Hubert use GDP growth as a measure of success. They concluded that in general there is no clear relationship between size and GDP growth; but for high income countries the relationship is negative and this is particularly true for the Eurozone countries. This is extremely relevant as the Eurozone countries tend to represent quite a homogeneous sample.

In the sample we used above, given the long time frame, small old countries dominate the small country sample. Is age important? Age or perhaps 'vintage' appears to have some influence. There is a four-fold difference in GDP per capita between 'old' small states (those in existence before 1945) and 'new' small countries. This is understandable given that many new small states have come into existence in the emerging world. It also helps to put in perspective the fascination that many economists have with the steady performance of the Alpine economies (Switzerland and the Nordic countries).

Further, as Figure 2 shows, new and old small countries together tend to have a higher per capita GDP than medium sized countries, though they fare less well than the median level for large countries. These aggregated figures disguise the contribution that largely 'old' small countries make to the world's economic elite. They make up 90%, 63% and 66% of the world's Top 10, 30 and 50 countries by GDP per capita, respectively. This at least underlines the importance of small countries as economic dynamos and policy models.

Wealth offers another way of assessing prosperity. Here we draw upon the data available in the Credit Suisse Global Wealth Report that measures the wealth of the 4.6 billion adults in the world (wealth is measured as financial plus non-financial wealth (i.e. property less debt). Wealth tends to have a high correlation with GDP but in itself can also reveal how small states manage their prosperity, particularly in the context of the current debate on wealth inequality.

In terms of wealth per adult, small countries are just ahead of large countries on average. When we sharpen the analysis, we find that wealth concentration as highlighted by the proportion of total wealth held by the top 10%, large countries (62%) appear to be more unequal than small ones (54%), Figure 2. What is also interesting is that while there is a gulf in difference between old small countries and new small countries in average wealth per adult (USD 140,000 vs. USD 25,000) there is not such a large difference between them in terms of concentration of wealth in the top 10%. We note that of the top 10 countries in the world by wealth per adult, 6 of them are small countries led by Switzerland and followed by Norway.

To further extend the analysis beyond GDP or wealth-based measures, we measure other variables of political economic and social attainment. On the basis of the UN's Human Development Index², 'old' small countries make up 11 of the world's top 20 countries (Figure 4).

If we break the data down further, we find that smaller countries in general tend to have higher human development scores (HDI) though the reverse is not true, as a significant share of large countries in our sample also score high on HDI (Figure 5). Interestingly, low and medium level HDI scores are dominant in medium-sized countries. In general, we can say that older, established small countries lead the rankings of global human development score.

A positive trend is that new countries have in general seen an improvement in their human development rankings. As Figure 6 shows, smaller states like Croatia, Slovenia and the Baltics in particular have seen their HDI scores improve consistently.

In several regions of the world, independence movements exist or have existed (e.g. Quebec). Purely for the sake of comparison we have included them in the human development score table on page 8. Given the prevailing interest, we calculate the HDI scores for Catalonia, Flanders, Wallonia, Quebec and Scotland. Quebec would rank the highest among these regions/countries and 13th globally, compared to 11th for Canada. However, based on our

2 <http://hdr.undp.org/en/statistics/hdi>

The Human Development Index (HDI) is a composite measure of health, education and income that was introduced in the first Human Development Report in 1990 as an alternative to purely economic assessments of national progress, such as GDP growth. It soon became the most widely accepted and cited measure of its kind, and has been adapted for national use by many countries. HDI values and rankings in the global Human Development Report are calculated using the latest internationally comparable data from mandated international data providers. Previous HDI values and rankings are retroactively recalculated using the same updated data sets and current methodologies.

Figure 3

Nominal GDP per capita small (median)

Source: World Bank, Credit Suisse

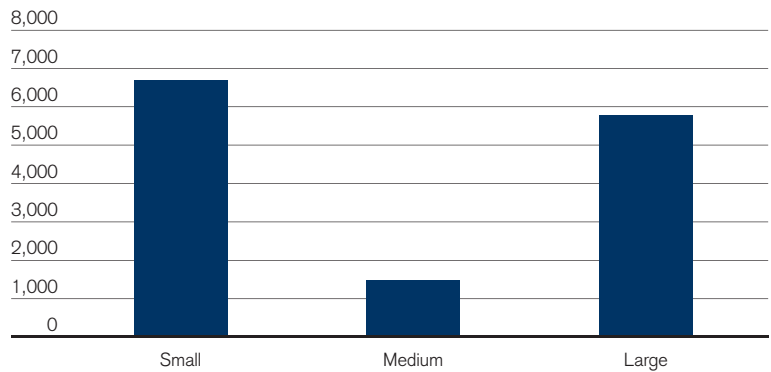


Figure 4

Top 20 based on HDI

Source: UNDP

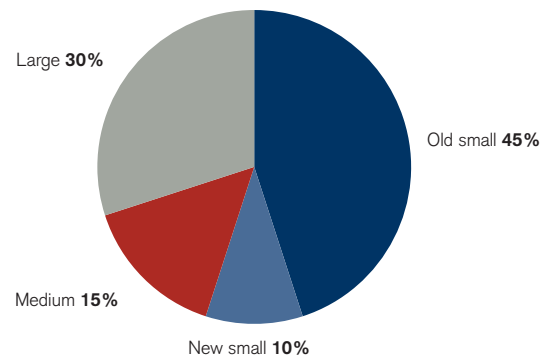
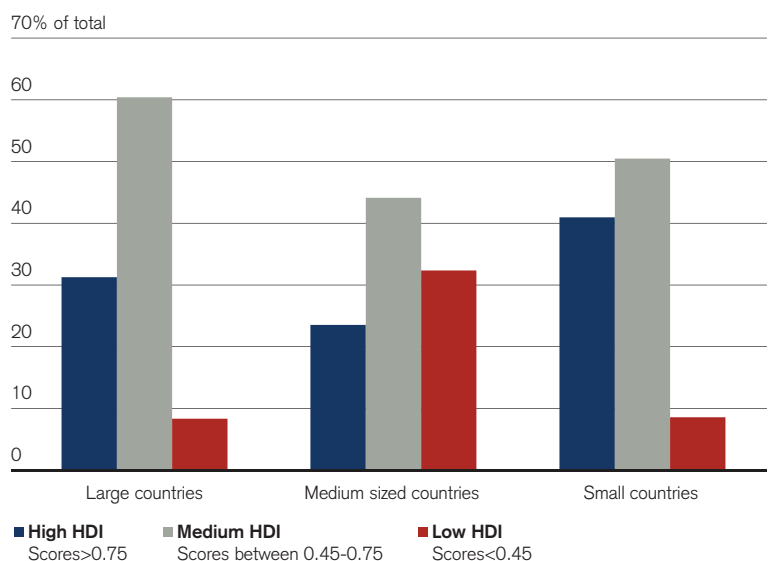


Figure 5

Human Development Index vs. country size

Source: UNDP, Credit Suisse



■ High HDI Scores > 0.75
 ■ Medium HDI Scores between 0.45-0.75
 ■ Low HDI Scores < 0.45

Table 2

HDI league tables

Source: World Bank, Credit Suisse

Country	HDI Score	HDI Rank
Norway	0.955	1
Australia	0.938	2
United States	0.937	3
Netherlands	0.921	4
Germany	0.92	5
New Zealand	0.919	6
Ireland	0.916	7
Sweden	0.916	7
Switzerland	0.913	9
Japan	0.912	10
Canada	0.911	11
South Korea	0.909	12
Quebec	0.906	13
Hong Kong SAR	0.906	13
Iceland	0.906	13
Denmark	0.901	16
Israel	0.900	17
Belgium	0.897	18
Flanders	0.895	19
Austria	0.895	19
Singapore	0.895	19
Catalonia	0.894	22
France	0.893	23
Finland	0.892	24
Slovenia	0.892	24
Scotland*	0.887	26
Spain	0.885	27
Liechtenstein	0.883	28
Italy	0.881	29
Spain (Ex-Catalonia)	0.880	30
Luxembourg	0.875	31
United Kingdom	0.875	32
Czech Republic	0.873	33
United Kingdom (ex-Scotland)	0.871	34
Wallonia	0.869	35
Greece	0.86	36
Brunei Darussalam	0.855	37
Cyprus	0.848	38
Malta	0.847	39
Andorra	0.846	40
Estonia	0.846	41
Slovakia	0.84	42

* Accounting for a geographical share of North Sea oil production.



calculations, both Catalonia and Scotland will rank higher than Spain and the UK, respectively. Catalonia would rank 20th globally, while Spain ranks currently 23rd and would slip to 26th ex-Catalonia. Scotland would rank 23rd if we include a geographical allocation to Scotland's GNI related to the North Sea oil output, versus the current 27th place for the UK and the hypothetical 30th for the UK ex-Scotland. Note that even excluding any allocation of oil output, Scotland would still rank ahead of the UK, but just so.

We mentioned before that trade and heterogeneity influence the potential size of a country and its success. Let us focus on heterogeneity first.

Small countries can differ from large ones in terms of their cultural diversity, the larger the country the more diverse its population is likely to be. Following the approach established in Alesina & Spolaore (2004), we have developed a fractionalization index that aims to gauge the degree of ethnic, religious and linguistic diversity between small and larger countries. We simply equally weight the fractionalization scores across the three variables – language, ethnicity and religion. As the source data is old (2001) there will have been



PHOTO: ISTOCKPHOTO.COM/PERESANZ

Figure 6
Average change in HDI percentile rank since independence

Source: UNDP, Credit Suisse

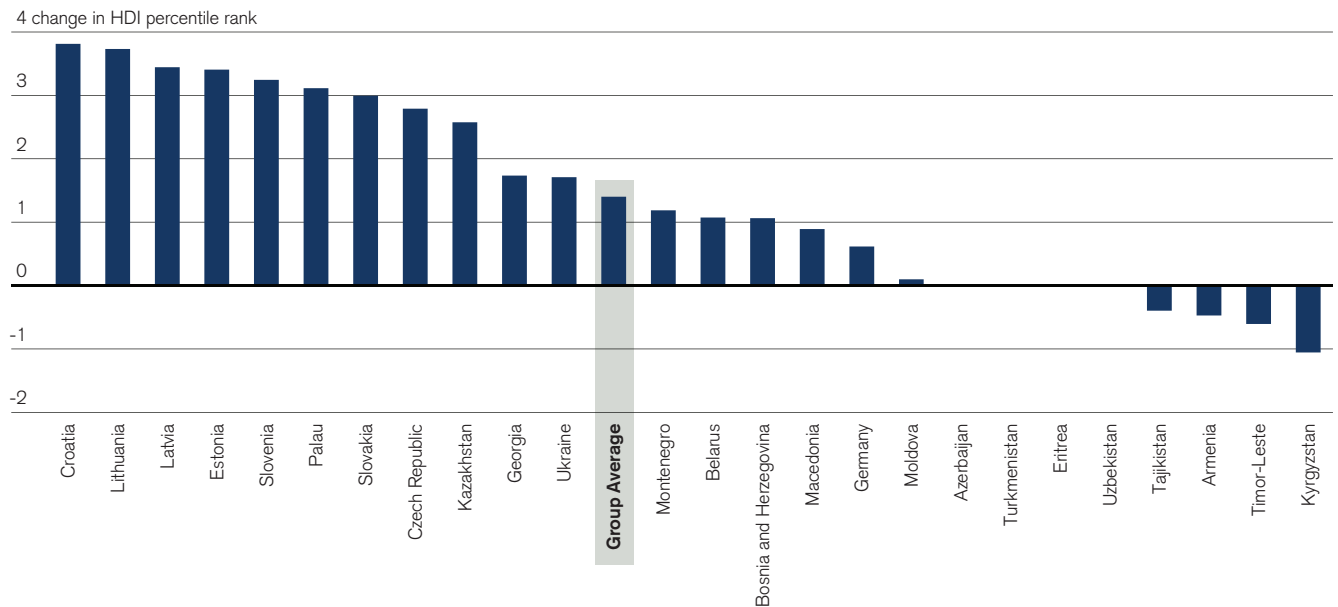


Figure 7
Fractionalization vs. HDI

Source: World Bank, Credit Suisse

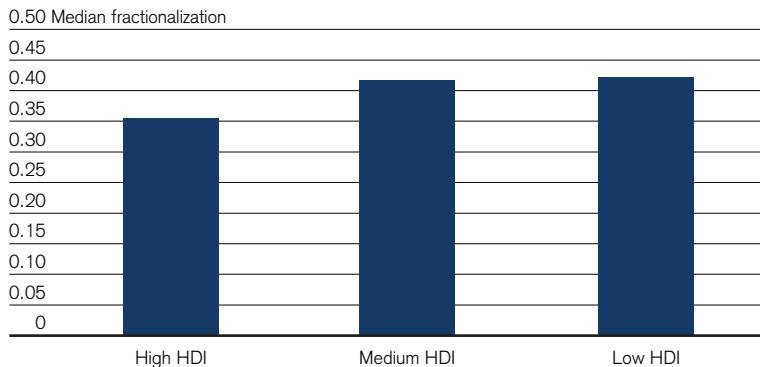


Figure 8
Expectedly, smaller countries tend to be more globalized

Source: World Bank, Credit Suisse

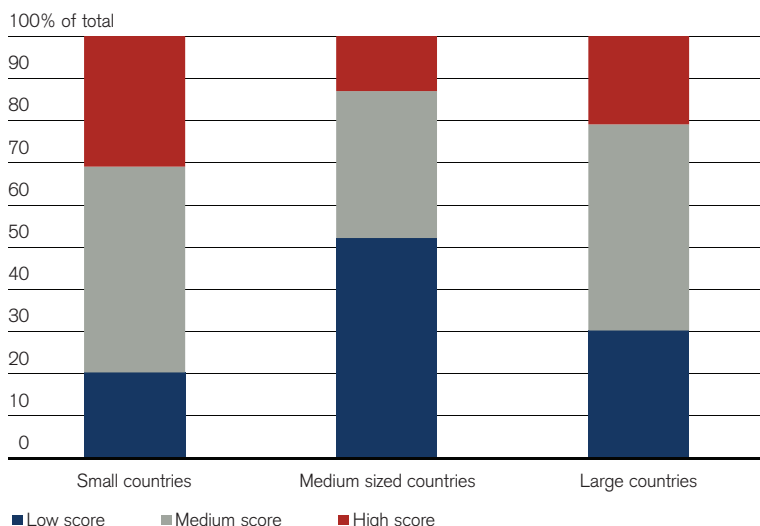
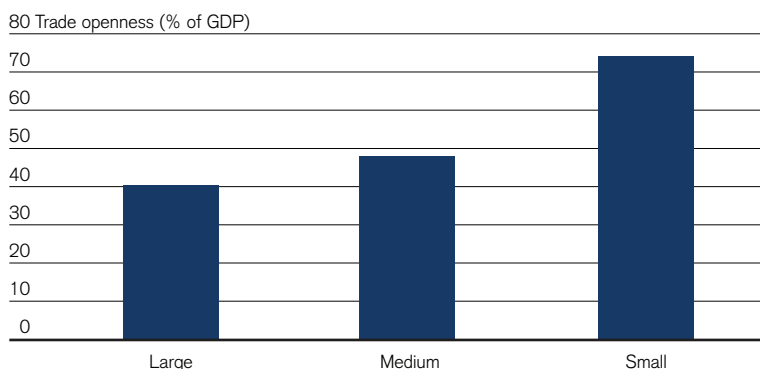


Figure 9
Trade openness

Source: World Bank, Credit Suisse



some changes to the figures, notably in ethnicity.

The overall picture shows that small countries are amongst the least ‘fractionalized’ or rather more homogenous. We also note that the ‘old small’ countries have the lowest median fractionalization score (Figure 7). There can be several explanations for this, and we will discuss this later on when we focus on the efficiencies or inefficiencies of scale.

Trade or globalization off the world economy is another important variable in determining the success of a country, particularly small countries. What is globalization? In general, it is not difficult to distil a couple of core characteristics from the many definitions that are offered of globalization. One is that globalization involves the increasing integration of markets, economies and societies, as borders become less relevant. The other is that integration brings increased interdependence between nations.

Taking the Foreign Policy/AT Kearney methodology as a basis, we construct a globalization index based around economic, social and technological factors³. As Table 3 highlights, small countries tend to dominate the globalization rankings, led by Luxembourg, Singapore, Switzerland and Ireland. In fact of the top 20 countries as ranked by our methodology, 85% are small.

3 Economic globalization: Trade openness (% of GDP), FDI (% of GDP), FPI (% of GDP)
Social globalization: Cellphone subscription (per 100 people), Telecom lines (per 100 people), Remittances (inward + outward) (% of GDP). There is a partial overlap with Intangible Infrastructure Index’s Technological Infrastructure dimension here
Corporate openness: Ease of doing business rank (by World Bank), import delays (in days), mean tariff rates (in %), Taxes on trade (% of government revenue). Once again, first three indicators are common to II’s business services dimension
Technological globalization: Internet users (per 100 people), secure servers (per million people). Overlap with II Index’s technology dimension

Luxembourg leads the index because it has the highest proportion of foreign investment flows (direct and portfolio) to its GDP among all countries



PHOTO: ISTOCKPHOTO.COM/PERCDS

There are some data issues here that we should flag. Small countries that act as trade or financial entrepôts (i.e. Luxembourg) have very heavy finance and trade flows relative to their GDP size and as such appear intensely ‘globalized’ in an economic sense. Monaco ranked high, though its excellent performance was almost entirely driven by an unusual number of secure internet servers and internet users per capita. The rank for St. Kitts and Nevis has also been boosted by extremely low trade tariff rates and very high density of technological infrastructure. Leaving these “exceptions” aside, Table 3 shows a very clear picture.

Using the same data mentioned above (58 countries and 33 years), we found that trade openness and GDP per capita are strongly correlated. As expected, openness to trade allows for success and small countries tend to be more open. So, it is easy to conclude that the globalization of the world economy has been a major factor in the success of smaller economies. The other side of the coin though is that small countries are more susceptible to show higher volatility in economic growth.

However, Alouini and Hubert show that there is no correlation between trade openness and economic volatility. Their hypothesis is that in a more globalized economy, small countries have tended to specialize in certain areas (Singapore in IT services for financial companies, for example) and that has made them more exposed to the volatility of that particular sector. Later on, we will focus on what determines the ability of countries to withstand economic shocks.

European countries dominate the top while African nations tend to be the least globalized.

Table 3

Globalization index

Source: World Bank, Credit Suisse

Country	Size	Globalization Index score
Luxembourg	S	0.93
Singapore	S	0.93
Hong Kong SAR	S	0.88
Switzerland	S	0.85
Ireland	S	0.83
Belgium	M	0.82
Iceland	S	0.81
Netherlands	M	0.81
Estonia	S	0.81
Hungary	S	0.79
Norway	S	0.79
Montenegro	S	0.78
Denmark	S	0.78
Malta	S	0.78
Bahrain	S	0.77
Austria	S	0.77
United Kingdom	L	0.77
Sweden	S	0.75
Finland	S	0.75
Cyprus	S	0.75
Malaysia	L	0.74
Panama	S	0.74
Portugal	M	0.73
Bulgaria	S	0.73
Mauritius	S	0.72

4 <https://www.credit-suisse.com/ch/en/news-and-expertise/research/credit-suisse-research-institute/publications.html>

Intangible infrastructure

Our focus on human development indicators helps to open up the debate on the factors that drive the success of smaller economies and societies. We developed the notion of ‘intangible infrastructure’ (II)⁴ which we had defined as “the set of factors that develop human capability and permit the easy and efficient growth of business activity”.

Figure 10
Intangible infrastructure (II) Index vs. GDP per capita

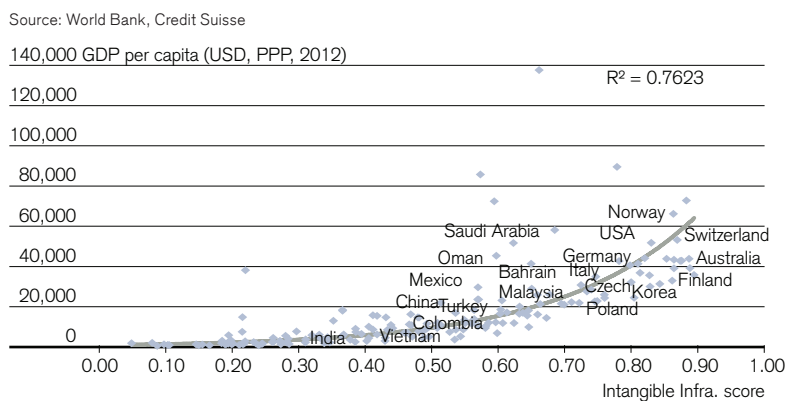


Figure 11
II Index vs. GDP per capita (small country version)

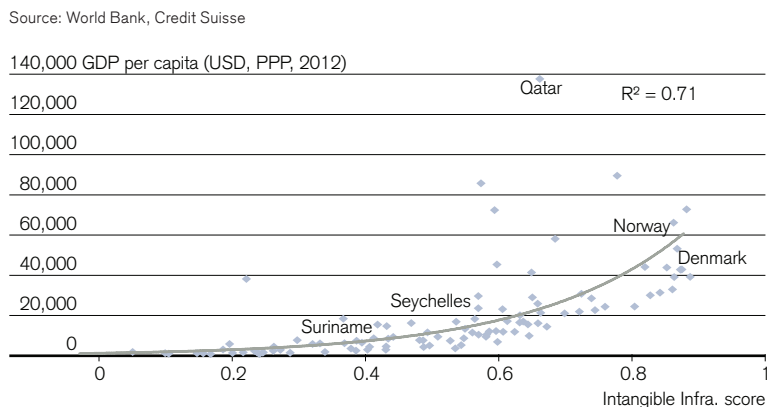
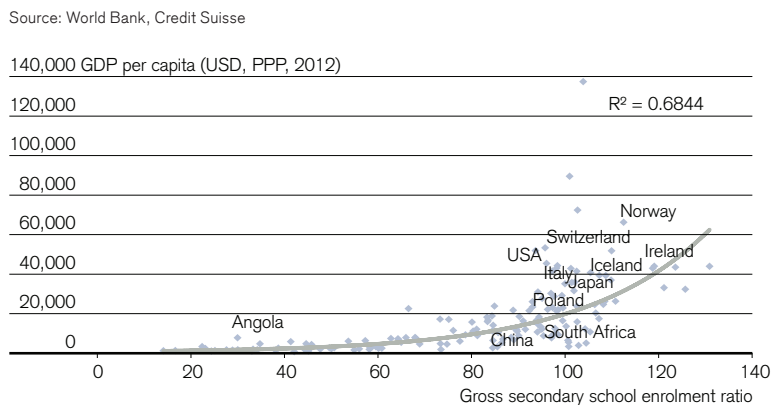


Figure 12
High school education vs. GDP per capita



These factors can be essentially political, legal or socio-economic in nature. Examples of political factors include the degree of political stability or the strength of the institutional framework. Legal factors include the rule of law, tax policies and intellectual and physical property rights protection. Examples of socio-economic factors include research and development capabilities, business processes or employee training and education.

We consider five specific components of intangible infrastructure – education, healthcare, finance, business services and technology⁵. Our sense is that while developing countries can achieve a record of high growth through physical investment (i.e. physical infrastructure), they need to cultivate intangible infrastructure in order to achieve a high and sustained level of growth and human development. In our analysis, we update our intangible infrastructure rankings that score countries from 0 to 1, with increasing values indicating increasing strength of infrastructure.

The link between the level of GDP a country enjoys and the quality of its intangible infrastructure is evident in Figure 10, where levels of intangible infrastructure appear to be linked to GDP per capita. We repeat this graphic for the small country universe only, and the relation holds, in just as strong a form (Figure 11).

Education is a key determinant of human capability. The value of education is intrinsic in almost all levels of economic output. As we illustrate in Figure 12, and discuss in more detail later, the correlation between high school educational attainment and GDP per capita is particularly strong. We can also track the historical precedents of economies, such as the early “Asian tigers” whose emphasis on investing in education paved the way for their success. Government commitment to education can be shown to have a significant impact on the nature of growth that economies then display, as much as the GDP level itself.

5 The sub-components of the intangible infrastructure index are as follows: Education: Secondary and Tertiary enrolment ratio. Healthcare: Infant mortality, Life expectancy and health spending per capita. Technology: Cellphone users (per 100), telephone lines (per 100), secure servers (per million), Internet users (per 100), R&D expenditure (% of GDP). Financial services: Credit Information score, legal rights score, lending risk premium, Equity market capitalization (% of GDP). Business services: Ease of doing business rank, Import delays, mean tariff rates, procedures needed to register a business

With considerations such as life expectancy (Figure 13) and related demographic trends, healthcare is another key factor in determining the average individual's output. Through time and across borders, there are very few exceptions to the rule that better healthcare fosters an environment of higher economic activity as well as human development. Despite this fact, it has not been a priority in many of the markets that we currently view as high growth markets such as China. This looks set to change.

While we have sought to categorize the nature of intangible infrastructure in these five categories, in reality, it is far more complicated than that. It is of course heavily inter-related and interdependent. It is not impossible, but it is highly unlikely that any country with a high degree of technology penetration would not also have a fairly comprehensive education system. In the same way, financial systems would struggle in the absence of a legal framework and advances in technology might falter without property rights to support the R&D.

Adding support to the case for "intangible infrastructure" are the broad trends in demographics, economics, society and geopolitics that point toward the rising importance of intangible factors, as well as the significant body of academic literature on economics and development. Nobel prize-winning work by Robert Solow has helped to structure ideas on the role that technology and human capital play in generating economic growth.

In turn, this has paved the way for theories that map out the means by which developing countries could "catch up" to wealthier ones. Acemoglu and Robinson⁶ are amongst the leading academic contributors on this topic, stressing the strong link between the economic development of states and their institutional strength.

Stability rather than democracy

We note that the notion of a "fair society" is not necessarily a prerequisite for intangible infrastructure to function. In the political-economic field, a good deal of the academic literature that links income and economic growth to "intangibles" has focused on democracy. At a broad level, the relationship between democracy and development is a close one, though the causality of this relationship is increasingly being questioned. Instead, the emerging consensus is that institutions and intangible factors like the rule of law matter more for economic development than democracy itself.

6 'D. Acemoglu & J. Robinson 'Why Nations Fail?' (Deckle Edge, 2012)'



Figure 13
Life expectancy vs. GDP per capita

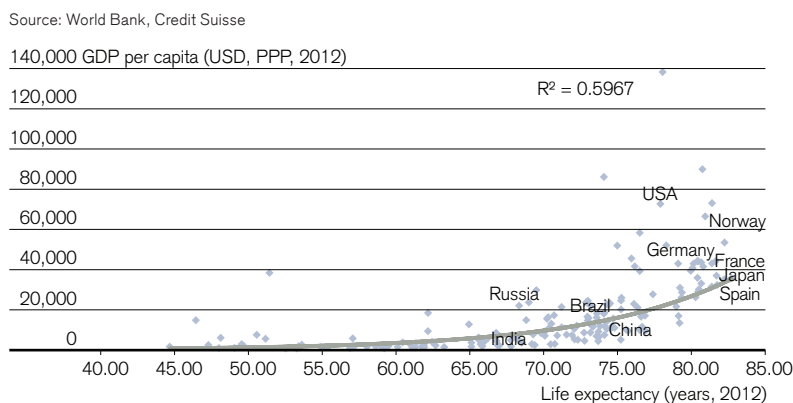


Figure 14
Rule of law vs. GDP per capita

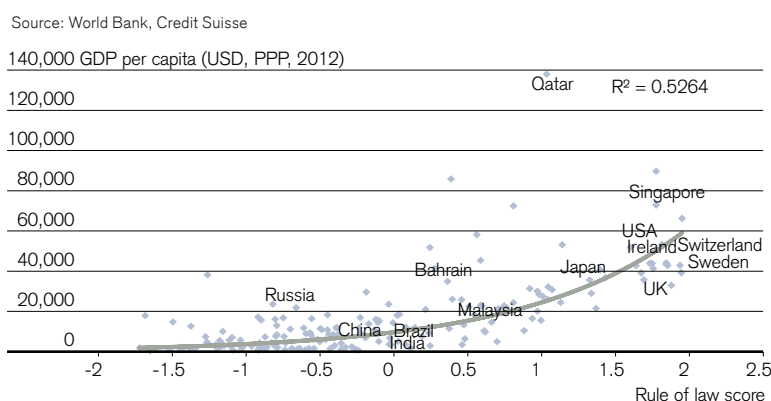


Figure 15
Political freedom vs. GDP per capita

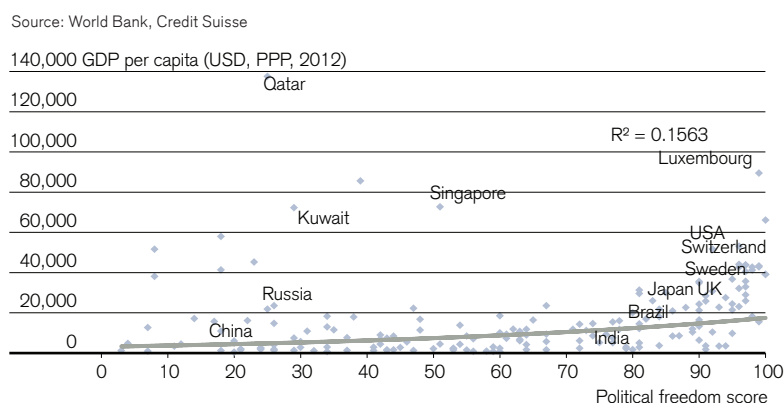
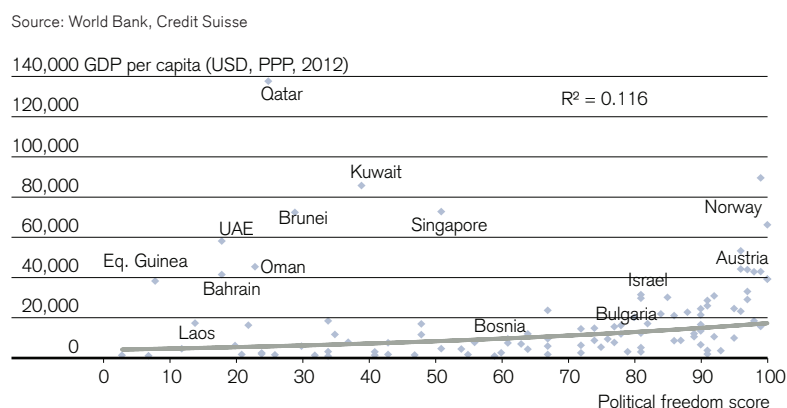


Figure 16
Political freedom vs. GDP per capita (small country version)



Our own findings suggest that institutions, or at least the quality of institutions, drive the distribution of resources in an economy and the way incentives and contracts are set up. Decent institutions encourage trust, investment in human capital and help to lower the frictions of doing business. A simple illustration is to compare the fit of GDP per capita with (a) World Bank data that scores the Rule of Law in each country and (b) with Political Freedom scores, again from the World Bank. The data clearly shows that the rule of law (R^2 of 0.5 with GDP) seems to be a far more important determinant of economic success than political freedom (R^2 of 0.15 with GDP, and 0.11 for small countries only). See Figures 14, 15 and 16.

Equally, if we examine state fragility⁷ index developed by Systemic Peace as a variable, there is a marked difference between small and medium countries, with small countries in general having much lower fragility scores. Medium sized states, mostly in Western Asia and Africa, tend to be more fragile than the rest.

Small countries and intangible infrastructure

To get into the detail of our intangible infrastructure index, Table 3 highlights the top 25 countries in terms of our intangible infrastructure rankings, with small countries such as Finland and Denmark, as well as bigger states Australia and the UK to the fore. Many of the countries that do well here are ‘usual suspects’ from the Nordic region, though New Zealand in particular scores well. Singapore, Ireland and Israel follow on.

It seems that excellence in intangible infrastructure is a small country speciality. Small countries make up 7 of the top 10 countries by intangible infrastructure and 60% of the top 30. From Figure 17, we see that medium sized countries fare less well here. The results are interesting because they suggest that small countries deploy their resources well and get a positive return on their investment.

In addition, we note that when we compare the changes in the II ranking from 2011 to 2013, small countries tend to be prominent in terms of having the best improvements in intangible infrastructure (Czech Republic, Iceland, Qatar, Bulgaria and Cyprus).

When we break down the overall intangible infrastructure index into its five component parts, small (mostly old) countries score best on four of five criteria (Figure 18). The exception is financial services, where large cities (London, Frankfurt and New York) in large countries have historically had an advantage in terms of the scale and depth of their financial markets and also where in the recent past the record of small countries as financial powerhouses has been a checkered one. Another interesting break out is to examine patents, which in larger countries have tended to mark economic

7 www.systemicpeace.org

success (Figures 19 and 20), though for some of the smaller countries that top the II league tables, patent applications appear to be low, with Israel an exception here.

When we compare 'old' small countries to 'new' small countries, the older ones like Switzerland or Sweden have a clear and understandable advantage. What is interesting however is to compare new small countries to large and medium ones, and here new small states are clearly in the ascendancy.

Our sense is that intangible infrastructure forms the backbone of a country, a key conduit for economic growth, and it is a crucial determinant in a state's ability to withstand and engage with globalization. For instance a country is more likely to engage in international trade if the rule of law holds and if its financial institutions are well developed.

A Country Strength Index

So far, we have examined some of the individual factors that are believed to influence the success of countries. Bringing this together we develop the CS Country Strength Index. The aim is to rank countries on the basis of the quality of their institutions and intangible infrastructure, their aptness to thrive in a globalized world, their ability to grow consistently with low volatility and lower volatility macroeconomic output and their level of human development. These many angles are closely related and in most cases the causality between them is hard to unravel. Our sense is that by looking at social and institutional aspects of states as well as economic ones, we achieve as rounded as possible a view on a state and in particular of its ability to be successful on a consistent basis.

In detail the factors we consider are as follows:

- The UN Human Development Indicator,
- The Credit Suisse Intangible Infrastructure index globalization index
- Macroeconomic volatility⁸
- Governance⁹

In general the 'Strength' strikes a chord with both the analysis we have carried out on the sub-components of the Strength index and with the broad literature on political economic development. Small countries tend to do well in terms of 'strength' but the results are biased in favor of 'old' small countries. Thirteen of the top twenty countries are small states, led by Switzerland, followed by Singapore and Hong Kong SAR, Denmark, Ireland and

8 Here we have taken two variables- Standard Deviation of GDP growth rates and inflation, taken from World Bank database, from 1960 onward. The average of these two standard deviations is then taken and then we assign them percentile rank such that lower volatility is given a higher rank. There is no clear relationship between age and macro volatility. Economic volatility is high in old Eastern European and Latin American countries (Uruguay, Bulgaria and Albania for example) whereas it is still small in closed island economies (Cape Verde, Pacific Islands). Surprisingly, macro volatility is not very high even for new oil-rich states in Asia.

9 The average of Transparency International's Corruption Perceptions Index Center for Systemic Peace's State Fragility Index.

Table 4

Top 25 countries by intangible infrastructure (II)

Source: World Bank, Credit Suisse

Country	Size	II Index score
United Kingdom	L	0.89
Finland	S	0.89
Australia	M	0.89
Singapore	S	0.88
Hong Kong SAR	S	0.88
Sweden	S	0.87
Denmark	S	0.87
Switzerland	S	0.87
Netherlands	M	0.86
Iceland	S	0.86
Norway	S	0.86
New Zealand	S	0.86
Ireland	S	0.85
Israel	S	0.84
United States	L	0.83
Korea, Rep.	L	0.83
Japan	L	0.83
Austria	S	0.82
France	L	0.81
Canada	L	0.81
Estonia	S	0.80
Spain	L	0.80
Belgium	M	0.80
Germany	L	0.78
Luxembourg	S	0.78

Figure 17

Smaller countries have significantly better levels of intangible infrastructure

Source: World Bank, Credit Suisse

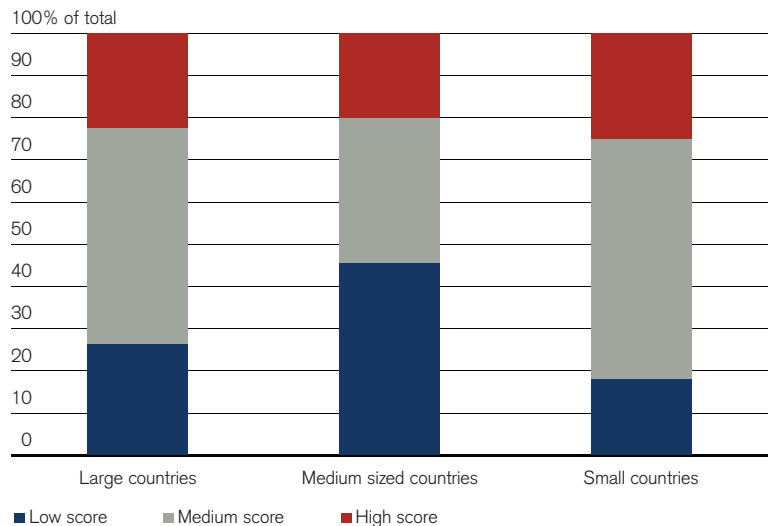


Figure 18
Small countries perform the best on most II metrics

Source: World Bank, Credit Suisse

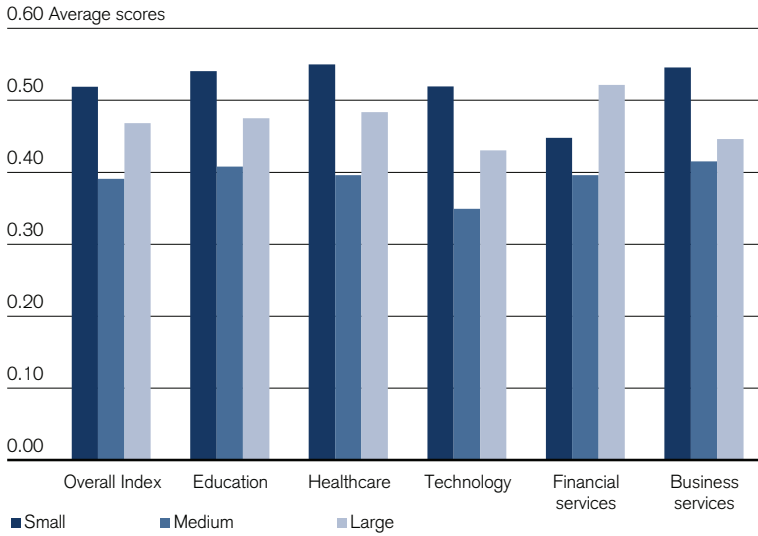


Figure 19
Patent filings in large countries

Source: Credit Suisse

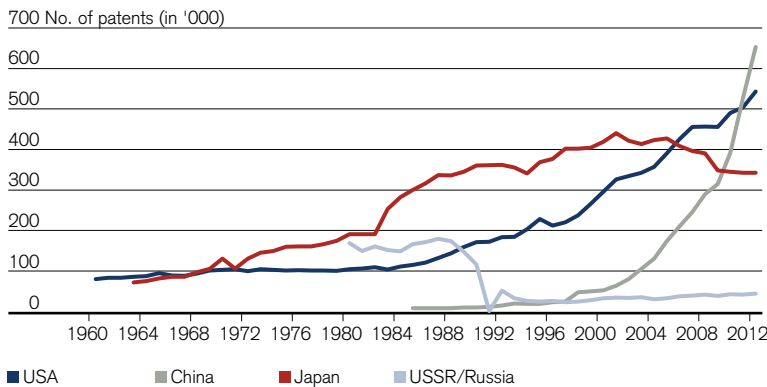
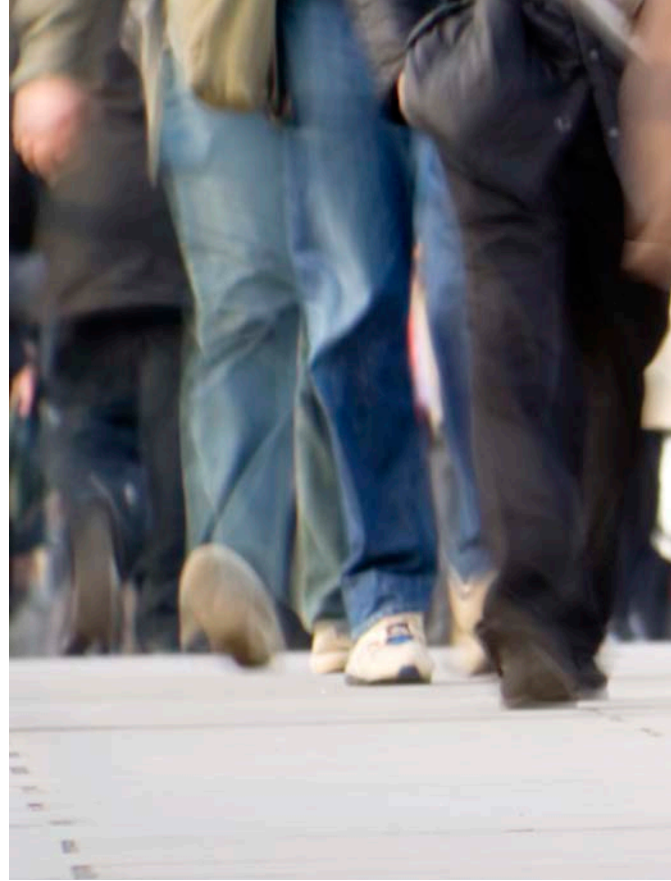
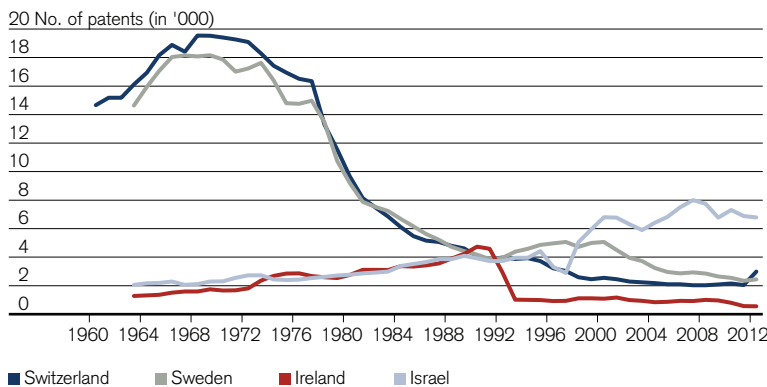


Figure 20
Patent filings in small countries

Source: Credit Suisse



Norway. A cluster of larger countries is led by Australia, the Netherlands and the UK. Other 'resilient' small countries are Finland, Austria, Sweden and New Zealand.

We should highlight that there are some factors our model does not capture – the favorable effect of geography (proximity to China) on Singapore and Hong Kong SAR, the role of oil for Norway and transfer from the EU to smaller European states'. These have certainly helped small states, but we would argue that long-term success depends on the ability of policy makers to manage the bonuses as well as the risks posed to small states. What is perhaps more interesting are the countries that do not make the top echelons. Hungary, Cyprus, Portugal (classified as medium sized) and Estonia are grouped together below the top table and in the middle of the table, the UAE and some of the Caribbean states are grouped together – their scores are lower than the top group owing to lower readings for globalization, macro volatility and intangible infrastructure.

Generally, speaking, the weaker nations in terms of our 'Strength' index tend to be African, both large and small states, States that have medium level 'Strength' cores and that we think have the potential to move higher given HDI and macro volatility improvements might be Costa Rica, Serbia, Kuwait and Latvia.



PHOTO: ISTOCKPHOTO.COM/STOCKCAM

A small country model?

There is a considerable amount of analysis by international institutions such as the OECD and IMF, as well as think tanks (Bruegel is notable here with Andre Sapir's analysis of socio-economic models) and academics on the notion that some countries are 'models' for others to follow. We are somewhat sceptical here in that the designation of a particular country as a model for others to follow invariably marks the peak in that country's (hubristic) growth. Ireland and Turkey are two good recent examples.

For the sake of argument and comparison, if we were to compare some of the economic, social and policy indicators for Scotland we find that it has some similarities to neighboring countries like Norway in terms of size, education, healthcare indicators and oil production (22% of GDP for Norway, 12% for Scotland assuming production is allocated on the basis of the median line principle).

The recurring dilemma is that many of the ingredients that have contributed to one country's success are very difficult to 'cut and paste' on to other nations. However, based on the broad literature on this subject and the findings that come through from the data, we would flag the following as being part of the 'secret sauce' of developing a small country: sense of strategic planning and an awareness of the impact that outside forces (markets, trade, immigration) can have on a small state as well as the institutional ability to implement policy in these fields.

Table 5

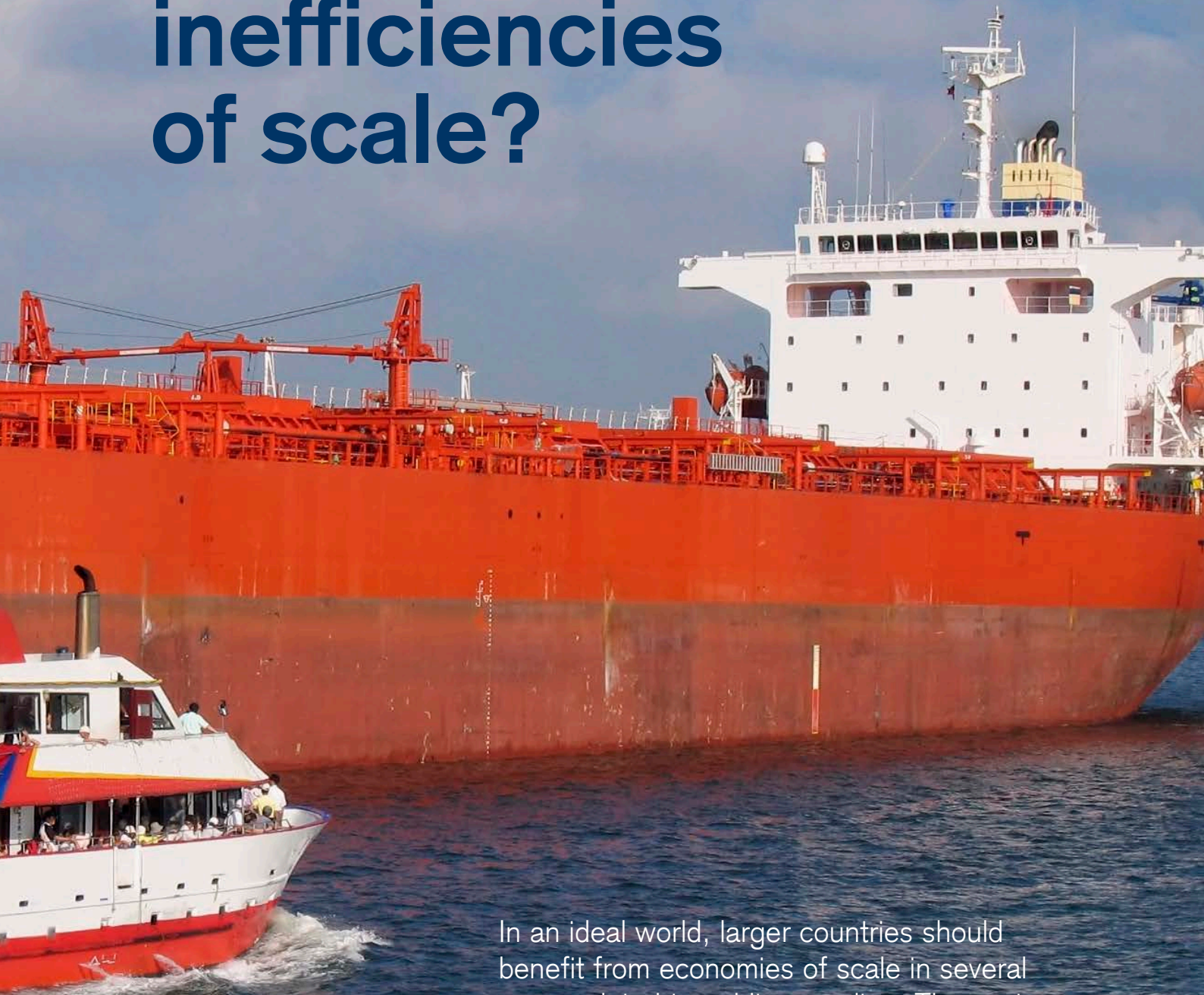
Country strength index

Source: World Bank, Credit Suisse

Country	Size	Country strength index
Switzerland	S	0.87
Hong Kong SAR	S	0.85
Singapore	S	0.85
Denmark	S	0.84
Netherlands	M	0.83
Australia	M	0.83
United Kingdom	L	0.83
Belgium	M	0.82
Ireland	S	0.82
Norway	S	0.82
Bottom 10		
Afghanistan	L	0.18
Myanmar	L	0.18
Guinea-Bissau	S	0.18
Niger	M	0.18
Burundi	S	0.17
Central African Rep.	S	0.14
Congo, Dem. Rep.	L	0.13
Chad	M	0.11
Eritrea	S	0.10
South Sudan	S	0.08



Efficiencies or inefficiencies of scale?

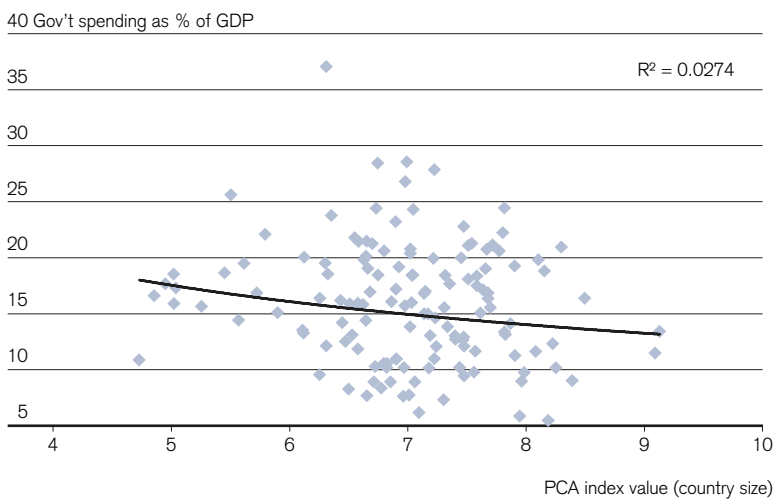


In an ideal world, larger countries should benefit from economies of scale in several areas related to public spending. The cost of nonrival public goods such as military spending, tangible infrastructure (roads, bridges, airports, etc), government or collecting taxes should be lower, on a per head basis, the larger the country's population.



Figure 21
Government spending

Source: World Bank, Credit Suisse



On the other hand, public services such as education or healthcare are driven by the number of students or patients; so the size of a country in terms of population should not have much influence on the per capita costs of these public services. However, if the definition of size includes or focuses on the geographical size of the country, some of these costs would vary according to the population's density.

In general, most academic research supports the view above, that the public sector expenditures on a per capita basis is larger for smaller countries; larger countries have in principle the ability to spread their cost over a larger pool of taxpayers. Our findings show a different story. Let us start with the big picture by first focusing on public spending and then how it is financed.

Alesina and Spolaore in their 2003 book "The size of Nations" show that expenditures as a percentage of GDP are negatively correlated to size. They focus on a large sample of countries over 1986 to 1990. In our analysis, we find a very weak correlation between government spending and size ($R^2=0.03$). The results do not change much using either one year (2012), three years (2010-12) or five years (2008-10). Note that we define size as a combination of population and physical size of the country. We get similar results when we look at the correlation of government spending per capita with size.



What is definitely more interesting is to look at the components of government spending. For example, spending on defense tends to be uncorrelated to size and spending on education as a percentage of GDP tends to be smaller for larger countries. As education gives a country a long-term growth advantage and there are some scale benefits (e.g., text books shared by a larger number of students), this is quite surprising.

Public spending on healthcare shows again that small countries invest more in healthcare compared to large countries, but not a lot more. Finally, we analyzed the data related to all salaries paid by the government. This is the only result consistent with the theory of the economies of scale: it shows that larger countries tend to spend less relative to GDP on salaries (5% of GDP for large countries versus almost 8% for small countries). Salaries here are a good proxy for the direct cost of “governing” a country.

However, the most surprising finding is on the funding side of government expenditures. The core postulate of the economies of scale for public services, military capabilities, etc. is that the cost of these “services” on a per head basis should be lower for larger countries. Not really. Tax rates for individuals tend to be higher in larger countries, by a hefty 5 percentage points! We need to add indirect taxes to this analysis, but it is quite a complicated exercise. A qualitative analysis of a few countries suggests that the results above would not change.

Figure 22

Spending on military as % of GDP

Source: World Bank, Credit Suisse

2.5 Military spending as % of GDP

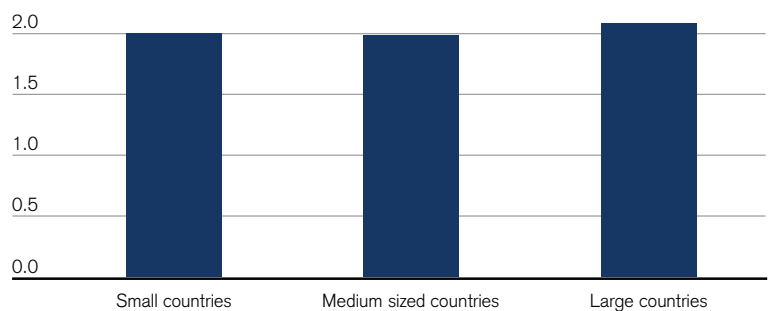


Figure 23

Spending on education as % of GDP

Source: World Bank, Credit Suisse

6.0 Spending on Education as % of GDP

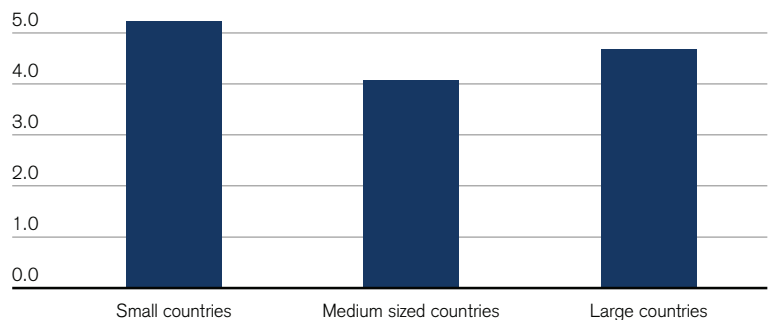


Figure 24

Spending on healthcare as % of GDP

Source: World Bank, Credit Suisse

8.0 Healthcare expenditure as a % of GDP

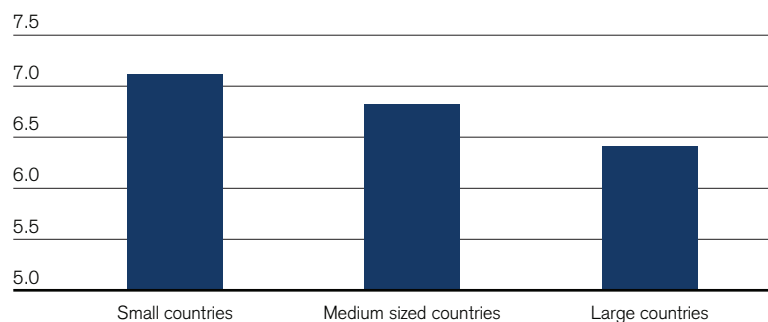


Figure 25

Compensation of public sector employees as % of GDP

Source: World Bank, Credit Suisse

8% Compensation of Employees (% of GDP)

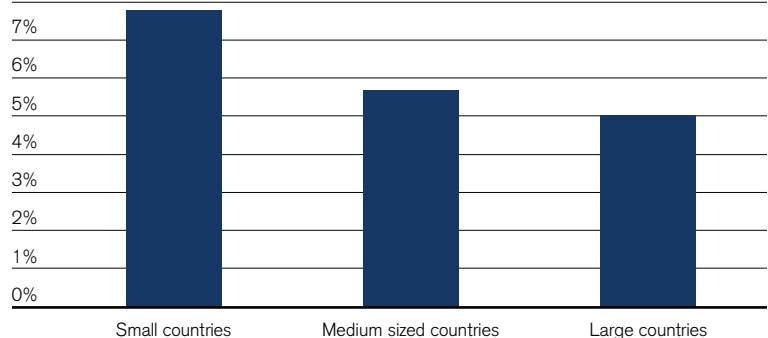


Figure 26

Tax rate for individuals

Source: KPMG, Credit Suisse

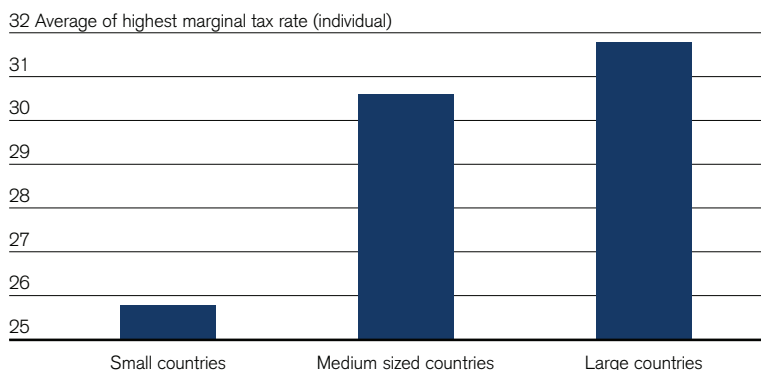


Figure 27

Corporate taxes

Source: KPMG, Credit Suisse

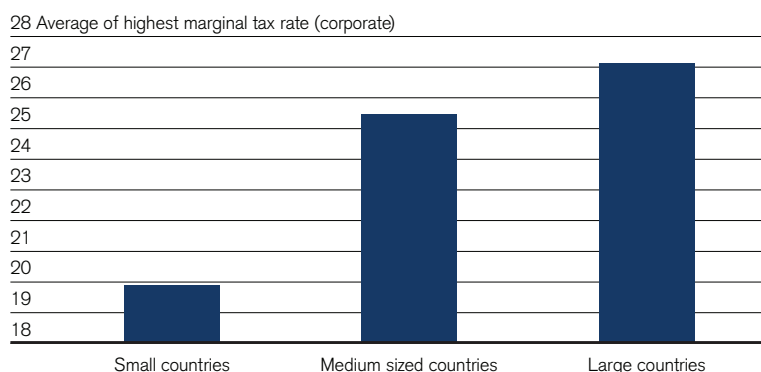
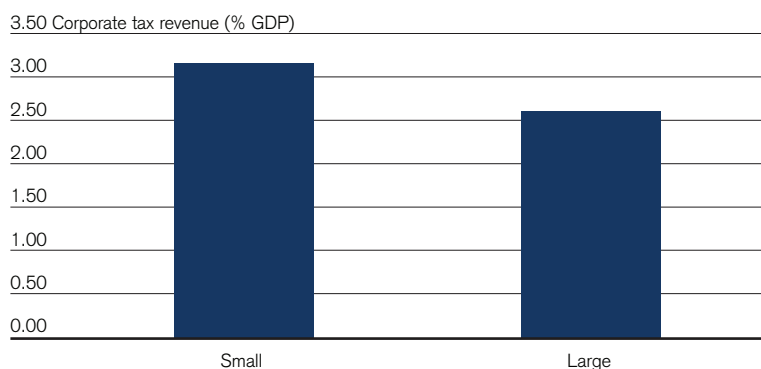


Figure 28

Corporate tax revenue

Source: OECD 2012, Credit Suisse



Corporate taxes also look higher in large countries versus small countries by a full 7 percentage points. But is that really the case? Only in theory. If we look at corporate taxes as a percentage of GDP we will find that the opposite is true: 3.2% for small countries and 2.6% for big countries. The issue, we think, is corporate tax management by large companies in large countries. Large corporations have subsidiaries abroad that allow them to minimize the tax burden at the home country level. So, in reality, in large countries few large corporations pay the marginal corporate rate.

Another interesting area on the funding front is leverage. As we would expect small countries show less leverage and smaller fiscal deficits. Part of this is the “age” effect: small younger countries have lesser need to mortgage the future of the country as they have less “historical” welfare burden, as the accumulation time has been shorter. We could read this on the basis that less leverage carries less risk; but this might also reflect that smaller countries are more vulnerable as they have less access to the global capital markets and therefore they need to be more conservative.

This was brought to light during the European crisis where the institutional framework of a larger “community” allowed larger countries in the EU to contribute to the rescue of several smaller countries. At crisis time, the size effect (US or EU) is a clear positive as larger resources and funds can be pulled and channeled across to help smaller countries, states, or cities.

Another way to explore the relative efficiency of countries is to measure the level of output or GDP relative to the level of input. Milner and Weyman-Jones have written several papers¹⁰ on the topic, focusing on developing countries. Intuitively again, we would expect that larger countries should have a “production” scale advantage. Yet, the authors concluded that there is no simple correlation between a country’s size and its relative efficiency rating, and that actually larger countries are more inefficient than smaller ones, albeit with a small statistical significance. The key factors for success based on their analysis is not size but education, healthcare and technology (i.e., the intangible infrastructure). This is confirmed by our own analysis which shows that smaller countries tend to have on average better intangible infrastructure than the larger ones.

So there are some inefficiencies of scale, maybe more so than the much touted efficiencies of scale. Why? This might be explained in part by a natural trend of larger countries towards the decentralization of power. The larger the country, the more the need for local and regional governments to manage some of the key social services like education or police services.

Decentralization also gives rise to transfers from the central government to the poorer regions or states to allow for a more balanced growth and relative wealth across the country. Transfers—a political tool to keep a country together— add complexity and may lead to distortions and inefficiencies if not allocated properly (the

10 e.g. Milner, C., and T. Weyman-Jones (2003): “Relative National Efficiency and Country Size: Evidence for Developing Countries,” *Review of Development Economics*, 7(1), 1–14.





perfect government has not yet been invented). This is further accentuated by the effects of heterogeneity.

The more heterogeneous the population is or the more heterogeneous are the preferences of the population, the higher is the cost of some services: education spending for example has to take into account the diversity of cultures and languages that exist in one country. Table 6 shows the top 10 countries under this metric (5 out of 10 are large ones) and the bottom 10 (8 out of 10 are small ones). Not surprisingly, the median fractionalization index of low HDI countries is 22% higher than that of high HDI countries. In other words, the more homogeneous a country is, the higher the HDI score is likely to be.

The USA and the European Union provide a valuable illustration of this dynamic. In the USA, Federalism has added costs as each state has its own government infrastructure and ability to issue legislation. The result of this “government” structure is often overspending and higher deficits at the regional or local level.

The same could be said about the European Union and the component states; 40% of the legislative acts of the EU concern agricultural policies, while agriculture represents less than 5% of European GDP.

On the other hand, Switzerland provides an excellent example of very successful federalism—arguably a highly efficient form of decentralization. Switzerland had to be set up as a decentralized, federal state because of its linguistic and cultural as well as religious heterogeneity and the resulting fiscal federalism is certainly one of the defining features of Switzerland’s political system and widely cited as one of the institutional reasons for the country’s economic success. So, we should not underestimate the power of a larger pool of countries, states or regions or a larger country. The European Union has been able to “rescue” one of its member countries by “emergency” loans and the US Federal government rescued the auto industry (Detroit and surroundings) not Michigan State. So, size has some advantages.

This is an important point as government size and economic growth tend to be negatively correlated. Several studies point to this link, which is particularly strong for richer countries. This effect is visible even when discounting the natural effect of increases in government spending during recessions. In other words, the size of a government beyond a certain level, creates inefficiencies in resource allocation and is not conducive to higher growth.

Alouini and Hubert make a valid point on why we observe these inefficiencies of scale. It could be that the costs associated with large size countries—transportation, transactions and heterogeneity – or conversely the benefits of smaller sized countries – homogeneity, density, higher efficiency and flexibility—helps explain why smaller countries tend to exhibit higher GDP growth or a higher HDI.

Table 6

Heterogeneity scorecard

Source: Alesina database, Credit Suisse

Country	Size	Fractionalization index
Kenya	L	0.83
Cameroon	M	0.82
Uganda	L	0.82
South Africa	L	0.82
Central African Republic	S	0.81
Congo, Dem. Rep. (Zaire)	L	0.81
Nigeria	L	0.81
Zambia	S	0.79
Chad	S	0.78
Cote d'Ivoire	M	0.78
Bottom 10		
Iceland	S	0.12
Bangladesh	L	0.11
Greece	S	0.11
Poland	L	0.11
Norway	S	0.11
Ireland	S	0.10
Malta	S	0.08
Portugal	S	0.07
Tunisia	S	0.02
Comoros	S	0.01



SPECIAL FEATURE

The break-up of Czechoslovakia

Gergely Hudecz

Following the collapse of communism, Czechoslovakia undertook reforms to introduce a market-based system, but the transition was more costly for Slovakia than for the Czech Republic. Between 1990-92 the Czech Republic's real GDP declined by around 15%, while Slovakia's by about 22%. Unemployment was 2.6% in the Czech Republic but reached 10.4% in Slovakia in December 1992. There were no legal restrictions on migration, but labor mobility did not mitigate the adverse effects of the shock.¹

The asymmetric shock led to the break-up of Czechoslovakia in 1993. Following the elections in 1992, centre-right parties in the Czech Republic and a nationalist party in Slovakia were unable to agree about the redistribution of power between the federation and its constituent states, and decided to create two independent countries on 1 January 1993. The two sides agreed to divide immovable assets and territorial debt according to location, and other assets and fed-

eral debt proportional to their population (around 2:1 in favor of the Czech Republic). In the meantime, fiscal transfers from the Czech Republic to Slovakia stopped (which may have reached as much as 8% of Slovakia's GDP in 1992).

The two newly independent states planned to maintain the common currency at least for the first half of 1993, but the lack of political commitment undermined the monetary union's credibility. Capital transfers by Slovak residents to Czech commercial banks surged, presumably anticipating a devaluation in Slovakia after the split. The Czech central bank initially attempted to balance the capital flow from Slovakia by credits to Slovak banks, but these became increasingly difficult to sustain and eventually the Czech government decided to separate the two currencies. The separation was implemented on 8 February 1993, and the Slovak central bank decided to devalue its currency by 10% in July 1993.

The break-up was more costly for Slovakia in the short run. In 1993, real GDP declined by 1% in the Czech Republic, while it fell by 4% in Slovakia, and by 1995 GDP per capita in Slovakia was only

¹ Source: Fidmuc et al. *Stability of Monetary Unions: Lessons from the Break-up of Czechoslovakia*, Transition Economics Series No. 10, Institute for Advanced Studies, Vienna



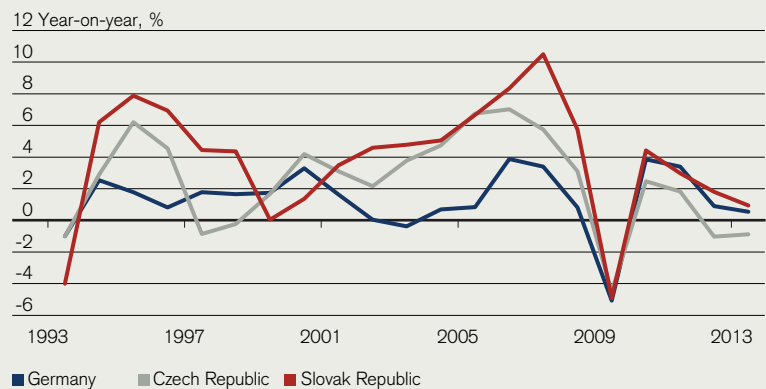
PHOTO: SHUTTERSTOCK.COM/BREZINA

around 68% of the Czech level, on purchasing-power-parity. Bilateral trade also declined significantly over the longer run: In 1991, around 50% of Slovakia's foreign trade was with the Czech Republic, but this dropped to about 25% by 1997. Czech trade with Slovakia declined from around 30% in 1991 to about 10% in 1997. However, such a sharp fall in bilateral trade suggests that the previous interdependence was artificial, and the large public sectors were not developed according to comparative advantages.

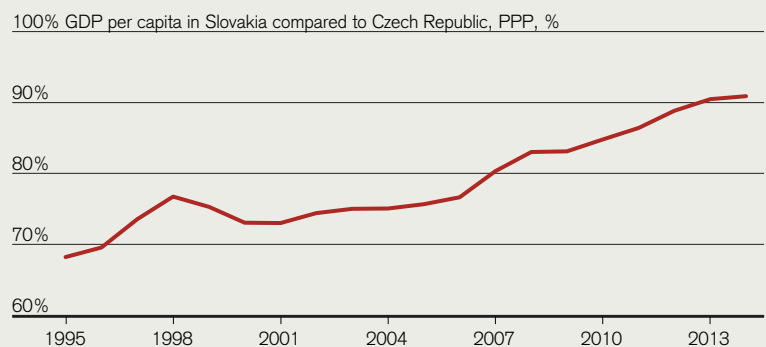
Integration with the EU mitigated the impact of the break-up to some extent, as much of the decline in Czech-Slovak trade reflected the growth in trade with other countries, in particular with the EU. Although the Czech Republic was the front-runner for EU integration initially, Slovakia's real GDP growth also rebounded sharply and the government change in 1998 opened the way for further reforms. Consequently, real GDP growth in Slovakia outpaced growth in the Czech Republic between 2001 and 2008, and the two countries joined the EU at the same time in 2004. Furthermore, Slovakia introduced the euro in 2009, and its GDP per capita almost reached the Czech level by 2014, on purchasing-power-parity.

Figure 29**Real GDP growth**

Source: Eurostat, Fidrmuc et al, International Monetary Fund, Credit Suisse

**Figure 30****Re-converging**

Source: International Monetary Fund, Credit Suisse





SPECIAL FEATURE

German re-unification

Christel Aranda Hassel

On the night of 9 November 1989, the wall dividing Berlin was breached starting negotiations that would culminate in a re-unified Germany. The monetary, economic and social union happened on 1 July 1990 followed by the political union on 3 October. For the first time in history, a capitalist and a socialist economy became one. To start with, all western institutions were transplanted to a large degree: justice, industrial relations, banking, education and social welfare.

On the economic front, the West German government decided to privatize the East German economy. This was carried out by the eastern Treuhandanstalt (THA, Trust Agency, commonly known as Treuhand). The agency became a politically independent body in charge of privatizing 8,500 previously state-owned enterprises containing 44,000 plants and accounting for nearly half of the eastern workforce. The THA closed unviable firms and plants, reduced employment at the viable plans and sought buyers for the remaining core businesses which to a large extent became subsidiaries of western companies since two-thirds were sold to West German firms or families. At the end of 1994, the THA finished its privatization brief with net losses of nearly 11% of 1994 GDP.

Other key economic decisions included converting the exchange rate at 1:1 and a high wage strategy in the east dictated by strong labor unions. Generous financial transfers to the east saw eastern GDP per capita and compensation rise sharply to start with.

In the early years of re-unification the economic outcome of these decisions was a collapse in eastern real GDP. It fell by nearly 16% and 23% in 1990 and 1991, respectively, resulting in the unemployment rate peaking above 20% in the second half of the 1990s. For the west and on the back of the positive aggregate demand shock, the early years of re-unification were boom years with GDP growth rates of more than 5%.

A series of studies have looked into the causes of the sharp decline in eastern GDP and employment. Often mentioned are the disruption of eastern supply chains and the substitution to western goods resulting in a sudden fall in demand for eastern goods and therefore output. The sharp reduction in labor supply was also a factor. In 1989-92, employment in the east declined by more than 3 m people. Early retirement on western pension benefits was offered to more than 1 m and more than 1 m emigrated to the west. The rapid wage convergence with the west not mirrored by productivity did



PHOTO: SHUTTERSTOCK.COM/LINERPICS

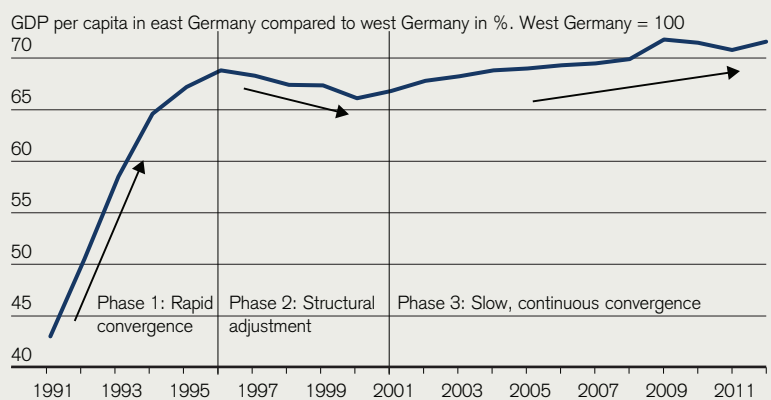
not help either. It led to the whole of Germany seeing double-digit wage growth in the early 1990s. Union power was only severely weakened after 1993.

From 1990 to date, the net cost of re-unification has been estimated at around EUR 2 tn equivalent to two-thirds of Germany's entire 2013 GDP. Payments into the social security system account for 60-65% of that cost. The east, including Berlin, accounts for 20% of the German population but only for 15% of German GDP. Eastern GDP per capita, at just over 70% of the average western level, continues to converge slowly but the modest upward trend suggests that it will take many years to close the gap. Thanks to social transfers, the difference between eastern and western disposable income is less marked, with the east standing at over 80% of the average western level. It helps that the eastern labor market has improved. While the eastern unemployment rate was more than 10 pp higher than that of the west for many years, at 4 pp the current gap is the most narrow since Germany re-united.

The political decision to integrate the east with the west as fast as possible was costly not only for Germany but the cost of adjustment spread also to the rest of Europe. High German wage growth triggered high interest rates in order to contain inflation but this led to the crisis of the Exchange Rate Mechanism (ERM), the forerunner of the Economic and Monetary Union (EMU). For Germany, it meant that in addition to the re-unification shock to interest rates it entered the monetary union with an overvalued exchange rate.

Figure 31**Remaining on convergence path**

Source: Bundesministerium des Innern: "Jahresbericht der Bundesregierung zum Stand der Deutschen Einheit 2013", Credit Suisse



Re-unification was costly and remains costly. German households and companies continue to pay a solidarity surcharge tax introduced in 1991 even if nowadays more than half of east Germans and more than four-fifths in the west believe it should be removed. The good news, however, is that eastern Germany remains on the path of convergence. The German parliament in its most recent annual review on the stand of German re-unification talks about an 'impressive' re-industrialisation of the east.



Cities and corporations

“Globalization is the ongoing process of greater interdependence among countries and their citizens, and is complex and multifaceted.”

Stanley Fischer – Vice Chairman of the Federal Reserve and former managing director of the International Monetary Fund (IMF)





Figure 32
Urbanization and prosperity

Source: World Bank, Credit Suisse

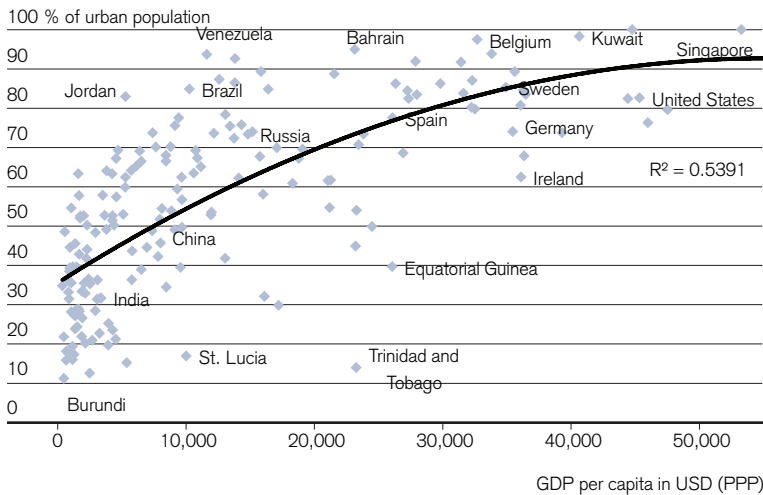
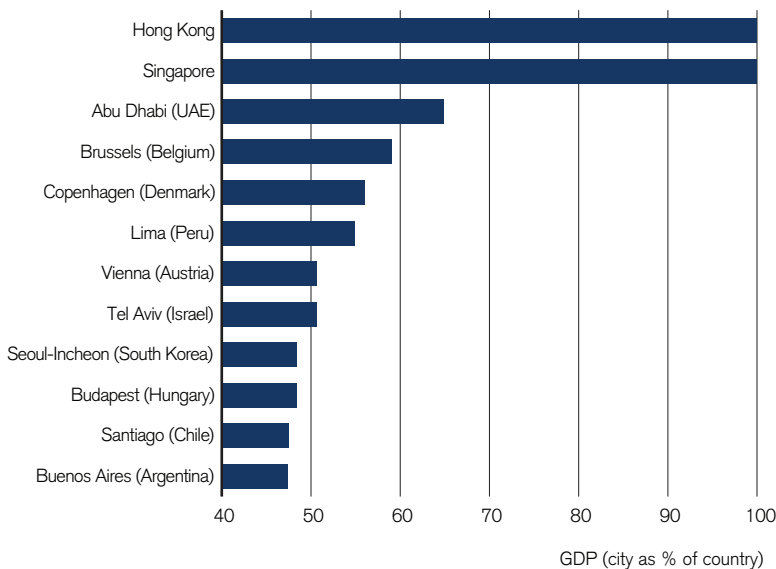


Figure 33
Cities within small countries

Source: Brookings Institute, Credit Suisse



Cities

With this in mind, it is not surprising to see that Hong Kong SAR or Singapore is among the countries/states/regions with the highest GDP/capita or the highest HDI. We have showed that in a world of free trade, size does not matter. This applies also to city-states, with easy access to global markets via unique deepwater harbors. In addition, cities are the most efficient form of human settlement. History shows that the richest countries in the twelfth to fifteenth century were the city-states of Venice, Genoa, Amsterdam and Hamburg. Free trade, larger cities and small governments was a recipe for raising wealth and growth.

This has been again the case in recent years: city-states have prospered and cities have become the most important engines of economic growth, particularly in developing economies. Five city-states are in the top 30 countries in HDI terms. Jakarta's economy is growing at twice the rate of growth of Indonesia. Urbanization is a massive driver of growth and of wealth, as we have recently highlighted in the CSRI Emerging Capital Market Report.¹¹

If we measure prosperity as GDP per capita, we can see that countries that have a higher proportion of the population in urban areas tend to show higher GDP per capita numbers. Using the HDI metric and dividing countries in four groups—from very high human development to low human development—we find that countries in the top group have a rate of urbanization of 81%, countries in the bottom group 34%. Not surprisingly, Tokyo's GDP is more than three times that of Switzerland, New York City's is more than twice that of Sweden and Mexico City's is twice that of Finland.

¹¹ <https://www.credit-suisse.com/ch/en/news-and-expertise/research/credit-suisse-research-institute/publications.html>



In this context, large cities can be considered 100% open economies, free to trade with the rest of the country. In addition, the higher concentration of the population allows for significant economies of scale in most public services (transport, healthcare, etc). Finally, cities thrive on services rather than manufacturing; services (banking, retail) are in general a higher-value-added sector and carry higher incomes.

But what about heterogeneity? Social studies show that the diverse interests and demands of heterogeneous groups tend to be softened by density and that the common interest of a well functioning city brings people closer together. Cities tend to attract “foreigners” (people from other cities, regions or countries) and “foreigners” want to integrate; the concept of city becomes the common denominator and a powerful unifying force. Polls show that higher density areas in cities are more open to immigration.

City inhabitants also tend to be more practical and less ideological. New York City—one of the country’s Democratic strongholds can easily elect and live with Republican mayors (Bloomberg, Giuliani, etc.). Local issues in cities are to a large extent beyond parties, race or age and the democratic process is much more direct and allows voters much more control and influence. Cities are characterized by a pro-business attitude, openness, global connections, relatively good education and in most cases a pragmatic and modern governance.

Table 7

Large cities vs. small countries

Source: Brookings Institution 2012, World Bank

City	GDP in USD bn (PPP)	Country	GDP in USD bn (PPP)
Tokyo	1519.4	UAE	534.3
New York City	1209.6	Switzerland	425.3
Los Angeles	786.7	Sweden	408
Seoul	773.8	Austria	371.9
London	731.2	Norway	331.9
Paris	669.2	Qatar	282.2
Osaka-Kobe	654.8	Kuwait	278.4
Chicago	524.6	Israel	247.9
Moscow	520.1	Denmark	239.1
Shanghai	516.4	Hungary	224.5
Sao Paulo	472.9	Finland	212.2
Cologne	465.1	Ireland	201.1
Beijing	427.1	Belarus	162.4
Washington	415.2	Ecuador	156.1
Mexico City	411.3	New Zealand	145.9
Houston	399.7		
Dallas	368		
Nagoya	366.9		
Hong Kong SAR	350.4		
Buenos Aires	348.4		
Singapore	327.2		

Figure 34
Revenue distribution

Source: Thomson Reuters DataStream, the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

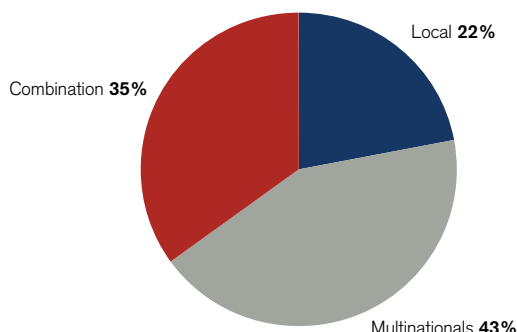
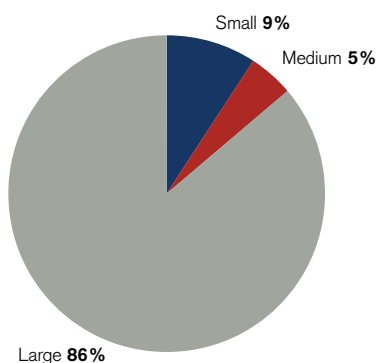


Figure 35
Most companies located in large countries

Source: Thomson Reuters DataStream, the BLOOMBERG PROFESSIONAL™ service, Credit Suisse



Corporations

One of the first and more prescient definitions of globalization came in 1983 in a paper by Theodore Levitt, professor of marketing at Harvard. Levitt wrote that:

The globalization of markets is at hand. With that, the multinational commercial world nears its end, and so does the multinational corporation. The multinational and the global corporation are not the same thing. The multinational corporation operates in a number of countries, and adjusts its products and practices in each – at high relative costs. The global corporation operates with resolute constancy – at low relative cost – as if the entire world were a single entity, it sells the same things in the same way everywhere¹².

His distinction between multinational and global companies is crucial to understanding how globalization differs from internationalization. A multinational company tends to replicate itself on a regional or national basis, building planning, marketing, production and distribution operations in each area. Conversely, a truly global corporation can locate its production operations in one country, marketing in another and be headquartered in yet another country.

Companies are an integral part of the framework of a country and provide a significant engine for economic growth. Among the top

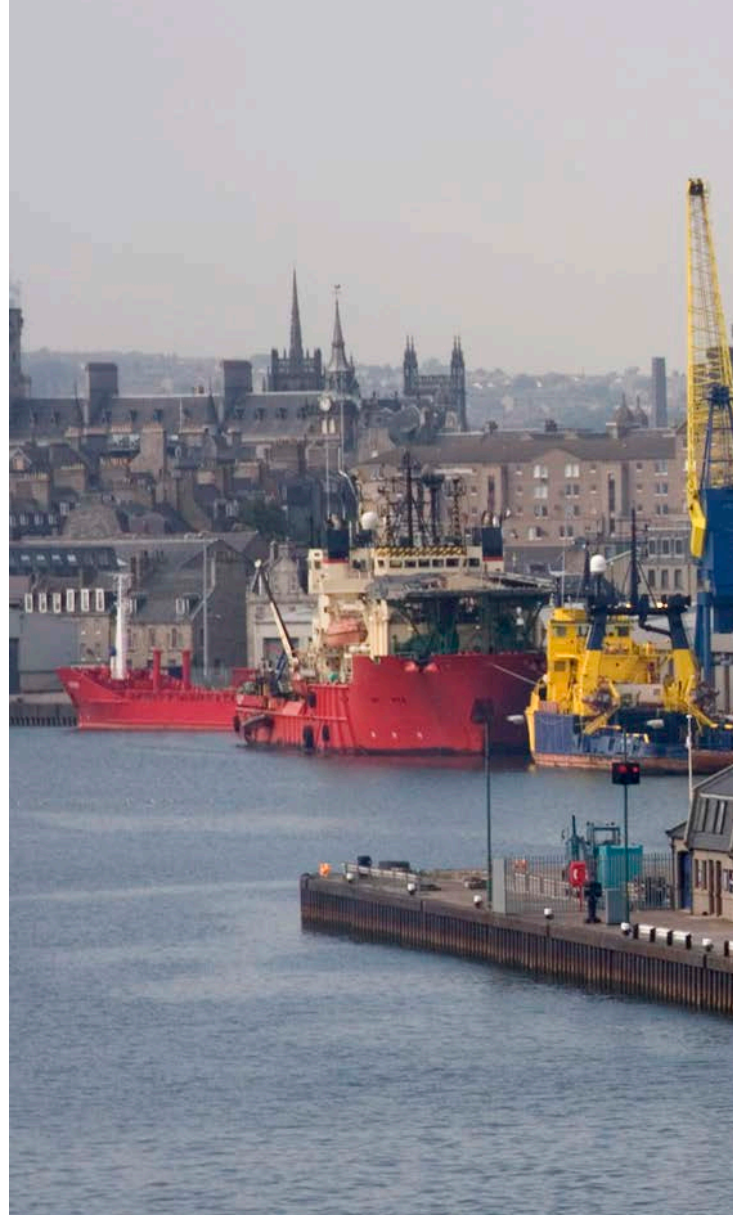


PHOTO: ISTOCKPHOTO.COM/ONFILM

500 companies by market capitalization, 86% are based in large countries, 5% in medium-size countries and 9% in small countries. Large countries provide a large domestic market that allows most companies to grow without the need to embark at the early stages in a foreign expansion.

Should we thus deduce that large countries are the main beneficiaries of the development of large corporations? Not necessarily. We divided the top 100 companies by market capitalization (we worked on smaller sample, just to illustrate the point) into multinationals (more than 50% of revenue generated by foreign subsidiaries), locals (less than 10% of revenues from foreign subsidiaries) and mixed (between 10-50% of revenues generated by foreign subsidiaries). Almost 50% of our sample is made of companies where foreign subsidiaries account for over half of revenues and only 22 of the 100 companies we considered could be considered tied just to the home country.

But even local companies source goods (manufacturing) and services (call centers) from abroad. So in a world of free trade, large local companies do not impact just the home country. This is even more evident for 50% of our sample, multinationals. Data from the U.S. Commerce Department show that, at the end of 2009, U.S. multinationals employed 21 million people at home (20% of the total workforce) and 10 million people abroad. According to a 2010 Business Impact Report, 20 Dutch multinationals have a positive direct impact outside Holland on 4.2

¹² Theodore Levitt, 'The Globalization of markets', Harvard Business Review, May/June 1983, p.2.



million people (commercial activities) and indirectly benefited another 4 million through philanthropic programs.

Not all is good news, though. From 2000 to 2009, U.S. multinationals reduced jobs at home by 2.9 million, but created 2.4 million jobs abroad. In 2009, undoubtedly a very tough year for the global economy, these same multinationals cut 5% of their U.S. based workforce (1.2 million people), but only 1% of their workforce abroad (100,000 people).

The impact of globalization on the host countries has been at the center of considerable debate. We reviewed several papers and articles and came to a few basic conclusions in the context of our analysis of large versus small countries.

- First, we did not find that multinationals or large corporations tend to invest significantly more in large host countries than in small ones. It varies a lot from sector to sector. Several small countries tend to have a highly educated and specialized work force that is extremely attractive to companies in sectors such as tech, for example. Other countries provide large pools of labor at very competitive rates. In addition, several host countries provide very attractive tax rebates and the ability to minimize the overall tax burden—corporate taxes paid as a percentage of GDP are larger for small countries than for larger ones.
- Second, it is difficult to generalize the impact of large corporation or multinationals on host countries. In some cases, the effect has been incredibly positive: job creation, overall wage increases across the whole country's workforce, higher educa-

tion, and better living standards. In other cases, the outcome has been quite negative, as the safety standards of some corporations abroad did not match their home standards.

- Third, in a world of free trade of goods and people, companies have evolved to consider the whole world not only as a market for their products and services, but also as a source of talented or attractively priced labor (we hate the word cheap) to foster growth and profitability. The overall effect has been higher productivity and higher global growth, with clear benefits for all those who participated either in the home or in the host countries.¹³

In conclusion, while it is true that large corporations are more likely to develop initially in large countries, they are also likely to expand quickly beyond the home boundaries, benefiting the rest of the world. A successful small country can benefit from this global trend by investing in education and specializing to provide services that might be significantly more expensive or not available at all in larger host countries. Singapore, Iceland and Switzerland are great examples of success stories in the growing trend towards specialization.

¹³ On the potential implications for publicly traded companies of a "yes" choice in the 18 of September vote in Scotland, we suggest reading an excellent paper by Paul Marsh and Scott Evans "The Scotsie 100: Sixty Years of Scottish Stocks."

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