

Research **Institute**

2018 Davos Edition

Eradicating Extreme Poverty

Introduction

This special report, commissioned by the Credit Suisse Research Institute at the occasion of the 2018 World Economic Forum, focuses on one of the most complex and seemingly unresolvable issues we face today: eradicating extreme poverty.

The aim to reduce and ultimately eliminate poverty has been followed by the development community for many years. Most recently, the international commitment has been reinforced in form of the Sustainable Development Goals that were articulated by the United Nations (UN) in September 2015 and strive to eradicate poverty “in all its forms everywhere by 2030”. According to UN data, over 700 million people live in extreme poverty today without access to water, sanitation, health services, or education. More than two thirds of the extremely poor people worldwide live on a daily budget of less than USD 1.90 - the challenge, however, is by far not limited to the developing world. In fact, 30 million indigent children grow up in the world’s richest countries.

Our publication takes a closer look at several topics in relation to addressing extreme poverty. Notably, we explore how investor interest in social impact has developed over time and argue that social entrepreneurship can represent an important extension to mainstream investment and the currently developed social finance solutions can become especially valuable sources to deal with poverty going forward. We further examine two demographics that deserve particular attention in relation to extreme poverty and its elimination.

First, with gender inequality being one of the most pervasive forms of inequality across the globe, we look into the vast benefits of investment into women’s health and education. With an improved economic standing of women, we see significant positive spill-over effects to the society conducive to economic growth. Also crucially, educated and empowered women are more likely to take leadership roles, motivating others and pushing for more accountable leadership and further empowerment.

Second, although disability is closely associated with poverty and other indicators of economic deprivation and people with disabilities are statistically overrepresented among those living in poverty, this group is often neglected as recipients of international support. Data shows that children with disabilities are less likely to have access to education and subsequently lack earnings opportunities on the labor market. Simultaneously, living in poverty is connected with conditions that increase the chances to develop a disability, including the risk of malnutrition or infectious diseases.

In light of continued challenges to eradicate poverty, we hope that this report will make a contribution to the awareness of some of the most neglected groups. I wish you an interesting, valuable read.

Urs Rohner
Chairman of the Board of Directors
Credit Suisse Group AG



Photo: Shutterstock, Charles Harker

02 Introduction

04 Foreword

Hugh Evans

Chief Executive Officer at Global Citizen

06 Escaping poverty: Investing in women's human capital

Dr. David E. Bloom

Clarence James Gamble Professor of Economics and Demography in the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health

Dr. Michael Kuhn

(Co-)leader of the research group on population economics at the Wittgenstein Centre and Vienna Institute of Demography

Dr. Klaus Prettner

Professor of Economics at the University of Hohenheim, Stuttgart, Germany

16 Disability and development: An economic perspective

Dr. Marc Suhrcke

Senior Researcher at the Luxembourg Institute for Socioeconomic Research and Professor of Global Health Economics at the Centre for Health Economics, University of York

24 Capitalizing social change: Social entrepreneurship and social finance

Dr. Alex Nicholls

Professor of Social Entrepreneurship within the Skoll Centre for Social Entrepreneurship at Saïd Business School, University of Oxford

36 References

40 About the authors

41 General disclaimer / Important information

Foreword

“Like slavery and apartheid, poverty is not natural. It is man-made, and it can be overcome and eradicated by the actions of human beings...” – Nelson Mandela

It has been one hundred years since the birth of one of the greatest global citizens of our time, former President of South Africa, Dr. Nelson Rolihlahla Mandela. Tata Madiba, as he was fondly referred to, was greatly concerned with the cause of the poorest and most marginalized members of society. He challenged us to “be that great generation” and to end extreme poverty within our lifetimes. Over the next 12 months, we will celebrate Mandela’s humanitarian legacy, while also leveraging political and corporate commitments toward alleviating extreme poverty in Mandela’s memory.

Hugh Evans, Chief Executive Officer at Global Citizen

In the development sector, we often like to tell the stories of progress. And while great progress has indeed been made in the struggle to end extreme poverty over the course of the last three decades, there is still much more to be done. Ten percent of the world’s population – approximately 750 million people – still remain in extreme poverty (defined by the World Bank as living under USD 1.90 per day) – this is intolerable in 2018.

Economic growth and international trade – rightly regarded to have played the critical role in lifting people out of extreme poverty in recent decades – can no longer be regarded as a panacea to poverty. These 750 million people often reside in marginalized excluded communities, completely disconnected from the engines of economic growth. Without focused targeted interventions, we risk missing the target of ending extreme poverty by 2030 as enshrined in the United Nation’s Sustainable Development Goals. Reaching this deadline will require renewed resources and political will, including, but not limited to, first, supporting countries as they work to meet their foreign aid commitments, particularly the funding needed to meet health, education and women’s health – all of which are critical to ending extreme poverty; second, removing or eliminating discriminatory practices that prevent people from participating in society as active fulfilled individuals; and third, unleashing the full potential of women through investing in their economic empowerment and health.

It has been written that Nelson Mandela did not care much for tributes. Rather, he was concerned with action, results and impactful outcomes to ensure the restoration of the dignity of all the people of South Africa, Africa, and the globe. If we are able to achieve that, then we might be able to fulfill Mandela’s unfinished work and thus live up to being that “great generation” he so desired and believed we were capable of being. ■



Photo: Shutterstock, thomas koch

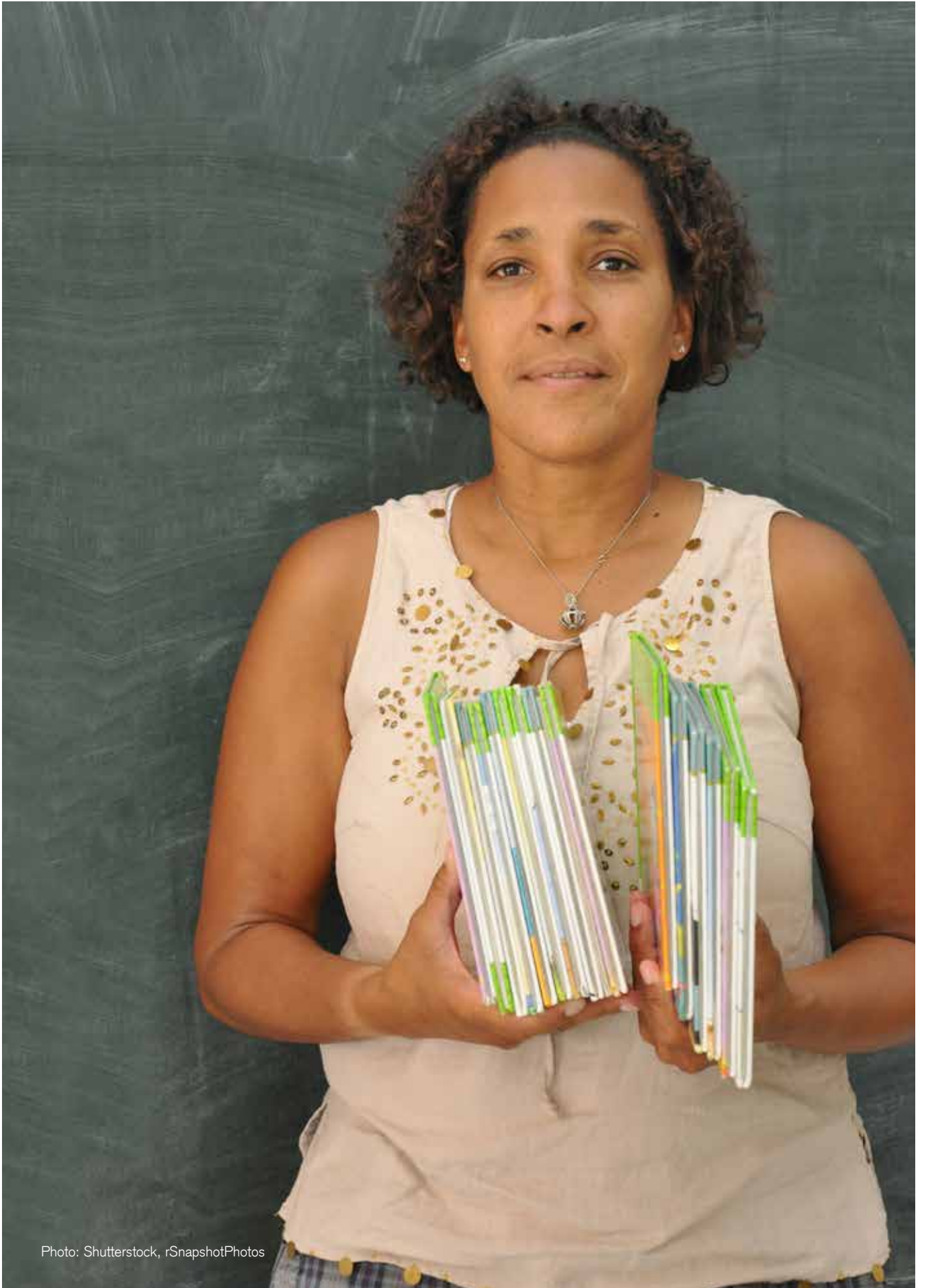


Photo: Shutterstock, rSnapshotPhotos

Escaping poverty: Investing in women's human capital

Policymakers in developing countries continually search for effective policy measures to promote economic growth and lift people out of poverty. Historically, investments in human capital have proven to be among the most effective means of accomplishing these ends. Recent research has provided evidence that investing in women's human capital may have an especially powerful effect on economic growth and poverty reduction.

Dr. David E. Bloom, Clarence James Gamble Professor of Economics and Demography in the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health

Dr. Michael Kuhn, (Co-)leader of the research group on population economics at the Wittgenstein Centre and Vienna Institute of Demography

Dr. Klaus Prettner, Professor of Economics at the University of Hohenheim, Stuttgart, Germany

Investing in the education, health and empowerment of women magnifies both their direct and indirect contributions to the economy. Direct contributions include paid and unpaid labor, and indirect contributions include reduced fertility, spillover benefits to the health and wellbeing of family members, and increased social engagement. By embracing policies that support female education, health and empowerment, national leaders can make an outsized impact on the economic wellbeing of their people.

This article¹ discusses women's distinct role in the transition to sustained economic growth and thereby in poverty reduction. Based on substantial evidence in the economic literature, we claim that women's empowerment and investments in their health and education are highly effective policy measures to promote economic development and reduce poverty. While moral and ethical grounds for social equity and human rights alone justify devoting public resources to advancing women's education and health and to ensuring that women have unhindered opportunities, the economic case for such spending is also gaining strength.

Background

Global poverty has been declining for decades, both in absolute numbers of individuals affected and even more so as a fraction of the population living below the poverty line (a predefined income level per day adjusted for purchasing power). Fast economic growth worldwide – particularly in China and India lifted almost one billion people above the absolute poverty line of one dollar per day (in 2005 prices) over the last three and a half decades. This progress unfolded against the backdrop of global

1. The authors would like to thank Daniel Cadarette and Vadim Kufenko for outstanding research and editorial assistance. This article is an updated and expanded version of an earlier article 'Invest in Women and Prosper,' originally published in Finance & Development magazine in September 2017.

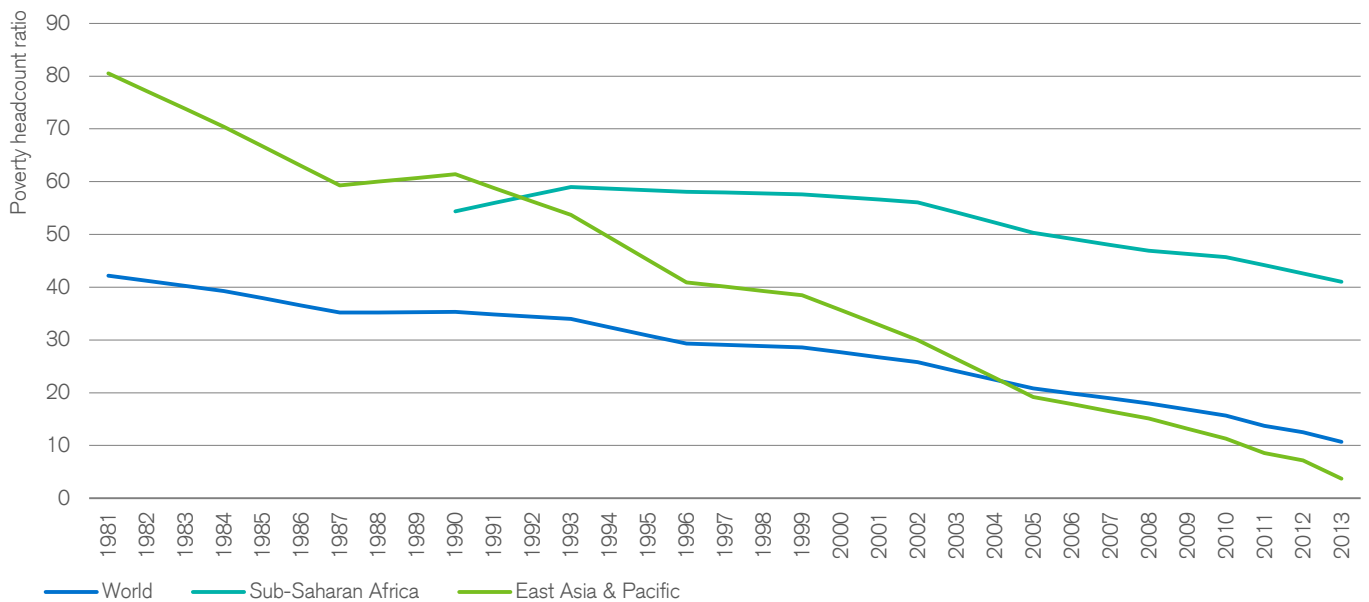
population growth of more than two billion people over the same period (Chen and Ravallion, 2010; Deaton, 2013, pp. 44–46; Milanovic, 2016, pp. 30–31).

Figure 1 illustrates the evolution of the poverty headcount ratio, defined as the fraction of the population living below USD 1.90 a day (adjusted for purchasing power with a base year of 2011), which corresponds to the poverty line used in the World Bank's Poverty and Equity database from which we obtain the data. Worldwide, the poverty headcount ratio declined from 35.3% in 1990 to just over 10% in 2013. Poverty declines in East Asia and the Pacific primarily drove this decrease, where the poverty ratio fell from 61.4% to 3.7%. The poverty ratio in Sub-Saharan Africa, however, declined by much less, from 54.4% in 1990 to 41% in 2013. This is because the absolute number of persons living below the poverty line of USD 1.90 a day in Sub-Saharan Africa has grown. Although offset by even faster overall population growth, the growing number of poor people in Sub-Saharan Africa shows that poverty reduction has not been uniformly successful throughout the world.

“Worldwide, the poverty headcount ratio declined from 35.3% in 1990 to just over 10% in 2013”

Figure 2 shows a country map of the average poverty headcount ratio (for a poverty line of USD 1.90 a day) between 2000 and 2015. We refer to the average because most countries do not report yearly data. The darker areas of the map represent countries with higher poverty headcount ratios. Those countries, which are concentrated in Sub-Saharan Africa are also those with the lowest economic growth rates over the time period examined. By contrast, fast-growing countries such

Figure 1

Poverty headcount ratio in % at USD 1.90 a day in 2011 (adjusted for purchasing power), 1981–2013

Note: For years in which data were not available, a linear interpolation has been used to impute the values.

Source: World Bank (2017), Poverty and Equity Database and authors' calculations.

as China and India have been very successful in poverty reduction. This observation is in line with previous findings that economic growth is the main pathway to reduce poverty (see, for example, Dollar and Kraay, 2002).² Given the established connection between growth and poverty reduction, the question of which policies are likely to instigate economic growth in areas that suffer from high poverty rates, particularly Sub-Saharan Africa, is clearly important. Policies and interventions that support women's empowerment, health and education represent one particularly high-leverage category of investments for fueling economic growth.

Women's contribution to economic growth

Women contribute to economic growth and development directly and indirectly. The direct route encompasses paid and unpaid (or market and non-market) productive activities. Women's participation in the paid workforce boosts output – and thus income, savings and tax contributions at the household, community and national levels. The extent of the contribution depends on how many women enter the workforce, how many hours they work, and how productive they are. Women also contribute much more than men through unpaid labor, particularly at

2. Several authors argue that the findings of Dollar and Kraay (2002) are to some extent driven by the choice of poverty measure and that they shield a lot of heterogeneity (e.g. Donaldson, 2008; Son and Kakwani, 2008). Donaldson (2008) identifies several factors that are conducive to poverty reduction aside from economic growth. These include stability and employment opportunities for the poor, progressive redistribution, state-sponsored welfare programs, and structural readjustment based on liberalization.

home. They often take (or are socially assigned) primary responsibility for child rearing. In addition, they often care for elderly family members and others in their household who need help. Women haul water, prepare food, do other household chores, and volunteer in the community. A 2015 United Nations Department of Economic and Social Affairs report³ estimates that women outwork men by an average of 30 minutes per day in developed economies and 50 minutes per day in developing economies when accounting for all paid and unpaid labor.

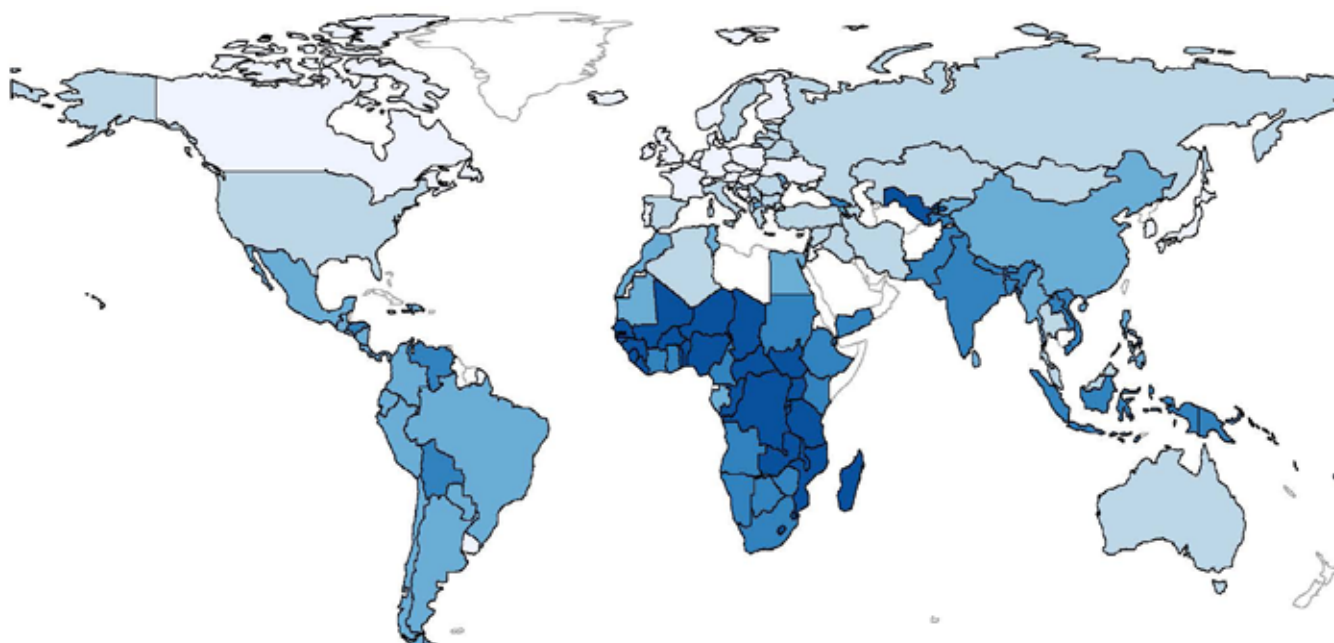
“Women also contribute much more than men through unpaid labor, particularly at home”

Women contribute indirectly to economic development and poverty reduction as well. Their indirect economic contribution takes various forms. When women's economic standing improves, spillover benefits to other family members tend to occur. For example, when women earn more and account for a larger share of household income, a greater share of household spending goes toward the health of the family, which positively affects the economy (Hoddinott and Haddad, 1995). Women can also be powerful instruments of social change in a manner that is conducive to economic growth. Furthermore, educated and empowered women are more likely to take leadership roles in the community and be less tolerant of gender inequity, which may help to push for more responsive leadership and further empowerment of women.

3. UN Department of Economics and Social Affairs, 2015

Figure 2

Average poverty headcount ratio at USD 1.90 a day (in 2011, adjusted for purchasing power), 2000–2015



Note: Average poverty headcount ratios were calculated for 2000–2015 because single-year data are missing for most countries.
 Source: World Bank (2017), Poverty and Equity Database and authors' calculations.

Fertility reduction is another powerful indirect pathway because high fertility is the main obstacle to long-run economic development, as Galor and Weil (2000), Bloom et al. (2003), Galor (2005, 2011), and Li and Zhang (2007) show. Families with large numbers of children are often caught in a poverty trap as the demands of raising many children result in relatively few resources being left for savings or for investment in schooling and child health. Consequently, children in large families tend to have low income, perpetuating poverty over generations. Investing in women's human capital helps to break this link and to shift a society from a poverty trap with high fertility to a regime of sustained growth with low fertility, which in turn contributes to lower poverty levels. In such a situation both overall economic growth and the reduction in fertility contribute to poverty reduction, whereby the reduction in fertility is the precondition for sustained growth in the first place.

“Gender equity remains far from the global norm”

Despite the numerous economic arguments for investing in women's human capital – and the clear moral imperative – gender equity remains far from the global norm. In low-income countries, fewer girls than boys are enrolled in secondary school (36% versus 43%). Rates for female enrollment are particularly abysmal in Niger (17%) and South Sudan (7%) (UNESCO, 2017). India spends less on women's health than on men's

across all demographic and socioeconomic groups (Saikia et al., 2016). Globally, women have fewer opportunities to enter high positions in business and government. As of 2016, women held fewer than a quarter of parliamentary positions worldwide, and only 11 women are currently heads of state (excluding figureheads) (UN Women, 2017).

To address these inequities and thereby promote economic development and poverty reduction, policymakers need to act decisively.

In the next section, we discuss some pathways through which women's empowerment and investments in women's health and education support economic development and poverty reduction. We also describe the complementarities between investing in women's education and health. In the third section, we discuss policy instruments available for enhancing women's education and health in less-developed countries and for strengthening the social standing of women.

Pathways

Empowerment

Female empowerment has the potential to reduce fertility by two main channels. The first channel is rooted in the preference structure outlined by Prettner and Strulik (2017). Following evolutionary psychology studies and in line with empirical regularities in less-developed countries (see Becker, 1999; Cox, 2007; Miller, 2008; Doepke and Tertilt, 2014; USAID, 2017), Prettner and Strulik (2017) assume that women, unlike men, tend to prefer having fewer better-educated and healthier children to having more less-educated and less-healthy children. When women's societal and household

standing increases, they are more likely to be able to enact their preference for fewer children. This results in a faster transition from a state of high fertility, low education and health, and sluggish economic growth to one of low fertility, high education and health, and sustained economic growth (see Bloom et al., 2003; Li and Zhang, 2007; and Galor, 2011). Prettner and Strulik (2017) show that this channel is particularly strong in countries where men's and women's preferences differ to a large extent; it might not be operative in countries where men and women differ to a lesser degree in their preference for children. This could reconcile Duflo's (2012) findings (according to which some randomized controlled trials conducted in areas where men and women hold similar preferences find only a weak and/or insignificant effect of female empowerment on economic development) with empirical studies based on cross-country regressions that find a positive effect (see, for example, Klasen, 2002; Knowles et al., 2002; Abu-Ghaida and Klasen, 2004; Klasen and Lamanna, 2009; Schober and Winter-Ebmer, 2011).

The second channel is rooted in the recent trend toward the elevated importance of "brain" relative to "brawn" in the labor market, which has been spurred by technological progress and structural transformation. Women, who have a comparative advantage in "brain," have become – and continue to be – more successful in the labor market because their skills are in increasing demand (Galor and Weil, 1996; Kimura and Yasui, 2010; de la Croix and Vander Donckt, 2010; and Diebolt and Perrin, 2013). This raises female labor-force participation and female wages, and thereby increases the opportunity costs of childcare. Fertility declines

as a consequence (see Figure 3), triggering a demographic transition,⁴ which releases resources that can be invested in education and health.

Given what we know about these two channels, how can investments in women's human capital help to bring the economy onto a path to development? In the following, we will consider the roles of female health and education and the way in which investments in the two complement each other.

Health and education

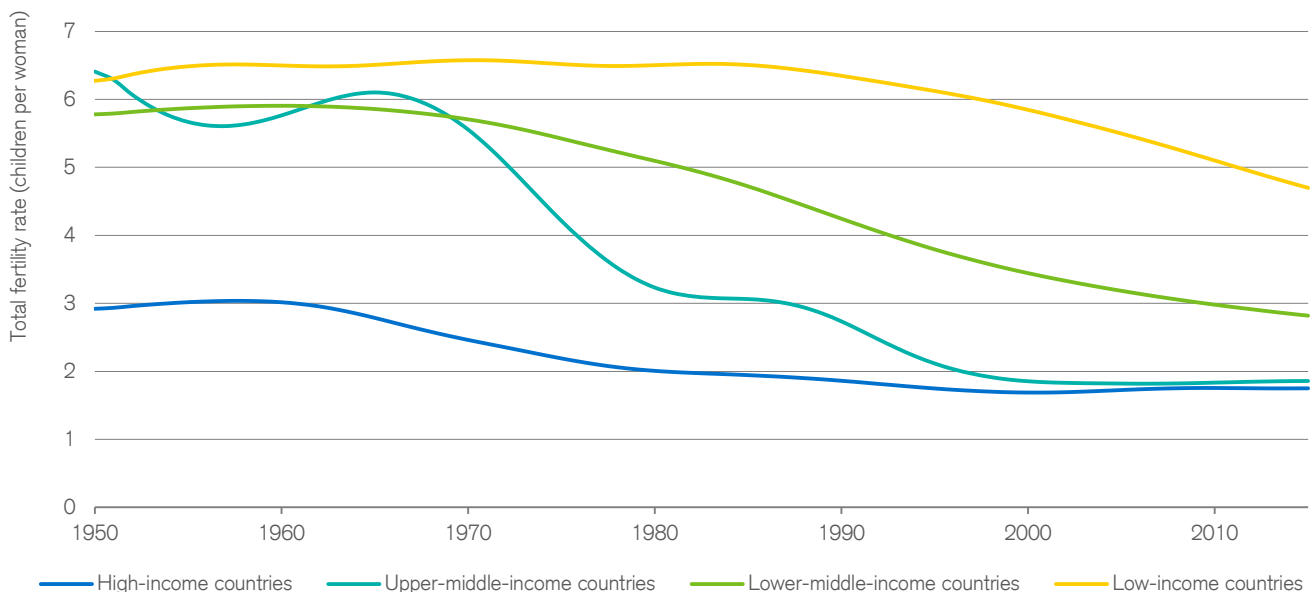
That health and education play a central role in economic development and poverty reduction is now common knowledge (see Galor and Weil, 2000; Galor, 2005, 2011; Cervellati and Sunde, 2005; Weil, 2007; Strulik et al., 2013; and Bloom et al., 2014). However, that women's health and education play a greater role than those of men, and that investments in women's human capital are likely to yield disproportionately large returns, may be more surprising (see, for example, Summers, 1992; Lagerlöf, 2003; Bloom et al., 2009, 2015; Stenberg et al., 2014; Onarheim et al., 2016; and UNFPA, 2016).

Recent studies strongly support the hypothesis

4. The term "demographic transition" refers to the transition of societies from a state of high fertility and mortality to a state of low fertility and mortality. With fertility and mortality both high in the initial state, the population barely grows. An initial decline in mortality drives a wedge between fertility and mortality such that population growth speeds up. Eventually, the fertility rate also declines, and population growth slows down again.

Figure 3

Total fertility rate over time by country income group, 1950–2015



Source: UN Population Division (2015), World Population Prospects: The 2015 Revision

that education is instrumental to growth (e.g. Cohen and Soto, 2007; Lutz et al., 2008; Hanushek and Woessmann, 2012), and evidence is mounting that restraining female education particularly hinders economic development (Klasen, 2002; Knowles et al., 2002; Klasen and Lamanna, 2009). Additionally, evidence shows that educational inequality in and of itself harms economic growth (Sauer and Zagler, 2014). Educating women also has implications for social and political organization. Lutz et al. (2010), for instance, show that improved female education fosters the transition to democratic forms of government. This in turn might have independent effects on long-run economic prosperity.

“While an increase in household income resulting from men’s health improvements leads to increased fertility, the converse holds true for females”

Bloom et al. (2015) account for gender differences in health and develop a theoretical dynamic general equilibrium framework that shows how female health improvements accelerate the demographic transition and thereby fuel long-run economic development, while improvements in male health tend to delay the transition. This relationship between female health and the demographic transition stems from the positive effect that health has on productivity and the negative effects that female labor-force participation and earnings have on fertility. While the increase in household income

resulting from men’s health improvements leads, *ceteris paribus*, to increased fertility because children are treated similarly to normal goods within households, the converse holds true for female health improvements. The reason is that increased earnings for women have a more pronounced effect on the opportunity costs of childcare, particularly in less-developed countries, where mothers spend vastly more time on childcare than fathers do (Berniell and Sánchez-Páramo, 2011).

It is worrying that studies continue to find discrimination against women and girls in the developing world in terms of access to healthcare and healthcare spending (e.g. Bloom et al., 2001; Self and Grabowski, 2012; Saikia et al., 2016), in terms of health outcomes during childhood (Bhalotra, 2010; Baird et al., 2011), and in terms of education (e.g., Aslam and Kingdon, 2008; Zimmermann, 2012; Sperling and Winthrop, 2016).⁵ In regard to the latter, disparities occur not only in terms of the “quantity” of education received, but also in terms of educational “quality,” as measured by differential attendance of private versus public schools (Aslam, 2009).⁶

5. At an even more basic level, discrimination against women is evidenced in “missing girls” or “missing women,” reflecting an unnatural bias in the sex ratio against females, especially in East and South Asian countries (e.g. Das Gupta, 2005; Bhaskar and Gupta, 2007; Ebenstein and Sharygin, 2009) and, at more mature ages, also in Sub-Saharan Africa (Anderson and Ray, 2010).

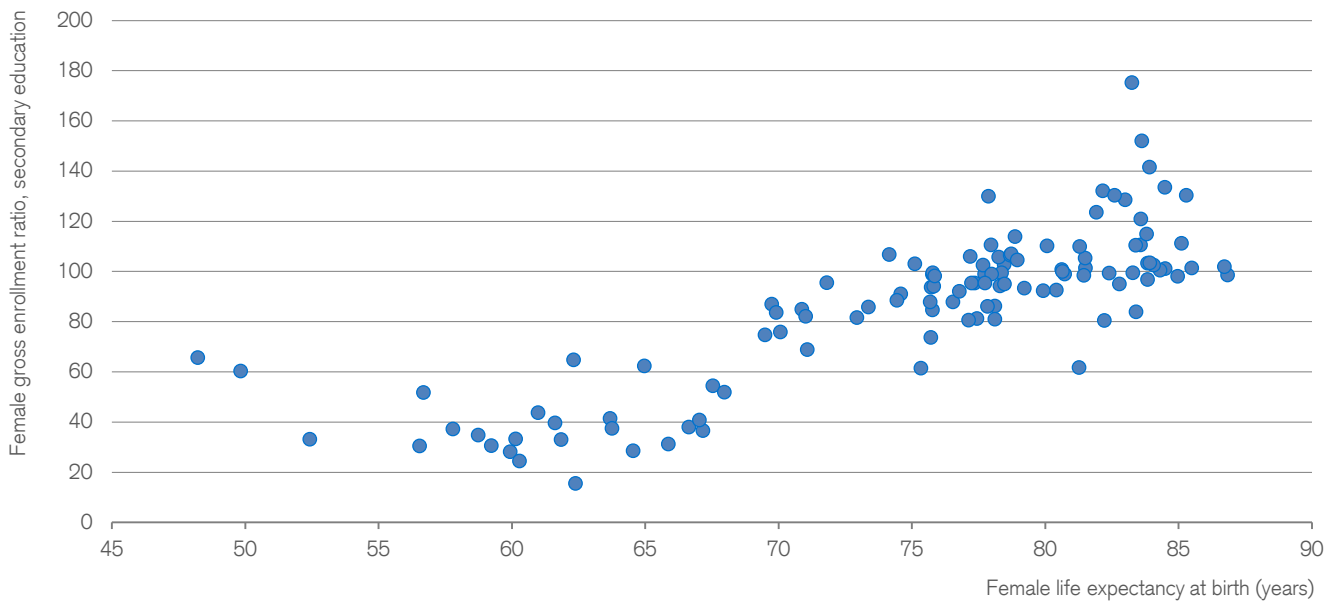
6. Showing that in patrilineal kinship systems the birth of a son often leads to the completion of fertility, Filmer et al. (2009) argue that girls therefore tend to grow up in larger families and for this reason tend to receive lower investments.



Photo: Shutterstock, CNK02

Figure 4

Female life expectancy and secondary education enrollment ratio by country, 2014



Note: All data are for 2014. Source: UNESCO Institute for Statistics (2017), Enrollment by level of education and UN Population Division (2015), World Population Prospects: The 2015 Revision

Complementarities

Investments in female health and education are important drivers of economic development independently. However, they can be all the more forceful when combined because they are complementary forms of human capital (Becker, 2007): Better survival and lower morbidity due to improved health increase the lifetime return to education and the opportunity to acquire education. Along the same lines, increased education tends to improve an individual’s ability to care for him/herself and increases the incentive to do so, as investment in personal health protects one’s accumulated human capital (see Figure 4). While human capital complementarity arises for women and men alike, it may be particularly forceful where poor health entraps women in a cycle of poor education. Jayachandran and Lleras-Muney (2009) show how a healthcare program aimed at lowering maternal mortality in Sri Lanka boosted girls’ literacy rates.

A second type of complementarity cuts across generations. Most directly, in-utero effects link mothers’ health statuses and behaviors with their children’s health. Bhalotra and Rawlings (2011, 2013) demonstrate the intergenerational persistence of disadvantageous health patterns. They also show that mothers’ enhanced education, child immunization programs and income growth can break these patterns. Field et al. (2009) provide evidence of a female-specific intergenerational complementarity: Improved maternal iodine intake has a particularly strong effect on the health and educational outcomes of girls. Finally, intergenerational complementarity stretches across types of human capital. If healthier women are more

active in the labor market or have more clout in the household, educational investment in their children tends to increase (Bratti and Mendola, 2014).⁷ In addition, some studies show that better-educated mothers are prone to do more for the health of their children (Aslam and Kingdon, 2012).

“Healthier, better-educated women are likely to have a better bargaining position”

Finally, women’s health and education improvements may contribute to changing social norms that militate against female labor-force participation. This is because healthier, better-educated women are likely to have a better bargaining position within the household and ultimately have a greater say in decision-making at the societal level. Micro-level evidence in Fernandez et al. (2004) supports such a view, showing that wives are more likely to work if their husbands had a working mother. Chung and Das Gupta (2007) provide a macro-level account of how economic development and policymaking combined to overturn strong preferences for sons arising from a patrilineal kinship tradition in South Korea. This is suggestive evidence for a third type of complementarity, namely that between human capital investments in women and girls and their social and political empowerment. Where anti-female social norms are strong, robust

7. See, however, Alam (2015) for conflicting evidence in a context of child labor.

policy initiatives may be required to empower women and girls to initiate investment in human capital – for themselves or their daughters – even against these norms and thereby give rise to a virtuous cycle.

Policy implications

Insofar as educated, healthy, and empowered women tend to be a powerful spur to economic development, a central policy question is how to equip large numbers of women in such a fashion. We propose four distinct categories of policy response: (1) direct more resources to the education and health sectors overall; (2) direct relatively more education and health spending to girls and women to ensure they are not disadvantaged vis-a-vis boys and men; (3) improve access to birth control; and (4) level the institutional playing field with respect to access to jobs, executive positions and political office.

More educational resources will draw more youth and adolescents – female and male alike – into school and provide them with a higher-quality education that aligns better with the demands of the labor market. Funds are needed to train teachers and administrators; establish performance incentives; update curricula and learning materials; and establish strong links among the primary, secondary and tertiary levels of the overall education system.

Increasing resources to the health sector will strengthen the health system and should yield lower rates of morbidity and mortality, resulting in higher productivity, income and educational attainment. Bloom et al. (2015) indicate that this could also

lead to lower fertility and redirect family and public investments away from the quantity of children toward their quality.

Targeted efforts are needed to boost school enrollment rates among young and adolescent women so they rival those of their male counterparts. In many developing countries, the need is greatest at the secondary and post-secondary levels. Secondary education system reforms should focus on improving school infrastructure, including ensuring that running water and working toilets are available, because the absence of such infrastructure deters many girls from enrolling in or attending school once they reach puberty (Bloom, 2014). Increasing the density of schools will also encourage female enrollment because long travel distances and times create personal safety concerns that are more likely to deter women (and their families) than men (see, for example, Sperling and Winthrop, 2016). Ensuring menstruating girls have sanitary products may further promote school attendance, although evidence on this front has been mixed (Bloom, 2014).

“Secondary education system reforms should focus on improving school infrastructure”



Photo: Shutterstock, Travel Stock

With respect to the health sector, considerable scope exists to improve access to reproductive health services, such as sexual counseling and providing access to contraceptive supplies that can prevent sexually transmitted infections and unwanted pregnancies. Vaccination programs for adolescent girls and boys to prevent human papillomavirus (HPV) infection and transmission are especially desirable (Luca et al., 2014). Strong health systems also offer adolescent girls and adult women regular PAP smears to detect HPV-related cervical lesions that can evolve into deadly cancers. Increased access to treatment for various diseases may encourage women (and men) to seek screening and testing aimed at early detection, when many diseases are more easily and inexpensively addressed. Iodine supplementation to address iodine deficiency – the world’s most common cause of cognitive impairment – is also a high-impact intervention that disproportionately benefits girls and women because of their disproportionate susceptibility to iodine deficiency’s effects (Field et al., 2009).

Das Gupta (2013) surveys several natural experiments in empowering women by facilitating access to birth control. Evidence from Rosenzweig and Wolpin (1980), Rosenzweig and Zhang (2009), and Joshi and Schultz (2013) on various Asian countries and from Miller (2010) on Colombia shows that fertility reductions are indeed associated with increases in schooling and greater health investments. While programs that enhance birth control may therefore be important triggers of human capital investments in a developing country, they also tend to disproportionately benefit the poor, as Salas (2012) and Jones (2015) show for the Philippines and Ghana, respectively. Thus, such programs may be instrumental in curbing poverty, both across countries and within a country.

“Initial policies must be sufficiently intense to make a genuine impact”

While the complementarities among health, education and fertility reduction mean that human capital investment in these areas can spark a virtuous cycle once these investments take effect, insufficient investment also has the potential to result in stark development traps. This poses a challenge to policymakers: Initial policies must be sufficiently intense to make a genuine impact, and they may need to be sustained for a certain period before triggering take-off. This may impose considerable strain on public budgets and therefore require the bundling of efforts in targeted programs. At the same time, policymakers must take care in determining which areas (health, education, or birth control) of policy investments are likely to be most effective, or whether targeting certain subgroups of

the population with comprehensive policies is better. Bell and Gersbach (2009) show that if human capital levels are low throughout the population, then targeting particular subgroups is more effective in stimulating development, but that this often comes at the cost of greater initial inequality. Targeting women may be a good strategy then, as this would likely result in restoring equity to some extent rather than disrupting it.

Moreover, labor, financial market and macroeconomic policies that aim to eliminate inefficient distortions and promote robust gender-blind access to steadily created “good jobs” will serve to incentivize investment in women’s education and health, promote female empowerment, and discourage early marriage and childbearing. Jensen (2012) shows that creating job opportunities induces young women to enter employment, invest in their education, and aspire to a smaller family size. Heath and Jayachandran (2017) point out that developing female labor market opportunities complements improvements in female education. Bandiera et al. (2017) show that a program aimed at allowing poor women to enter livestock-rearing led to a sustained increase in asset accumulation and poverty reduction among program participants without compromising the outcomes of noneligible households. Hashemi et al. (1996) show that microcredits targeted to women have significantly positive effects on female empowerment.

“Microcredits targeted to women have significantly positive effects on female empowerment”

As far as the general social context is concerned, enhancing women’s involvement at the community level could have a substantial impact on young women’s educational attainment and on the career aspirations of both young women and their parents (Beaman et al., 2012). Reserving governmental leadership positions is one mechanism for promoting greater political involvement; this tactic has the benefit of increasing the likelihood that other women will succeed in subsequent elections (Beaman et al., 2009). Finally, Jensen and Oster (2009) and La Ferrara et al. (2012) reveal a strong impact of television on fertility norms, as popular television programs often depict wealthy, urban families with relatively few children. Indeed, Das Gupta (2013) attests to an important role for the media in increasing the acceptability of contraception and of women taking greater control over their fertility.

Table 1

GNI per capita in top- and bottom-performing countries by GII, 2014

Region	Gender Inequality Index (GII)	
	Lowest country	Highest country
Arab states	United Arab Emirates GNI per capita: 67,330	Yemen GNI per capita: 3,740
East Asia and the Pacific	Singapore GNI per capita: 79,660	Papua New Guinea GNI per capita: 2,800
Europe and Central Asia	Slovenia GNI per capita: 30,360	Georgia GNI per capita: 9,130
Latin America and the Caribbean	Chile GNI per capita: 21,470	Haiti GNI per capita: 1,740
South Asia	Bhutan GNI per capita: 7,330	Afghanistan GNI per capita: 1,960
Sub-Saharan Africa	Rwanda GNI per capita: 1,640	Niger GNI per capita: 930

Note: GNI per capita is adjusted for purchasing power (current international USD). Source: UN Development Programme (2015), Human Development Report, Gender Inequality Index and World Bank (2017), World Development Indicators online database

Conclusions

Countries continually search for policies that will promote growth and reduce poverty. Economists and policymakers have come a long way over the course of centuries in identifying good practices and sound policies to achieve these aims. High on the list of favorable policies are those that facilitate investments in human capital. However, not all investments in people yield the same results. Evidence and sound reasoning strongly suggest that investments in women – especially investments in their education, health and empowerment – pay disproportionate dividends.

“The potential for female empowerment to fuel economic growth and reduce poverty is a strong incentive for policymakers to invest in women’s health and education”

Indeed, countries in which women fare better with respect to education, health and empowerment tend to perform better economically than countries in which the situation for women is worse. [Table 1](#) compares the top- and bottom-performing countries in the United Nations Development Programme’s Gender Inequality Index (GII) in six regions for the year 2014. In each region, gross national income

(GNI) per capita is substantially higher in the country with the lowest relative level of gender inequality than in the country with the highest level of gender inequality. Of course, an element of reverse causality is likely at play here, as countries with higher-performing economies have more resources to invest across all elements of society, which may result in greater equity. But, as we have sought to argue and document in this essay, substantial evidence shows a positive relationship between women’s improved social standing and superior economic outcomes.

Empowering women and promoting women’s health and education are, of course, highly important aims in and of themselves. However, beyond the obvious moral imperatives to seek greater gender equality and improved wellbeing for all, the potential for female empowerment to fuel economic growth and thereby to reduce poverty is a strong incentive for policymakers to invest in women’s health and education. ■



Disability and development: An economic perspective

Eliminating poverty is the ultimate aim of the international development community. Persons with disability are overrepresented among those living in poverty, and yet have typically been left outside the focus of major development initiatives. One of the barriers may have been the scarcity of evidence about the relationship between disability and economic development.

Dr. Marc Suhrcke, Senior Researcher at the Luxembourg Institute for Socioeconomic Research and Professor of Global Health Economics at the Centre for Health Economics, University of York

Reducing – and ultimately eliminating – absolute poverty worldwide has long been the aim of the international development community, as is reflected by the renewed commitment expressed by the Sustainable Development Goals (SDGs). The SDGs were agreed by the international community in September 2015, striving to eradicate poverty “in all its forms”. Out of the estimated one billion people living with at least one disability, 80% are thought to reside in low and middle income countries (LMICs). While it is not known with certainty how many of these live in absolute poverty, it is not hard to imagine that they make up an at least significant part of the population that the SDGs are in fact targeting. It is well documented that living with a disability is associated with lower likelihood of employment and higher odds of little or no formal education relative to persons without disability (World Health Organization (WHO)/World Bank 2011). Taken together, this would suggest that if the ambitious poverty reduction targets are to be met, some serious consideration ought to be given to the likely specific situation and needs of persons with disabilities (PwDs).

And yet, PwDs have traditionally suffered from neglect within the overall development research, policy and practice. From a disability perspective, the predecessor of the SDGs, the Millennium Development Goals (MDGs), that were agreed upon among all 191 UN member states (and numerous international organizations) and were set for 2015, failed to explicitly acknowledge disability as a development issue (Groce & Trani 2011). Fortunately, this omission has at least partly been rectified in the SDGs, which comprise a total of 17 goals and 169 targets – numbers high enough to accommodate several references to disability, mainly in the sections related to education, growth and employment, inequality, accessibility of human settlements, as well as data collection and monitoring of the SDGs.

While this commitment may be seen as an important step towards the recognition of disability as an important development issue, it remains to

be seen in how far the verbal commitment will translate into real action. Moreover, from a scientific perspective, there is reason to believe that in terms of underlying empirical evidence many questions remain unanswered. This evidence gap may, in turn, represent a significant barrier to policy action (alongside several others). In this chapter we set out to review the actual state of the evidence about various dimensions of the relationship between disability and (economic) development.

“Living with a disability is associated with lower likelihood of employment and higher odds of little or no formal education relative to persons without disability”

Section 2 starts with some basic, and yet far from straightforward, discussion of how the concept of disability can best be defined, and how it can be – or at least thus far has been – measured. How disability is defined and then measured is at the very heart of any assessment of the poverty consequences (and determinants) of disability. While there is variation across measures, there is no doubt about disability affecting a considerable and far from absolutely marginal share of the population in LMICs.

Section 3 proceeds to examine how far disability is linked to economic development (and hence poverty): the question of whether indeed disability is – as one might expect – more likely to be found among the poor (countries and people) than among the rich. While, again, data and measurement are critical, this relationship appears to hold at country level. At individual and household level, while empirical evidence remains scarce in the LMIC context, a recently growing evidence base also does overwhelmingly support the hypothesized relationship.

While showing correlation between disability and economic outcomes (including poverty) is important, as it points at the potential of vicious circles of poverty and disability, it is precisely the causal understanding that is needed to credibly inform policymakers, for instance about the extra costs incurred by PwDs as a result of their disability. Therefore, in Section 4, we critically review the existing literature on one direction of the causal link – the impact of disability on costs at household and individual level. Section 5 concludes by briefly discussing the policy and research implications of the presented findings.

Defining and measuring disability

As the UN Convention on the Rights of Persons with Disabilities (UNCRPD) – the international human rights treaty of the United Nations intended to protect the rights and dignity of PwDs – states, disability is an evolving concept. An early traditional view used to take a predominantly medical perspective, viewing disability as a problem of the individual that is directly caused by a disease, an injury or other health conditions, and that requires prevention interventions or medical care in the form of treatment and rehabilitation (Johnstone 1998). This “medical model” of disability soon gave rise to the rather opposing view that attributed disability entirely to the social environment (“the social model”), which, as opposed to medical interventions, saw the solution primarily in social change (Shakespeare 2006).

“Disability became seen as the umbrella term for impairments, activity limitations and participation restrictions”

The International Classification of Functioning, Disability and Health (ICF) model, adopted among others by the WHO/World Bank 2011 flagship report on disability, subsequently offered a compromise between the two extreme models. According to this “bio-psycho-social model,” functioning and disability was considered as the outcome of a dynamic interaction between health conditions and contextual factors, both personal and environmental. Disability became seen as the umbrella term for impairments, activity limitations and participation restrictions. While the UNCRPD refrains from an explicit definition, this is also how it conceptualizes disability.

A further influential and not necessarily mutually exclusive conceptual view has been put forth by economics Nobel laureate Amartya Sen, who viewed disability as a double handicap, which (1) reduces the ability to generate an income (“earning handicap”) and (2) reduces the ability to convert money into good living (“conversion handicap”) (Sen 2004).

With such a multitude of definitions and concepts, it may not be surprising that it has been hard to come up with a widely accepted harmonized measure of disability (even though in some cases differences in definition and measurement of disability may be explained by differences in the purposes for which they have been collected (e.g. the collection of prevalence data versus the provision of services).

Recent efforts have tried to harmonize measurement internationally: in 2001 the Washington Group on Disability Statistics was set up by the United Nations Statistical Commission as an international, consultative group of experts to facilitate the measurement of disability and the comparison of data on disability across countries. The questions selected by the Group use the World Health Organization’s International Classification of Functioning, Disability, and Health as a conceptual framework, with the focus being on functioning in basic actions, as opposed to approaches that are based on impairments or bodily functions. The severity scale is used in the response categories in order to capture the full spectrum of functioning from mild to severe.¹

“15.6% of adults (aged 18+) could be considered as disabled”

As definitions and measures of disability have evolved, so have global estimates of disability prevalence. In 1981, the WHO Expert Committee on Disability, Prevention and Rehabilitation put the figure at 10% of the world population, based on “expert opinions” (WHO 1981). The 2004 WHO Global Burden of Disease (GBD), adopting a predominantly medical perspective, suggested – based on extensive epidemiological modeling – that 19.4% of adults aged 15+ suffered from severe or moderate disability and 3.8% have a severe disability. In the GBD, disability prevalence is inferred from data on health conditions and impairments alone using available data on distributions of limitations that may result from health conditions and impairments.

The WHO/World Bank (2011) flagship report, which put forth the one billion global disability prevalence estimate mentioned in the introduction, found that 15.6% of adults (aged 18+) could be considered as disabled, as derived from responses

1. The exact wording of the short version of the set of questions is as follows: “The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM. (1) Do you have difficulty seeing, even if wearing glasses? (2) Do you have difficulty hearing, even if using a hearing aid? (3) Do you have difficulty walking or climbing steps? (4) Do you have difficulty remembering or concentrating? (5) Do you have difficulty (with self-care such as) washing all over or dressing? (6) Using your usual (customary) language, do you have difficulty communicating (for example understanding or being understood by others)?” For each question, four response categories are used: (1) No, no difficulty, (2) Yes, some difficulty, (3) Yes, a lot of difficulty and (4) Cannot do it at all.

to 15 questions of the WHO's World Health Survey in 59 countries. More recently, Mitra & Sambamoorthi (2014), using the same survey (but for 54 countries and using a subset of four questions to identify disability), estimated that 14% of adults (aged 18+) have a disability, as measured by having at least one severe or extreme difficulty.

Empirical evidence on the relationship between disability and (economic) development

In a chapter entitled "Disability and Development," the obvious question arises: what precisely is the link between disability and (economic) development? Is it indeed the case, that – as one would expect – the poorest countries have the highest levels of disability and that as countries grow richer and out of poverty, disability prevalence does decline? Or, taking the relationship to the within-country level: are people with disabilities (or households with disabled members) more likely to be among the poor in a given country? In this section, we seek to answer those questions in turn, relying on recent data and on the current published evidence, first from a cross-country perspective and, second, from a within-country perspective. Before turning to the empirical evidence though, we briefly discuss the potential mechanisms behind what is widely seen as a bi-directional relationship.

As Figure 1 illustrates in a somewhat stylized manner, there are multiple ways in which disability may lead to poverty. For instance, children with disabilities are less likely to attend school than their non-disabled counterparts, with long-term adverse

effects on the human capital they accumulate, and subsequent lower employment and earnings opportunities on the labor market (Filmer 2008). Some of the adverse educational and employment outcomes may come about as the result of discrimination in (access to) schools and in the labor market, and some may be driven by reduced productivity (Mitra 2017). In addition, there are a range of potential extra costs incurred by PwDs which affect the economic wellbeing of the individual or household concerned. At the same time, living in poverty exposes people to a number of conditions that increase the chances for people to develop a disability, e.g. via the risk of malnutrition or infectious diseases, greater exposure to violence, lack of access to safe water and sanitation infrastructure (Emerson et al 2006, Peters et al. 2008).

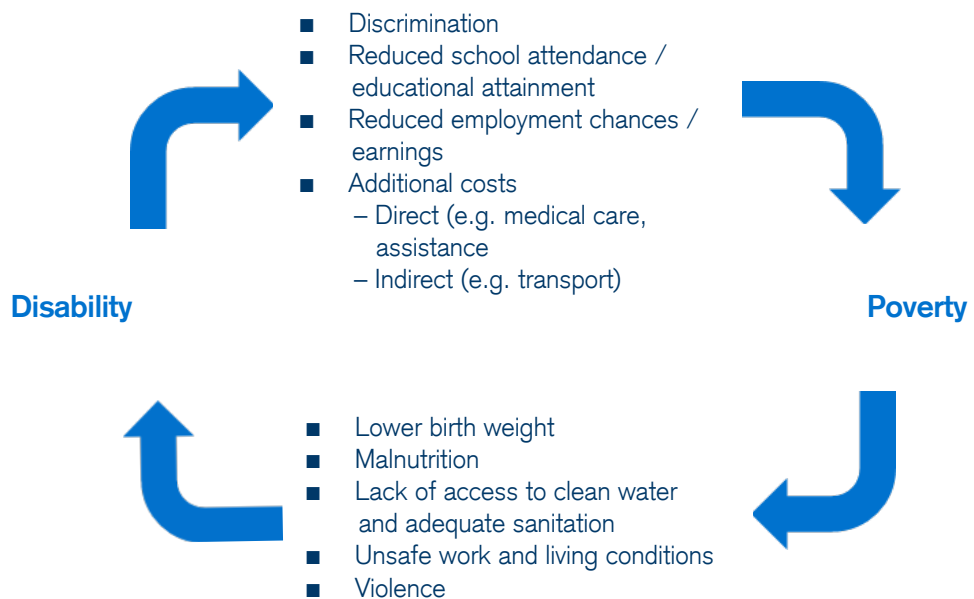
"There are multiple ways in which disability may lead to poverty"

Cross-country perspective

From a cross-country perspective, providing an accurate picture of the empirical relationship between disability and (economic) development hinges on the availability of data that is comparable across countries. We have mentioned above the challenges in this respect (which will hopefully be overcome as the ongoing harmonization efforts spurred on by the Washington Group take effect). Figure 2 makes use of the latest (publicly) available data on disability prevalence, based on a dedicated

Figure 1

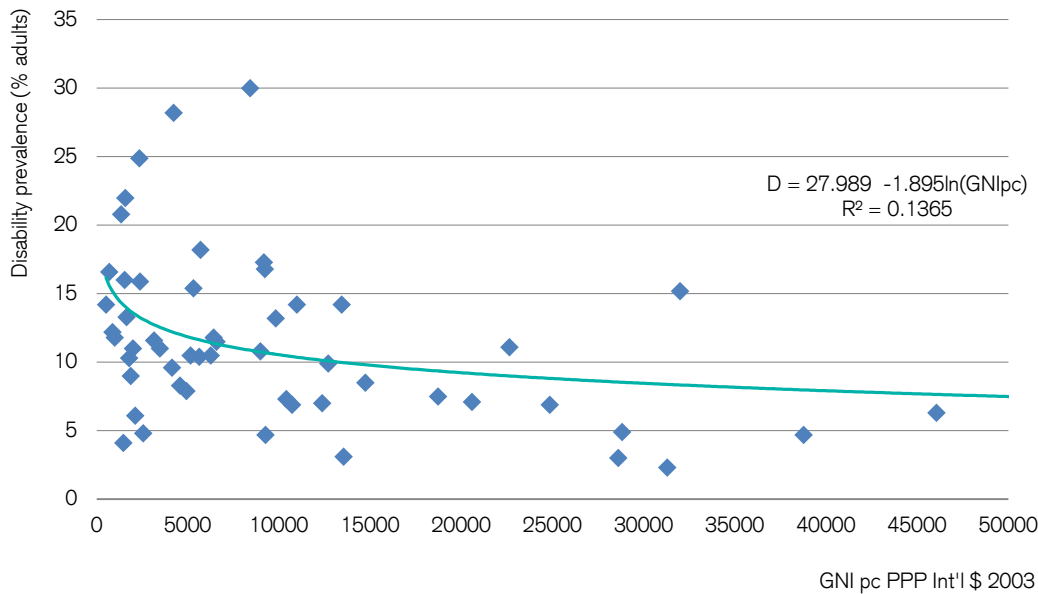
The bi-directional relationship between disability and poverty



Note: The listed potential mechanisms do not necessarily present an exhaustive list, and neither does the framework account for potential inter-relationships between the different channels. Source: Modified based on WHO/World Bank (2011)

Figure 2

Disability prevalence (% of adults) and economic development (GNI per capita) in 54 countries worldwide



Source: Disability data from Mitra & Sambamoorthi (2014), Gross national income (GNI) per capita data from World Bank World Development Indicators (<https://data.worldbank.org/data-catalog/world-development-indicators>)

effort by Mitra & Sambamoorthi (2014), and plotted against the standard proxy for the economic wealth of a country (which is closely correlated with absolute poverty levels across countries).

The first thing to note about Figure 2 is the considerable variation in disability prevalence among the lower-income countries alone, ranging from 3.1% in Malaysia to 30% in South Africa. While there is much variation, on average the expected inverse relationship is confirmed. (Using a slightly different disability measure, but with a similar data source, i.e. the one employed in the WHO/World Bank 2011 report, but for more countries, a broadly similar pattern emerges.) Hence, across a large set of countries world-wide, disability indeed appears to be associated with poverty on average.

Within-country perspective

An inverse correlation between disability and economic status at country level does not necessarily mean that the same, yet intuitively expected, correlation holds at the level of the individual or household within a given country. A review on disability and poverty in LMICs published in 2011, revealed that (1) the evidence base (at least back then) was severely limited, (2) some studies did show strong links, but also that what evidence existed sometimes presented a more nuanced complex relationship between disability and poverty (Groce et al. 2011). A very similar picture emerged from a review on childhood disability and socio-economic indicators in LMICs (Simkiss et al. 2011).

A most recent review (Banks et al. 2017) has thoroughly re-assessed and updated the evidence

base, by systematically and critically appraising the peer-reviewed literature published from 1990 to March 2016. This study represents the latest, most comprehensive stock-take of what is known on the subject. The study finds a total of 150 relevant studies, of which the majority (81%) found evidence supporting the hypothesis of a positive disability and poverty link. On the whole, the relationship appeared robust to the inclusion of controls for a set of measurable, potential confounders (e.g. age, gender, education), and across all regional contexts, impairment types, study designs and age groups.² There was also evidence of a dose-response relationship – with greater severity of disability being associated with greater odds of poverty, and vice versa. Table 1 gives a break-up of the reviewed papers by geographic region, income grouping, disability type and study design.

2. At the same time, it is important to recognize that the evidence is not without nuance. For instance, studies in low-income countries or in certain regions (notably sub-Saharan Africa and Europe/Central Asia) were less likely to observe a relationship between disability and poverty, perhaps due to challenges in accurately and appropriately measuring poverty in complex and varying economies. Or it may be the case that PwDs are left behind as regions develop economically, so that the gap in poverty between those with and without disabilities will be larger in areas that are less poor. There was also some slight variation in the results by age group. Analyses focused on older adults were slightly less likely to be positive, compared to working-age adults and children. Moreover, as economic poverty has been linked consistently to lower life expectancy (Marmot & Allen 2014), poorer individuals who survive into older age may be healthier than their wealthier counterparts.

Table 1

Selected descriptive characteristics of disability and poverty studies reviewed by Banks et al. (2017)

		Number of studies	(%)
Region	East Asia/Pacific	40	26.7%
	Latin America/Caribbean	31	20.7%
	South Asia	26	17.3%
	Sub-Saharan Africa	22	14.7%
	Middle East/North Africa	11	7.3%
	Europe/Central Asia	4	2.7%
	Multi-region	16	10.7%
Income group	Low	38	26.4%
	Lower-middle	42	29.2%
	Upper-middle	48	33.3%
	Mix	16	11.1%
Disability type	Visual impairment	12	7.5%
	Hearing impairment	2	1.3%
	Physical impairment	12	7.5%
	Intellectual/cognitive impairment	23	14.5%
	Mental disorders	73	45.9%
	Mixed impairments/functional limitations	37	23.3%
Study design	Cross-sectional	124	82.7%
	Case-control	11	7.3%
	Cohort	13	8.7%
	Other	2	1.3%

Source: Banks et al. (2017)

Table 1 shows that – reassuringly – each region is covered by at least some analysis, though the majority has been focused on East Asia and the Pacific, possibly due to better data availability. The geographic distribution is at least partly reflected in that by income grouping: the richer the country covered, the more likely there is empirical evidence available on the link between disability and poverty. The majority of disability types addressed by the studies is based on mental disorders, a finding which could be driven by the fact that there is a distinct and growing research community out there that focuses on mental disorders in the context of global health.³ Classifying studies by study design reveals the dominance of cross-sectional designs, which severely limit the extent to which the nature of the relationship can be explored in any further depth, beyond the description of a correlation or lack thereof.

Despite the mostly consistent picture emerging on the close link between disability and poverty, this evidence does not allow an assessment of the direction of causality between the two, or indeed whether the relationship may be driven by a third, hard-to-measure factor.

3. See for example the Lancet Special Series on Global Mental Health in 2007 and 2011, as well as major reviews focusing particularly on the link between mental health and poverty (Lund et al. 2010, 2011).

The costs of disability

This section reviews what is known about some of the dimensions of the (broadly interpreted) “costs” of disability. This is important for several reasons. First, in the case of labor market consequences (e.g. employment chances, earnings), it provides an indication of the benefits that could result from more effective inclusion in the labor market, and it may point toward potential discrimination for PwDs in the labor market.⁴ Second, understanding the additional costs PwDs experience as a consequence of their disability can inform by how much social security systems should compensate those costs through the provision of benefits.

“The evidence does clearly indicate that individuals with disabilities face sizable extra costs”

Third, estimates of the extra costs of disability also help to provide an adequate assessment of the poverty level in a given country, and especially in LMICs where the majority of the world’s population with disabilities reside. In turn, this allows us to properly assess progress toward the SDG poverty reduction goal, taking into account the extra costs of disability that are required. Fourth, knowledge of the true costs of disability is important from a policy perspective in light of the commitments countries have made under the UNCRPD. The CRPD requires signatories to protect the right of persons with disabilities to have an adequate standard of living for themselves and their families, including adequate food, clothing and housing, as well as to safeguard access by families living in situations of poverty to social protection assistance with disability-related expenses (Palmer et al. 2016).

In the literature, multiple approaches have been used to estimate the extra costs of disability.⁵ A recent review by Mitra et al. (2017) has synthesized the evidence base on the extra costs of disability worldwide – measured in different ways – as published in the peer-reviewed literature from 1995

4. The studies reviewed below do not focus specifically on the labor market consequences of disability. For a thorough assessment in some LMICs, see Mitra (2017).

5. See Morciano et al (2015) for a description of five different measurement approaches, including (1) assuming that the political process has resulted in an acceptable evaluation of disability costs by using an income measure for distributional analysis which excludes any receipt of disability benefit, on the assumption that income from disability benefit is exactly offset by the extra costs of disability, (2) asking a panel of experts or disabled people themselves, (3) an “objective” equivalence approach constructing an equivalence scale by using the consumption pattern as an indicator of living standards in a comparison of a sample of disabled people with matched individuals who are unaffected by disability, (4) a “subjective” equivalence approach, based on individuals’ reported satisfaction with their well-being, and (5) the SoL approach described in the text.

to 2014. The review only located 20 relevant studies, the majority of which were in high-income countries, hinting at the lack of reliable evidence on the subject, particularly for LMICs, where the vast majority of PwDs live. That said, the evidence does clearly indicate that individuals with disabilities face sizable extra costs. These direct costs appear to vary according to the severity of disability, life-cycle and household composition. As the methods used across the studies are highly heterogeneous, we focus below on the findings based on one method, i.e. the increasingly popular, so-called Standard-of-Living (SoL) approach.

The SoL approach is related to Sen's above-mentioned concept of the "double handicap," which implies that the additional expenditures incurred by PwDs for goods and services as a result of their disability have the effect of creating disadvantage because higher income is required so that households with disabled members can achieve the same level of well-being as an otherwise similar household. The extra expenditures may relate directly to disability (e.g. assistive devices or medication) or indirectly (e.g. transport). Because of these additional costs, PwDs experience a lower standard of living than their non-disabled counterparts. The absolute costs of disability can then be identified as the additional income required by a disabled person to reach the same standard of living as a non-disabled person, holding constant other characteristics. A key advantage of the "indirect" estimation followed by the SoL approach is that it does not rely on the often challenging collection of individual disability-related expenditures.

As Table 2 reveals (which draws on the results of the studies in Mitra et al. 2017, complemented by further primary studies), expressed as a share of average income, the extra cost estimates vary hugely from 3% to 158%. Where studies have assessed costs by severity of the disability, they find a clear expected gradient in the costs. Comparing results for high-income countries (HICs) versus LMICs, it is apparent that the percentage of extra costs is lower in the latter. (The intuitively surprising pattern of households with disabled members in richer countries facing on average higher disability costs than poorer ones also emerges from the Antón et al (2016) study that compares disability costs in 31 EU countries.) This may be explained by relatively low level of household resources to devote to disability-related costs or lower levels of availability of, and accessibility to, disability goods and service markets (e.g. rehabilitation services) in less-wealthy countries. In LMICs, there may also exist stronger family and community networks to care for people with disabilities. And overall living standards will be low, which may further mitigate the extent of disability costs estimated under an SoL approach.

Some of the studies summarized in Table 2 assessed estimated disability costs against the receipt of income support from government. In the UK, Cambodia and China, public transfers have been found to fall significantly short of disability-

cost estimations (Zaidi/Burchardt 2005; Palmer et al.; Loyalka et al. 2014). This suggests that public support programs are not sufficiently taking into account the extra costs associated with a disability.

The study on Cambodia (Palmer et al. 2016) also estimated what the extra costs meant for the absolute poverty levels of households with disabled members. The authors find that, if the additional costs of disability are accounted for, the poverty rate among households with disabled members almost doubles, increasing from 18% to 34%. This underlines the point made earlier about the importance of taking proper account of the extra costs of disability when measuring poverty levels in the context, for instance, of SDG poverty reduction progress assessments.

Table 2

Estimates of extra costs of disability, using the Standard-of-Living (SoL) approach

Study	Country	Age	Extra costs as % of average income
Brans & Anton (2011)	Spain	17+	40% (moderate disability)
			70% (severe disability)
Braithwaite & Mont (2009)	Bosnia	All ages	14%
Braithwaite & Mont (2009)	Vietnam	All ages	9%
Cullinan et al 2011	Ireland	All ages	23%
			30% (moderate)
			33% (severe)
Cullinan et al 2013	Ireland	65+	40%
Loyalka et al (2014)	China	NA	For households with disabled adults: 8%–43%
			For households with disabled children: 18%–31%
			Moderate 3%–116%
			Severe 14%–158%
Mont & Cuong 2011	Vietnam	NA	12%
Saunders 2007	Australia	NA	29%
			30% (moderate)
			40% (severe)
Zaidi & Burchardt 2005	UK		11% (mild)
			34% (moderate)
			64% (severe)
Morciano et al 2015	UK	65+	62%*
Palmer et al 2016	Cambodia	All ages	17%
Anton et al 2016	EU-countries (31)	All ages	ca. 18%–98%**

Notes: * In Morciano et al (2016), the cost is expressed as a share in the net weekly pre-disability household income. ** Precise numbers are estimated from visual inspection of Figure 1 in Antón et al. (2016). No precise numeric information was given in the paper. Source: Mitra et al (2017), Morciano et al. (2015), Palmer et al (2016), Antón et al (2016)

Concluding remarks

In this chapter, we have briefly reviewed selected (but by no means all) aspects of the relationship between disability and (economic) development, with a primary interest in LMICs. We have seen that, despite the still-significant measurement challenges and the overall scarcity of evidence in this field, several key conclusions emerge:

1) Disability affects a noticeable share of the population, the vast majority of which live in LMICs.

2) While it is not (yet) known exactly how many PwDs live in absolute poverty, and hence would be part of the prime target group of international poverty-reduction efforts via the SDGs, we do know that disability is closely associated with poverty and other indicators of economic deprivation at both the country and individual/household level.

3) There is also a growing body of evidence documenting the sizeable additional costs incurred by PwDs as a direct or indirect consequence of their disability, underlining the increased risk of PwDs (and the households they are part of) falling under the absolute poverty line in any given LMIC.

Taken together, this adds significant weight to the case for making disability a key consideration of any serious, comprehensive poverty-reduction effort – a case that appears to have been verbally adopted in the SDGs, but will need to be followed through with concrete policy action.

Looking ahead, there remains massive scope for more evidence on the link between disability and poverty, particularly as far as the causal nature of the relationship is concerned, of which we currently know fairly little. Collecting and using longitudinal survey data would go some way toward this end, particularly if analyzed with advanced econometric methods able to provide causal inference. As more and better causal evidence becomes available, the more reliable information there would be about relevant entry points for policies to break the cycle between disability and poverty. More evidence would also be required to improve our understanding of how disability leads to extra costs of living and poverty in LMICs, as this would provide useful information about the design of social protection programs (e.g. via social insurance programs, pension or cash transfer programs).

A related, significant evidence gap that could not be discussed within the space of the present chapter is in the rigorous evaluation of the impact of programs and policies intended to improve the wellbeing of PwDs, for instance in the domains of social protection, labor market, education or health. Ideally, such evaluation should consider not only effectiveness but ought also take into account suitable concepts of 'value for money'. While the latter is well developed in the field of health technology assessment (Drummond et al. 2015), where it can usefully inform priority-setting under given budget constraints, significant conceptual and measurement challenges remain when trying to apply similar assessments in the context of disability. ■



Photo: Shutterstock, Ververidis Vasilis



Capitalizing social change: Social entrepreneurship and social finance

Two important innovations of potentially global significance are social entrepreneurship and social finance. In the following, we outline their relevance in terms of the pressing challenges of the 21st century. The contention here is that, in tandem, social entrepreneurship and social finance can help drive important changes in global markets, political institutions and the third sector as a part of a wider set of reforms aimed at resolving the key challenges of the modern age.

Dr. Alex Nicholls, Professor of Social Entrepreneurship within the Skoll Centre for Social Entrepreneurship at Saïd Business School, University of Oxford

Today the world faces a series of complex and seemingly unresolvable issues, including climate change, poverty and inequality, mass migration, pandemics, growing nationalism and terrorist extremism, and water and food scarcity. These types of challenges are often grouped under the umbrella term “wicked problems”¹ – meaning that they are multi-systemic, dynamic and multi-level. While such problems may be mitigated by various means, they typically defy a single solution. One obvious conclusion from this is that the status quo of global institutions and their inter-relationships are no longer well placed to address such multi-dimensional and shifting challenges.

1. Rittel, H., and Webber, M. (1973), ‘Dilemmas in a General Theory of Planning’, *Policy Sciences* 4, pp. 155–169.

Partly as a consequence of this circumstance,² the three main institutional pillars of liberal democracies – the state, the market, and the third sector³ – have all been undergoing processes of reform and change over the past 30 years. Perhaps the most striking set of such institutional changes has been the emergence of new hybrid organizations and institutions. Such hybrids respond to failure of the status quo by blending elements from the conventional sectors into novel forms that are better adapted to today’s “wicked problems.” It is from within these patterns of institutional change and hybridity that modern social entrepreneurship has emerged.⁴

Social entrepreneurship

Social entrepreneurship operates in a broad range of sectors from arts and culture to social care, from financial inclusion to Fair Trade, and from healthcare to education. At its simplest, social entrepreneurship is private action for public good or the application of principles and models from the private sector to create value normally associated with the public and third sectors. However, more clarity about the shape and scope of the social entrepreneurship field can be achieved by considering four defining features: social intent, innovation, market orientation and hybridity (see Figure 1).⁵

2. These changes have also been ideologically driven – notably during the 1980s and 1990s when Keynesian welfare models were increasingly replaced by market models.

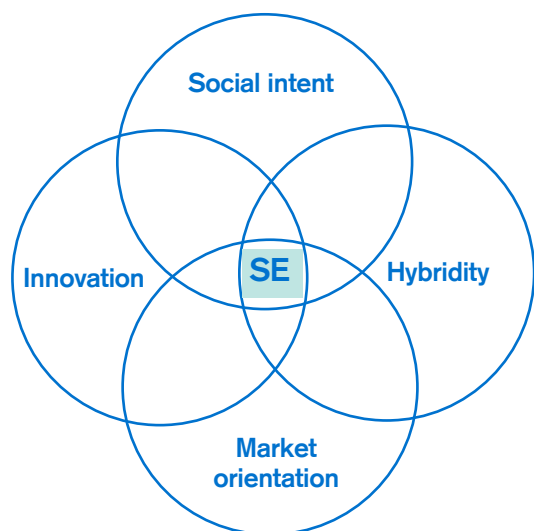
3. Such a tripartite structure is much less clear in non-liberal democracies such as China. Although here too all three sectors are undergoing reform.

4. See Dees, J.G. (1997), *The Meaning of “Social Entrepreneurship”*, The Fuqua School of Business, Duke University, Durham, NC.

5. Nicholls, A. (Ed.) (2006), *Social Entrepreneurship. New Models of Sustainable Social Change*, Oxford University Press.

Figure 1

Defining social entrepreneurship



Source: Nicholls, A. (ed) (2006), *Social Entrepreneurship*, Oxford University Press

Key features

First, social entrepreneurship has a stated intent to create social or environmental value as its prime strategic objective. Of course, intent is hard to test, but, in social entrepreneurship, it is typically demonstrated in problem-driven strategies focused primarily on creating social or environmental value. Thus, unlike conventional entrepreneurs, social entrepreneurs begin by identifying a problem or “social” market failure, not a profit-making opportunity. Moreover, social entrepreneurs pay careful attention to evidencing their impact in alignment with their social or environmental strategic objectives – in practice this means measuring and managing (and reporting) relevant impact data and reporting it transparently.

Second, social entrepreneurs innovate. This offers a clearer commonality with mainstream entrepreneurship than the issue of social intent, but also has distinctive features. Primarily, innovation in social entrepreneurship focuses on how best to transfer value from the organization to key target populations (the private action for public good). Thus, value creation and value appropriation are not aligned here as they typically are in profit-maximizing firms. Moreover, innovation

in social entrepreneurship can be seen at different structural levels. Thus it can be incremental and micro-level, offering small improvements to existing products and services in order to re-purpose them more effectively to address social or environmental issues, e.g. by lowering the cost of components in an irrigation foot-pump or tablet computer to make them affordable to poorer populations. Alternatively, innovation can be disruptive and macro-level, driving more substantive changes in society. For example, microfinance and mobile banking dramatically altered the structural relationships between capital markets, banks and the very poor.

“Microfinance and mobile banking dramatically altered the structural relationships between capital markets, banks and the very poor”



Photo: Shutterstock, Lano Lan

Third, social entrepreneurship is characterized by a strong market orientation. This takes two forms. First, many social entrepreneurs harness the power of commercial markets to advance their social or environmental mission by creating businesses for a social purpose, usually known as “social enterprises.” Textbook examples include Fair Trade companies such as Café Direct in the UK that operate in consumer-facing markets (e.g. coffee, tea or textiles) or “work integration social enterprises” that address labor market failures to start businesses that employ populations that cannot otherwise access jobs such as Digital Divide Data in Cambodia that employs ex-sex workers and land-mine victims in high-value-added computer outsourcing contracts. Second, when not operating in actual markets, social entrepreneurs still behave as if they are competing in terms of their social or environmental performance. This means that they measure and manage their impact carefully and relentlessly drive toward innovation and improvements in their organization. Thus, social entrepreneurs bring the performance logic of commercial firms into the social or environmental impact space.

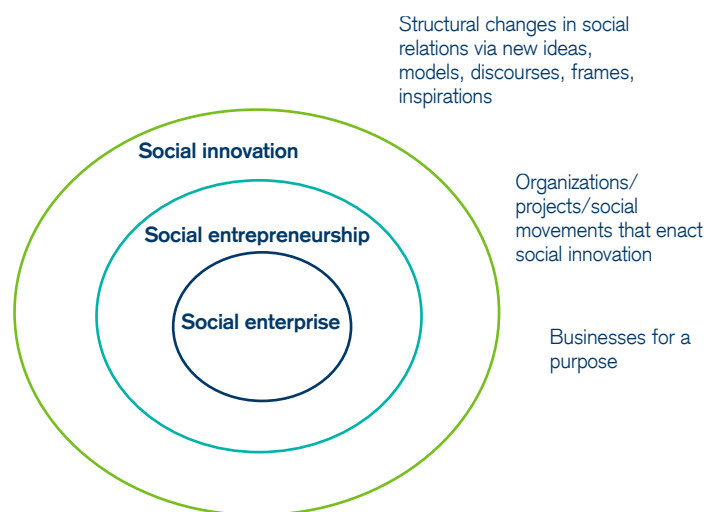
Finally, social entrepreneurship is enacted in hybrid organizational forms. Hybridity in social entrepreneurship represents the blending of institutional practices and norms from different sectors (public, private, third) into new models that innovate around social or environmental problems and issues (see Figure 2). Between the private and third sectors lie social enterprises or businesses for a social purpose. These organizations use the market to address their social or environmental goals and have to manage two bottom lines simultaneously – profit and impact. An example of this is Divine Chocolate – a UK luxury chocolate brand part owned by African cocoa farmers. Between the private and public sectors are various public-private partnerships that typically engage social enterprises to deliver government contracts or welfare programs. An example of this is Hackney Community Transport in London. Between the third and public sectors are examples of the “shadow state” where social entrepreneurs deliver public welfare as if they were the state in cases where the existing government provision is inadequate or absent. An example is BRAC in Bangladesh, which provides access to finance, education and healthcare outside of the state. Finally, some hybrids blend elements of all three sectors. An example of this is the Social Impact Bond Model discussed further below.

Social innovation

One further issue of definition has emerged since the mid-2000s – the meaning of social innovation. For some time, this term was used to differentiate social entrepreneurship focused on social change from examples using market or business models to advance their objectives (e.g. social enterprises or social business). More recently, however, social innovation has come to be redefined as key changes in socio-structural relationships or power structures that bring about social change objectives – having

Figure 2

The relationship of key concepts



Source: Nicholls, A., and Murdock, A. (eds) (2011), *Social Innovation*, Palgrave MacMillan

much more in common with social movements than social enterprises.⁶ Powerful institutions, such as the European Union, have now endorsed this redefinition and the term has become linked with a variety of public policy agendas from the USA to South Korea (see Figure 3).⁷

Data

While social entrepreneurship has gained increasing attention over the past decade, data on the size and scale of the sector remains difficult to gather – primarily because there is no single legal form for the field globally. As a consequence, it is impossible to extract meaningful information easily from national data sets. However, some valid indicators can be identified. In the UK – which has one of the most developed social entrepreneurship sectors – government data suggests that nearly 9% of all UK small businesses are social enterprises or roughly 100,000 firms employing around 1.5 million people.⁸ These social enterprises contribute roughly GBP 18.5 billion to the UK economy annually.⁹

6. Nicholls, A., and Murdock, A. (2012), *Social innovation* Palgrave Macmillan; Nicholls, A., and Ziegler, R. (2017) *An Extended Social Grid Model For The Study Of Marginalization Processes And Social Innovation*, CRESSI Working Paper 2/2015 available at: https://www.sbs.ox.ac.uk/sites/default/files/research-projects/CRESSI/docs/CRESSI_Working_Paper_2_2017rev_Ch2_April17.pdf

7. Edmiston, D (2015), *EU Public Policy, Social Innovation and Marginalisation: Reconciling Ambitions With Policy Instruments*, CRESSI Working Paper 18/2015 available at: https://www.sbs.ox.ac.uk/sites/default/files/research-projects/CRESSI/docs/CRESSI_Working_Paper_18_EU_Social_Innovation_Policy_Edmiston.pdf

8. Department for Digital, Culture, Media and Sport (2017), *Social Enterprise: Market Trends 2017*, UK Government

9. <https://www.socialenterprise.org.uk/faqs/what-data-is-there-on-the-size-of-the-social-enterprise-movement>

The British Council¹⁰ has suggested that social entrepreneurship accounts for 3.5% of US Gross Domestic Product (GDP) – a greater proportion than Silicon Valley. The same report concluded that, in continental Europe, the “social economy” (consisting of social enterprises and co-operatives) accounted for 20% of GDP in Spain, 15% in Italy and 10% in France. Other proxy indicators of the size of the social entrepreneurship sector include the scale of the global Fair Trade market – which has grown at double-digit annual rates for over ten years to EUR 8 billion in 2016¹¹ – or the scope of global microfinance loans – up 9% in 2016 to a loan portfolio of USD 102 billion reaching 123 million customers.¹²

Challenges

Despite the undoubted progress in the institutionalization of social entrepreneurship as a field of action globally,¹³ there remain several problematic challenges. These include little evidence of achieving true scale (with the exception of micro-finance), a limited willingness to share and learn from failure, and a continued debate concerning how best to account for impact. However, perhaps the most significant challenge concerns access to resources, most notably investment capital. Nevertheless, here too, innovation is under way as a bespoke set of instruments, funds and models is emerging under the umbrella heading of social finance.

Social finance

Social finance can be broadly defined as the allocation of capital for social or environmental return, as well as in some cases for a financial return.¹⁴ Of course, social finance – like social entrepreneurship – is not entirely new. Capital has been allocated for social impact for centuries via philanthropy or faith-based donations, but it seems clear that, today, there is a new wave of social finance emerging partly in response to the capital needs of the growing social entrepreneurship sector as well as other pressing development and impact capital gaps.¹⁵

10. https://www.britishcouncil.org/sites/default/files/british_council_-_seuk_think_global_report_graph4.pdf

11. <https://www.statista.com/statistics/247491/estimated-retail-sales-of-fairtrade-products-worldwide/>

12. <https://group.bnpparibas/en/news/microfinance-barometer-2017-global-trends-sector>

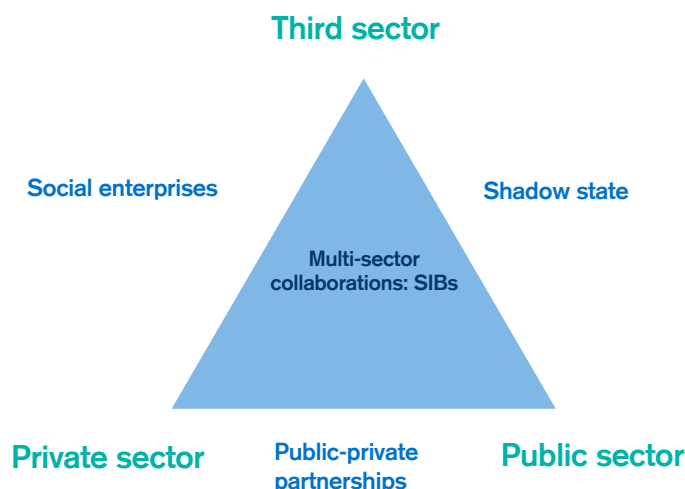
13. For example, social entrepreneurship now has several bespoke legal forms globally including Community Interest Companies in the UK and Type Two Co-operatives in Italy. Policy makers have also developed focused fiscal policy for the field (Social Investment Tax Relief in the UK; the Corporate Social Responsibility Act in India) and government commissioning practice (The Public Services [Social Value] Act in the UK).

14. See Nicholls, A., Emerson, J., and Paton, R. (2015), *Social Finance*, Oxford University Press.

15. It is estimated, for example, that there is US\$2-3 trillion per annum capital gap to achieve the UN Sustainable Development Goals by 2030 (UK National Advisory Board on Impact Investing [2017], *The Rise of Impact investing: Five Steps Towards an Inclusive and Sustainable Economy*).

Figure 3

Hybrid models



Source: Nicholls, A. (ed) (2006), *Social Entrepreneurship*, Oxford University Press

The precursor to the development of today’s social finance market emerged in the 1990s as “socially responsible” investment (SRI). SRI aims to combine market level financial returns with an investment management strategy that takes into account social and environmental variables, largely by screening out so-called “sin” stocks (alcohol, gambling, arms, tobacco and so on) from portfolios. Today, the SRI market accounts for roughly 1 in 4 of all assets under management globally or more than USD 23 trillion.¹⁶

“Today, the SRI market accounts for roughly 1 in 4 of all assets under management globally or more than USD 23 trillion”

A proportion of SRI is more pro-active in its investment strategy – choosing socially or environmentally positive stocks rather than just screening out negative stocks – and this provided the first models for the subsequent development of the social finance market.

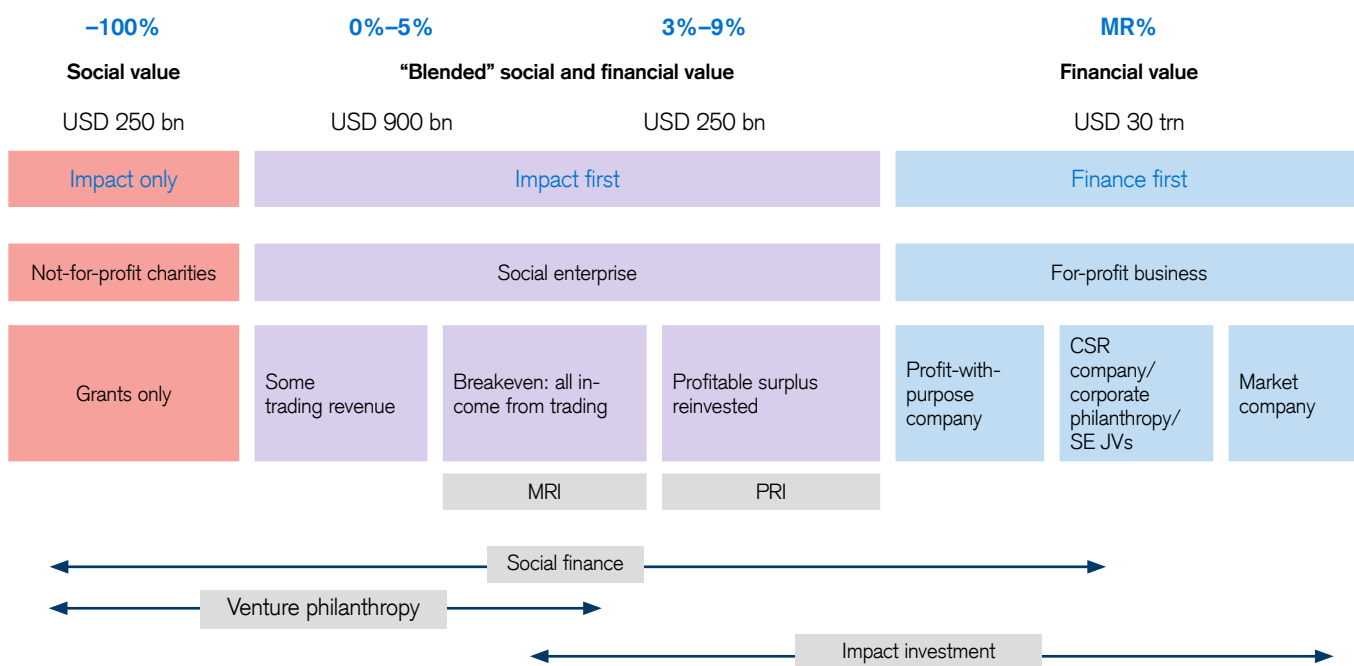
Social finance spectrum

Today, the social finance market can be best understood as a spectrum of capital allocation from grants and engaged philanthropy to market-rate-return investments (see Figure 4). Within this capital spectrum from grants to market returns, there are

16. Global Sustainable Investment Alliance (2016), *2016 Global Sustainable Investment Review*, available at: http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf.

Figure 4

The social finance spectrum



Source: Nicholls, A., Paton, R., and Emerson, J. (eds) (2015), *Social Finance*, Oxford University Press

a number of interesting innovations. First, venture philanthropy takes a venture capital approach to grant making that aims to maximize the impact of such capital. This approach alters the institutional logic of the philanthropic process from hands-off gift-giving to deep engagement around a grant. Venture philanthropy offers highly engaged grant-making plus a range of non-financial consultancy and networking support linked to clear and agreed outputs and outcomes.

“Estimates have suggested that the (impact) market could grow to USD 250–300 billion by 2020”

Second, mission-related investment (MRI) and program-related investment (PRI) aims to align the invested capital held in foundation endowments with their social impact objectives. Currently, the majority of charitable assets is not directed toward social-finance opportunities, but rather is invested in standard market-rate products that aim to maximize return and minimize risk in order to generate returns that can be given away as grants. In the USA, the ratio is typically 5% of total assets deployed as mission-focused grants and 95% invested in the mainstream markets. Aligning foundation assets with impact thus opens up a

substantial new pool of social finance capital as well as making better use of foundation assets that total over USD 1 trillion globally.¹⁷

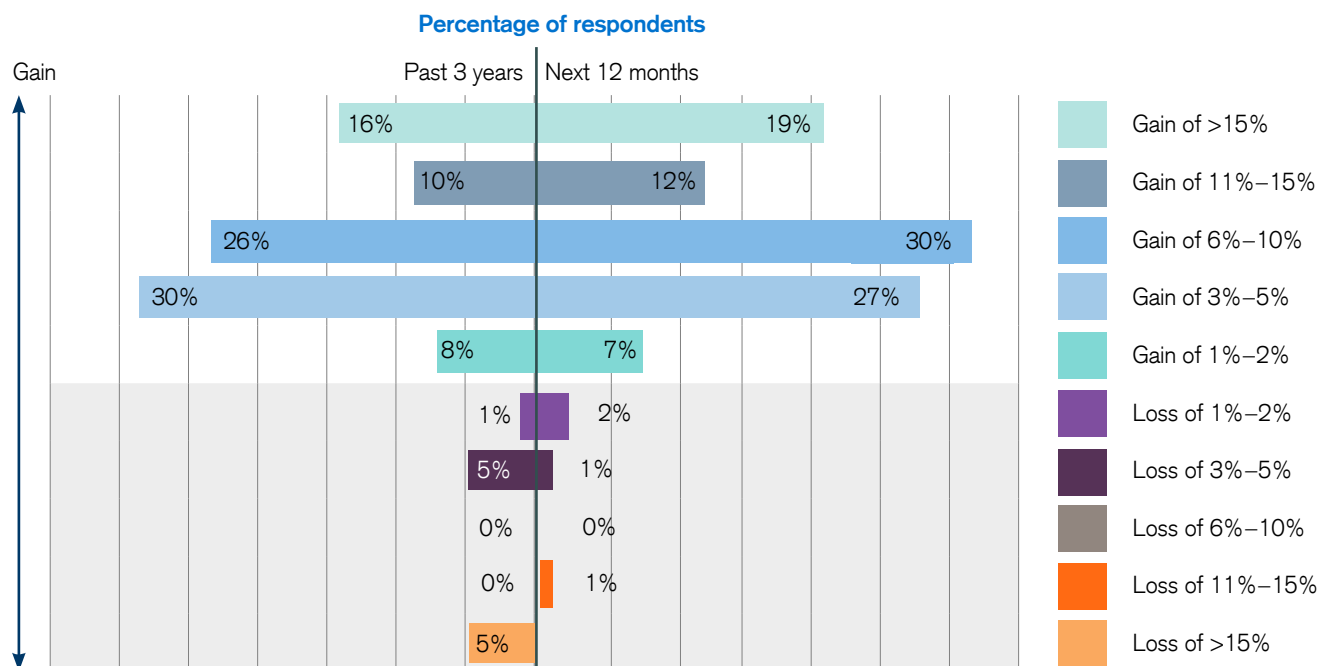
Finally, impact investment aims to achieve social or environmental outcomes and financial returns of at least the principal investment to the investor, sometimes with a further upside return.¹⁸ In the first major report published on this new market, impact investment was defined as: “Investments intended to create positive impact beyond financial return. As such they require the management of social and environmental performance...in addition to financial risk and return.”¹⁹

The Global Impact Investing Network (GIIN) annual investor survey report estimated a market size of USD 114 billion of impact investment assets under management in 2016 (compared to USD 60 billion in 2014).²⁰ Other estimates have suggested that the market could grow to USD 250–300 billion by 2020.²¹

17. <http://data.foundationcenter.org>.
 18. See Bugg-Levine, A. and Emerson, J. (2011). *Impact Investing: Transforming How We Make Money while Making a Difference*. *Innovations: Technology, Governance, Globalization*, 6(3), pp.9-18.
 19. O’Donohoe, N., Leijonhufvud, C., and Saltuk, Y. (2010). *Impact Investments: An Emerging Asset Class*, J.P. Morgan and Rockefeller Foundation.
 20. Global Impact Investing Network (2017). *Annual Impact Investor Survey 2017*. Seventh Edition. The GIIN annual survey offers a likely minimum size of the impact investing market, given that its sample does not capture the entire impact investor population.
 21. Barclays Wealth and Investment Management (2015), *The Value of Being Human: A Behavioural Framework for Impact Investing and Philanthropy*.

Figure 5

Impact investment annual average returns (actual and expected)



Source: Financial Times, Investing for Global Impact, 2017

Data on impact investment returns is difficult to obtain and somewhat ambiguous. Nevertheless, there is evidence that some impact investments have equaled or outperformed other market-rate risk-adjusted investments. There is also evidence of losses. Overall, it seems that impact investments may reasonably be expected to return 3%–10% in many cases (see Figure 5).

Blended deals

One further important feature of the social-finance spectrum is that it allows for a far greater diversity of deal and fund structures than the mainstream because it can blend different risk and return capital together in innovative ways to maximize social and environmental impact. For example, grant makers may find it very attractive to deploy their 100% loss grant capital in deals or funds where 50% may actually be returned to be recycled, thus doubling the impact of their money. This is particularly the case if their grant capital is used as a loss guarantee or subordinate capital in a deal or fund that can then leverage other – more market – capital into a structured or blended capital “stack” with a social or environmental impact. For example, in 2011, Fair Finance – a UK-based micro-lender – raised a GBP 2 million loan from Societe Generale and BNP Paribas that was underwritten by GBP 750,000 of philanthropic patient capital and a GBP 350,000 soft loan from the UK’s Big Society Capital wholesale social investment bank. Guarantees or underwriting have also been important in structuring other social finance contracts, notably for Social Impact Bonds

(SIBs) in the USA (where Bloomberg Philanthropies underwrote 70% of Goldman Sachs’ investment in the Ryker’s Island SIB) and Australia (where the New South Wales government underwrote a portion of the first Social Benefit Bond).

“The absence of any fully functioning “social” stock markets is a major challenge to growing this form of social investment”

Instruments

In terms of specific instruments, the social finance market includes the conventional options of debt and equity, but adds grants and a range of other novel models (see Table 1). There are five basic debt options available to social entrepreneurs: personal credit cards, personal bank overdrafts, mortgage finance, commercial loans and lines of credit from banks at market rates, and commercial and semi-commercial loans from government and other social investors. Semi-commercial loans typically offer non-market interest rates, long repayment periods, and sometimes repayment “holidays” that suspend interest (and sometimes principal) repayments for agreed periods. Debt has the advantage that, assuming the investee has collateral assets and/or sustained cash flows, it can often be quicker to obtain than grants.

Table 1

Social finance instruments

Financial instrument	Purpose of finance	Type of finance	Examples
Private grant	Fulfilling mission capacity building	(Venture) philanthropy PRI MRI	Impetus Trust FB Heron Foundation Calvert Foundation
Government grant	Regeneration	Community development loans	Community Development Finance Institution (CDFI)
	Market development	Unclaimed assets	Social investment bank
Government contracts	Outsourcing welfare services	Contractual exchange	Greenwich Leisure Ealing Community Transport
Debt	Economic and social development	Microfinance	Grameen Bank Citibank
Quasi-equity	Growth capital	Share of ownership	Bridges Community Ventures Catalyst
Sub-market equity	Growth capital	Restricted "ethical" shares	Cafédirect Ethical Property Company
Market equity	Growth capital	Standard shares	London Bridge Capital Compartamos Bank
Joint equity	Growth capital	Co-operative ownership (IPS)	Mondragon BayWind

Source: Nicholls, A., Schwartz, R., and Jones, C. (2015), 'Building the Social Finance Infrastructure', in Nicholls, A., Paton, R., and Emerson, J. (eds), *Social Finance*, Oxford University Press, pp. 488-520

Terms may be flexible (short-, medium-, or long-term) and open to renegotiation over time. Debt is useful in bridging funding gaps and helping build for growth and scale. Debt contracts also typically attract fewer reporting requirements than grants, and offer greater autonomy for the borrower. On the other hand, not-for-profit organizations may not be able to access debt since it must be repaid with interest and, furthermore, the need for collateral may put assets at risk in the case of default.

For the most part, equity in social finance is very similar, if not identical, to equity investments in mainstream companies. The main differences usually lie in the governance arrangements of the company. These might restrict the freedom of the board in some way in order to ensure the continuance of a social mission, or to provide for a certain percentage of any surpluses to be invested socially or retained by the company, or other socially oriented limitations such as an "asset lock" or "golden share" that prevents a take-over. Issuing "social" public equity (sometimes known as an Alternative Public Offering) can raise large amounts of capital on a permanent basis without the need for repayment. However, social entrepreneurs must give up some ownership and control when issuing

equity, and this is often either unattractive (for fear of mission drift) or impossible (because of legal limitations). The absence of any fully functioning "social" stock markets – despite several important current initiatives in the UK, Brazil, South Africa and Singapore/Mauritius – and the resultant lack of liquidity in social equity is also a major challenge to growing this form of social investment.

"Quasi-equity" was developed specifically for the social finance market. It aims to give investors returns that look like equity returns with the feature of being tied to the organization's underlying performance. This is usually done by linking investor returns to the revenue growth of the social enterprise. Quasi-equity is, in fact, usually some sort of debt contract.

In addition to the examples outlined above, other instruments for social finance investment that are distinct from the mainstream have emerged. These include:

- Revenue-based financing strategies in which future returns to investors are based not on loan repayment or an ownership position, but rather through commitments to share future revenue on the basis of percentage growth in future enterprise revenue.
- Revenue redemption structures that allow investors to purchase equity with the company agreeing to repurchase shares out of a percentage of future revenue.
- Crowdfunding strategies that enable potential investors to allocate capital at various levels to both not-for-profit and for-profit firms.
- Direct Public Offerings in which a company is able to raise capital on a crowdfunding basis from both accredited and non-accredited investors.
- Co-operative and mutual investment that allows enterprises to be owned by employees, customers or the local community.
- ESOPs (Employee Stock Ownership Plans) are a US example that has been actively used to offer employees an equity stake in the company where they work.

Market structure

The structure of the social finance market is much the same as in mainstream investing; namely supply, intermediation and demand. On the supply side, there is a range of social investors seeking different "blended" returns on their capital allocation, including individuals (philanthropists, social/ethical investors, commercial investors, retail investors),²² institutions (foundations, pension funds, co-operative and

22. For example, since 1995, more than 13,500 people have invested over USD 1 billion in the Calvert Foundation's Community Investment Note to support community development and social enterprise in the USA and around the world. In France, savers have the option to put their money into "fonds d'investissement solidaires dits 90/10," which allocate at least 10% to funding social enterprises, typically with long-term loans at low interest rates. Retail investors can range from small-scale retail investors allocating capital via crowdfunding platforms such as Kiva or Buzzbnk or social finance institutions such as Charity Bank to high-net-worth individuals investing via private banks such as UBS.

mutual funds), and governments.²³ Intermediaries linking supply and demand in social finance include various types of private funds (including pension and venture philanthropy funds), microfinance institutions, credit unions, community development finance institutions, social stock exchanges and other “matching” platforms, mainstream financial players such as investment banks and asset managers,²⁴ insurance companies, specialist banks, and wholesale investment institutions.²⁵

Associated with these is an emergent ecosystem of specialist professional service organizations that support the social finance market, e.g. legal firms, consultancies, market makers and capacity-building organizations. Alongside these investment managers, a new set of specialist social finance organizations has been particularly influential in the evolution of the sector over the past decade or so. These include Social Finance (UK, USA, Israel), ClearlySo (UK, India), Imprint Capital (USA), Impact Assets (USA), Third Sector (USA), Société d'Investissement France Active (France), Institut de Développement de l'Economie Sociale (IDES) and Credit Coopératif (France), and Social Ventures Australia (Australia). Finally, the demand side of the social finance market includes various investees such as social enterprises, charities, co-operatives, social “profit-with-purpose” businesses, and hybrid organizations (combining elements of the state, the private sector, and the civil society sector engaging in social innovation).

23. For example, the UK government has been a global leader in capitalizing the social finance market, investing over GBP 1 billion of public money in the sector from 2001 to 2011. For example, Goldman Sachs and Bank of America Merrill Lynch invested in SIBs to tackle recidivism in New York City and New York State, and UBS helped launch a Development Impact Bond to reduce dropout rates from girls' primary schools in Rajasthan. Morgan Stanley created an Investing with Impact Platform for its clients, which it aims to grow to USD 10 billion in five years. Black Rock, one of the world's largest asset managers, has also developed impact-investment products. J.P. Morgan has also committed almost USD 100 million to Impact Funds.

24. For example, Goldman Sachs and Bank of America Merrill Lynch invested in SIBs to tackle recidivism in New York City and New York State, and UBS helped launch a Development Impact Bond to reduce dropout rates from girls' primary schools in Rajasthan. Morgan Stanley created an Investing with Impact Platform for its clients, which it aims to grow to USD 10 billion in five years. Black Rock, one of the world's largest asset managers, has also developed impact-investment products. J.P. Morgan has also committed almost USD 100 million to Impact Funds.

25. In the UK, Big Society Capital was launched in 2013 as a provider of wholesale social finance. It was endowed with over GBP 400 million of unclaimed assets held by four high street banks plus GBP 200 million of equity from the same source. This model has sparked global interest with the Japanese and French governments considering similar legislation in 2014. This model could also be expanded to draw down not only the unclaimed assets of dormant bank accounts, but also dormant life assurance policies and pension funds.

“A new set of specialist social finance organizations has been particularly influential in the evolution of the sector over the past decade”

Policy

The development of the social finance sector has also been driven in several countries by a proactive policy agenda. In the vanguard has been the UK government with over 15 years of policy development aimed at growing the social entrepreneurship and social finance sectors. This has included targeted fiscal policy (Community Investment Tax Relief, Social Investment Tax Relief), regulation (Community Interest Company legislation, the Unclaimed Assets Act), direct investment (Futurebuilders, the Investment and Contract Readiness Fund, the Social Outcomes Fund), and commissioning reform (Public Services [Social Value] Act, SIBs), as well as a host of research and marketing support.

Interestingly, this policy agenda bridged a change of government in 2010 and culminated in 2013 when London hosted the G8 Social Investment Forum as a part of the UK convening that year's G8 Summit. This meeting led to the establishment of a G8 (plus Australia and minus Russia) Social Impact Investment Taskforce that reported back in September 2014 with a range of policy recommendations agreed by the world's richest countries. Each member country established a National Advisory Board to develop an agenda for the local social finance market, bringing together policy makers, investors, and civil society representatives. The Taskforce also initiated four working groups to provide further support for an international social impact investment agenda exploring asset allocation, social impact measurement, social mission lock-in and international development. In 2015, a new Global Steering Group was established to build upon the G8 efforts by engaging a wider range of countries across the G20 and beyond.

Outside of the UK, social finance policy agendas have also developed in the USA, Canada, Australia, South Africa, South Korea, Japan, France and India. For example, many countries are now moving public capital into vehicles to support the evolving practices of social finance. In Italy, there is a social fund to finance impact-driven businesses. In Japan, the government provided a USD 210 million grant for social innovation during 2010–12 under the “New Public” initiative, of which USD 86 million went to support over 800 social enterprise start-ups. In France, the 2014 Social and Solidarity Bill facilitated the financing of social-sector organizations. In the USA, the Office of Social Innovation and Civic Participation within the Obama White House used public money to catalyze additional private-impact investment for entrepreneurs, particularly

via existing social organizations and charities. One particularly prominent policy innovation connected to social finance has been the emergence of SIBs globally.

“Many countries are now moving public capital into vehicles to support the evolving practices of social finance”

Social Impact Bonds

A Social Impact Bond (SIB) represents a contract between a public sector body or other outcomes payer, social investors and frontline service providers. The contract stipulates that investors provide upfront working capital to service providers to address a welfare problem on the condition that the outcomes payer commits to pay investors for an agreed measurable improvement in a clearly defined social outcome. The rates of return will typically be calibrated to the rate of improvement with respect to the social outcome. Effectively the SIB acts a social “futures” contract rather than a debt instrument.

SIBs fit within a wider set of welfare reforms known as payment-by-result or pay-for-success models in which government commissioners contract for outcomes rather than processes or activities. However, SIBs are unique in that they bring in private capital to fund the model.

“One particularly prominent policy innovation connected to social finance has been the emergence of Social Impact Bonds globally”

The SIB structure aims to align the interests of key stakeholders around social outcomes including:

- **Government:** The public sector pays only for positive outcomes and aims to save money overall because of increased efficiency in welfare programs. These savings fund the returns to investors and leave a surplus. There may be some risk transfer to investors depending on the SIB structure.
- **Social investors:** Social and financial imperatives are aligned since investors receive greater financial return as social returns improve.



Photo: Shutterstock, Miriam Doerr, Martin Frommherz

- Service providers: The focus is on the social value that service providers can offer, rather than on the cost of services alone. Providers have an incentive to innovate in order to maximize outcomes for their target populations.

Each SIB is typically structured around a well-defined social outcome in a clearly specified intervention area (e.g. youth offending, teenage pregnancy, young people not in education, employment or training). Appropriate outcomes and success metrics are negotiated and agreed between government and sector expert intermediaries. Having established the terms of the contract, private capital is sought from social investors that have an interest in targeting the defined outcomes. These investors may be asked to take some of the risk that the interventions may not lead to the target outcomes, but know that, in the event that the interventions are successful, they will make a return on their investment.

The first pilot SIB was launched in collaboration with the Ministry of Justice on 18 March 2010 and had a 7-year time-span. It focused on reducing re-offending events in a population of 3,000 short-term low-risk prisoners at HMP Peterborough. The initial social investors included charities such as the Esmée Fairbairn Foundation

and the Monument Trust, as well as social venture funds such as Bridges Ventures. The investment closed at GBP 5 million. The contract agreed that the Ministry of Justice would make payments to investors in the event that re-offending was reduced below an agreed threshold of 7.5% against a national control group. The total cost of the project was capped at GBP 8 million. At its conclusion in 2017, the SIB reduced overall re-offending events by 9%, triggering a 3% per annum payment (plus the principal) to investors. Today over 100 SIBs are up and running or in development globally, accounting for over GBP 350 million of investment.

“Social finance appears to be here to stay as it becomes codified in regulatory and fiscal policy across several countries as well as attracting increasing investor attention”



Photo: Shutterstock, Skorodum

Future trajectories

The social finance market is still at an early stage of institutionalization and is typified by experimentation and a lack of scale, and has yet to develop standardized data sets, instruments or fund structures. Nevertheless, social finance appears to be here to stay as it becomes codified in regulatory and fiscal policy across several countries as well as attracting increasing investor attention (and capital). Looking ahead, three possible future scenarios for social finance can be imagined.

Scenario 1 – Assimilation: The first possible future scenario would see social finance move into the mainstream of financial markets only by its assimilation into large financial institutions. The acquisition of Imprint Capital by Goldman Sachs in 2015 may offer a precursor to this scenario. The outcome of this could be the dilution of the social or environmental impact objectives of social finance as a focus on pure financial returns comes to dominate. This could lead to investment criteria that privilege the most profitable social enterprises over those with the greatest impact.

Scenario 2 – Parallel institutionalization: The second scenario suggests that social finance would continue to operate on the margins of the mainstream market, intersecting with it where mutual interest makes this viable (i.e. co-investing in profitable social enterprises that are at scale), but also working as a separate parallel market supporting the wider social economy. This is the current situation. In this scenario, venture philanthropy and the emerging collaborations between for-profit and not-for-profit organizations would play key roles in institutionalizing new relationships between formerly distinct investment opportunities. A resurgence of mutualization would also be a distinctive feature of this scenario, seeing a return to regional stock markets, new local currencies, a new wave of friendly and building societies, and local co-operatives taking on significant roles in terms of public and private sector action.

Scenario 3 – Institutional transformation: In the third scenario, social finance first institutionalizes a unique set of impact-driven instruments and funds, and then exports them into mainstream capital markets. This scenario would generate systemic change across all investment via radical and disruptive action seeking a broader or deeper transformation of society marked by more explicitly political, critical, and counter-cultural orientations. The rise of ethical consumption and its effect on supply chain transparency more broadly provides a possible template for this transformation. In this scenario, social finance would act as both a symptom and a cause of a re-alignment of mainstream investment demanding that risk and return calculations are re-embedded in their social and environmental context, which is something that is already happening in terms of the carbon footprint of many industrial businesses.

Conclusion

Whichever of these scenarios comes to pass, social finance offers an important extension of the models and logics of mainstream investment. This new market is institutionalizing fast and growing assets under management rapidly across many countries. It also has coordinated and focused policy support internationally. The new types of blended capital being developed within social finance will offer key resources to social entrepreneurs to tackle the wicked problems noted above effectively in the future. Without this combination of social finance and social entrepreneurship, it will be increasingly improbable that the world can effectively address the pressing challenges that face it in the 21st century. ■



Photo: Shutterstock, mark reinstein

References

Chapter 1: Escaping poverty: Invest in women's human capital

- Abu-Ghaida, D., and Klasen, S. (2004). The costs of missing the millennium development goal on gender equity. *World Development*, 32(7), 1075–107.
- Alam, S. A. (2015). Parental health shocks, child labor and educational outcomes: evidence from Tanzania. *Journal of Health Economics*, 44, 161–75.
- Anderson, S., and Ray, D. (2010). Missing women: age and disease. *Review of Economic Studies*, 77(4), 1262–300.
- Aslam, M. (2009). The relative effectiveness of government and private schools in Pakistan: are girls worse off? *Education Economics*, 17(3), 329–54.
- Aslam, M., and Kingdon, G. G. (2008). Gender and household education expenditure in Pakistan. *Applied Economics*, 40(20), 2573–91.
- Aslam, M., and Kingdon, G. G. (2012). Parental education and child health – understanding the pathways of impact in Pakistan. *World Development*, 40(10), 2014–32.
- Baird, S., Friedman, J., and Shady, N. (2011). Aggregate income shocks and infant mortality in the developing world. *Review of Economics and Statistics*, 93(3), 847–56.
- Bandiera, O., Burgess, R., Narayan, D., Gulesci, S., Rasul, I., and Munshi, S. (2017). Labor markets and poverty in village economies. *Quarterly Journal of Economics*, 132(2), 811–70.
- Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., and Toalova, P. (2009). Powerful women: does exposure reduce bias? *Quarterly Journal of Economics*, 124(4), 1497–540.
- Beaman, L., Chattopadhyay, R., Duflo, E., Pande, R., and Toalova, P. (2012). Female leadership raises aspirations and educational attainment for girls: a policy experiment in India. *Science*, 335(6068), 582–6.
- Becker, G. (2007). Health as human capital: synthesis and extensions. *Oxford Economic Papers*, 59(3), 379–410.
- Becker, S. (1999). Measuring unmet need: wives, husbands or couples? *International Family Planning Perspectives*, 25(4), 172–80.
- Bell, C., and Gersbach, H. (2009). The macroeconomics of targeting: the case of an enduring epidemic. *Journal of Health Economics*, 28(1), 54–72.
- Berniell, I., and Sánchez-Páramo, C. (2011). Overview of time use data used for the analysis of gender differences in time use patterns. Background paper for the World Development Report 2012. World Bank, Washington D.C.
- Bhalotra, S. (2010). Fatal fluctuations? Cyclicity in infant mortality in India. *Journal of Development Economics*, 93(1), 7–19.
- Bhalotra, S., and Rawlings, S. B. (2011). Intergenerational persistence in health in developing countries: the penalty of gender inequality? *Journal of Public Economics*, 95(3–4), 286–99.
- Bhalotra, S., and Rawlings, S. B. (2013). Gradients of the intergenerational transmission of health in developing countries. *Review of Economics and Statistics*, 95(2), 660–72.
- Bhaskar, V., and Gupta, B. (2007). India's missing girls: biology, customs, and economic development. *Oxford Review of Economic Policy*, 23(2), 221–38.
- Bloom, D. E. (2014). Getting past the basics: pursuing secondary education. *Education and Skills 2.0: New Targets and Innovative Approaches*, World Economic Forum, Geneva, Switzerland.
- Bloom, D. E., Canning, D., and Fink, G. (2014). Disease and development revisited. *Journal of Political Economy*, 122(6), 1355–65.
- Bloom, D. E., Canning, D., Fink, G., and Finlay, J. E. (2009). Fertility, female labor force participation, and the demographic dividend. *Journal of Economic Growth*, 14(2), 79–101.
- Bloom, D. E., Canning, D., and Sevilla, J. P. (2003). The demographic dividend. *Population matters. A RAND Program of Policy-Relevant Research Communication*, Santa Monica, California.
- Bloom, D. E., Kuhn, M., and Pretzner, K. (2015). The contribution of female health to economic development. NBER Working Paper No. 21411, National Bureau of Economic Research, Cambridge, MA.
- Bloom, S. S., Wypij, D., and Das Gupta, M. (2001). Dimensions of women's autonomy and the influence on maternal health care utilization in a north Indian city. *Demography*, 38(1), 67–78.
- Bratti, M., and Mendola, M. (2014). Parental health and child schooling. *Journal of Health Economics*, 35(C), 94–108.
- Cervellati, M., and Sunde, U. (2005). Human capital formation, life expectancy, and the process of development. *American Economic Review*, 95(5), 1653–72.
- Chen, S., and Ravallion, M. (2010). The developing world is poorer than we thought, but no less successful in the fight against poverty. *Quarterly Journal of Economics*, 125(4), 1577–625.
- Chung, W., and Das Gupta, M. (2007). The decline of son preference in South Korea: the roles of development and public policy. *Population and Development Review*, 33(4), 757–83.
- Cohen, D., and Soto, M. (2007). Growth and human capital: good data, good results. *Journal of Economic Growth*, 12(1), 57–76.
- Cox, D. (2007). Biological basics and the economics of the family. *Journal of Economic Perspectives*, 21(2), 91–108.

- Das Gupta, M. (2005). Explaining Asia's "missing women": a new look at the data. *Population and Development Review* 31(3), 529–535.
- Das Gupta, M. (2013). Women's empowerment and fertility: policy lessons. United Nations, Population Division, Expert Paper No. 2013/2.
- Deaton, A. (2013). The great escape. Health, wealth, and the origins of inequality. Princeton University Press, Princeton, NJ.
- de la Croix, D., and Vander Donckt, M. (2010). Would empowering women initiate the demographic transition in least developed countries? *Journal of Human Capital*, 4(2), 85–129.
- Diebolt, C., and Perrin, F. (2013). From stagnation to sustained growth: the role of female empowerment. *American Economic Review*, 103(3), 545–49.
- Doepke, M., and Tertilt, M. (2014). Does female empowerment promote economic development? NBER Working Paper 19888, Cambridge, Massachusetts.
- Dollar, D., and Kraay, A. (2002). Growth is good for the poor. *Journal of Economic Growth* 7(3), 195–225.
- Donaldson, J. A. (2008). Growth is good for whom, when, how? Economic growth and poverty reduction in exceptional cases. *World Development*, 36(11), 2127–43.
- Duflo, E. (2012). Women empowerment and economic development, *Journal of Economic Literature*, 50(4), 1051–79.
- Ebenstein, A. Y., and Sharygin, E. J. (2009). The consequences of the "missing girls" of China. *World Bank Economic Review*, 23(3), 399–425.
- Fernandez, R., Fogli, A., and Olivetti, C. (2004). Mothers and sons: preference formation and female labor force dynamics. *Quarterly Journal of Economics*, 119(4), 1249–99.
- Field, E., Robles, O., and Torero, M. (2009). Iodine deficiency and schooling attainment in Tanzania. *American Economic Journal: Applied Economics*, 1(4), 140–69.
- Filmer, D., Friedman, J., and Shady, N. (2009). Development, modernization, and childbearing: the role of family sex composition. *World Bank Economic Review*, 23(3), 371–98.
- Galor, O. (2005). From stagnation to growth: unified growth theory. Ch. 4 in P. Aghion and S. N. Durlauf (eds), *Handbook of Economic Growth*, Elsevier, North Holland.
- Galor, O. (2011). *Unified growth theory*, Princeton University Press, Princeton, NJ.
- Galor, O., and Weil, D. N. (1996). The gender gap, fertility, and growth. *American Economic Review*, 86(3), 374–87.
- Galor, O., and Weil, D. (2000). Population, technology, and growth: from Malthusian stagnation to the demographic transition and beyond. *American Economic Review*, 90(4), 806–28.
- Hanushek, E., and Woessmann, L. (2012). Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of Economic Growth*, 17(4), 267–321.
- Hashemi, S., Schuler, S., and Riley, A. (1996). Rural credit programs and women's empowerment in Bangladesh. *World Development*, 24(4), 635–53.
- Heath, R., and Jayachandran, S. (2017). The causes and consequences of increased female education and labor force participation in developing countries. NBER Working Paper No. 22766, Cambridge, MA, USA.
- Hoddinott, J., and Haddad, L. (1995). Does female income share influence household expenditures? Evidence from Côte d'Ivoire. *Oxford Bulletin of Economics and Statistics*, 57(1) 77–96.
- Jayachandran, S., and Lleras-Muney, A. (2009). Life expectancy and human capital investments: evidence from maternal mortality declines. *The Quarterly Journal of Economics*, 124(1), 349–97.
- Jensen, R. (2012). Do labor market opportunities affect young women's work and family decisions: experimental evidence from India. *The Quarterly Journal of Economics*, 127(2), 1–40.
- Jensen, R., and Oster, E. (2009). The power of TV: cable television and women's status in India. *Quarterly Journal of Economics*, 124(3), 1057–94.
- Jones, K. M. (2015). Contraceptive supply and fertility outcomes: evidence from Ghana. *Economic Development and Cultural Change*, 64(1), 31–69.
- Joshi, S., and Schultz, P. (2013). Family planning and women's and children's health: long-term consequences of an outreach program in Matlab, Bangladesh. *Demography*, 50(1), 149–80.
- Kimura, M. and Yasui, D. (2010). The Galor-Weil gender-gap model revisited: from home to market. *Journal of Economic Growth*, 15(4), 323–51.
- Klasen, S. (2002). Low schooling for girls, slower growth for all? Cross-country evidence on the effect of gender inequality in education and economic development. *World Bank Economic Review*, 16(3), 345–73.
- Klasen, S., and Lamanna, F. (2009). The impact of gender inequality in education and employment on economic growth: new evidence for a panel of countries. *Feminist Economics*, 15(3), 91–132.
- Knowles, S., Lorgelly, P. K., and Owen, P. D. (2002). Are educational gender gaps a brake on economic development? Some cross-country empirical evidence. *Oxford Economic Papers*, 54(1), 118–49.
- La Ferrara E., Chong, A., and Duryea, S. (2012). Soap operas and fertility: evidence from Brazil. *American Economic Journal: Applied Economics*, 4(4), 1–31.
- Lagerlöf, N.-P. (2003). Gender equality and long-run growth. *Journal of Economic Growth*, 8(4), 403–26.

- Li, H. and Zhang, J. (2007). Do high birth rates hamper economic growth? *The Review of Economics and Statistics* 89(1), 110–7.
- Luca, D. L., Iversen, J. H., Lubet, A. S., Mitgang, E., Onarheim, K. H., Prettner, K., and Bloom, D. E. (2014). Benefits and costs of the women's health targets for the post-2015 development agenda, Working Paper, Copenhagen Consensus Center.
- Lutz, W., Crespo-Cuaresma, J., and Abbasi-Shavazi, M. J. (2010). Demography, education, and democracy: global trends and the case of Iran. *Population and Development Review*, 36(2), 253–81.
- Lutz, W., Cuaresma, J., and Sanderson, W. (2008). The demography of educational attainment and economic growth. *Science*, 319(5866), 1047–18.
- Milanovic, B. (2016). *Global inequality. A new approach for the age of globalization.* The Belknap Press, Cambridge, MA.
- Miller, G. (2008). Women's suffrage, political responsiveness, and child survival in American history. *Quarterly Journal of Economics*, 123(3), 1287–327.
- Miller, G. (2010). Conception as development? New evidence from family planning in Colombia. *Economic Journal*, 120(545), 706–36.
- Onarheim, K. H., Iversen, J. H., and Bloom D. E. (2016). Economic benefits of investing in women's health: A systematic review. *PLoS ONE*, doi: <http://dx.doi.org/10.1371/journal.pone.0150120>.
- Prettner, K., and Strulik, H. (2017). Gender equity and the escape from poverty. *Oxford Economic Papers*, 69(1), 55–74.
- Rosenzweig, M., and Wolpin, K. I. (1980). Testing the quantity-quality fertility model: the use of twins as a natural experiment. *Econometrica*, 48(1), 227–40.
- Rosenzweig, M., and Zhang, J. (2009). Do population control policies induce more human capital investment? Twins, birth weight and China's "one-child" policy. *Review of Economic Studies*, 76(3), 1149–74.
- Saikia, N., Moradhvaj, and Bora, J. K. (2016). Gender difference in health-care expenditure: evidence from India human development survey. *PLoS ONE* 11(7), 1–15.
- Salas, J. M. I. (2012). Consequences of withdrawal: free condoms and birth rates in the Philippines. Mimeo. University of the Philippines: UP School of Economics Discussion Paper No. 2012-20.
- Sauer, P., and Zagler, M. (2014). (In)equality in education and economic development. *Review of Income and Wealth*, 60(S2), S353–79.
- Schober, T., and Winter-Ebmer, R. (2011). Gender wage inequality and economic growth: is there really a puzzle? – A comment. *World Development*, 39(8), 1476–84.
- Self, S., and Grabowski, R. (2012). Female autonomy and health care in developing countries. *Review of Development Economics*, 16(1), 349–53.
- Son, H. H., and Kakwani, N. (2008). Global estimates of pro-poor growth. *World Development*, 36(6), 1048–66.
- Sperling, G. B., and Winthrop, R. (2016). *What works in girls' education. Evidence for the world's best investment.* Brookings Institution Press, Washington, D.C.
- Stenberg, K., et al. (2014). Advancing social and economic development by investing in women's and children's health: a new global investment framework. *The Lancet*, 383(9925), 1333–54.
- Strulik, H., Prettner, K., and Prskawetz, A. (2013). The past and future of knowledge-based growth. *Journal of Economic Growth*, 18(4), 411–37.
- Summers, L. (1992). The most influential investment. *Scientific American*, August 1992, 267(2), p. 132.
- UN Department of Economic and Social Affairs. (2015). *The world's women 2015: trends and statistics.* UN Department of Economic and Social Affairs, Statistics Division, New York.
- UN Department of Economic and Social Affairs (2015). *World Population Prospects: The 2015 Revision, Interpolated demographic indicators by region, subregion and country, annually for 1950-2099.* Downloaded from <https://esa.un.org/unpd/wpp/Download/Standard/Interpolated/>.
- UN Development Programme (2015). *Gender Inequality Index. Human Development Report 2015*, pp. 224-227. UN Development Programme, New York.
- UNESCO Institute for Statistics. (2017). *Enrolment by level of education.* Available at <http://data.uis.unesco.org/> [accessed on 12/9/17].
- UN Women. (2017). *Leadership and political participation: facts and figures.* Available at <http://www.unwomen.org/en/what-we-do/leadership-and-political-participation/facts-and-figures> [accessed on 12/12/17].
- UNFPA. (2016). 10, How our future depends on a girl at this decisive age. *State of World Population Report.* United Nations Population Fund, New York.
- USAid (2017). *STATcompiler. The DHS program.* Available at <https://www.statcompiler.com/en/index.html> [accessed on: 12/03/2017].
- Weil, D. (2007). Accounting for the effect of health on economic growth. *The Quarterly Journal of Economics*, 122(3), 1265–306.
- World Bank (2017). *World Development Indicators online database.* Available at <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>.
- Zimmermann, L. (2012) Reconsidering gender bias in intrahousehold allocation in India. *Journal of Development Studies*, 48(1), 151–63.

Chapter 2: Disability and development: An economic perspective

- Antón JI, Braña FJ, de Bustillo RM. An analysis of the cost of disability across Europe using the standard of living approach. *SERIEs*. 2016 Aug 1;7(3):281-306.
- Banks LM, Kuper H, Polack S (2017) Poverty and disability in low- and middle-income countries: A systematic review. *PLoS ONE* 12(12): e0189996.:
- Braithwaite & Mont (2009) Braithwaite J, Mont D. Disability and poverty: a survey of World Bank poverty assessments and implications. *ALTER, Eur J Disabil Res*. 2009;3:219e232.
- Brana F-J, Anton J-I (2011). Pobreza, discapacidad y dependencia en España. *Papeles de Economía Española* 129:14–26
- Cullinan et al 2011 Cullinan J, Gannon B, Lyons S. Estimating the extra cost of living for people with disabilities. *Health Econ*. 2011;20:582e599.
- Cullinan J, Gannon B, O'Shea E. The welfare implications of disability for older people in Ireland. *Eur J Health Econ*. 2013;14:171e183. Cullinan et al 2013
- Drummond MF, Sculpher MJ, Claxton K, Stoddart GL, Torrance GW. *Methods for the Economic Evaluation of Health Care Programmes*. 4th ed. Oxford: Oxford University Press, 2015.
- Emerson E et al. Socio-economic position, household composition, health status and indicators of the well-being of mothers of children with and without intellectual disabilities. *Journal of Intellectual Disability Research*, 2006,50:862- 873.
- Filmer D. Disability, poverty and schooling in developing countries: results from 14 household surveys. *The World Bank Economic Review*, 2008,22:141-163.
- Groce N, Kembhavi G, Wirz S, Lang R, Trani J, Kett M. *Poverty and disability—a critical review of the literature in low and middle-income countries*. Leonard Cheshire Disability, 2011.
- Groce N, Trani J. (2011). *Disability and the Millennium Development Goals*. United Nations Publication.
- Johnstone D (1998). *An Introduction to Disability Studies* (London, David Fulton).
- Loyalka P, Liu L, Chen G, Zheng X. The cost of disability in China. *Demography*. 2014;51:97e118.
- Lund C, Breen A, Flisher AJ, Kakuma R, Corrigall J, Joska JA, Swartz L, Patel V. Poverty and common mental disorders in low and middle income countries: a systematic review. *Social science & medicine*. 2010 Aug 31;71(3):517-28.
- Marmot M, Allen JJ. (2014). *Social determinants of health equity*. American Public Health Association, 2014.
- Mitra S (2017). *Disability, Health and Human Development*. Palgrave Studies in Disability and International Development.
- Mitra et al. (2017) Extra costs of living with a disability: A systematized review and agenda for research
- Mitra, S. and U. Sambamoorthi (2014). Disability prevalence among Adults: Estimates for 54 Countries and Progress toward a Global Estimate. *Disability and Rehabilitation*. Vol. 36(11), pp. 940-47.
- Mont D, Cuong NV. Disability and poverty in Vietnam. *World Bank Econ Rev*. 2011;25:323e359.
- Morciano M, Hancock R, Pudney S. Disability costs and equivalence scales in the older population in Great Britain. *Review of Income and Wealth*. 2015 Sep 1;61(3):494-514.
- Palmer M, Williams J, McPake B. The cost of disability in a low income country. 2016. Working paper. <https://www.un.org/development/desa/disabilities/wp-content/uploads/sites/15/2016/02/The-Cost-of-Disability-in-a-Low-Income-Country.pdf>
- Peters DH et al. Poverty and access to health care in developing countries. *Annals of the New York Academy of Sciences*, 2008,1136:161-171.
- Saunders P. The costs of disability and the incidence of poverty. *Aust J Soc Issues*. 2007;42:461e480.
- Sen, A., 2004. *Disability and Justice*. Address to World Bank Disability & Inclusive Development Conference, Washington, D.C., November 30–December 1, 2004.
- Shakespeare T. The social model of disability. *The disability studies reader*. 2006 Aug 15;2:197-204.
- Simkiss DE, Blackburn CM, Mukoro FO, Read JM, Spencer NJ. Childhood disability and socio-economic circumstances in low and middle income countries: systematic review. *BMC Pediatrics*. 2011; 11:119.
- World Health Organization. *Disability prevention and rehabilitation: report of the WHO expert committee on disability prevention and rehabilitation*. WHO; 1981.
- Zaidi A, Burchardt T. Comparing incomes when needs differ: equivalization for the extra costs of disability in the U.K. *Review of Income and Wealth*. 2005;51:89e114.

About the authors

Dr. David E. Bloom is Clarence James Gamble Professor of Economics and Demography in the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health. Dr. Bloom is an economist whose work focuses on health, demography, education, and labor. In recent years, he has written extensively on primary, secondary, and tertiary education in developing countries and on the links among health status, population dynamics, and economic growth.

Dr. Michael Kuhn is (co-)leader of the research group on population economics at the Wittgenstein Centre (IIASA, VID/ OEAW, WU) and Vienna Institute of Demography. Having received a doctorate in economics from the University of Rostock, Germany, in 2001, he has since held positions at the Centre of Health Economics, University of York, UK, and at the Max-Planck-Institute for Demographic Research/University of Rostock, Germany. His research interests lie in the area of health and population economics.

Dr. Klaus Prettner is a Professor of Economics at the University of Hohenheim, Stuttgart, Germany, with a focus on Growth and Distribution. His main research interests lie in the areas of Inequality and Economic Policy Analysis, Women's Health and Economic Development, and Demography and Long-run Economic Growth Perspectives. Klaus Prettner received his Ph.D. in Economics from the University of Vienna, Austria.

Dr. Marc Suhrcke is a Senior Researcher at the Luxembourg Institute for Socioeconomic Research (LISER) and a Professor of Global Health Economics at the Centre for Health Economics (CHE). Prior, he held positions as Professor of Public Health Economics with the University of East Anglia (UK), and as a researcher with the World Health Organization, the UNICEF Innocenti Research Centre, the University of Hamburg, the European Bank for Reconstruction and Development, the Centre for European Policy Studies (Brussels), the European Commission (Brussels), and the Hamburg Institute for International Economics.

Dr. Alex Nicholls MBA is the first tenured professor in social entrepreneurship appointed at the University of Oxford and was the first staff member of the Skoll Centre for Social Entrepreneurship in 2004. His research interests range across several key areas within social entrepreneurship and social innovation, including: the nexus of relationships between accounting, accountability, and governance; public and social policy contexts; social investment; and Fair Trade. His 2009 paper on social investment won the Best Paper Award (Entrepreneurship) at the British Academy of Management. In 2010, he edited a Special Edition of Entrepreneurship, Theory and Practice on social entrepreneurship – the first time a top-tier management journal had recognized the topic in this way. He is also the General Editor of the Skoll Working Papers series and the Editor of the Journal of Social Entrepreneurship.

General disclaimer / Important information

This document was produced by and the opinions expressed are those of Credit Suisse ("CS") as of the date of writing and are subject to change. It has been prepared solely for information purposes and for the use of the recipient. It does not constitute an offer or an invitation by or on behalf of CS to any person to buy or sell any security. Nothing in this material constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. The price and value of investments mentioned and any income that might accrue may fluctuate and may fall or rise. Any reference to past performance is not a guide to the future.

The information and analysis contained in this document have been compiled or arrived at from sources believed to be reliable but CS does not make any representation as to their accuracy or completeness and does not accept liability for any loss arising from the use hereof. A Credit Suisse Group company may have acted upon the information and analysis contained in this publication before being made available to clients of CS. Investments in emerging markets are speculative and considerably more volatile than investments in established markets. Some of the main risks are political risks, economic risks, credit risks, currency risks and market risks. Investments in foreign currencies are subject to exchange rate fluctuations. Any questions about topics raised in this piece or your investments should be made directly to your local relationship manager or other advisers. Before entering into any transaction, you should consider the suitability of the transaction to your particular circumstances and independently review (with your professional advisers as necessary) the specific financial risks as well as legal, regulatory, credit, tax and accounting consequences. This document may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in European Union (except Switzerland): by Credit Suisse (UK) Limited and Credit Suisse Securities (Europe) Limited. Credit Suisse Securities (Europe) Limited and Credit Suisse (UK) Limited, both authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, are associated but independent legal entities within Credit Suisse; Germany: Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"); United States and Canada: Credit Suisse Securities (USA) LLC; Switzerland: Credit Suisse AG authorized and regulated by the Swiss Financial Market Supervisory Authority (FINMA); Brazil: Banco de Investimentos Credit Suisse (Brasil) S.A or its affiliates; Mexico: Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); Japan: by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (Kinsho) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Investment Advisers Association, Type II Financial Instruments Firms Association; Hong Kong: Credit Suisse (Hong Kong) Limited; Australia: Credit Suisse Equities (Australia) Limited; Thailand: Credit Suisse Securities (Thailand) Limited, regulated by the Office of the Securities and Exchange Commission, Thailand, having registered address at 990 Abdulrahim Place, 27th Floor, Unit 2701, Rama IV Road, Silom, Bangkok, Bangkok 10500, Thailand, Tel. +66 2614 6000; Malaysia: Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse AG, Singapore Branch; India: Credit Suisse Securities (India) Private Limited (CIN no.U67120MH1996PTC104392) regulated by the Securities and Exchange Board of India as Research Analyst (registration no. INH 00001030) and as Stock Broker (registration no. INB230970637; INF230970637; INB010970631; INF010970631), having registered address at 9th Floor, Ceejay House, Dr.A.B. Road, Worli, Mumbai - 18, India, T- +91-22 6777 3777; South Korea: Credit Suisse Securities (Europe) Limited, Seoul Branch; Taiwan: Credit Suisse AG Taipei Securities Branch; Indonesia: PT Credit Suisse Securities Indonesia; Philippines: Credit Suisse Securities (Philippines) Inc., and elsewhere in the world by the relevant authorized affiliate of the above.

Additional regional disclaimers

Hong Kong: Credit Suisse (Hong Kong) Limited ("CSHK") is licensed and regulated by the Securities and Futures Commission of Hong Kong under the laws of Hong Kong, which differ from Australian laws. CSHK does not hold an Australian financial services license (AFSL) and is exempt from the requirement to hold an AFSL under the Corporations Act 2001 (the Act) under Class Order 03/1103 published by the ASIC in respect of financial services provided to Australian wholesale clients (within the meaning of section 761G of the Act). Research on Taiwanese securities produced by Credit Suisse AG, Taipei Securities Branch has been prepared by a registered Senior Business Person. Malaysia: Research provided to residents of Malaysia is authorized by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020. Singapore: This report has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (each as defined under the Financial Advisers Regulations) only, and is also distributed by Credit Suisse AG, Singapore branch to overseas investors (as defined under the Financial Advisers Regulations). By virtue of your status as an institutional investor, accredited investor, expert investor or overseas investor, Credit Suisse AG, Singapore branch is exempted from complying with certain compliance requirements under the Financial Advisers Act, Chapter 110 of Singapore (the "FAA"), the Financial Advisers Regulations and the relevant Notices and Guidelines issued thereunder, in respect of any financial advisory service which Credit Suisse AG, Singapore branch may provide to you. UAE: This information is being distributed by Credit Suisse AG (DIFC Branch), duly licensed and regulated by the Dubai Financial Services Authority ("DFSA"). Related financial services or products are only made available to Professional Clients or Market Counterparties, as defined by the DFSA, and are not intended for any other persons. Credit Suisse AG (DIFC Branch) is located on Level 9 East, The Gate Building, DIFC, Dubai, United Arab Emirates. UK: The protections made available by the Financial Conduct Authority and/or the Prudential Regulation Authority for retail clients do not apply to investments or services provided by a person outside the UK, nor will the Financial Services Compensation Scheme be available if the issuer of the investment fails to meet its obligations. To the extent communicated in the United Kingdom ("UK") or capable of having an effect in the UK, this document constitutes a financial promotion which has been approved by Credit Suisse (UK) Limited which is authorized by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority for the conduct of investment business in the UK. The registered address of Credit Suisse (UK) Limited is Five Cabot Square, London, E14 4QR. Please note that the rules under the UK's Financial Services and Markets Act 2000 relating to the protection of retail clients will not be applicable to you and that any potential compensation made available to "eligible claimants" under the UK's Financial Services Compensation Scheme will also not be available to you. Tax treatment depends on the individual circumstances of each client and may be subject to changes in future EU: This report has been produced by subsidiaries and affiliates of Credit Suisse operating under its Global Markets Division and/or International Wealth Management Division.

This document may not be reproduced either in whole, or in part, without the written permission of the authors and Credit Suisse. © 2018 Credit Suisse Group AG and/or its affiliates. All rights reserved.

Also published by the Research Institute



How Corporate Governance Matters
January 2016



Credit Suisse Global Investment Returns Yearbook 2016
February 2016



Emerging Consumer Survey 2016
March 2016



The CS Gender 3000: The Reward for Change
September 2016



Global Wealth Report 2016
November 2016



The Next Frontier
December 2016



The Future of Monetary Policy
January 2017



Getting over Globalization
January 2017



Credit Suisse Global Investment Returns Yearbook 2017
February 2017



Emerging Consumer Survey 2017
March 2017



CSRI Special Report: The Chinese Consumer in 2017
April 2017



Switzerland: A Financial Market History
June 2017



The CS Family 1000
September 2017



The Swiss Family Business Model
September 2017



Global Wealth Report 2017
November 2017

CREDIT SUISSE AG

Research Institute
Paradeplatz 8
CH-8070 Zurich
Switzerland

research.institute@credit-suisse.com

www.credit-suisse.com/researchinstitute