# Transitioning to
# NO POVERTY

**Isabel Günther and Rahul Lahoti (Eds.)**

# Transitioning to **No Poverty**

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# In memory of Prof. Stephan Klasen, Ph.D. (October 27, 2020)

who dedicated his entire life to fight global poverty with science, who contributed to this book in 2019, at a time when the incurable disease amyotrophic lateral sclerosis (ALS) already made writing incredibly difficult for him, who has been a life-long inspiration for the editors of this book, and who has been a good friend to many authors of this book.

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# Abstracts

## The Fight against Global Poverty: 200 Years of Progress and Still a Very Long Way to Go

**by Max Roser and Joe Hasell**

Almost one in ten people globally live on less than $1.90 per day and recent projections suggest we are not on track to achieve the goal of eradicating such extreme poverty by 2030. What the long-run history of global poverty shows clearly, however, is that the continued presence of extreme poverty is far from inevitable. The aim of this chapter is to inform our aspirations for the future of global poverty by summarising what we know about its history. To provide this long-term perspective, we present global poverty estimates based on two methods: household survey-based estimates from the World Bank and national accounts-based estimates derived from historical data on GDP per capita and inequality. The latter method allows us to estimate the trajectory of global poverty over the last two centuries. We compare the methods and data underlying these two approaches to poverty measurement. There are discrepancies between the resulting estimates and sources of uncertainty in each case. However, there are key points of agreement, and the main trends on which they converge are robust to various sources of uncertainty. This evidence shows a substantial decline in global poverty rates over the last two centuries, with particularly fast progress made in recent decades. The extent of the changes we see over the long run should embolden us to reach not only for the eradication of the most extreme forms of poverty but for much more ambitious goals still.

## Global Absolute Poverty: The Beginning of the End?

**by Sanjay G. Reddy**

The first Sustainable Development Goal of "Ending poverty in all its forms everywhere" must be interpreted in light of an understanding of what "poverty in all its forms" means societally. It cannot be reduced to a narrow technical focus on official targets and indicators. There are reasons for concern that the official indicators are unsatisfactory, and that there is a considerable gap between their focus and the societal understanding of poverty. Even if conventional approaches to global poverty estimation are used, considering a range of alternative poverty lines

demonstrates that the choice of poverty identification criterion can significantly influence conclusions drawn about how much poverty there is, where it is, how it is evolving over time, and what are the appropriate priorities and policies. Although poverty is expected to be nearly "eliminated" by 2030 in regions other than sub-Saharan Africa at the lowest poverty lines, this is not true at higher poverty lines. The projected regional composition of future poverty is also greatly dependent on the choice of poverty line, because poverty in the other world regions increases markedly at higher lines. These conclusions undermine the widespread presumption that addressing the problem of absolute poverty worldwide requires a singular focus on sub-Saharan Africa. Especially at higher poverty lines, income poverty is a global problem, and sustaining growth throughout the developing world is important for its reduction. Comparison of estimates based on pre- and post- pandemic growth forecasts shows that while the elimination of poverty by 2030 was already unlikely, the global economic contraction due to COVID-19 has made it even more so. For the highest poverty line examined, an additional 500 million people will be poor in 2030 as a result of the growth slowdown due to Covid-19.

## SDG 1: The Last 3%

**by Martin Ravallion**

There is a little-noticed but important difference between the World Bank's original goal for poverty reduction and the subsequent UN Sustainable Development Goal (SDG). While both target the "$1.90 a day" poverty rate, the Bank's goal was a 3% rate by 2030, while the SDG is to "eradicate" poverty by 2030. Simple linear projections of recorded progress against $1.90 poverty in the world does suggest that we are on track to attaining the UN's goal. If we can return to the pre-COVID pace of poverty reduction after two or three years, then we should still be roughly on track. However, closer scrutiny of the pre-COVID data leaves one less optimistic. There are a priori reasons why the last few percentage points could be harder to reach with current development policies. Consistent with that hypothesis, the paper documents recent (pre-COVID-19) signs of a levelling-off in progress for the poorest in East Asia—the star performer regionally over the longer term. This is evident in the region's slower progress recently in both lifting the floor—and thus reaching the poorest—and in reducing the poverty rate. This levelling off is also found, on average, for the 18 developing countries that have reduced their poverty rate from over 10% (around the current global rate) to under 3% during the period 1981–2017. Similar to East Asia, progress in reaching the poorest declined once the

last 3% had been reached, though some countries did better than others. Overall, the results suggest that returning to "business as usual" post-COVID will not suffice to eradicate extreme poverty.

## How Can the International Community Eradicate Poverty and Hunger by 2030?

**by Stephan Klasen**

In vowing to eradicate poverty and hunger by 2030, the international community has set itself an extremely ambitious goal as the success of this venture depends on effectively addressing a number of challenges in the poorest countries. The classic instruments of development cooperation can contribute little to this agenda. Instead, a much broader agenda must become a political priority of the international community and must involve political, economic, and occasionally, even military engagement.

## "Leave No One Behind" in Middle-Income Countries. A Review of Progress and Policies

**by Jann Lay and Jan Priebe**

We show that "Leave no one behind" (LNOB) can be a meaningful guiding principle for national development policy as well as development cooperation in middle-income economies, as very unequal progress threatens the gains for the poor in countries graduating from low to middle-income status. Our review, measuring the progress of LNOB, clearly illustrates the huge data gaps that remain for key LNOB indicators. Disaggregated indicators or data to compute them are often not (yet) available. Our brief and selective review of LNOB-relevant policies and approaches in middle-income countries shows a very rich foundation for evidence-based policy-making, particularly in education, health and social protection. Some clear messages emerge, for example, a clear call for progressive universal policies in education that emphasize equality in learning achievements. In general, the sectorally interlinked challenges of implementing LNOB demand integrated approaches that combine education, health, and labor market components and pay attention to mainstreaming anti-discrimination efforts.

## SDG 1 and Women's Work: Ignoring the Needs of Women and History—The Case of Sri Lanka

**by Megan Todd and Kanchana N. Ruwanpura**

Our paper evaluates SDG 1 with regard to labour reforms in Sri Lanka, by seeking to understand how women workers in the garment sector may be affected by proposed changes to the laws. Our paper is based on a decade of fieldwork, supplemented by interviews and recent archival work. We first give an account of Sri Lanka's recent history. It offers a necessary context, given that politics and legacies from the ethnic conflict continue to mar current efforts. Critically, it is found that ethnic divisions continue to create tensions, and that these have often been exacerbated by labour conditions. Through investigating the place of women workers in Sri Lanka's apparel sector, including the North and the East of Sri Lanka, we show that labour insecurity remains, and discrimination is rife. Importantly, Sri Lanka has thus far failed to position women's experiences accurately in SDG1 by failing to consider its linkages to SDG5, SDG8 or SDG10. The current inability of policies to alleviate the position of women workers in relation to SDG1 places added importance to recent labour policy reform, which tends to be neglected because of an emphasis on creating pro-market friendly labour conditions.

## Social Protection in Ghana—History, Equity- Driven Reforms, Financing and Sustainability

**by Edward Asiedu and Anita Baku**

Social protection has become very important in development policy, due partly to the widening gap in health, income and opportunities between the rich and the poor. The growing number of national social protection policies and interventions implemented by many developing countries, particularly in sub-Saharan Africa, ties into the emerging consensus around the view that social protection provides an effective response to poverty and vulnerability in developing countries. This chapter examines the history of social protection in Ghana, highlighting the key social protection reforms and interventions to assess how they are aligned with the attainment of societal equity. The historical antecedent of social protection policies and programs in the past three to four decades is therefore provided in order to illustrate a rigorous background for the design and strengthening of social protection in the decade ahead. We also provide a discussion on the financing of social protection policies and their long-term sustainability, emphasizing the role of

technology in the sustainable delivery and targeting of social protection programs.

## Education Access and "Learning Poverty" in Seven Southern African Countries

**by Servaas van der Berg**

Against the backdrop of the shift in emphasis from the MDGs, with the educational focus on access, to the SDGs with the focus on educational outcomes and equity, this chapter discusses some education issues and policy responses in seven southern African countries. These countries—South Africa and its six neighbours—cover a wide economic development range: Mozambique is a low-income country, Lesotho, Zimbabwe and Eswatini lower-middle income, and Namibia, South Africa and Botswana upper-middle income countries. Examples from these countries show little evidence that the focus in policy debates and practice has shifted to the educational goals formulated and propagated by the international community. This may well also be the case in many other developing countries. The continued focus on broadening access needs to be supplemented with steps to reduce "learning poverty".

## Early Childhood Development: Current Status and Gaps

**by Günther Fink**

We review the literature on early childhood development as well as the current knowledge on developmental gaps between high-, middle- and low-income countries. While current data on children's early developmental outcomes are limited, the available evidence suggests that early trajectories are comparable among children growing up in home environments providing adequate support and stimulation globally. Large gaps in physical and likely also cognitive early development persist in low- and middle-income countries due to poverty, lack of maternal education and lack of early learning opportunities. These gaps can be reduced by continued efforts to reduce poverty and increase education, as well as targeted government programs to support parents and children during the first few years of children's lives.

## Mobilizing Resources for the Poor

**by Kathleen Beegle and Alejandro de la Fuente**

The SDG agenda to address poverty needs to extend beyond shifting programs and policies. It also requires a careful revisit of a range of fiscal issues especially in countries in Africa that are poor and also resource constrainted. Current levels of public spending in Africa that effectively reach and benefit the poor are not nearly sufficient and often poorly spent. This chapter explores how poverty reduction can be accelerated by mobilizing more resources, domestically and internationally, and by spending more efficiently and with a greater focus on the needs of the poor in terms of both raising their income today and investing in the next generation in Africa. What is the path to tackle these challenges? First, on the revenue side countries need to mobilize more resources domestically. While mobilizing domestic revenues (with VAT expansion currently a favorite vehicle), countries need to make sure the poor are net receivers. Other promising avenues include improving tax compliance, with a larger focus on local large taxpayers, corporate taxes and transfer (mis)pricing (which has a global agenda), as well as excise and property tax collection. Yet, even with improvements in domestic resource mobilization, international development assistance will still be critical in the poorest and most fragile countries, for both direct spending as well as to leverage private capital. Aid makes up more than 8 percent of GDP for half of low-income countries in Africa, but in recent years aid to countries in the region has been declining. Second, spending patterns need to shift towards more pro-poor investments and improve in terms of the levels spent in critical sectors, the instrument/programs for a given investment, and the efficiency of implementation. In levels, spending on "pro-poor" sectors has a mixed track record with some generally reaching international targets (like education) but others falling short for many countries (health, WASH, risk management, and agriculture and rural infrastructurel). The choice of program design matters for given spending— untargeted programs can result in large shares of spending going to non-poor households. One obvious area for attention are the currently high subsidy expenditures (in energy and fertilizer)—often regressive with little impact on poverty. Cash transfers seem more effective and efficient than subsidies where evidence exists, but more is needed to compare their performance relative to public good provision for the poor in agriculture and rural infrastructure, security, risk management, education and health. Agricultural and rural spending

should tilt more heavily towards investment in public goods. And finally, there are significant inefficiencies in spending that need to be addressed. The low quality of health and education services is not only explained by low spending levels.

## Development Cooperation, Growth and Poverty Reduction: A Survey of the Evidence

**by Rainer Thiele**

The donor community has taken a prominent role in the implementation of the Millennium Development Goals (MDGs), and is likely to stay strongly involved when it comes to achieving the poverty-oriented targets of the Sustainable Development Goals (SDGs). Against this background, the present paper provides an overview of the empirical evidence regarding the impact of international development cooperation on economic growth, (monetary and non-monetary) poverty and inequality in order to assess whether donors have directly or indirectly contributed to achieving internationally agreed upon poverty reduction targets. The general conclusion is that development cooperation can help achieve growth and poverty reduction in partner countries, even though the effects are likely to be modest. Most confidence can be put into the finding that, in accordance with the MDGs, aid for social infrastructure has contributed to achieving non-monetary goals such as higher school enrollment and lower infant mortality. In contrast, it is inherently difficult to empirically identify income effects of foreign aid at the macro level, which the long-standing and still unresolved debate about the aid–growth relationship illustrates.

## A Safety Net for You, a Safety Net for Me? Donor Promotion of Social Protection Schemes Faces Policy Coherence Issues

**by Fritz Brugger**

Social protection schemes are effective instruments to fight poverty in "normal" times. During crises, they are even more important to prevent people from falling into poverty, as the COVID-19 pandemic has demonstrated. Developing countries have long struggled to generate sufficient tax revenue to fund the social programs and investments needed to protect their populations. In recent years the donor community has increasingly converged on a consensus around the need to boost tax revenue as part of the broader development agenda. At the same time, donors have also promoted and defended international tax standards that benefit their business communities, and which, to a degree, work against the ability of developing countries to obtain a fair share of taxes from multinational corporations operating

in their jurisdictions. The rules for taxing multinational enterprises are brokered by the Organization for Economic Co-operation and Development (OECD), the club of industrialized countries where donor governments are heavyweights. This chapter analyzes the reform of the OECD transfer pricing regulation after the financial crisis, which promised to simplify transfer pricing rules in a way that strengthens the position of developing economies towards multinational enterprises. The reform largely failed to deliver on its promise but was a success for those who benefit from the status quo. The political economy behind the reform points to the lack of policy coherence among donor countries and the deep politicization of the seemingly technical topic of international tax policy.


# Preface: Transitioning to no poverty by 2030

**Isabel Günther and Rahul Lahoti**

The first sustainable development goal (SDG 1) is "to end poverty in all its forms everywhere and for all", which seems to be non-negotiable for the "world we want", which would provide minimum living standards for all global citizens. However, the question remains: is this goal feasible, especially given the set-backs in the fight against poverty and the unequal access to health resources that we have observed in 2020 and 2021? If yes, how do governments and civil society need to engage and what resources are needed? In this book, we bring together a diverse set of perspectives on SDG 1 from leading scholars around the world. When we first invited scholars in 2019 to reflect on ending poverty by 2030, the world looked very different; or rather, the necessity of global social protection, decent and not only sufficient livings standards and strong international cooperation to fight global poverty became even more apparent—and the pandemic put a spotlight on the lack of these three components. The COVID-19 pandemic and the resultant lockdowns across the world have not only led to millions of lost lives across the world, but have also led to large numbers of people falling once again into extreme poverty.

The exact impact of the pandemic on poverty is already difficult to ascertain in the short term, due to data limitations in tracking the living conditions of the most marginalized communities in the world; and more so in the long term: it depends on the speed of the economic recovery across countries, as well as on the long-term consequences that the pandemic has on the health and education of poor households that might lead to long term poverty traps.

Given the uncertainty, estimates of researchers on the short-term impacts vary, but all agree that many of the gains made in the last twenty years in reducing poverty are likely to be lost. Lakner et al. (2021) estimate that around 120 million people around the world have additionally become extremely poor in 2020. In the absence of the pandemic, poverty was expected to decline by more than 30 million people in the year 2020. Sumner et al. (2020) estimate that, in some regions of the world, we might lose 30 years' worth of gains against poverty reduction. In their worst-case scenario, poverty would increase by about half a billion across the world. Using IFPRI's global model, Vos, Laborde et al. (2021) estimate that over 150 million additional people could have fallen into extreme poverty in 2020. Some initial estimations also indicate large, long-lasting impacts. UNDP (2020) estimates that the number of people living

in extreme poverty will increase by 44–250 million (up from 861 million in No Covid Scenario) in 2030 because of the pandemic. In Chapter 2, Reddy estimates that an additional 500 million individuals will be poor (defined as less than 5 international dollars per day) in 2030 due to COVID-19.

This book starts with a broad perspective on the feasibility of ending extreme poverty by 2030—the likelihood of which has obviously decreased since the start of writing the chapters in 2019 and its publication in 2021. The first three chapters delve into data to present the current status of the progress made against the goals and projections of a reduction in poverty by 2030 across world regions (chapters 1–3). These chapters also discuss several challenges when it comes to measuring extreme poverty, pointing towards our limited understanding of the goal as such. The next six chapters (chapters 4 to 9) discuss the role of policies in ending poverty in all nations, which is now necessary to achieve the goal of no global poverty by 2030. The authors discuss selected essential policies needed to leave no low-income country and no person in middle-income countries behind in more detail, with a particular focus on social protection and investments in new generations, using case studies of countries from across the world. The last three chapters (chapters 10 to 12) discuss ways to mobilize the needed resources to successfully eliminate poverty in the 21st century: achieving SDG 1 requires not only good policies, but also substantive resources to invest in various poverty reduction policies.

**Part 1: Is the World on Track to Achieving SDG 1?**

A long list of indicators have been proposed for tracking the progress of SDG 1 of "ending poverty in all its forms everywhere" (United Nations 2017). These indicators refer to those deprived according to the international poverty line, the national poverty lines, poverty in all its dimensions, and those who lack access to basic public services and social protection. In addition, these indicators are meant to be disaggregated and tracked by sex and age. However, there is a lack of data to monitor all these indicators, especially by disaggregated groups. Hence, the international poverty line of 1.90 international dollars per day, which clearly defines the most extreme forms of poverty, is among the most likely indicator to be monitored and used to determine success in meeting SDG 1 by the international community by 2030. In chapters 1–3, we present diverse views on the measurement, history and potential future of global poverty. These chapters offer first-hand insights into both the challenges of understanding global poverty and achieving SDG 1.

In chapter 1, Roser and Hasell document the long-term history of poverty reduction and discuss the learnings from history for future progress in reducing poverty. They first show that from 1981 to 2017, extreme poverty in the world (defined as people living below 1.9 international dollars per day) has declined from 42 percent to 9 percent. They also document the changes using a societal poverty line that combines the absolute poverty line with a relative poverty line, defined based on average incomes in the individual's society. This poverty rate is not only higher, but has also declined at a slower rate: from 45 percent in 1990 to 28 percent in 2017. Similarly, they show that for higher absolute international poverty lines (such as, for example, 5.5 international dollars per day), the pace of decline in poverty has been slower as compared to that of a decline in extreme poverty. To further analyze historical poverty over the last two hundred years, they use average income data from national accounts and historical data on the extent of inequality in each country. These data have, of course, important limitations concerning coverage and quality, but the authors show that even though the exact extent of poverty reduction is difficult to deduce, the broad trends are clearly evident from the data. They find a more or less continuous poverty decline since 1820, with rapid acceleration in the second half of the 20th century. They argue that, based on historical progress made when it comes to poverty, reduction elimination is possible.

In chapter 2, Reddy takes a more critical perspective on how extreme poverty is defined globally and what this means for reaching SDG 1. The author argues that the societal understanding of poverty differs substantially from the technical understanding of how poverty is defined by governmental organizations. A societal understanding of no poverty would mean that everyone is able to meet their basic needs (food, clothing, shelter, etc.), whereas the technical definition is based on the 1.9 international dollars poverty line, which might not be enough to meet the costs to fulfill these necessities in countries that do not belong to the very poorest countries. There is a likelihood that SDG 1 will be met according to the technical view, but not by the societal view of what constitutes poverty. Reddy further estimates poverty using different poverty thresholds and various growth estimates, to determine if the world can achieve the SDG 1 targets. The estimations show that, for the 1.9 dollars international poverty line, poverty would be below 3 percent in almost all regions around the world by 2030, except in Sub-Saharan Africa. In Sub-Saharan Africa, poverty in 2030 is estimated to be between 32 and 53 percent, based on the growth projections that are used. However, the outlook and where the poor are located changes substantially if higher, and according to Reddy, "more realistic poverty" lines are used (2.52, 3.02 and 5.04 international dollars). Reddy estimates that with a

poverty line of 5.04 international dollars (same as the United States Department of Agriculture food poverty line for the United States), about 35 percent of the world would be deemed poor in 2030, with a far larger fraction coming from South Asia.

In chapter 3, Ravallion argues that it is difficult to achieve the SDG 1 goal of "eradicating" poverty, because the current set of development policies do not reach the poorest. The author argues that linear projections currently used to estimate poverty rates in 2030 based on historical trajectories are misleading. The linear projections might indicate that we are on track to achieve SDG 1 goals, but we might fall short because of both slowing growth rates over the next ten years (even before the COVID-19 crisis) and the difficulty in reaching the very poorest, which has already become evident in many countries. The poorest might be hard to reach due to their remote physical location, persistent social exclusion, dynamic poverty traps and deficiencies in state capacity and policy in reaching the very poorest. Ravallion argues that the progress in poverty reduction declines substantially once a country reaches a poverty level close to 3%. Ravallion investigates the experience of 18 middle-income countries across the world that had reduced their poverty rate to 3 percent, and their success in terms of reducing poverty further. Ravallion finds that countries that have been successful in reducing poverty, both in East Asia and other places, witnessed a substantial decline in the pace of poverty rate reduction once they reached 3 percent levels. This experience was not driven by declines in growth rates, but by an inability to reach the poorest in society. The chapter argues that "business as usual" development policies might not be enough to reach the poorest and to achieve SDG 1, and that a change in policy frameworks is needed

**Part 2: Policies to End Extreme Poverty**

Building on the analysis of Ravallion, Klasen lays out the required policies for low-income countries, to end widespread poverty in the 21st century (chapter 4). Complementing chapter 4, Lay and Priebe focus instead on the poorest people in middle-income countries and the future policies needed to "leave no one behind" until 2030. Chapters 6–9 discuss two important dimensions of this policy agenda, namely social protection to reach the extreme poor left out of any growth processes, and investments in the future generation, so that as many people as possible can benefit from and contribute to the development of their countries.

In chapter 4, Klasen first argues that the growth-led reduction in poverty that helped achieve the Millennium Development Goal 1 (MDG 1) by 2015, namely reducing the share of people below the extreme international poverty line and who

suffer from hunger by 50%, cannot be relied on any further for achieving SDG 1. MDG 1 was achieved because large populous countries like China and India were successful in substantially reducing poverty, even though many smaller countries did not achieve the MDG target. However, since SDG 1 calls for an elimination of poverty in each country in the world, for the goal to be met, all countries have to be successful, and that will be disproportionately harder. Moreover, the drastic declines in poverty in Asia have been led by a boost in agricultural productivity, industrialization and the development of export-oriented sectors. These three conditions might not be easy to implement across the poorest countries, who are still facing high extreme poverty rates of up to 30% in the 21st century.

Klasen identifies commodity sector-driven growth, conflicts, climate change and lack of fertility declines across different groups of countries as impediments to achieving SDG 1. High commodity prices that have helped several African countries to reduce poverty in recent years are no longer sustainable. The ill effects of a strong commodity sector—lack of structural change, lack of investment in agriculture and industry—severely limit any further progress in poverty reduction in these countries. A large number of poor people also live in conflict-ridden fragile states, and progress in these countries without international political (and military) commitment does not seem possible. The accelerating effects of climate change will further impact progress in poverty reduction in several countries. Parts of Africa have not experienced the decline in fertility rates usually associated with countries as they develop, leading to increased strain on scarce resources. To address these challenges, Klasen calls upon the poorest countries to implement country-specific policies (depending on the major challenge faced) to make progress in poverty reduction and to develop a broad social security net (see also chapters 6–7). He also calls on the international community to significantly expand non-reciprocal trade preferences, fund climate adaptation and provide increased political and military commitments for fragile countries.

In chapter 5, Lay and Priebe discuss the "leave no one behind" agenda and policies that would help middle-income countries to make it a reality. LNOB is a comprehensive principle that emphasizes social, economic and political inclusion that, according to the authors, must go beyond an anti-discrimination and/or an anti-poverty agenda. For policies, this implies a focus on key areas for economic and political participation—hence, education, social protection, and labor market policies. LNOB is an important guiding principle that can help guide national development policy in middle-income countries to eradicate poverty, as very unequal progress may threaten the development gains for poor countries graduating from low- to middle-income status. The authors first note that there are huge data

limitations to identify who has been left behind in particular countries, and in particular related to the poverty status of migrants and people with disabilities. The authors go on to review policies that have worked in achieving LNOB goals in middle-income countries. In the sphere of education conditional cash transfers, policies to improve teacher quality (see also chapter 8), early childcare (see also chapter 9), and affirmative action programs are critical to provide knowledge and skills to all. For social protection policies (see also chapter 7), they conclude that a universal approach to social protection is effective and possible, with special emphasis given to increase coverage for marginalized people working in the informal sector. For labor policies (see also chapter 6), which are key for the poor to benefit from economic growth, Lay and Priebe indicate that large public work programs, minimum wage policies and affirmative action policies for various marginalized groups have been effective in generating decent employment. However, conclusions for labor market policies are less clear than for education and social protection, given that labor markets greatly depend on the macroeconomic developments of countries.

In chapter 6, Ruwanpura and Todd assess SDG 1 from the perspective of working women in Sri Lanka. Extreme poverty rates in Sri Lanka were 14 percent in 1985 and declined to below 1 percent in 2016. The authors outline that, despite this overall progress, women workers and minorities have made uneven progress. Even though women in Sri Lanka are highly educated and have had opportunities in the textile sector, they are concentrated in labor-intensive low-paying jobs and do not have any job security. Moreover, working Tamil minority women in Sri Lanka have to encounter discriminatory practices such as lower wages, derogatory language and abuse. Analyzing the labor law reforms proposed in 2019, the authors contend that though the reforms have several measures that are progressive, but overall they are catered towards attracting foreign investors rather than protecting the interests of the labor force. In particular, the reforms give employers the power to self-monitor and take away oversight from the state and unions. This will impact informal and vulnerable workers the most. Achieving sustainable poverty reduction as laid out in SDG 1, gender inequality and workers' rights need to be recognized and given their due importance—otherwise, women will be left behind. Additionally, the authors argue that the poverty reduction objectives of SDG 1 are intimately linked to other SDGs, and policies need to be more aware of these connections.

In chapter 7, Asiedu and Baku explore the goal of SDG 1 from the perspective of social protection policies in Ghana, a fast-developing country on the African continent. They argue that the rate of poverty reduction for one percentage point of economic growth has declined substantially over time in Ghana, and if the country is to achieve

SDG 1, it cannot rely merely on economic growth, but has to expand its social safety net. Ghana currently spends less than one percent of its GDP on social security schemes (0.63% in 2019), which is substantially lower than even most sub-Saharan African countries (2.16% of GDP). The authors argue that Ghana needs to spend more. The major current social protection schemes include the social grant scheme for vulnerable households, a range of education-focused programs providing free meals and schooling, and labor market interventions like a public works program. The authors also argue for the need for better targeting of these programs to improve the efficiency of public expenditures. The authors recommend the increased use of digital tools, like data obtained from the Taxpayer Identification Number (TIN) to better target benefits of various schemes to the people in need. A positive development in Ghana has been the decrease in reliance on international donors for social security expenditures, with more spending covered through domestic resources, making the social protection programs more sustainable.

In addition to social protection schemes, education is key to achieving SDG 1, as it contributes to economic development to finance any programs to alleviate poverty and, more importantly, provides a more equitable access to any gains from economic development.

In chapter 8, van der Berg discusses education challenges for seven southern African countries, namely South Africa, Mozambique, Lesotho, Zimbabwe, Eswatini and Botswana. The author argues that the MDGs led to a large expansion in enrollment and access to education in these countries and that the SDGs have rightly shifted focus to learning outcomes and equity, but this is not reflected yet in policies of southern African countries. "Learning poverty" is, hence, still widespread with little emphasis on measuring or determining whether children going to school are actually learning. The little that is known about learning levels among these countries indicates that it is very low – the average student in these seven southern African countries is between 3 and 6 years behind students in an average country where Pisa test is conducted. These countries do not regularly participate in international testing and many governments are not interested in measuring and monitoring progress in learning. A shift in focus from expanding and measuring access towards measuring and improving learning outcomes is essential to meet SDG 1.

In chapter 9, and building on van der Berg, Fink reviews the literature on early childhood education. Increasingly, it is being recognized that the early years of a child's life are critical for various life outcomes, including the likelihood of suffering under poverty. Fink first documents the large gaps in the average development of children in low- and middle- income countries as compared to high-income

countries. However, if he compares similarly endowed home environments across the world—with basic needs meet and mothers with completed secondary education—then these gaps disappear. Most of the lower development in early childhood in low- and middle-income countries are, hence, not driven by geographic or climate-related reasons, but linked to poverty and a lack of access to basic public services. A reduction in poverty will help narrow these gaps and a reduction in these gaps will lead to less poverty in the future. Early life interventions have been shown to have high returns, but have not been widely adopted in many countries around the world. Fink recommends home visit programs by trained community agents who provide regular guidance to parents on how to provide stimulating environments for children, as a way to reduce the early childhood gaps. These programs have proven to be effective in several countries and could be adopted at scale in many countries.

**Part 3: Resources to End Extreme Poverty**

In addition to targeted policies that differ across countries to achieving SDG 1 (see chapters 5–6), essential policies to increase social protection (see chapters 6–7) or providing better access to education to children across all ages (see chapters 8–9) require substantive resources. There are several alternatives to increasing resources—domestic taxation, revenue from natural resources, international development assistance, corporate taxation including of multi-national corporations, and borrowing from domestic and international markets. The last three chapters in this volume (chapters 10–12) discuss some of the challenges and steps forward in mobilizing resources for achieving SDG 1.

Beegle and de la Fuente, in Chapter 10, delve into the issue of how to mobilize resources and use them more efficiently for the poor across African countries. They first present evidence to show that many African countries still face a huge gap in the resources required to end extreme poverty. The authors argue that low levels of GDP on which to tax and limited ability to borrow from international markets restricts the resources that countries have to effectively address poverty. To increase resources, Beegle and de la Fuente recommend increasing direct tax compliance (such as income taxes) and decreasing reliance on indirect taxes (such as the value added tax), which are often regressive in nature, taxing the rich through property taxes, reducing lost corporate tax revenues due to transfer pricing policies (see also chapter 12), and increasing government revenues from extractive industries. Beegle and de la Fuente further argue that in addition to limited resources, the existing resources are often mistargeted and inefficiently used. In particular, the reallocation of energy

and fertilizer subsidies to other sectors, and improving pro-poor spending within the sectors (towards goods and services used more by the poor, like elementary and secondary education and primary health services), would be two important first steps.

In chapter 11, Thiele analyzes another resource to end global poverty—international aid—and reviews the comprehensive literature on the impact of international aid on poverty and economic growth—including trade and foreign direct investment (FDI) as important drivers of growth. Thiele concludes that the impact of aid on growth is unclear, and that the literature lacks consensus on whether there is an impact or not. International aid leads to an increase in FDIs and exports of middle-income recipient countries, but this impact is missing among low-income countries. Thiele points to an important caveat that, due to inherent difficulties in identifying the causal impact of international aid on macro level development outcomes, the long-standing debate about whether aid can help countries to develop remains unsolved. However, the literature also suggests that foreign aid can support people directly to escape poverty. International aid targeted at improving social infrastructure leads to a substantial impact on reducing non-monetary poverty, such as higher school enrollment or lower child mortality. The open question is how much international aid can contribute to achieving the more ambitious social goals of the SDGs, which require much more context-specific and complex interventions than building social infrastructure.

In chapter 12, Brugger discusses the tensions among high-income countries between supporting low-and middle-income countries to raise sufficient revenues for social protection of the global poor through tax policies and pressure to uphold favorable tax frameworks for global corporations with headquarters in high-income countries. The chapter delves into the international political economy of international corporate taxation. To sustainably fund social security programs, countries need to mobilize resources locally through taxation and rely less on international aid (see also chapter 7). Industrialized countries have pledged to support low- and middle-income countries in developing their tax administration capacity. However, multinational corporations headquartered in high-income countries lobby for favorable tax frameworks, with their governments putting many countries in conflict between the two objectives. The author cites data indicating that the potential for raising domestic revenues in low-income countries by preventing the abusive tax avoidance by multinational corporations far exceeds tax avoidance by local companies. Abusive transfer pricing by multinational corporations allows profits to be transferred from high-taxation countries to lower-taxation countries, and in

turn, avoiding taxation. Even though countries are internationally required to prize transactions within their organization as they would prize other unrelated companies (the arm's length principle), the technical capacity of tax administrations to monitor multinational companies on this arm's length principle is missing in many countries. Brugger documents various efforts to simplify the transfer pricing mechanism and shows that they have faced strong resistance and ultimately failed up to now. Even proposals to set up a more inclusive International Tax Organization (ITO) that has more representation from low- and middle-income countries have stalled. The author argues that if high-income countries are to take their pledge of ending global extreme poverty seriously, they must start thinking about their policies, as much as about policies in low- and middle-income countries.

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# Part 1: Is the World on Track to Achieve SDG 1?


# The Fight against Global Poverty: 200 Years of Progress and Still a Very Long Way to Go

**Max Roser and Joe Hasell**

## 1. Introduction

Global poverty is one of the most pressing problems that the world faces today. The poorest in the world are often hungry, without access to basic services such as electricity and safe drinking water, have less access to education, and suffer from much poorer health.

Reflecting its importance, the eradication of extreme poverty by 2030 is the very first of the 169 targets set out in the Sustainable Development Goals (SDGs) by the United Nations. The international poverty line on which this target is based is set to the threshold of living on less than 1.90 international dollars per day. That is a very low threshold, in line with poverty definitions adopted in the world's poorest countries.

Recent projections suggest we are not on track to achieve this goal. Even before the onset of the coronavirus pandemic and the resulting global recession, prevailing rates of economic growth and levels of inequality suggested that around 500 million people—roughly 6% of the world's population—would remain in extreme poverty in 2030 (World Bank 2018, 2020).

Is such extreme poverty inevitable?

The history of global poverty shows us clearly that this is not the case. The aim of this chapter is to summarise what we know about that history, to help inform our aspirations for the future.

The chapter considers two approaches adopted by researchers to estimate the extent of global poverty over time. The first of these are estimates from the World Bank based on household survey data, which cover the period from 1981 onwards.

However, in order to see where we have come from, we must look much further back in time: 30 or even 50 years are not enough. When you only consider how the world has looked during this recent past it is easy to make the mistake of thinking of the world as static—the rich and healthy parts of the world here and the poor and sick regions there—and to falsely conclude that it always was, and will always be,

as such. Indeed, this is what polling data suggests that the majority of the public believe to be true.[1]

With a longer perspective, it becomes very clear that the world is not static at all. The countries that are rich today were very poor until just a few generations ago and were in fact worse off than many poor countries today.

To avoid portraying the world in a static way we have to start at least 200 years ago, before the time when living conditions really changed dramatically. To do this, we rely on historical estimates based on data recorded in national accounts and earlier reconstructions of such data made by economic historians.

This evidence shows a substantial decline in poverty rates over the last two centuries, with particularly fast progress made in recent decades. The changes we see over the long run should embolden us to reach not only for the eradication of the most extreme forms of poverty but for much more ambitious goals still.

The chapter is structured as follows: Section 2 first outlines the data and methods used by the World Bank to estimate the evolution of global poverty over time. Considering the range of official poverty lines adopted by richer and poorer countries, it then discusses World Bank estimates for global poverty measured according to multiple poverty lines spanning that range. Section 3 discusses the available historical data on incomes that are needed in order to estimate global poverty trends over the last two hundred years: reconstructions of GDP per capita and data on the extent of inequality. Section 4 presents our long-run global poverty estimates, comparing the trends to those found in the World Bank estimates for recent decades. Section 5 outlines other data and research on the living conditions of people in past centuries as a means of sense-checking the long-run trends in monetary poverty presented in the chapter and setting them in the broader context of human welfare.

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[1] A 2016 survey conducted by Glocalities, in partnership with Oxfam, the Bill and Melinda Gates Foundation, and Global Citizen found 87% of people from 24 countries surveyed believe that extreme poverty has either increased or stayed the same over the last 20 years. Overall, 67% of respondents believed that ending global poverty by 2030 was unlikely (Lampert and Papadongonas 2016). Similar results concerning public awareness of extreme poverty trends were found in an 2017 Ipsos MORI poll ("Ipsos MORI" 2017).

## 2. World Bank Survey-Based Estimates

To track progress towards the target of eradicating extreme poverty by 2030, the UN relies on World Bank estimates of the share of the world population falling below the international poverty line of $1.90 per day, shown in Figure 1 below.

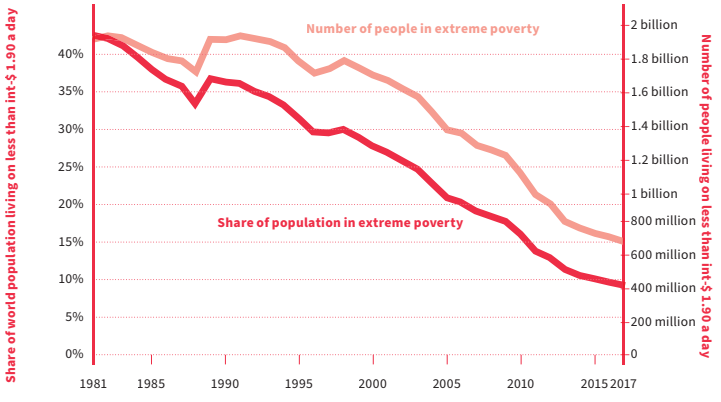


**Figure 1.** Number and share of people living in extreme poverty globally, 1981–2017. Source: PovcalNet (World Bank). Note: Extreme poverty is defined as living with per capita household consumption or income below 1.90 international dollars per day (in 2011 PPP prices). International dollars are adjusted for inflation and for price differences across countries. The sharp rise in 1989 reflects a change in survey methodology in China.

The reference to the 'international poverty line' (IPL) here, however, signals not just a particular dollar threshold but also the set of methods adopted by the World Bank in drawing that line and estimating the share of people above or below it.

### *2.1. The World Bank's Approach to Measuring Global Poverty*

This method was first presented by the World Bank in its *World Development Report 1990: Poverty* (World Bank 1990) which provided estimates of extreme poverty based on a $1 a day poverty line, expressed in 1985 prices.[2] This line was chosen

[2] As discussed below, the reference to 1985 prices here indicates adjustments to account for both inflation and price differences across countries as observed in 1985. The '$1 a day' line was initially set at $1.02 a day based on a sample of national poverty lines, adjusted for price differences across countries, collected by Ravallion et al. (1991). This was revised to $1.08 upon applying 1993 prices to the same set of poverty lines (Chen and Ravallion 2001, 2007).

so as to measure global poverty by the standards of the world's poorest countries, being representative of the national poverty lines observed in such countries at the time. Following broader adoption in the international development community, this measure became the basis for the first of the eight Millennium Development Goals (MDGs). The goal to halve the rate of extreme poverty between 1990 and 2015 was one of the MDGs that were achieved.[3] Based on an expanded and updated set of national poverty lines, this was revised to $1.25 at 2005 prices (Ravallion et al. 2009) in line with the official lines observed in the poorest 15 countries.[4] More recently, the IPL was updated to $1.90 in 2011 prices, a figure obtained by adjusting the same set of 15 national lines for inflation (Ferreira et al. 2016).

The Bank's estimates of the share of the population falling below the IPL are based on national surveys that provide data on households' consumption or income.[5]

These survey data are adjusted to account for price differences across countries and for inflation over time. The resulting figures, as well as the poverty line itself, are expressed in 'international dollars' at a given year's prices. The World Bank's current estimates are based on 2011 prices, such that one international dollar has the same purchasing power as 1 US dollar had in the United States in 2011. In the interest of readability, we do not repeat the full unit of measurement as international dollars in what follows and simply use $ as an abbreviation throughout.

Since surveys are not conducted every year in every country, in order to estimate the global share of people below the IPL for a given reference year, researchers must rely on the closest available survey data for each country. Data from surveys not conducted in the reference year are 'lined up' using growth rates recorded in the national accounts (Prydz et al. 2019).

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[3] Achievement of the MDGs was measured by targets and, out of fourteen targets permitting quantitative assessment, this was one of only five that were achieved. For a collection of data on the achieved and missed MDG targets see https://ourworldindata.org/millennium-development-goals (accessed 25 January 2021).

[4] As ranked by consumption per capita—namely, Malawi, Mali, Ethiopia, Sierra Leone, Niger, Uganda, Gambia, Rwanda, Guinea-Bissau, Tanzania, Tajikistan, Mozambique, Chad, Nepal, and Ghana (Ravallion et al. 2009).

[5] This is largely determined by which type of survey is available in each country. Consumption surveys are used for a majority of countries, and this is particularly true of poorer countries in which most of the world's poor live. But the World Bank's estimates for many countries, most notably many Latin American and Caribbean countries, are based on income surveys. This inconsistency affects the comparability of estimates across countries and over time, discussed later on in the chapter.

### 2.1.1. Criticism and Alternative Approaches

It is important to remember that there is no concept of poverty that can claim universal agreement. In this regard, measuring the extent of poverty is not like measuring a person's height or weight. Competing normative principles and limitations in the quality of available data leaves room for disagreement as to how poverty should be measured, and this is especially the case at the global level.

One question concerns the level at which the poverty line is to be set. A number of authors view the international poverty line of $1.90 a day to be too low (Pritchett 2006) or too high (Ravallion 2016b) to capture morally relevant aspects of the global income distribution, or, in any case, to be lacking clear justification (Reddy and Pogge 2009). The inability of a single line to reflect both the depth and breadth of poverty experienced around the world (discussed further in Section 2.3 below) demonstrates the importance of tracking multiple poverty lines, as will be carried out throughout this chapter.

A more general area of contention relates to the aforementioned price adjustments needed to apply *any* fixed poverty line that is constant in terms of purchasing power across countries. The difficulty involved in such an adjustment is the source of significant uncertainty concerning the level of extreme poverty globally and its geographic distribution (Deaton 2010). This is evidenced, for instance, by the substantial revisions to the World Bank's estimates of global poverty that have followed the periodic updates of the price data on which these adjustments are based (Deaton 2010; Dykstra et al. 2014).

Moreover, adjusting for price differences across countries faces the inherent challenge of comparing a diverse set of goods and services, the consumption of which is often specific to particular regions or income levels. Some authors have questioned the validity of the World Bank's approach in adjusting for the price of a basket of goods and services that includes many items only consumed by the non-poor or in rich countries (Reddy and Pogge 2009; Allen 2017). Asali, Reddy and Visaria (2008) and Allen (2017) advocate an alternative approach in which incomes are compared against the local minimum cost of meeting the basic needs of food and shelter, all measured in local currencies and thereby avoiding the need for cross-country price indices altogether.

Within this debate, however, it is important not to take an exaggerated impression of the uncertainty that international price comparisons imply for poverty measurement. Updates to the international price data, although leading to significant revisions of the estimated levels of global poverty, have left our understanding of the key trends in extreme poverty broadly unchanged (Chen and Ravallion 2010;

Deaton 2010). Using household survey data, Deaton and Dupriez (2011) compare purchasing power parity rates (PPPs)—the standard price indices used to compare incomes internationally, including within the World Bank's poverty estimates—with 'poverty-weighted' PPPs that reflect the consumption patterns of households living at or near the poverty line. They find that relative price levels between countries are broadly similar across the two sets of PPPs, implying a limited impact on poverty measures. Furthermore, Moatsos (2021), applying Allen's 'cost of basic needs' approach, finds long-run declines in global poverty broadly similar to those found using the World Bank's methodology (see Section 5.1). In summary, the available evidence concerning the influence of cross-country price adjustments on poverty measures does not undermine the key trends present below—it *reinforces* them.

### *2.2. Extreme Poverty Since 1981*

Figure 1 shows the global estimates for the number and share of people living below the international poverty line from the World Bank. The estimates begin in 1981, prior to which survey coverage is judged to be too low (Chen and Ravallion 2009). In that year, 42% of the world's population is estimated to have been living on less than $1.90 per day, roughly 1.9 billion people. The figures show a substantial reduction in extreme poverty in the decades following. By 2017, the latest available year, the World Bank estimates that the share had fallen to 9%—less than one-quarter of its 1981 level. This translates to more than 1 billion fewer people living in extreme poverty, over a period in which the world's population grew by around 3 billion.

Recent decades show us that rapid, substantial reductions in poverty are possible. However, a number of factors point to a future in which progress against extreme poverty is slower.[6]

Firstly, the recession caused by the coronavirus pandemic has likely increased the number of people in extreme poverty. 'Nowcasting' estimates produced by the World Bank suggest that there were more than 100 million more people in extreme poverty in 2020 relative to its expectations for what would have occurred in the absence of the pandemic—'the worst reversal on the path towards the goal of global poverty reduction in at least the last three decades'.[7]

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[6] For a discussion of future possibilities for moving beyond very low levels of extreme poverty towards its eradication, see Martin Ravallion's contribution to the present volume, 'SDG1: The Last 3%'.

[7] The World Bank *Poverty and Shared Prosperity 2020* report provides two COVID-19 scenarios that yield 88 million and 115 million people in extreme poverty above the baseline scenario. An update published in January 2021 presents even higher projections of between 119 and 124 million additional

Yet, even before the pandemic, there was evidence of a slowdown in the rate of extreme poverty reduction: we see the lines in Figure 1 flattening from the early 2010s. Projections made by the World Bank and other development research organisations concur that, even if pre-pandemic rates of economic growth and levels of inequality had continued, future progress against extreme poverty would have fallen short of the goal of eradication by 2030.[8]

The reasons for this can be better understood by looking at the regional trends in extreme poverty.

Figure 2 shows that the distribution of the extremely poor across world regions has changed significantly in recent decades. In 1990, more than a billion of the extremely poor lived in China and India alone (Figure 2, left panel). In the decades that followed, those economies grew faster than many of the richest countries in the world, bringing down extreme poverty rates in their regions and across the world as a whole (Figure 2, right panel). As a consequence, the concentration of the world's poorest shifted from East Asia in the 1990s to South Asia in the 2000s and then to sub-Saharan Africa in the 2010s. Sub-Saharan Africa has seen less growth in incomes and poverty rates have, therefore, fallen far slower. The slow decline of the *share* in extreme poverty was offset by population growth, resulting in a slow increase in the number of extremely poor people in sub-Saharan Africa.

Global poverty declined during the last generation because the majority of the poorest people on the planet lived in countries with strong economic growth. This is now different. The majority of the world's poorest today live in economies that have seen little growth in recent decades. A return to the growth trajectories of the time before the pandemic will not be enough to end global extreme poverty—the lack of growth in the economies that are home to the world's poorest populations would imply a future in which hundreds of millions face the prospect of remaining stuck in extreme poverty.

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people in extreme poverty (https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-looking-back-2020-and-outlook-2021, accessed 25 January 2021). The quote given is taken from an earlier update (https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-effect-new-data, accessed 25 January 2021).

[8] See the World Bank projections in its *Poverty and Shared Prosperity* report series (World Bank 2018, 2020). Prior to the coronavirus pandemic, these projections pointed to around 6% of the world's population—roughly 500 million people—living below the international poverty line in 2030. This is similar to the projections made by the Overseas Development Institute (ODI) and the World Poverty Lab jointly with the Brookings Institute, documented by ODI at their blog (https://www.odi.org/blogs/10688-new-projections-show-extreme-poverty-falling-not-fast-enough, accessed 25 January 2021).

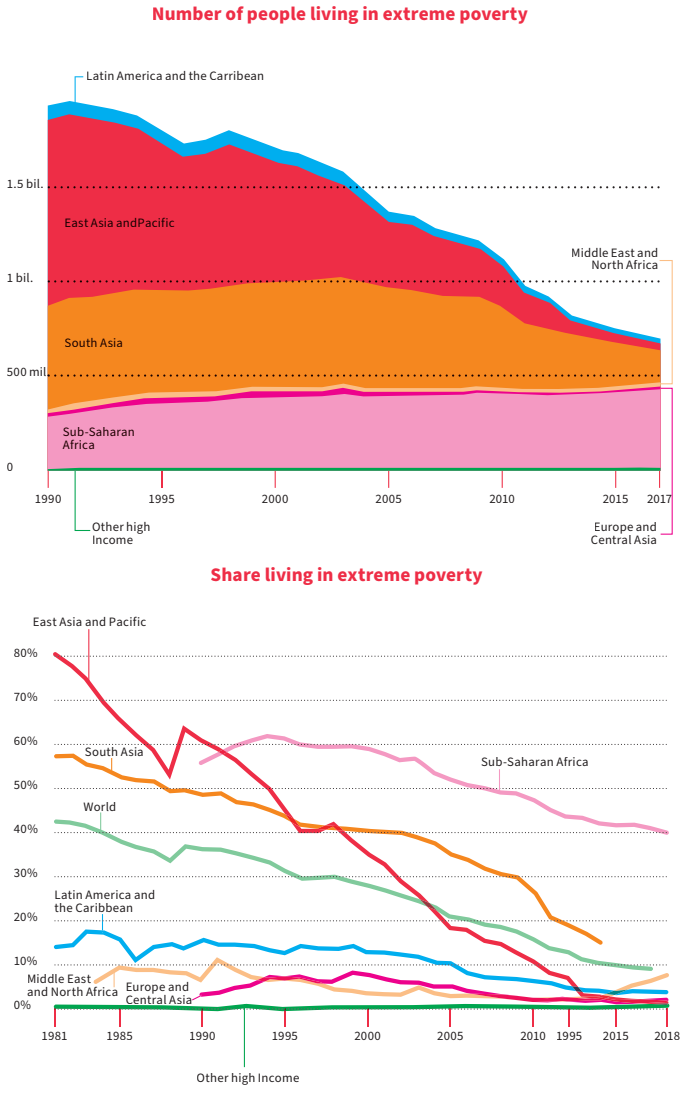


**Figure 2.** Number and share of people living in extreme poverty by world region. Source: PovcalNet (World Bank). Note: Extreme poverty is defined as living with per capita household consumption or income below 1.90 international dollars per day (in 2011 PPP prices). International dollars are adjusted for inflation and for price differences across countries. The rise in East Asia in 1989 reflects a change in survey methodology in China.

*2.3. Poverty at Higher and Lower Thresholds*

### 2.3.1. Poverty from the Perspective of Richer and Poorer Countries

Whilst the international poverty line has been adopted widely by international organisations, it is important to remember that different individual countries adopt different definitions when assessing the extent of poverty amongst their own citizens.

Comparing across countries, we see that richer countries tend to set substantially higher poverty lines. Figure 3 plots a dataset of national poverty lines collated by Jolliffe and Prydz (2016) against GDP per capita. This chart makes it clear how *extremely low* the international poverty line of $1.90 is. It denotes a standard of living that falls far beneath the level at which people would be considered poor in rich countries.

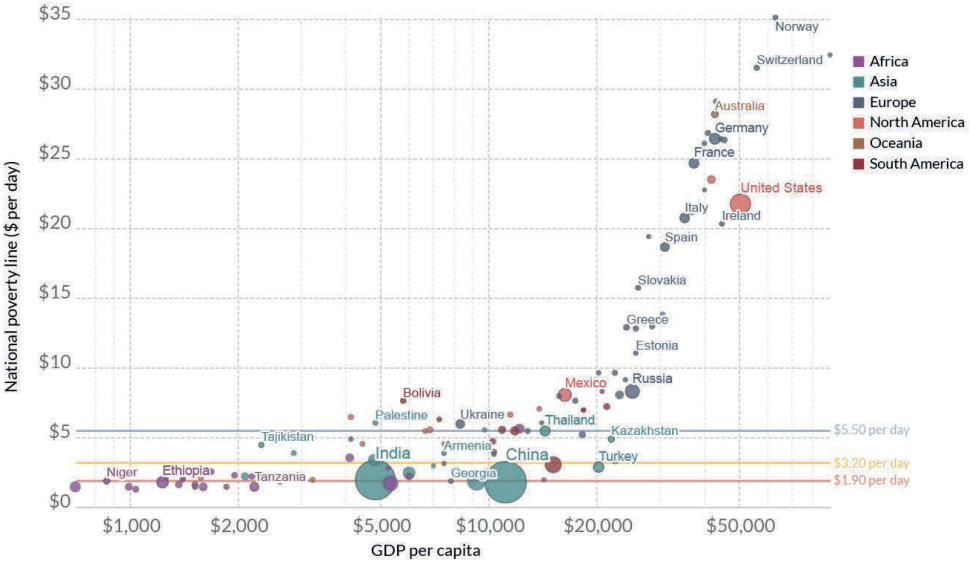


**Figure 3.** National poverty lines vs. GDP per capita. Source: Jolliffe and Prydz (2016), World Bank. Note: Both metrics are adjusted for price differences between countries and are measured in international-$ at 2011 PPP prices. The three horizontal lines mark the three poverty lines adopted by the World Bank (World Bank 2018).

The national poverty lines shown in this figure are set according to both absolute and relative definitions of poverty. Most low- and middle-income countries measure poverty according to an absolute poverty line whose value remains fixed over time.

Most high-income countries use a relative poverty line whose value rises (or falls) in line with the general standard of living in that country. Typically, relative national poverty lines are set at 40%, 50%, or 60% of the median income.

Such a relative concept aims to identify individuals or households whose income is so low relative to the average in their society that they are 'excluded from ordinary living patterns, customs and activities' (Townsend 1979, p. 31). The principle behind setting a poverty line relative to the average income is the idea that as incomes in a society rise, so too does the level of material resources needed in order to participate in 'ordinary' life in that society. On such a definition, poverty can only fall where inequality in the lower half of the distribution is reduced.

Whilst the principles behind these two ways of measuring poverty are very different, Figure 3 shows that the distinction is less stark in practice. The upward-sloping relationship can be observed across all countries, not only the high-income countries that have adopted a relative definition of poverty. This means that absolute poverty lines also tend to be set at a level that is reflective of the standard of living typical for that society, albeit in a less mechanical way. Whilst absolute poverty lines are not pegged to average incomes, they are subject to periodic revision. As countries become richer, they tend to raise the official poverty line. India, China, and Nepal, for instance, have all raised their poverty lines in the last decade as their average incomes have risen (World Bank 2018, p. 74; Chen and Ravallion 2013).

The diversity of definitions of poverty we see across richer and poorer countries raises an important question: Which of these perspectives should be relied on in order to quantify the extent of poverty *globally*? This has been a central concern of poverty researchers since the very first global estimates (Ahluwalia et al. 1979; Ravallion et al. 1991).

One common response has been the use of multiple poverty lines. As is seen in Figure 3, the IPL is set at the level of the poverty lines typical amongst the very poorest countries in the world. The World Bank has adopted two further poverty lines of $3.20 and $5.50 in order to monitor global poverty from a perspective more in-line with the definitions adopted in lower- and upper-middle-income countries (World Bank 2018).[9] The extent of recent progress against poverty as measured relative to these higher lines will be assessed in the next section.

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[9] These thresholds were the median values found by Jolliffe and Prydz (2016) within their dataset when looking at the national poverty lines adopted in lower-middle- and upper-middle-income countries (defined according to the World Bank's income classification based on the level of GDP per capita).

A second, more recent, response to this question has been the development of a new approach to global poverty measurement in which this relative dimension is brought to the fore. Building on the work of Jolliffe and Prydz (2021), Chen and Ravallion (2013), Atkinson and Bourguignon (2001) and others, the World Bank has adopted an additional 'societal poverty line' (SPL) that combines absolute and relative approaches (World Bank 2018). For the world's poorest countries, the SPL is set at the international poverty line of $1.90. Above a certain threshold, however, the value of the line begins to rise in proportion to the median level of consumption in each individual country. For every additional $1 the median level of consumption per day rises, the SPL rises by 50 cents—similar to the way in which national relative poverty lines increase with median income across most high-income countries.

The SPL can be thought of as combining two goals within a single measure of global poverty: firstly, that a minimum absolute level of subsistence is ensured for all, and secondly, that people achieve an acceptable standard of living judged according to the norms of the country in which they live. To be judged non-poor according to this 'societal' measure, a household must fall into neither kind of poverty (Ravallion and Chen 2019; Atkinson and Bourguignon 2001).

According to World Bank estimates for 2017, on top of the roughly 690 million people below the absolute poverty threshold of the IPL, there were a further 1.4 billion people living in relative poverty, bringing the total number of poor under this combined definition to just over 2 billion (World Bank 2020, p. 65). Over time, the global societal poverty rate has fallen but much less rapidly than the extreme poverty rate—from 45% in 1990 to 28% in 2017. Many of the people that managed to leave extreme absolute poverty over this time remained poor measured by a poverty line typical of the income level of their country.

This relative component of the SPL means that two people with the same absolute level of income (above the IPL) may be judged poor in one country and not another, depending on which country they live in. This is brought into particularly sharp relief in aggregating over countries with such widely varying levels of income. The idea that a person living in Liberia that sees their income rise above $2 and a person living in Norway that sees their income rise above $32 are both to be considered as having been lifted out of the same concept of poverty may strike some as counter-intuitive or even unethical.[10] Whilst the observation that richer countries

[10] The SPL is calculated as the maximum of either the international poverty line of $1.90, or else $1.00 + 0.5 × median consumption. According to survey data provided in Povcalnet (http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx, accessed 25 January 2021) the median monthly consumption in

tend to adopt higher poverty lines nationally highlights the inherently social nature of poverty, an understanding of the share of people living below higher and lower absolute thresholds remains indispensable.

### 2.3.2. Global Poverty at Higher and Lower Poverty Lines

The same approach used to monitor the share of people falling below the international poverty line can be relied upon to assess the extent of poverty relative to other fixed poverty lines.

Figure 4 shows the share and the total number of people around the world living below different absolute thresholds. The $1.90, $3.20, and $5.50 lines shown are those adopted by the World Bank to reflect the poverty lines typical of low-, lower-middle-, and upper-middle-income countries, respectively. We have added two higher lines of $10 and $30 which broadly cover the range of poverty lines adopted by rich countries, as indicated in Figure 3 above.[11]

We see that globally the share of people below any of the poverty lines was declining up to the latest data in 2017. However, the timing and pace of the decline were very different across the different thresholds.

Whilst the share falling below the international poverty line of $1.90 decreased fairly steadily at a rate of around 1 percentage point per year since 1981, there was no progress against a poverty line of $10 per day until around 2000, with roughly only one-quarter of the world population living on more than $10 a day between 1981 and 2000. The world started to make progress against poverty relative to higher cutoffs only recently, but progress has been fast since then: by 2017, the share living on more than $10 had increased to more than one-third.

Measured against a $30 a day line—roughly the level of the poverty lines set in the world's very richest countries—the vast majority of the world population is living in poverty, and the share above the poverty line has increased only slowly over this period.

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Liberia in 2016 was $62.83, or $2.07 as a daily figure. The SPL is thus 1 + 0.5 × 2.07 = $2.03. The same source reports Norway's median monthly income in 2017 to have been $1890, or $62 per day. The SPL, in this case, is 1 + 0.5 * 62 = $ 32.

[11] The figures for each poverty line are the global aggregates as reported by the World Bank's Povcalnet API on 25 January 2021 (see http://iresearch.worldbank.org/PovcalNet/getstarted.aspx).

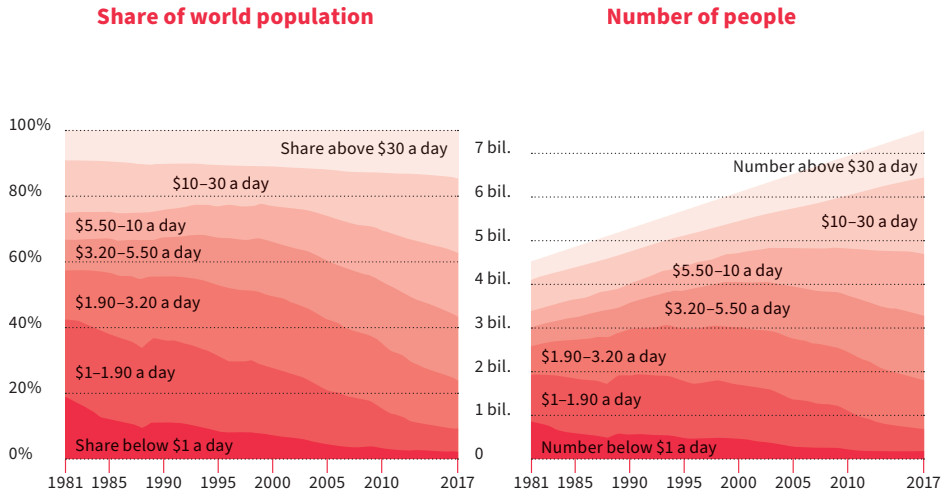


**Figure 4.** The share and number of people globally living below different poverty thresholds. Source: PovcalNet (World Bank). Note: Poverty at each threshold is defined as living with per capita household consumption or income below the indicated level, measured in international-$ at 2011 PPP prices. International dollars are adjusted for inflation and for price differences across countries.

However, in making use of higher poverty lines, we should not lose sight of what is happening to the very poorest people in the world. Figure 4 also shows the extent of global poverty as measured against a $1 a day line—far beneath the IPL. In the years running up to 2017, the number of people living below this ultra-low poverty line had stopped falling altogether—with around 170 million stuck in the very deepest poverty.[12] As development economists have emphasised for some time, the very poorest people in the world have seen next to no improvement in their material living conditions in recent decades (Ravallion 2016b) (Lakner and Milanovic

[12] There are some caveats concerning the estimation of very low poverty lines using the World Bank's methodology. For some countries, including China, poverty estimates are derived from fitting an assumed functional form to grouped data, rather than from 'micro-data' concerning individual households. These estimates become less precise in the tails of the distribution. Secondly, since within income surveys a certain proportion of households typically report having zero incomes, this can make comparisons across countries using income and consumption surveys less meaningful when considering very low poverty lines. However, neither issue appears to be of much concern here. Overall, 150 million of the 174 million people estimated to be living on less than $1 a day in 2017 in the World Bank data were in sub-Saharan African countries. These countries make use of consumption surveys and, as a regional aggregate, saw a $1 a day poverty rate of 14% (i.e., the line does not fall into the tail of the distribution).

2016). This fact is surely one of the biggest development failures of our time, and yet it is not as widely known as it should be. A big part of the reason why this issue does not receive the attention it deserves is that the international poverty line of $1.90 is too high for this fact to be seen.

Poverty metrics have several purposes. One is to express a social standard concerning the level of income needed to lead a decent life. Yet, another is to specify a target for progress, such as the Sustainable Development Goal to end extreme poverty by 2030. In seeking to understand the evolution of living standards across the world, however, it is clear that we need to consider multiple poverty lines that make visible important differences in the trends concerning the poor, the extremely poor, and the very poorest.

**3. Evidence on the Incomes of the Past**

It is only from the 1980s that the coverage of household surveys is considered to be sufficient for reliable global poverty estimates based on survey data.

Can we know anything about global poverty in earlier decades, or even the distant past?

Thanks to the work of historians, we can. In Section 4, we present estimates of how the extent of poverty globally has changed over the last two hundred years. The estimates are based on a 'national accounts' approach in which data on average incomes available in the national accounts—GDP per capita—are combined with data on the extent of inequality in each country. It is a method that has been used to investigate global poverty trends both for recent decades and for the distant past.[13]

For recent decades, the necessary data on average incomes are available from official national accounts data, while the inequality data are based on the kind of household surveys discussed in the previous section. However, in order to apply this approach to earlier periods, we must rely on the work of economic historians who have produced reconstructions of GDP per capita and estimates of inequality for a range of different countries from available historical sources.

There are, unsurprisingly, important limitations concerning the coverage, comparability, and quality of this historical data. Therefore, the historical poverty estimates provided at the end of this section should be treated as offering a broad

[13] For global poverty estimates for recent decades using the national accounts, see Pinkovskiy and Sala-i-Martin 2016. For historical estimates, see (Bourguignon and Morrisson 2002; Ravallion 2016b).

indication of global trends, rather than very precise estimates for any given point in time.

However, here too, it is important not to overexaggerate the uncertainties. In this section, we discuss the evidence on average incomes and inequality on which our long-run poverty estimates rely, and how their limitations might bias the results. The limitations are real. However, they do not undermine our ability to say a good deal about the broad trends in poverty across the world over the last two hundred years.

### *3.1. Historical Data on GDP per Capita*

We can learn a lot about the living conditions of people in the past by knowing how average incomes have changed. Thanks to the work of economic historians, who have been able to reconstruct historical estimates of GDP per capita, we have a good idea about the evolution of average incomes for many countries in the world.

How do economic historians estimate incomes in the distant past?

In broad terms, the strategy is to extend the system of national income accounting that countries use today to estimate GDP back to earlier periods. In the absence of complete data collected at the time, researchers have to bring together what evidence they can from historical sources. However, the basic principles are the same. Here, we discuss three key principles on which historical national accounts data are based.

One very important principle to bear in mind is the fundamental identity behind all national accounts: 'Within the methodological framework provided by national income accounting, the estimation of GDP can be approached in three different ways, via income, expenditure and output, all of which ought to yield broadly similar results'(Broadberry et al. 2015, p. xxxii).

For historical estimates, the output approach is often considered the more reliable in practice. Depending on the evidence available, however, information on incomes and expenditure are also used, and all three approaches can provide benchmarks to cross-check the plausibility of estimates.

A second point is that these data relate to real incomes: the figures are adjusted for inflation using available data on the prices of goods and services over time. It is straightforward to compare material prosperity over time relative to goods which remained relatively unchanged over the course of history—economic historians can track the affordability of products such as bread, shirt, beer, nails, meat, books, or candles over time.

This, however, is not easily possible when entirely new products were introduced or when the quality of products and services changed substantially. Many of the

most valuable goods today were not available at all in the past: no king or queen had access to antibiotics, they had no vaccines, no comfortable transport in trains or planes, no electronic devices, no computers, and no light at night.

While modern national accounting practices attempt to take the innovation of new products and changing the quality of existing products into account, there is limited scope to address this in historical accounts. It is important to remember that, no matter how high someone's income might have been in the distant past, some of the goods you might value the most—or would value when you fall ill—were not available at all.[14]

A third key principle is that these estimates of GDP do not just concern the amount of money people had in the past or only the value of goods purchased in the market. This is a common misunderstanding of historical research. Over the last two hundred years, there has been a major shift from people farming for their own consumption to people working for a wage and purchasing goods in the market. Historians of course know about this historical change and take it into account in their analysis of how global prosperity changed. In the important case of subsistence farmers, the value of the food they produce represents both the economic output of the activity and the income received by the farmer. Consumption of that produce then represents a form of expenditure, as it is using up part of the farmer's income.

This issue is not just of importance for historical estimates, but it is also of central relevance today, given the importance that food produced at home, or otherwise received in kind, continues to play in the life of the rural poor, especially in low-income countries. Accordingly, these flows are accounted for in national accounts—both in the official data compiled today and in historical reconstructions.

The extensive work carried out by Broadberry et al. (2015) to produce the historical GDP per capita series for England and the UK, shown in Figure 5, serves as a good illustration. It is difficult to convey the level of detail that is considered in such estimates in a short overview such as this one, but a passage on agricultural output provides some insight.

> [The output method] has entailed, first, estimating the amounts of land under different agricultural land uses ... and, then, deriving valid national trends from spatially weighted farm-specific output information on cropped areas and crop yields and livestock numbers and livestock yields... The

[14] To some extent, the opposite problem also exists, and some goods that were available in the past—such as slaves—are not available today. But this is a much rarer problem.

latter task is further complicated by the need to correct for data biases towards particular regions, periods and classes of producers.

(Broadberry et al. 2015, p. xxxv)

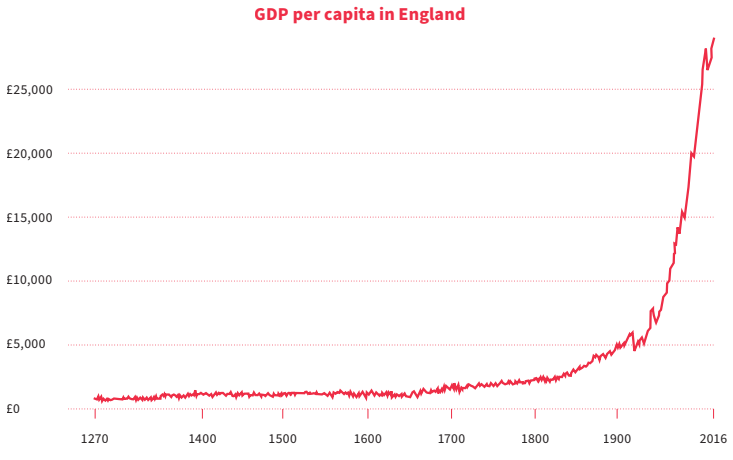


**Figure 5.** GDP per capita in England, 1270–2016. Source: Broadberry et al. (2015) via Bank of England (2017). Note: Data refers to England until 1700 and the UK from then onwards. Adjusted for inflation and measured in British pounds in 2013 prices.

Hundreds of datasets on agricultural outputs are involved in producing these estimates of agricultural production, themselves built upon a substantial body of historical research. To this is added estimates of the output of industry and services in order to yield a measure of aggregate GDP.

There are two key takeaways. First, that historical reconstructions of GDP are the outcome of decades of important academic work. Second, these represent estimates of total production, not just that part of production sold on markets.

### The Evolution of Average Incomes over the Long-Run

In order to produce the global poverty estimates presented at the end of this section, we have relied on the Maddison Project's database of historical GDP per capita series for different countries (Bolt and van Zanden 2020).

This database brings together the research efforts of a huge range of country specialists, including the work on England just discussed. In different countries, researchers employ different methods, depending on what historical evidence is

available and is most reliable. In addition to being adjusted for inflation over time, the series in this dataset are adjusted to account for price differences across countries.[15]

Figure 6 shows GDP per capita since 1820 for different world regions and for the world as a whole, as constructed from the Maddison database. Globally, average income per person has increased by roughly a factor of ten over this period. It is worth keeping in mind that this change has occurred while the world population increased fivefold. As we will show below, this rise in the average global income generated a substantial fall in the share of the world population living in poverty over the last two hundred years.

The extent of poverty is not determined solely by average incomes—poverty will be more or less prevalent depending on how equally or unequally incomes are distributed in a country. However, average incomes play a hugely important role, and they set boundaries on what is possible for poverty. If the average income in a country is below the poverty line, so too will be the incomes of the vast majority of people, irrespective of the level of inequality.

This basic but important fact can be appreciated by comparing the regional GDP per capita estimates shown in Figure 6 with the regional distribution of extreme poverty found in the World Bank's estimates based on survey data, as shown in Figure 2. Regions with a high level of GDP per capita have few people in extreme poverty. Regions where GDP per capita was growing rapidly experienced a decline in the number of people in extreme poverty.

Just as the increase in the global average income over the last two hundred years is clear from historians' work, so too is the increase in global inequality. Whilst many Western European countries, as well as the US, Australia, and Canada, experienced rapid economic growth throughout the 19th and 20th centuries, incomes in Asia and Africa stagnated. Exploitative colonialism is one of the institutions to blame for these poor development outcomes (Acemoglu et al. 2001). It was only in the second half of the 20th century that many low-income countries began to see growth rates comparable to, and eventually even higher than, those seen in rich countries. Many

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[15] Adjusting for price differences across countries is a difficult task even for recent years (for a discussion, see Deaton and Heston 2010). Moreover, over extended periods of time, inconsistencies can arise between evidence concerning the level of inflation in two countries and comparisons of their price level at two points in time, as the composition of the goods and services produced and consumed in the countries evolves. This is all the more challenging for the distant past given the absence of very detailed price data. Nevertheless, different approaches are available to economic historians to gauge and cross-check relative price levels across countries in the distant past. These methods are discussed in detail in the paper accompanying the 2020 release of Maddison Project dataset (Bolt and van Zanden 2020).

countries, particularly, but not only, in Africa, are still being left behind in terms of economic prosperity as Figure 3 shows. It is in these countries that most of the world's extremely poor populations are to be found today.

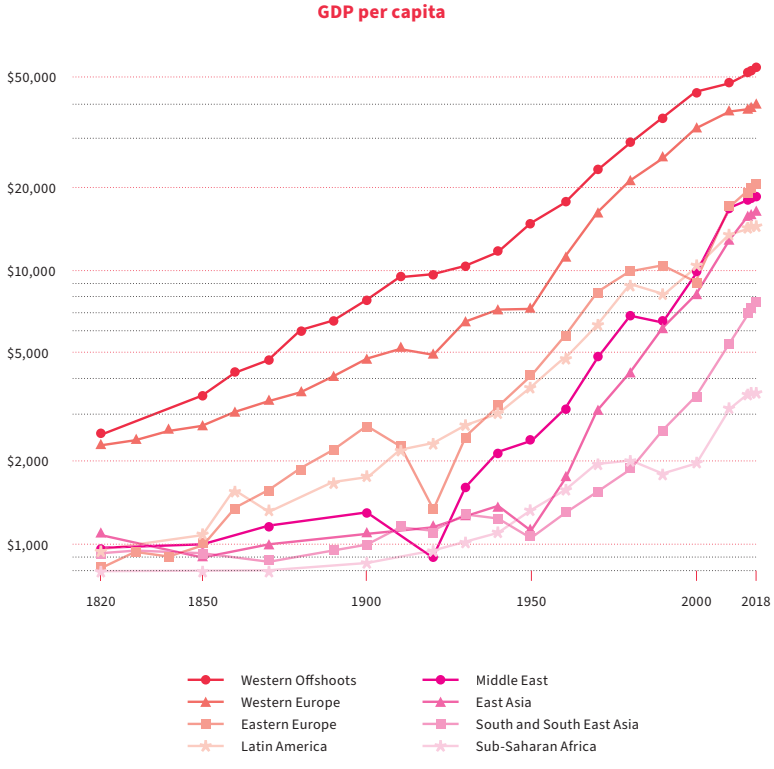


**Figure 6.** Regional and world GDP per capita, 1820–2018. Source: Maddison Project Database 2020 (Bolt and van Zanden 2020) Note: GDP per capita adjusted for price changes over time (inflation) and price differences between countries. It is measured in international-$ in 2011 prices. The 'Western Offshoots' region refers to the US, Canada, Australia, and New Zealand.

### *3.2. Historical Inequality Data*

GDP per capita is the first relevant metric from which we can learn about living standards in the past; the second one is the level of inequality. In a very unequal country, the majority of people are substantially poorer than indicated by the average income, while in a country with low inequality, the average is much more reflective of the incomes typical across the population.

In order to estimate the extent of poverty from data on GDP per capita, we also need data on inequality.

For recent decades, the data on inequality can be obtained from the kind of household surveys discussed in the previous section. However, for earlier periods, historians must rely on a range of historical sources: 'social tables' that document the average incomes of different social classes; census data; top income shares derived from tax records; evidence on wage levels; in some cases, information regarding the extent of inequality in adult heights.[16]

The inequality data used in the global poverty estimates presented below are taken from a historical dataset produced by van Zanden et al. (2014), which combines estimates based on the range of sources just described. For more recent decades, we rely on the Global Consumption and Income Project (GCIP) dataset which provides estimates of inequality based on household survey data.[17]

Figure 7 plots Gini coefficients from these two data sources for a set of benchmark years along with unweighted and population-weighted averages. Whilst there are clear differences across individual years, we observe no overall trend over the last two centuries: the average across all observations in each period varies between 0.35 and 0.5, with the bulk of observations falling between 0.25 and 0.6.

There are, however, important limitations concerning the comparability and quality of these estimates that make such trends highly uncertain.

Whilst each data point refers to an estimate of the level of income inequality, the measure of welfare in the underlying source varies. This includes incomes assessed before tax, incomes after tax, wage income, and consumption expenditure. Both datasets use statistical models to try to standardise the data in certain ways, but this is inevitably partial and imprecise.[18]

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[16] For a discussion of early inequality estimates and the sources of data that these can draw on, see van Zanden et al. (2014 Data Appendix) and Milanovic et al. (2011).

[17] The data are made available at http://gcip.info/ (accessed on 9 September 2021). For a study introducing the dataset and the sources and methods behind it, see Lahoti et al. (2016).

[18] Both data sources adjust expenditure survey data using a statistical model to try to estimate what the level of income inequality would have been. In the case of van Zanden et al. (2014), they also adjust data on net incomes in the same way to be more in line with a measure of gross income inequality. In an online data appendix (https://ourworldindata.org/history-of-poverty-data-appendix (accessed on 9 September 2021)), we provide alternative estimates for global poverty that instead make use of GCIP data where the standardisation is carried out in the opposite direction—towards a consumption basis—and also World Bank data that do not attempt to standardise income and consumption surveys in this way. Whilst there are notable differences in the poverty estimates that these different datasets yield, it does not affect the broad long-run trends that are our focus here.


**Figure 7.** Gini coefficient of income, 1820–2014. Source: van Zanden et al. (2014) and Global Consumption and Income Project (GCIP). Note: The GCIP data shown are survey-year observations that fall within two years of the benchmark year.

There are also many sources of potential bias and uncertainty concerning the individual estimates. As will be discussed in more detail below, this is true even of modern survey data. However, it is all the more true for earlier inequality estimates given the limitations of the underlying data. One particular concern of the historical data is that the value of subsistence farmers' production may not

be properly accounted for in historical sources and early household survey data, implying that earlier estimates of inequality could be overstated.[19]

How Sensitive Are Poverty Estimates to Different Assumptions about Inequality?

These limitations mean that there is substantial uncertainty surrounding historical poverty estimates for any given country or any given year. However, for the following reasons, our broad understanding of the changes in global poverty over the last two centuries is not much impacted by this uncertainty.

Firstly, it is important to bear in mind that, although differences between richer and poorer individuals within countries are substantial, they are overall much smaller than the differences we see across countries. Milanovic (2015) shows that around two-thirds of the income differences we see across individuals globally can be predicted just by knowing the country in which they live. It is the very large differences in average incomes we see across richer and poorer countries that contribute the most to overall global inequality today.[20]

Analogous considerations apply over time too. As we saw from the historical data on GDP per capita, the extent of global inequality across countries today is the consequence of substantial economic growth having been achieved in some parts of the world but not in others. The kind of income you receive in your life is greatly determined not just by *where* you were born but *when*. These two factors have a much more decisive influence than the relative position you occupy within your society.

This is not to say that reducing inequality cannot play a vital role in reducing poverty. The forward projections of global poverty prepared for the World Bank by Lakner et al. (2020) find that reductions in inequality compare favourably with assumptions about higher growth rates in their ability to reduce future extreme poverty.[21] Whilst recent trends suggest the world is far from being on track to achieve

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[19] We thank an anonymous reviewer for drawing our attention to this potential concern. An assessment of this issue could not be made within the scope of this chapter. As we discuss below, even after allowing for a wide error margin on the inequality estimates, the broad long-run trends we focus on are not affected in any substantial way.

[20] In a population-weighted regression of (within-country) income percentiles derived from household survey data, Milanovic (2015) finds that 66% of the variation can be explained by country controls alone (Milanovic 2015, Table 2). Using an inequality measure that allows for a decomposition of global inequality—the extent inequality across all the world's citizens—into a within-country and between-country components, he finds that in 2008, 70% of global inequality related to differences between countries. See also Lakner and Milanovic (2016) and Milanovic (2020) for more recent estimates.

[21] 'A 1% annual decline in each country's Gini index is shown to have a bigger impact on global poverty than if each country experiences 1 pp higher annual growth rates than forecast' (Lakner et al. 2020).

the goal of eliminating extreme poverty by 2030, their projections suggest that this goal at least 'becomes more viable by reducing inequalities'.

However, the scale of economic growth over the last two hundred years has been large enough such that the differences in poverty generated by shifting from a high- to a low-inequality setting are comparatively much smaller. To illustrate this point, Figure 8 plots modelled income distributions based on the GDP per capita of China in 1820 and 2017. It shows the distributions under three different inequality scenarios. The middle panel shows the distributions using the estimates of inequality found in the datasets just described. The top panel shows a low-inequality scenario in which a Gini coefficient is 0.25 is assumed in both years. The bottom panel shows a high-inequality scenario in which a Gini coefficient of 0.65 is assumed in both years.[22]

The shaded areas to the left of the $2 a day line show the share of the population with incomes falling under this threshold. The 14-fold growth in GDP per capita between 1820 and 2017, from $882 to $12,734, implies a major decline in poverty measured against a $2 a day line, whatever we assume about inequality. In all three scenarios in 1820, around half or more of the population in China fell below this threshold.[23] Additionally, in all three scenarios in 2017, the vast majority fell above this threshold.

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[22] Here, we assume that incomes follow a lognormal distribution. This is a common assumption made by researchers modelling income distributions. This distribution offers a good approximation of the bulk of the distribution observable in survey data, though it can be less accurate in the tails. See (Cowell 2011, pt. 4.4, for a discussion).

[23] The high-inequality scenario for 1820 is not a plausible one at such a low level of average income: it results in a distribution in which a substantial share of the population falls below a credible level of subsistence. On this subject, see the discussion of Milanovic et al. (2011) on the 'inequality possibility frontier'.

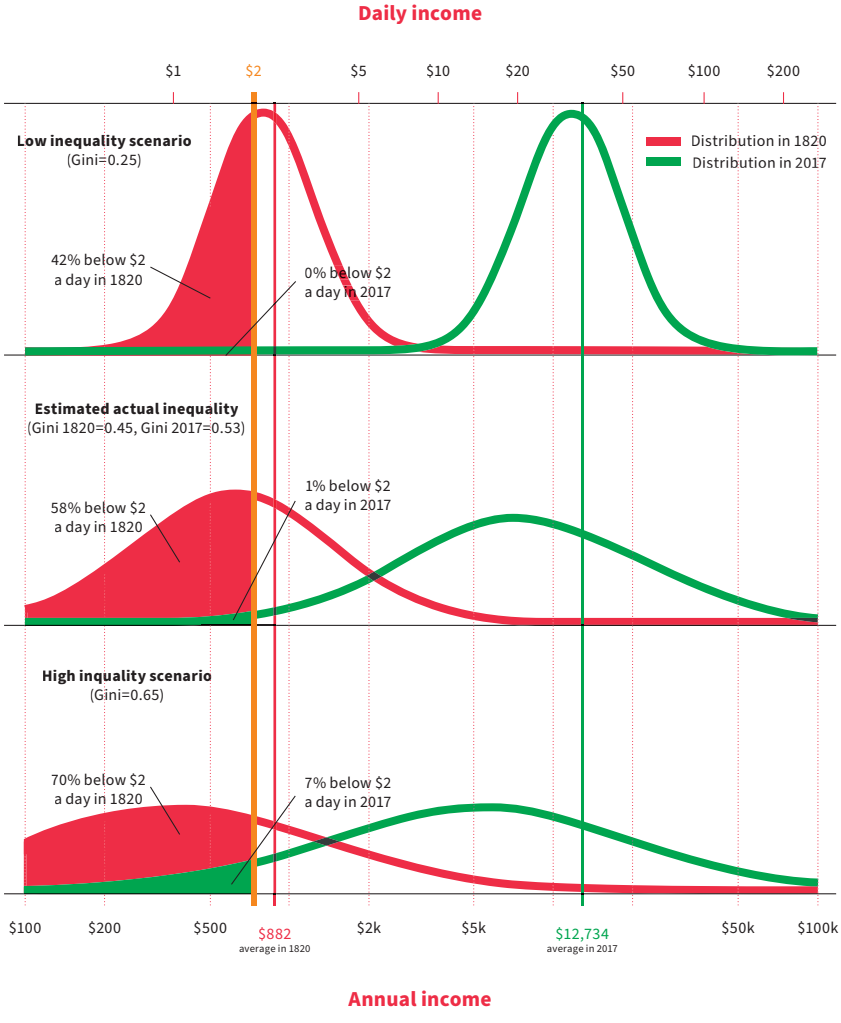


**Figure 8.** Modelled distribution of income in China in 1820 and 2017 under different inequality scenarios. Source: Estimates of GDP per capita are taken from Maddison Project Database 2020 (Bolt and van Zanden 2020). Estimates of inequality are taken from van Zanden et al. (2014) (1820 value) and Global Consumption and Income Project (GCIP) (2017 value). Note: The incomes shown are adjusted for price changes over time (inflation) and price differences between countries. They are given in international-$ in 2011 prices. The Gini coefficient used for the 2017 distributions relates to a 2014 consumption survey adjusted by GCIP using a statistical model to bring the estimate more in line with an income welfare concept.

The fact that the 1820 and 2017 distributions overlap so little, even in a very high inequality scenario, shows us that these points are not specific to a particular poverty line. Any poverty line under which a substantial proportion of the 2017 population lived is a poverty line that almost the entire population in 1820 must have lived under. That is true whatever we assume about inequality for either period.

Additionally, since between these two periods China experienced income growth broadly in line with the global average, what is true for China is also true for the world. In an online data appendix, we provide hypothetical estimates of global poverty applying such high- and low-inequality scenarios to all countries.[24] Even allowing for such large margins of error does not substantially affect our understanding of the evolution of global poverty over the last two hundred years.

*3.3. Incomplete Coverage in Historical Data*

One additional difficulty in arriving at global poverty estimates is the incomplete coverage of the available historical data. For a number of countries, historical estimates for GDP per capita or inequality are either missing for particular years or else are lacking altogether.

In terms of country observations, the early inequality data are particularly sparse. For the early 19th century, the dataset of van Zanden et al. (2014) includes observations for only around 40 countries. However, this includes many of the most populous countries, such that estimates covering around three-quarters of the world's population are available. To produce our estimates of global poverty, countries with missing data for a particular year are attributed the average Gini observed in the region or, in the case of the successor states of the USSR and Yugoslavia, the average within the bloc. While this will not always be an accurate assumption, it will not have a substantial influence on the resulting global trends: this method is applied to a relatively small share of the world's population and, as we previously discussed, in most cases, the overall trends are robust to widely different assumptions concerning inequality.

The available GDP per capita data are more complete but again with notable gaps. To produce our global poverty estimates, we have interpolated between observations, assuming a constant growth rate, and in a number of cases have

[24] https://ourworldindata.org/history-of-poverty-data-appendix (accessed on 9 September 2021).

extrapolated backwards by applying average growth rates observed within the region (or again, the former bloc).[25]

In the case of sub-Saharan Africa, evidence concerning the level of incomes in the distant past is particularly poor. Since coverage prior to 1950 is especially limited within the Maddison database, our poverty estimates instead make use of the economic growth rates for African countries produced by Prados de la Escosura (2012). These estimates are based on inferring total output per head from available records on international trade, and Prados de la Escosura is very explicit about the uncertain nature of the resulting 'quantitative conjectures'.

Again, it is important to put this uncertainty in context. The available evidence concerning incomes of the past does not suggest that people in Africa in the 19th century were much richer than Europeans at the time. Additionally, what we know about living conditions more broadly supports this. Riley (2005) provides estimates of life expectancy for all world regions and suggests that Africa, with a life expectancy of 26 years in 1770, was the worst-off region in this respect (Riley 2005). Finally, the population of sub-Saharan Africa accounted for around 6% of the world population in the 19th century. Uncertainty concerning the level of incomes in this region in the past can only have a limited impact on the resulting global estimates.

Overall, whilst our knowledge of the incomes of the distant past is very far from complete, the bulk of the world's population over the last two hundred years lived in countries that have been studied extensively by economic historians. Moreover, as we demonstrate in an online data appendix, the fact that incomes today are estimated to be several times larger than those of the past means that the broad long-run trends that are the focus of this chapter are robust to wide margins of error.[26] The historical data, though incomplete, are still sufficient to provide us an overall idea of how poverty has evolved across the world over the last two hundred years.

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[25] The procedure is required for around 10–15% of the world's population between 1850 and 1950, though this rises to 36% in 1820. From 1950 coverage increases markedly in the Maddison Project Database, and from this point, it is only former USSR and Yugoslavia member states for which this method must be applied.

[26] https://ourworldindata.org/history-of-poverty-data-appendix (accessed on 9 September 2021).

## 4. Historical National Accounts-Based Estimates of Global Poverty

### *4.1. Comparing Two Approaches to Global Poverty Measurement*

Combining the available historical data on GDP per capita and inequality previously described allows us to estimate the extent of poverty across the world over the past two hundred years. The estimates from this 'national accounts' approach to global poverty measurement are presented and discussed below.

However, before doing so, we discuss the important ways in which this approach differs from the estimates based on household surveys outlined in Section 2. Estimating the extent of global poverty based on household surveys is used by international organisations to measure progress towards the SDG goal of eradicating extreme poverty by 2030. Therefore, it is important that we understand how our historical poverty estimates, achieved via a different set of methods, relate to these more familiar poverty estimates.

#### 4.1.1. How Do the Two Approaches Differ?

The key difference between the household survey- and national accounts-based approaches relates to the different average incomes to which the poverty estimates are anchored: whether the average reported by the surveyed households or a national accounts aggregate such as GDP per capita. The averages reported in survey data are typically lower—in some cases, much lower—than the national accounts aggregates. Poverty estimates produced using the national accounts approach accordingly result, therefore, in substantially lower poverty estimates. In many cases, national account aggregates have grown at a faster rate than the survey data averages, and where this occurs, it results in an increasing divergence between the two sets of poverty estimates over time. Pinkovskiy and Sala-i-Martin (2016), for instance, calculate global poverty rates according to the two approaches and find that survey-based estimates are four to five times higher than national accounts estimates and fell less rapidly between 1992 and 2010.

There are several reasons for the discrepancy between national accounts and survey means (see Deaton 2005 for a comprehensive discussion).

Firstly, there are conceptual differences in what is being measured in each case. GDP includes many items that are typically not measured in household income surveys, such as an imputed rental value of owner-occupied housing, the retained earnings of firms, and taxes on production, such as VAT. The gap is even larger when GDP is compared to surveys of household consumption—the latter concept excluding both investment expenditure and government expenditure on public services such

as education and health. Other aggregates beyond GDP are available in the national accounts that are more comparable to the concepts applied in household income and consumption surveys. However, important differences still remain even here. For example, in addition to imputed rents, imputations for the value of certain financial services, such as bank accounts, are included in aggregate household consumption measured in national accounts, with no equivalent for these items recorded in the survey data. In many countries, the consumption of nonprofit institutions serving households (NPISH) is included as part of household consumption within national accounts but not within household surveys.

On top of these conceptual differences is a range of mismeasurement problems that affect both sets of data. Whilst in principle, national accounts aggregates should include the value of unreported economic activity in the informal or secondary economy—including food grown for households' own consumption—in practice, compilers of national accounts face particular difficulties in making such an assessment. Estimates of total agricultural output are often derived by multiplying acres under cultivation by a measure of agricultural productivity—a process that can offer a distorted view where out-of-date assumptions concerning these are applied (Deaton 2005). As Ravallion (2003) explains, incomplete measurement of non-exchanged output or that of informal employment can not only affect estimates of the level of total output, but also the trends: "As an economy develops, the household-based production activities that are not measured in the [national accounts] become "formalised," imparting an upward bias to measured NAS growth rates of output".

Since these activities are thought to be better captured by survey data, this may contribute to the growing discrepancy observed between survey and national accounts means. Survey data are, however, also subject to a number of different sources of measurement error. Although there are potential problems along the income distribution, much of the concern relates to how well incomes or consumption at the top of the distribution are captured. There is evidence, for instance, suggesting that richer people are less likely to respond to surveys and that this may bias downwards both the level and rate of growth of average incomes or consumption reported in survey data (Deaton 2005; Korinek et al. 2006). There is also the problem of the considerable heterogeneity in the survey methods applied across countries and years which can, in some instances, have a very significant impact. Whilst this is unlikely to contribute to the overall divergence in trends with national accounts data, it is a source of substantial 'noise' in the resulting poverty estimates (Karshenas 2003).

The fact that both sets of data suffer from known measurement problems has resulted in some disagreement among poverty researchers as to which of these approaches, or what combination of them, offers the most reliable picture about the evolution of global poverty (Pinkovskiy and Sala-i-Martin 2016; Chen and Ravallion 2010; Karshenas 2003).

Pinkovskiy and Sala-i-Martin (2016) point to the fact that nighttime lights, as viewed in satellite images, are much more closely correlated with GDP per capita than with survey means. They argue that this provides independent evidence that national accounts offer a more accurate picture of the true evolution of average incomes and that, consequently, poverty estimates should be anchored more closely to these means. Even if national accounts data do offer a truer picture of the average level of income or consumption, the fact that much of the concern about mismeasurement in survey data relates to the upper end of the distribution makes many researchers sceptical of the uncritical use of national accounts means for the purposes of poverty measurement (Atkinson 2019, pp. 139–43; Chen and Ravallion 2010; Deaton 2005). Since these measurement errors in the survey data are likely to affect not only estimates of the mean but also of the extent of inequality, in making use of the latter but rejecting the former, there is arguably some inconsistency in the national accounts approach. Korinek et al. (2006) provide empirical evidence for the United States that highlights this point. By comparing survey response rates across geographic areas, they are able to make estimates of the relationship between a household's income and their likelihood of participating in an income survey. Correcting for this differential nonresponse 'appreciably increases mean income and inequality, but has only a small impact on poverty' (Korinek et al. 2006).

Our use of the national accounts method to produce the global poverty estimates provided below is driven by our objective of arriving at a broad understanding of poverty trends over the very long run, rather than any assessment of the relative merits of this method for measuring global poverty today. However, amidst this debate, it is important not to overexaggerate the uncertainties involved and lose sight of the key points on which both approaches agree: there have been substantial reductions in the share of the world's population living in poverty in recent decades across a wide range of different poverty lines.

In addition to helping to pinpoint their respective flaws, the conjunction of the two different approaches increases the confidence of poverty researchers that the share of people below a wide range of poverty lines has indeed substantially decreased.

#### 4.1.2. A Comparison of Recent Trends: Poverty Estimates Based on National Accounts vs. Poverty Estimates Based on Survey Data

With this in mind, before presenting our historical estimates of global poverty over the last two hundred years, we first investigate how the estimates based on national accounts compare to the household survey-based estimates made by the World Bank for recent decades in which both are available.

In making a comparison of trends across the two approaches, it is important to bear in mind that incomes have risen at different rates at different points in the global distribution (Lakner and Milanovic 2016). We noted this earlier when examining the different poverty lines used by the World Bank: the share living below the international poverty line fell faster than the share below higher poverty lines. However, this means that given a difference in the *level* of poverty estimated by the two different approaches, part of the difference in the *trends* we observe is due to a given dollar value poverty line tracking the evolution of a different part of the global distribution in each case.

In order to separate this factor from the concerns of a growing divergence between mean incomes in household survey and national accounts data, we compare the two sets of poverty estimates in two different ways.

Figure 9 shows a comparison of the global poverty rates according to four different poverty lines—$1.90, $5.50, $10, and $30. Figure 10 shows the share of the population falling below an income corresponding to the level that marked the bottom quarter, the median, and the top quarter of the distribution in 1980 (in the case of the World Bank data, the earliest year, 1981, is used as the reference). In the World Bank estimates, these thresholds were $1.19, $2.40, and $10.40 a day. Within our national accounts-based estimates, these thresholds lie at $3.05, $6.48, and $23.77, respectively—between two and three times higher.

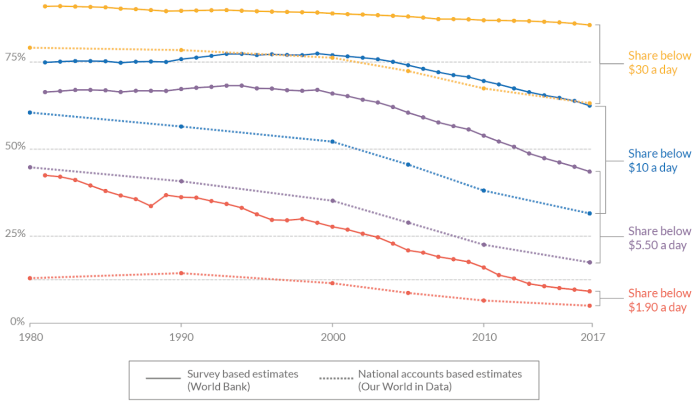


**Figure 9.** The share of world population below different poverty thresholds, according to survey- and national accounts-based estimates. Source: Survey-based estimates from PovcalNet (World Bank); authors' own national accounts-based estimates based on GDP per capita data from Maddison Project Database 2020 (Bolt and van Zanden 2020) and data on income inequality from Global Consumption and Income Project (GCIP).

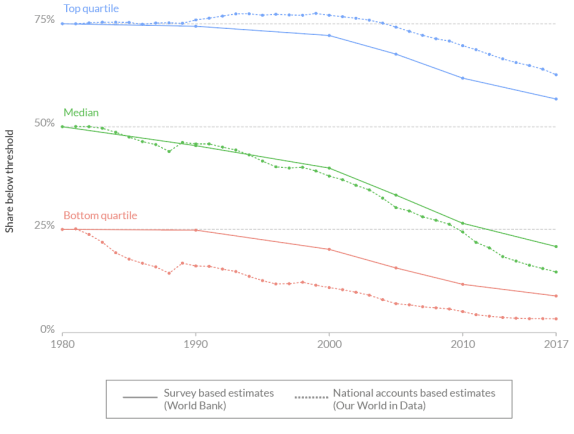


**Figure 10.** The share of world population below the quartile thresholds in 1980/81, according to survey- and national accounts-based estimates. Source: Survey-based estimates from PovcalNet (World Bank); authors' own national accounts-based estimates based on GDP per capita data from Maddison Project Database 2020 (Bolt and van Zanden 2020) and data on income inequality from Global Consumption and Income Project (GCIP).

We see in Figure 9 that the headcount ratios estimated using the national accounts approach are indeed considerably lower than the World Bank estimates, in line with the discussion in the previous section. Global poverty measured against a $1.90 a day line following the national accounts method was less than a third of the level of the survey-based estimates in 1980/81 (red lines). This gap subsequently narrowed considerably, although, from 1990, the two estimates fell in proportional terms at roughly the same rate—both falling by slightly more than half until 2017. The size of the gap between the two sets of estimates, and how it changes over time, is somewhat different at each poverty line.

However, a notable observation from Figure 9 is that where the trend lines pertaining to different poverty thresholds happen to fall close to one other—such as the survey estimates relating to the $1.90 line (solid red) and the national accounts estimates for $5.50 (dotted purple), or likewise the estimates for $10 (solid blue) and $30 (dotted yellow)—the trends move much more in step. Whilst poverty lines defined in terms of a given dollar value yield very different estimates across the two sets of data, poverty lines defined in terms of their position within the global distribution result in much more agreement.

This observation is confirmed by Figure 10 which makes this comparison more directly. The share of people falling below the income level that marked the bottom quartile, the median, and the top quartile in 1980/81 evolved broadly similarly across both sets of data. For instance, the two approaches disagree about the global median level of income in 1980/81: it was $2.40 according to survey data and $6.50 when anchoring incomes to GDP per capita. However, both sets of estimates agree that the share of people falling below that level of income fell from 50% to around 20% in 2017. The estimates for the bottom and top quartile thresholds do not move as closely as at the median, but nor are the trends all that dissimilar. Interestingly, they diverge in different directions.

Overall, Figure 10 shows that the trends in global poverty according to the two methods are not in fact as different as one might suspect. It suggests that whilst there may be a good deal of uncertainty in the level of global poverty at any one point in time, our understanding of the key changes seen across the bulk of the global distribution in recent decades is not dependent on the choice of method.

### *4.2. National Accounts-Based Estimates of Global and Regional Poverty Since 1820*

Figure 11 shows historical estimates of the share and number of people globally living at different income thresholds—$2, $5, $10, and $20—based on the national accounts method and data sources just outlined. All figures are expressed in 2011

international-$, so as to adjust for inflation over time and price differences across countries. A more detailed description of all the data and methods used to produce these estimates can be found on our website.[27]

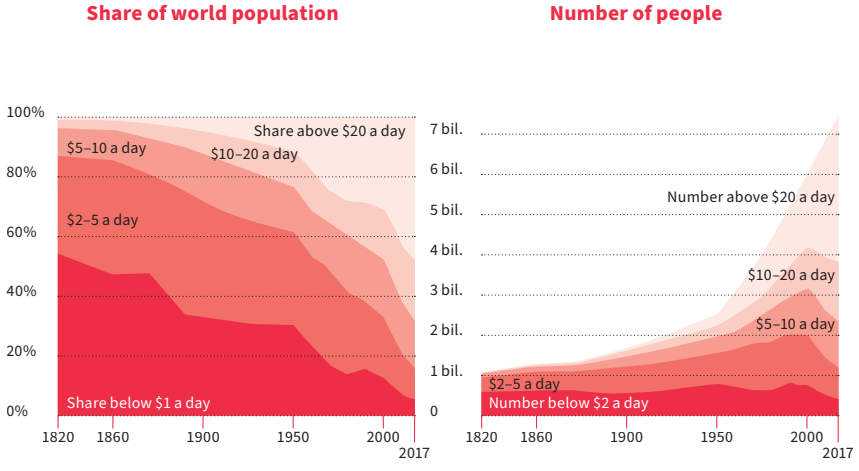


**Figure 11.** The share and number of people globally living below different poverty thresholds, national accounts estimates 1820–2017. Source: Authors' own estimates based on GDP per capita data from Maddison Project Database 2020 (Bolt and van Zanden 2020) and data on income inequality from van Zanden et al. (2014) and the Global Consumption and Income Project (GCIP).

What these estimates allow us to see is that declines in the share of the world's population living in poverty were not limited to the recent decades for which extensive household survey data are available. We see a more or less continuous decline in the share of the world's population below each poverty line that accelerated in the second half of the 20th century (Figure 11, left panel). As the global population rose from around 1 billion in 1820 to 6 billion in 2000, the number of people living in poverty was rising. This is true for all but the lowest threshold of $2 a day, below which the number of people stayed largely constant until very recently (Figure 11, right panel).

As in the World Bank estimates based on survey data (Figure 4), we see a further acceleration in the decline in poverty rates from around the turn of the new

[27] https://OurWorldInData.org/history-of-poverty-data-appendix (accessed on 9 September 2021).

millennium. From this point, the number of people living below each poverty line began to decrease.

It is not the case that the number of poor people declined everywhere, however. Figure 12 shows the poverty rate measured relative to a $5 a day line for each region. Figure 13 shows the share of the world population falling below this threshold, where each region's contribution is shown separately.

We see from Figure 12 that, relative to this income threshold, a majority lived in poverty across all parts of the world in 1820. That is true for today's rich countries, although we see that poverty was less prevalent in Western Europe, along with its 'offshoots' (the US, Canada, Australia, and New Zealand), than in other world regions.

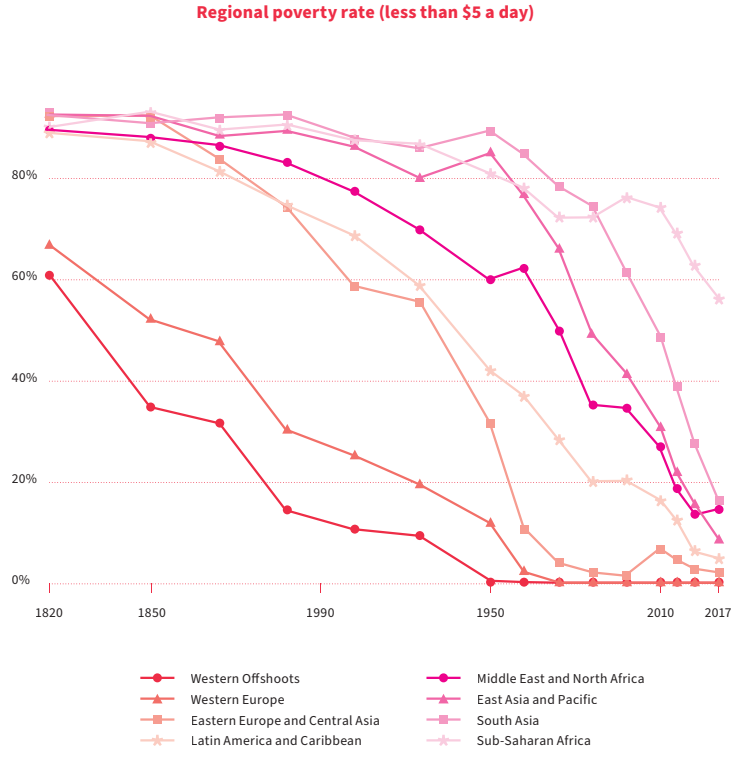


**Figure 12.** Share of the population living below $5 a day, national accounts estimates 1820–2017. Source: Authors' own estimates based on GDP per capita data from Maddison Project Database 2020 (Bolt and van Zanden 2020) and data on income inequality from van Zanden et al. (2014) and the Global Consumption and Income Project (GCIP).

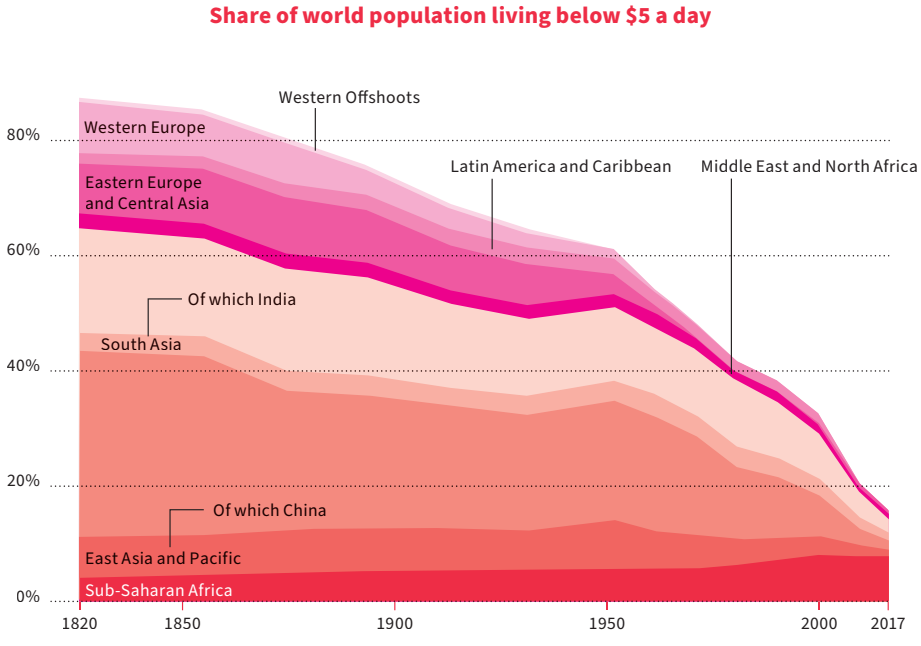


**Figure 13.** Share of the world population living below $5 a day by region, national accounts estimates 1820–2017. Source: Authors' own estimates based on GDP per capita data from Maddison Project Database 2020 (Bolt and van Zanden 2020) and data on income inequality from van Zanden et al. (2014) and the Global Consumption and Income Project (GCIP).

Globally, almost 90% of the population lived under this threshold in 1820, as we can see from Figure 13. We see that the subsequent fall in the global poverty rates is owed primarily to the decreasing contributions to this total made by Western Europe, Eastern Europe and Central Asia, China, and India. In the case of Western Europe and EECA, this was due to falling poverty rates. However, in the case of China and India, poverty rates remained high. Up until the mid-20th century, their reduced contribution to the global poverty rate was due to their share in the world population declining—from more than half in 1820 to around one-third in 1950.

Until the mid-20th century, global poverty fell because the poverty rate in some regions was falling and because the population grew faster in those same regions than in the regions where incomes were stagnant. However, the growth in incomes in India and China from the mid-20th century onwards meant that, for the first time in history, progress was being made against poverty across most of the world. From this point, the decline in global poverty accelerated.

The important exception to this trend, however, is sub-Saharan Africa. Poverty rates remain high in sub-Saharan Africa following limited economic growth in the late 20th century, coupled with persistently high levels of inequality in many countries in the region. As we discussed regarding the World Bank estimates based on household survey data, global extreme poverty is becoming increasingly concentrated in sub-Saharan Africa. What this long-run view makes very clear, however, is that the low and stagnating incomes endured by a large share of the population in many sub-Saharan African countries should not in any way be accepted as inevitable. Persistently high levels of extreme poverty were once the rule but are now the exception.

*4.3. The History of Extreme Poverty in the Last Two Centuries: Combining Survey and National Accounts Estimates*

In this chapter, we have presented evidence on the history of poverty based on two different methods. We have referred to these as survey and national accounts estimates, reflecting the different average incomes to which the estimates are anchored: in the first case, to household survey data, and in the second case, to average incomes observed in national accounts or historical reconstructions of this.

On the one hand, we have pointed to many sources of uncertainty in estimating global poverty. For recent decades, this is underlined by the differences in the poverty estimates arrived at by these two methods. There are known sources of mismeasurement in both approaches and questions remain as to how best to combine all the evidence available from national accounts and survey data. Estimates for the distant past, relying on reconstructions from historical sources, are no doubt more uncertain still.

On the other hand, we have argued that this uncertainty must not be overstated. For recent decades, both approaches show substantial falls in poverty across a wide range of poverty lines. The scale of the changes seen in average incomes in many parts of the world over the last two hundred years gives us a clear indication that global poverty also fell substantially over this longer timeframe, even allowing for significant uncertainty regarding the historical data. Whilst estimates for any given point in time are highly uncertain, the available evidence consistently points to a range of trajectories that is plausible and a range of trajectories that is not.

Within this range of plausible trajectories, however, is it possible to construct a single time series for the evolution of global poverty over the long term?

Martin Ravallion's seminal book on the history and measurement of poverty features a chart that shows one possible approach to provide such a long-term

perspective (Ravallion 2016a, Figure 2.1). He presents the long-run poverty estimates of Bourguignon and Morrisson (2002), which are based on the historical national accounts method discussed above, and brings them together with data based on household surveys for the recent period. Bourguignon and Morrisson's estimates were made in relation to a poverty line set specifically so as to result in the same global extreme poverty rate as that found in survey-based estimates for an overlapping year.[28] In this way, the researchers sought to account for the 'gap' in the poverty estimates resulting from the two different sets of methods, as discussed in Section 4.1 above. Ravallion (2016a) extends this historical series for the global extreme poverty forward using the survey-based estimates published in Chen and Ravallion (2010).

That chart is reproduced here in Figure 14, using recent World Bank estimates of the share of the population living below the updated international poverty line of $1.90 per day from 1981 onwards. Prior to this, we use our own historical poverty estimates that were presented above. These apply very similar methods as those used by Bourguignon and Morrisson (2002) but make use of more recently published historical evidence on both the extent of inequality and the level of average income. As in Bourguignon and Morrisson's original study, to produce the historical estimates of extreme poverty shown in Figure 14, we set a poverty line that results in estimates that align with the survey-based data in the overlapping year.[29]

Supporting this method of combining the two sets of data is the observation made above in relation to Figure 10. There, we saw that estimates of poverty measured relative to a line anchored to a certain point in the global distribution showed similar reductions over time under both approaches. Indeed, we have shown that this was particularly true at the global median, which the extreme poverty line used in Figure 14 fell close to in 1980/81.

The series in Figure 14—as with Ravallion's original chart and any reconstruction of the history of poverty—suffers from the many uncertainties associated with the available evidence. However, the available historical evidence is clear with respect to the broad features of this trajectory: poverty levels were very high in the past, and the share of the world population living in poverty declined significantly.

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[28] Namely, the estimates of poverty measured using the '$1 a day' line found in Chen and Ravallion (2001). This relates to a $1.08 poverty line measured in 1993 prices with which the authors updated the $1 a day line given in 1985 prices.

[29] World Bank estimates of the extreme poverty rate in 1981 and 1982 were 42.4% and 42.1% respectively. We set the extreme poverty line in the National Accounts data at $5.20 (in 2011 prices). This yields a global poverty rate of 43.0% in 1980, roughly continuing the trend linearly.

Moreover, as we discuss in the following final section, this broad trend concerning *monetary* poverty is also corroborated by historical evidence concerning a range of *non-monetary* metrics.

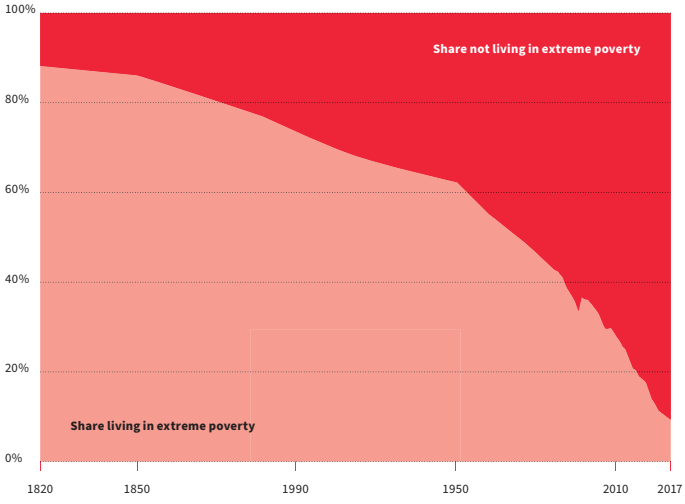


**Figure 14.** Share of the world population living in extreme poverty, 1820–2017. Source: 1820–1980: Authors' calculations based on Maddison Project Database 2020 (Bolt and van Zanden 2020), van Zanden et al. (2014), and Global Consumption and Income Project (GCIP); 1981–2017: PovcalNet (World Bank). Note: This series is based on the methods employed in the long-run global poverty estimates that appeared in Bourguignon and Morrisson (2002) and Ravallion (2016a). It uses a more recently published set of historical data and, for the period from 1981 onwards, more recent World Bank estimates for the share falling below the updated international poverty line of $1.90 a day.

## 5. Other Evidence on Historical Poverty

### *5.1. Other Long-Run Estimates of Monetary Poverty*

Figure 15 compares our estimates of the share of the world population living in extreme poverty shown above against three other existing sets of estimates.

Our estimates are shown in red. In green are the original estimates of Bourguignon and Morrisson (2002) whose methodology we have largely emulated

in producing our historical estimates. In blue is a series produced by Moatsos (2021) that also follows a similar methodology to that described in the present chapter.[30]

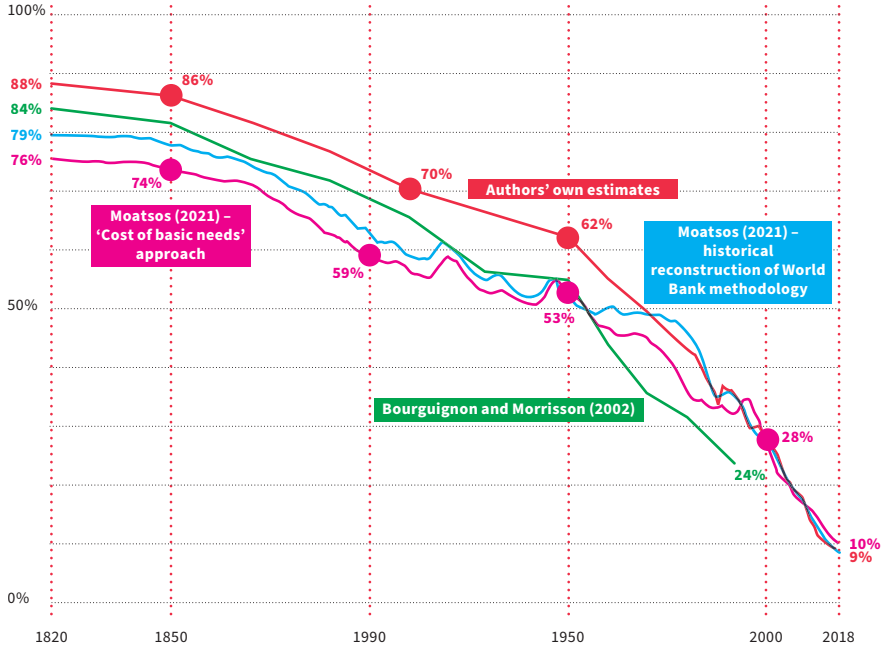


**Figure 15.** The share of the world population living in extreme poverty, according to four sets of estimates. Source: Bourguignon and Morrisson (2002), Moatsos (2021), and the authors' own estimates.

In pink is a second series from Moatsos (2021) that is instead based on the 'cost of basic needs' approach suggested by Allen (2017). Within this approach, incomes are measured against a poverty line that varies across countries according to the local minimum cost of meeting dietary and other basic needs.

One advantage of the approach is that it gives us an understanding of the history of global living standards in terms of a more readily interpretable definition of poverty: as recently as 1950 the majority of people in the world 'could not afford

[30] The approaches are similar in terms of the use of PPP-adjusted incomes and the use of historical national accounts and inequality data to extend estimates of the global income distribution into the past. See Moatsos (2021) for a full description of the methodology.

a tiny space to live, food that would not induce malnutrition, and some minimum heating capacity' (Moatsos 2021, p. 195).

The cost-of-basic-needs estimates are also significant in providing an alternative methodology with which to benchmark poverty estimates, such as those of the World Bank and our own historical estimates presented here, that use incomes adjusted for price differences across countries and expressed in common units of purchasing power. This is one aspect of the World Bank's approach that has been the subject of debate in particular, and which the cost-of-basic-needs approach avoids (see Section 2.1.1 above). Overall, the long-run trends across all four series are remarkably similar. The fact that different researchers using different methodologies and data sources reach similar conclusions concerning the history of extreme poverty greatly increases our confidence in the overall trends.

### *5.2. Long-Run Evidence from Non-Monetary Metrics*

The poorest people in the world today have worse living conditions more broadly. They live shorter lives, lack access to basic services, and a higher share suffers from hunger and malnutrition. To assess how plausible, or implausible, the historical reconstructions of poverty are, we should therefore look at the historical evidence for the living conditions in the past. Does the historical evidence on non-monetary metrics such as mortality and malnutrition match the reconstructions of high levels of monetary poverty?

#### 5.2.1. Mortality at a Young Age

Figure 16, based on Volk and Atkinson (2013), shows the share of children who died before they reached the end of puberty.[31] These data, covering the last 2400 years, relate to a range of different locations from around the world. What is striking about the historical estimates is how very similar the mortality rates for children were across this wide range of 23 historical cultures. Whether in Ancient Rome, Ancient Greece, the pre-Columbian Americas, Medieval Japan or Medieval England,

[31] In modern global health statistics, child mortality is defined as the share of children who die before the age of five. The historical research does not provide data for this age cutoff. A cutoff at the end of puberty has the advantage that it captures mortality over the entire course of childhood. To compare the historical estimates with modern global health data, we relied on data from the United Nations Inter-agency Group for Child Mortality Estimation (IGME) which publishes the mortality rate up to the age of 15 for countries around the world.

the European Renaissance, or Imperial China—no matter when and where a child was born, almost one in two children did not survive.

Volk and Atkinson also bring together mortality data from 20 different hunter-gatherer societies from very different locations to give an indication of the youth mortality rate in the type of society that humans in prehistoric times lived in.[32] Again they find very similar mortality rates with an average death rate until the end of puberty of 48.8%, almost exactly the same as the historical sample over the last three millennia.

The high mortality of children in all world regions is plausible when we consider the evidence on humanity's population growth. We know that population growth was close to zero, while fertility rates were high. The fertility rate, the average number of children per woman in the reproductive age bracket, was high—an average of 6 or more children per woman was certainly not rare (Roser 2014). A fertility rate of 4 children per woman would imply a doubling of the population size each generation; a rate of 6 children per woman would imply a tripling from one generation to the next. However, instead, the population barely increased: historical reconstructions suggest that between 10,000 BCE and 1700, the world population grew by only about 0.04% annually (Roser et al. 2013). A high number of births without a rapid increase of the population can only be explained by one sad reality: a high share of children died before they could have children themselves. The historical evidence that almost half of all children died certainly does not seem consistent with notions that poverty levels were low in the past.

Equally important for the plausibility of the historical poverty reconstructions is the fact that both population growth and declining mortality levels coincide with the decline in poverty that the national accounts data suggest, at both the global and country level. Globally, the chart shows that the global death rate of children younger than 15 declined from close to 50% to below 5% over the course of the last century. And today, populations in places with high levels of poverty still suffer from

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[32] To study mortality at a young age in prehistoric societies, the researchers need to mostly rely on evidence from modern hunter-gatherers. Here, one needs to be cautious of how reflective modern hunter-gatherer societies are of the past. This is because recent hunter-gatherers might have been in exchange with surrounding societies and 'often currently live in marginalised territories', as the authors state. Both of these could matter for mortality levels.To account for this, Volk and Atkinson have attempted to only include hunter-gatherers that are best representative for the living conditions in the past; they limit their sample 'only to those populations that had not been significantly influenced by contact with modern resources that could directly influence mortality rates, such as education, food, medicine, birth control, and/or sanitation'. The one study on mortality rates of paleolithic hunter-gatherers finds a higher youth mortality rate: 56% did not survive to puberty.

youth mortality rates of up to 15%, while in places with the lowest poverty rates, up to 99.7% of children now survive their first 15 years of life.

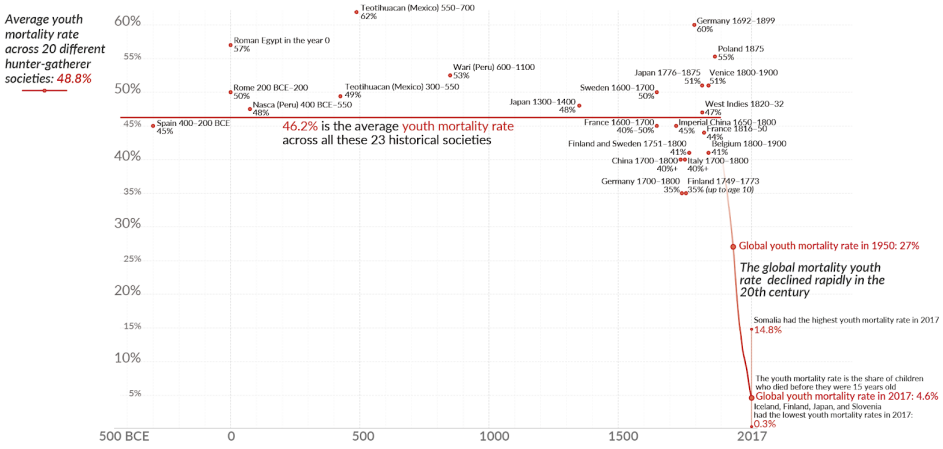


**Figure 16.** Youth mortality over the last 2400 years. Source: The mortality estimates for historical societies are from a large number of independent studies collected in Volk and Atkinson (2013). Data for 2017 are from the United Nations Inter-agency Group for Child Mortality Estimation (IGME). Global estimates for the 20th century are based on under-five mortality from Our World in Data. Note: Youth mortality measures the share who died as infants or children before reaching the end of puberty (approximately around the age of 15).

### 5.2.2. Human Height

A second set of evidence that allows us to study whether the reconstructions of monetary poverty over the last few generations are plausible can be found in the mortal remains of people around the world.

An individual person's height is largely determined by their genetic background, but the average height of an entire population is almost entirely determined by their living conditions, particularly the nutrition and health at a young age (Baten and Blum 2014). This allows historians to reconstruct people's living conditions by relying on the average human height in a population as a proxy measure. When there are no records of population height over time, the average height can be reconstructed from bones.

Figure 17 shows how the height of adult men has changed over the course of the last century (estimates of women's heights are published by the same source and

show a very similar change).[33] The differences in the height of men born in 1996 correlate closely with levels of monetary poverty today, the height of men born in the richest parts of the world being the tallest, while those born in the poorest countries being among the shortest.

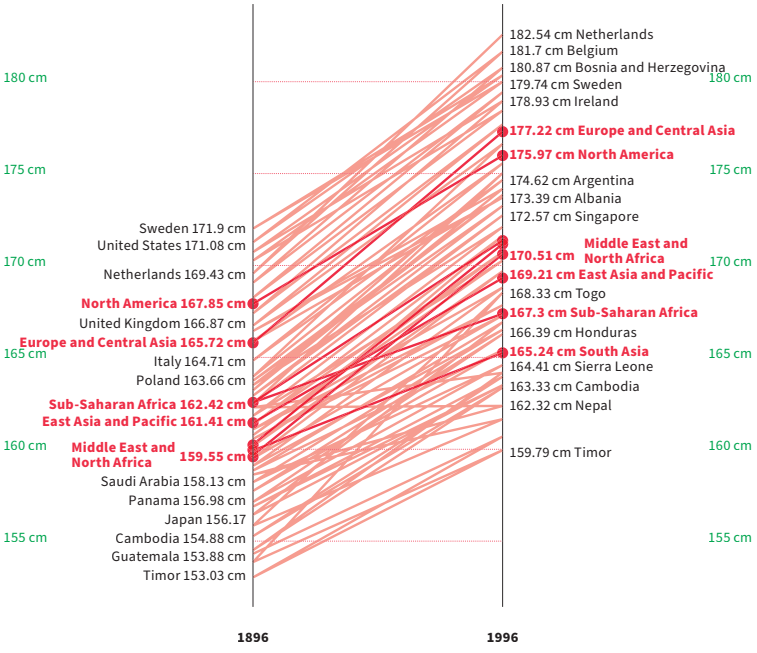


**Figure 17.** Height of adult men, 1896–1996. Source: NCD Risk Factor Collaboration (NCD-RisC), Our World in Data. Note: These data relate to the height of adult men by year of birth. Poor nutrition and illness in childhood limit human growth. As a consequence, the average height of a population is strongly correlated with living standards in a population.

Furthermore, importantly for the question at hand, it is also the case that the historical changes in men's height match closely with the historical reconstructions of monetary poverty presented before. These data show large changes in men's height over time: the global average increased by 9 cm from 1.62 m to 1.71 m, and in the regions and countries that made the fastest progress against poor living conditions, it can be well over 10 cm. The average man in Europe and Central Asia in the

[33] The data are published by NCD Risk Factor Collaboration (NCD-RisC).

late 19th century was smaller than the average man in sub-Saharan Africa today.[34] Additionally, as is the case with poverty reduction, the smallest improvements over the last century are documented for men in sub-Saharan Africa and South Asia. Large increases, on the other hand, are documented for people in North America, Europe, Central Asia, and Latin America and the Caribbean.

The data shown here goes back to the late 19th century when differences in economic prosperity had already emerged. In line with these differences, men in the least poor regions of the world were already the tallest. Reconstructions of the economic history of Europe suggest very poor economic living conditions during the centuries preceding the Industrial Revolution. Long-run reconstructions of human height in Europe by Koepke and Baten (2005) corroborate this long-run perspective.

### 5.2.3. Escaping the Malthusian Economy

Lastly, it is economic theory and its empirical support that suggests that the very high levels of poverty that we reported earlier do indeed reflect the living conditions in the past.

The mechanism that prevented progress against poverty and hunger in the past is referred to by economic historians as the 'Malthusian trap'. When the large majority of a society suffers from poverty and hunger, only an increase in production can raise living standards and reduce poverty. However, in the past, such productivity increases occurred only very rarely, and whenever they did occur, they only led to a brief increase in living standards because it ultimately caused an increasing size of the population which left everyone as poor as they were before. Due to this basic mechanism, higher productivity did not result in lower levels of poverty but in a larger number of people.

Ashraf and Galor (2011) develop a formal model of the Malthusian economy theoretically and study the evidence for it empirically. If the economic living standards of people in the pre-growth economy were in fact determined by the Malthusian trap, then we would expect to see a positive correlation between the level of productivity in a region and the density of the population in this area. Figure 18 is taken from their publication and confirms the theoretical prediction for the pre-growth economies in the year 1500.

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[34] On the question why men in the world's poorest region, sub-Saharan Africa, are slightly taller than men in South Asia, see Bozzoli et al. (2009).

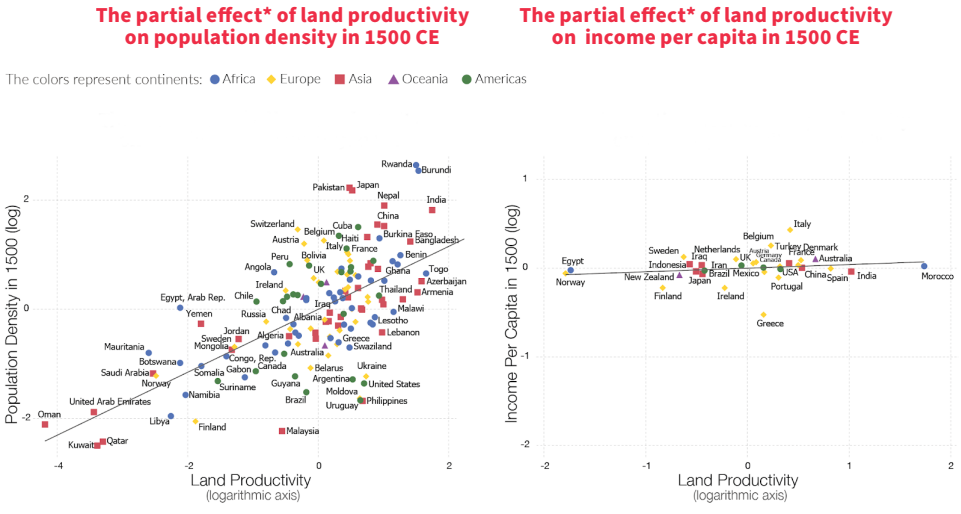


**Figure 18.** The partial effect of land productivity on population density and income per capita in 1500 CE. Source: Ashraf and Galor (2011). Note: The figure depicts the partial regression line for the effect of land productivity while controlling for the timing of the transition from hunting and gathering to agriculture, and the influence of absolute latitude, access to waterways, and continental fixed effects. The x- and y-axes plot the residuals obtained by regressing population density and income per capita, respectively, on these covariates.

All data in this visualisation are reported in the current borders of the world. On the x-axis of both charts, you find the same metric—the productivity of the agricultural land as measured by the quality of the soil and the climate. In the chart on the left we see that those world regions with the most productive land had the highest population density.

On the chart on the right, we see that the higher productivity of the land did not result in higher living standards. The agricultural sector in Spain, India, or Morocco was much more productive than in Finland, Egypt, and Norway, but the people in these countries were not better off—they were merely more numerous. The more productive regions were the more populous regions, and the people in these areas had to share with so many that everyone remained at dismal levels of prosperity.

In the long history before modern economic growth, higher productivity led to larger, but not richer, populations. This mechanism ensured that poverty levels were high everywhere.

## 6. Conclusions

Poor material living conditions were such a persistent and pervasive reality that, for much of human history, it was unimaginable that it could ever be different. Poverty did not change, and so, it was easy to believe that poverty was unchangeable. The Reverend Thomas Malthus wrote about the living conditions in his native England 'It has appeared that from the inevitable laws of our nature, some human beings must suffer from want. These are the unhappy persons who, in the great lottery of life, have drawn a blank'.[35]

When Malthus wrote these words in 1789, he was right about the past, but he turned out to be wrong about the world's reality after his death: In the two centuries since his death, many countries broke out of the stagnation of the past, achieved economic growth, and reduced poverty. The reconstructions of poverty presented here make clear that it is *not* an inevitable law of nature that humans must suffer from want. It is not only possible to reduce poverty, but it is a reality.

During the long past when humanity did not make any substantial progress in reducing poverty, there was no one bold enough to even imagine that it could be different in the future. Not only the reality of poverty reduction over the last 200 years stands in sharp contrast to the centuries and millennia preceding it, but with the reduction of poverty, the thinking about poverty has changed as well. Today, poverty is widely considered a social bad, a problem to be solved rather than a reality that needs to be accepted. Ravallion (2013) documents that before the modern reduction of poverty, poverty was considered a social good—'necessary and even desirable for a country's economic success'. That this idea is so repellent for us today makes clear how dramatic the change in perspective has been.

The reality of poverty reduction changed our view on poverty, and this matters substantially for our aspirations for the future. The same evidence that we presented here shows us how far the world has come, and *how* far we still have to go. That fewer than 10% of the world live in extreme poverty is the outcome of unprecedented progress and one of the most atrocious problems that the world faces today. It is the progress that we have made that makes the reality of extreme poverty so appalling—if Malthus was right that poverty was inevitable, we would need to accept the suffering that poverty causes; it is the decline in poverty documented here that makes it clear to us that the world can change and that economic growth and reductions of inequality can reduce poverty.

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[35] Thomas Malthus (1798)—An Essay on the Principle of Population. Chapter X, paragraph 29, lines 12–15.

As we emphasised before, the international poverty line is a very low poverty line—the name 'extreme poverty' is apt. As long as there are extremely poor people, it is ethically right that the world considers a poverty line that focuses our attention on the very poorest, but our aspirations should of course not be limited to ending only extreme poverty. According to the PovcalNet data, 85% of the world lives on less than $30 a day—the world is a very long way away from ending poverty relative to these higher poverty cutoffs. The fact that the global mean income (at $16 per day according to the 2017 PovcalNet data) is only about half of this poverty line shows just how much the world economy needs to grow to bring an end to poverty into reach.

Even after two centuries of unprecedented progress, an extremely large number of people around the world still suffer from poverty and extreme poverty. What we have learned is that poverty is not inevitable; now it is on us to continue and accelerate the progress the world has made. The history of global poverty reduction has only just begun.

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# Global Absolute Poverty: The Beginning of the End?

**Sanjay G. Reddy**

## 1. Introduction

*The Idea of Ending Poverty, Rhetoric and Reality*

The first Sustainable Development Goal of "Ending poverty in all its forms everywhere" reflects an admirable collective aspiration.[1] The idea that the poor need not always be with us[2] is a revolutionary idea, and arguably a modern one[3].

If global development goals such as SDG 1 are not meant to be taken literally but rather to provide a guide to action and a horizon for aspiration (see, e.g., Reddy and Kvangraven 2015), neither the use of demanding words such as "ending" and "all", nor the adequacy of their specific definition in terms of targets and indicators, would lead to excessive preoccupation. If goals are meant to provide a concrete objective for policy-making, or a reference for enabling those who frame and implement policies to be held accountable, then the details of their definition may matter a great deal.

The understanding of the first Millennium Development Goal (to "Eradicate Extreme Poverty and Hunger") showed a gap between rhetoric and implementation, because "eradication" was ultimately interpreted with exceedingly modestly, as an intention to halve, between 1990 and 2015, the proportion of people in the developing

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1 I would like to thank Rahul Lahoti for undertaking the calculations, based on the Global Consumption and Income Project, which gave rise to the alternative forecasts reported later in this paper, and for useful suggestions.

2 Jesus of Nazareth was said to have said (Matthew 26, p. 11): "The poor you will always have with you, *but you will not always have me*". There is no reason to interpret this famous remark as an injunction to fatalism, even if it involved the idea that the eradication of poverty was not a proximate prospect.

3 Classical political economists such as Smith, Malthus, and Ricardo, because of their notion that wages were determined by the cost of a modest subsistence, were skeptical of the prospects for economic growth leading to a necessary improvement in living standards of ordinary workers, including in particular the eradication of poverty. The attitude of Smith to China is illustrative. He views it both as a most prosperous country and one in which beggars and distress abound. Smith states (in *The Wealth of Nations*, Book 1, Chapter VIII) that "China has been long one of the richest, that is, one of the most fertile, best cultivated, most industrious, and most populous countries in the world", but also that "The poverty of the lower ranks of people in China far surpasses that of the most beggarly nations in Europe".

world living on less than $ 1.25 (2005 PPP) a day (Pogge 2004; United Nations 2015).[4] Ultimately, the declaration that the first Millennium Development Goal (MDG) had been achieved also turned crucially on an interpretation of the halving of poverty as applying to the global total headcount rather than to regional or national totals. Presumably, the most favorable case for the SDGs would be that they can do both, providing a framework for motivating and directing action and meaningful and well-defined statistical objectives.

This paper examines the likelihood that income poverty will be "ended" by 2030 as demanded by the first Sustainable Development Goal. It is demonstrated that this is unlikely, with the extent of remaining poverty and the regional distribution of poverty depending greatly on the assumptions made. It is also shown that the global economic downturn brought about by policies against COVID-19 has led to a significant setback to the goal. Conceptual issues in estimation, poverty projections, and implications for the attainment of SDG 1 are discussed.

## 2. Relationship between Goals, Targets, and Indicators: Internal vs. External Views

As already noted, a basic question when approaching an exercise of a societal nature such as the SDGs is that of the relationship between their public face—the understandings of them in broad social and political contexts—and their technical face—the understandings of them relevant for operational applicability in administrative contexts. Does the technical understanding of SDG 1 correspond to the societal understanding?

An interesting feature of SDG 1 targets and indicators is that they are plural (see United Nations 2019a). The very idea of eliminating poverty in all its forms involves an implicit recognition that any single measure of poverty—which must fail to capture all the forms of poverty that there are—cannot suffice. This recognition is echoed in the fact that diverse targets and indicators were chosen for SDG 1, with indicators referring, for instance, both to "the international poverty line" and to "the national poverty line", to "poverty in all its dimensions", and to the population covered by "social protection floors/systems", having "access to basic services", having "rights to land", affected by "disasters", and that live in localities or countries that adopt and implement "disaster risk reduction strategies". Moreover, each of

[4] The poverty lines referred to are in "international dollars", a unit for assessing purchasing power parity (PPP) that is set notionally equivalent to one US dollar in the United States.

these are required to be disaggregated by various sub-categories, such as age, sex, employment status, geographical location (urban/rural), children, disability status, pregnancy status, whether an individual is a work-injury victim, etc. The idea of poverty adopted for technical purposes appears to involve a somewhat haphazard collection of concepts and is less clear, than the umbrella concept of eliminating poverty in all its forms adopted for public purposes.

How should an analyst or an advocate for poverty reduction respond to this situation? The internal and the external view of the matter may be distinguished. The internal view holds that the technical definition fully determines the meaning of the SDGs. The external view holds that the adequacy of the technical definition of the SDGs must be assessed in light of their broader societal role and responsibility. In the external view, the meaning of the phrase, "eliminating poverty in all its forms" must be examined in light of a broader field of references; accustomed ordinary language uses of terms such as "eliminate" and "poverty" or ambient social and political understandings (as revealed, for instance, by the spirit of political documents such as the Agenda 2030). From the external point of view, although the officially adopted list of targets and indicators (see United Nations (2019a)) provides a relevant, and perhaps even a privileged, reference point, it cannot be viewed as the last word on the subject of whether the goal of "eliminating poverty in all its forms" is adequately being met.

The SDGs ultimately gain their credibility and their authority from their endorsement by political authorities and their acceptance by a wide range of actors; therefore, it seems that the external view demands due attention. Targets and indicators should not become objects of obsession. They must be subject to ongoing scrutiny to assess their individual and joint adequacy for achieving the objective of ultimate interest, "eliminating poverty in all its forms".

## 3. Slips between Cup and Lip: Questions of Measurement

There is a wide and well-developed body of literature on the appeal and adequacy of individual poverty measures, which cannot be treated comprehensively here. Many of the questions raised in this literature are relevant to determining the suitability of the chosen SDG indicators. These can guide the application of the external view, since the officially accepted SDG targets and indicators may be inadequate to monitoring whether poverty "in all of its forms" is on course to being "eliminated".

Amartya Sen has noted (see, e.g., Sen 1981) that descriptions of the extent of poverty can be seen as decomposable into two component exercises, viz. identification

(e.g., determining who is poor, in what ways and to what degree) and aggregation (e.g., determining the quantity, severity and distribution of poverty in a population). Both exercises can be approached in multiple ways, and there can be reasonable disagreement over the alternative ways of specifying them:

(1) Identification

Unidimensionality vs. Multidimensionality:

Should poverty be conceived primarily in terms of inadequate command over material resources (e.g., in the form of income or consumption) or in terms of the presence of deprivations of diverse sorts, whether of means (e.g., access to schooling) or attainments (e.g., years of schooling completed)? In either case, what is the underlying conceptual framework used to determine whether there is inadequacy or deprivation and to guide the selection of indicators?

Adequacy of Thresholds:

In any given dimension (e.g., income or consumption) what is the appropriate threshold to be used in determining adequacy? Specifically, how should a threshold be specified in order for it to have a *meaningful* interpretation as being adequate for poverty avoidance? How should they be defined so as to have a *common meaning* at different points in space and in time? It is not only the setting of a threshold for any one context, but also its translation across contexts to ensure a consistent interpretation that requires reference to a common meaning (see Pogge and Reddy 2010; Reddy 2004, 2007, 2008, 2013, 2020; Reddy and Lahoti 2016; Reddy and Pogge 2006; and Reddy et al. 2008).

(2) Aggregation

How should the overall extent of poverty in a society be summarized? For instance, is the number of poor persons, the proportion of poor persons, the typical severity of poverty or a composite measure most suitable? Moreover, is the performance of society in relation to the goal to be judged on the basis of a global aggregate or performance in each region or country? If the latter, what importance is to be given to each region when assessing overall progress?

(3) SDG Targets and Indicators in Light of These Questions

In practice, SDG targets and indicators raise very serious issues. For example, what United Nations (2019a) refers to as the "international poverty line" (the World Bank's $ 1.90 2011 PPP poverty line, which it has deemed equivalent to its own previous $ 1.25 2005 PPP poverty line) has come in for serious criticism ["Indicator

1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)"]. It has been argued, for instance, that this line lacks meaning in terms of the real requirements for achieving human well-being. This results both from the absence of sound conceptual and empirical underpinnings, and from distortions generated by the price indices used to attempt to maintain purchasing power over space and time (see previously cited writings, and Reddy and Lahoti (2016) for detailed criticism of the$ 1.90 2011 PPP line and the claim of equivalence to the prior line).

National poverty lines are not necessarily better, because they correspond to many distinct methodologies, often poorly conceived or executed, and subject to political influence ["Indicator 1.2.1 Proportion of population living below the national poverty line, by sex and age"]. Although such measures may be validated by governments, they may not capture poverty in a sense that can be rationally justified and widely accepted. The debates about the adequacy of national poverty lines in many countries testify to this difficulty. Even if these lines have discernible purchasing power interpretations (which they often do not) these are not common across countries. Additionally, many countries, including even otherwise advanced countries, simply do not have official poverty lines (see, e.g., Reddy 2007, 2013; Subramanian 2012, etc.).

In the case of international poverty lines, and very often also in the case of national poverty lines, the focus has been on a stringent "absolutist" concept of poverty, whereas poverty "in all its forms" implies a more expansive concern. For instance, whereas according to the international poverty line, poverty is almost non-existent in most advanced countries, it is frequently present according to national poverty lines, and even prevalent when unofficial poverty lines and rights-based assessments of conditions of the poor are employed.[5]

Similarly, efforts to assess multidimensional poverty using a single composite index, although well-intentioned, may capture but also miss a great deal ["Indicator 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions"]. Such an effort necessarily involves choices about what information to include, or not (depending, in part, on the availability of data), where to place thresholds of adequacy in each dimension, and how to aggregate across dimensions, including, in particular, how to treat correlations

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[5] See, for instance, the evaluations of the UN Special Rapporteur on Extreme Poverty and Human Rights, available on https://www.ohchr.org/EN/Issues/Poverty/Pages/CountryVisits.aspx (accessed on 1 August 2021).

between dimensions which reflect intensive concentrations of poverty. As a result, aggregate measures of multidimensional poverty may fail to take adequate note of specific deprivations, or of intense concentrations of multiple deprivations, if these do not greatly influence averages.

The chosen SDG targets and indicators can offer only a partial picture of the extent of poverty in 'all of its forms'. The credibility of the measures which have already been chosen or are likely to play roles as SDG 1 indicators is undermined by various weaknesses. As such, those who adopt the 'external view' of the appropriate relationship between the public and the technical faces of the SDGs cannot, therefore, accept as definitive the picture of global poverty that is presented by such measures alone. This having been said, the measures which are most readily available and are most prominently circulated are also likely to continue to provide public reference points for SDG monitoring. For this reason, we employ in what follows conventional measures (in particular, the $ 1.90 2011 PPP poverty line and some variants of them within the World Bank's favored "money metric" international poverty line approach) despite our conviction that better poverty monitoring methods are possible and deserve significant additional investment. The use of alternative lines within the money metric approach offers one way of recognizing the uncertainties involved, although a limited one. We have argued extensively elsewhere against the existing measures of global income poverty, and also made a case for an international project to develop credible alternative measures based on the cost of achieving income-dependent human capabilities. Therefore, we shall not make this case again here.[6]

**4. Poverty Projections to 2030**

What is the likely evolution of poverty to 2030? We draw on the survey data of the Global Consumption and Income Project (GCIP) (see Lahoti et al. 2016) and consider alternative poverty lines and growth scenarios. Using the data of the GCIP, we were able roughly to replicate the poverty estimates of the World Bank for the SDG initial year (2015), and prior years, although with small discrepancies in estimates

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[6] In addition to the readings cited elsewhere in this paper, see also the debate of the author with World Bank economist Francisco Ferreira on the credibility of its existing global poverty estimates, conducted in early 2019: https://www.worldbank.org/en/news/video/2019/03/05/smackdown-debate-how-credible-are-the-world-banks-global-poverty-estimates-how-can-they-be-improved (accessed on 10 February 2020).

for individual regions and countries.[7] In the baseline scenario we considered, we employed projected real income growth rates for individual countries from an available source (the U.S. Department of Agriculture International Macroeconomic Data Set[8]) which provides publicly available forecasts to 2030, unlike other prominent forecasting sources (notably the IMF World Economic Outlook Database[9]). We considered both USDA estimates from immediately before the pandemic (January 2020) and more recent ones (January 2021) revised as a result of the pandemic in order to gauge the effect of COVID-19 on global poverty projections.[10]

These are summarized by region and for the world in Table 1. It may be observed that growth projections for the decade fell for all regions as a result of the pandemic, with the world as a whole expected to have annual per capita growth rates that are almost half a percentage point lower than previously expected. In South Asia, the Middle East and North Africa, and Latin America and the Caribbean, more than one percentage point of annual per capita growth is expected to be lost.

**Table 1.** USDA projected compound annual per capita income growth rate between 2020 and 2030.

| Region | January 2021 USDA Projections | January 2020 USDA Projections |
|---|---|---|
| East Asia and the Pacific | 3.40 | 3.53 |
| Latin America and the Caribbean | 0.86 | 2.05 |
| Middle East and North Africa | 0.65 | 1.84 |
| South Asia | 3.44 | 5.33 |
| Sub-Saharan Africa | 0.39 | 1.33 |
| World | 1.48 | 1.89 |

In the analyses we report on below, we also consider 'low' and high' forecasts, which are based on greater and lesser per capita real income growth rates than those projected by the USDA (one percentage point higher or lower than the baseline growth rate, respectively). Projections can vary greatly depending on the source and

[7] This reflects the presence of some differences between the sources and underlying assumptions of the two databases.
[8] See https://www.ers.usda.gov/data-products/international-macroeconomic-data-set/ (accessed on 25 January 2020).
[9] See https://www.imf.org/external/pubs/ft/weo/2019/02/weodata/index.aspx (accessed on 25 January 2020).
[10] These were downloaded in January 2020 and in March 2021, respectively.

its assumptions, and this gives reason to consider different possibilities. For instance, the USDA estimates of growth rates in sub-Saharan Africa are considerably lower than those of the IMF—a difference which is potentially consequential, due to the presence of high poverty rates in the region. The IMF projected (prior to the onset of the pandemic) an average annual per capita income growth rate through 2024 of 3.89% per annum, whereas the USDA estimate through 2030 was 1.33% per annum.

Population projections were drawn from the same source and used to calculate expected per capita real income growth rates. These alternative growth rates were used to project the initial year per capita real consumption levels for percentiles of national populations, and to arrive at estimated future levels for these same percentiles. Regional consumption levels at each percentile were determined by aggregating national information using the methods described by Lahoti et al. (2016). These were then compared to the real ($ 2011 PPP) poverty line used (also expressed in terms of real per capita consumption levels) to estimate alternative poverty headcounts and headcount ratios for individual countries, major regions, and for the world as a whole.

The poverty lines chosen were (all in$ 2011 PPP) $ 1.90, $ 2.52, $ 3.10 and $ 5.04. The first of these is the "absolute" poverty line, which has been claimed by the World Bank to be equivalent to its previous $ 1.25 (2005 PPP) IPL (accepted as an SDG indicator by the United Nations). The $ 3.10 line is the higher poverty line applied by the World Bank (for reasons that are unclear, because limited conceptual justification has been offered for it). The $ 5.04 line is that which was deemed necessary for meeting basic nutritional requirements in the United States in 2011, according to the Thrifty Food Plan of the USDA (see the discussion in Reddy and Lahoti (2016) of why this should, in principle, provide some guidance as to the minimum cost of basic human requirements elsewhere too, if the PPPs used are taken at face value as preserving purchasing power over relevant commodities). The $ 2.52 line is half of this basic nutritional standard for the United States, providing a more stringent alternative. In neither case is any allowance made for non-nutritional capabilities.

The current poverty headcount ratios in 2020 in each world region for the various poverty lines used are shown in Table 2.

The baseline pre-pandemic forecast generated the same estimate of the $ 1.90 2011 PPP global poverty headcount ratio for 2030 as United Nations (2019b), namely, six percent (compared to eleven percent in 2020), as can be seen in Table 3(a). The projected 2030 poverty headcount ratio in sub-Saharan Africa is 36%, considerably greater than that for any other world region. The projected 2030 headcount ratio was expected to be between zero and three percent in every other region. Adopting more

favorable assumptions leads to lower poverty headcount ratios. Growth rates that are two percent higher (closer to IMF estimates) lead to the projected headcount ratio for sub-Saharan Africa being lowered to 27%, and the world headcount ratio falling by one percentage point, to 5%.

**Table 2.** Poverty headcount ratios (%) for different poverty lines for 2020. Source: own estimates based on Global Consumption and Income Project data.

| | Poverty Headcount Ratio (%) for Different Poverty Lines ($ 2011 PPP) | | | |
|---|---|---|---|---|
| Region | $ 1.90 | $ 2.52 | $ 3.10 | $ 5.04 |
| East Asia and the Pacific | 1 | 7 | 13 | 30 |
| Latin America and the Caribbean | 5 | 11 | 17 | 38 |
| Middle East and North Africa | 4 | 9 | 15 | 34 |
| South Asia | 14 | 30 | 44 | 75 |
| Sub-Saharan Africa | 47 | 61 | 70 | 86 |
| World | 11 | 20 | 27 | 45 |

**Table 3.** (**a**) Poverty headcount ratio estimates (%) for $ 1.90 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount ratio estimates (%) for $ 1.90 IPL in 2030 using post-COVID-19 growth estimates. Source: own estimates based on Global Consumption and Income Project data.

| (a) | | | | | |
|---|---|---|---|---|---|
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 0 | 0 | 1 | 0 | 1 |
| Latin America and the Caribbean | 2 | 1 | 2 | 1 | 3 |
| Middle East and North Africa | 1 | 1 | 2 | 1 | 3 |
| South Asia | 0 | 0 | 0 | 0 | 0 |
| Sub-Saharan Africa | 36 | 31 | 41 | 27 | 46 |
| World | 6 | 5 | 7 | 5 | 8 |

**Table 3.** *Cont.*

| (b) | | | | | |
|---|---|---|---|---|---|
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate +1% | Baseline Growth Estimate −1% | Baseline Growth Estimate +2% | Baseline Growth Estimate −2% |
| East Asia and the Pacific | 0 | 0 | 1 | 0 | 1 |
| Latin America and the Caribbean | 3 | 2 | 4 | 1 | 6 |
| Middle East and North Africa | 3 | 2 | 3 | 1 | 5 |
| South Asia | 1 | 0 | 2 | 0 | 5 |
| Sub-Saharan Africa | 42 | 37 | 47 | 32 | 53 |
| World | 8 | 7 | 9 | 6 | 11 |

As shown in Table 3(b), for the baseline scenario and the $ 1.90 poverty line, the lower growth estimates as a result of the pandemic lead to a higher expected 2030 level of the poverty headcount ratio in sub-Saharan Africa (42%; six percentage points higher than under the pre-pandemic scenario) and in all regions other than East Asia. The expected 2030 world poverty headcount ratio is raised by two percentage points, or one-third of the pre-pandemic projection, to 8% of the global population. The expected world poverty headcount ratio is also raised in all other scenarios. In the most unfavorable case corresponding to growth rates two percentage points lower than in the baseline estimate, it rises a full three percentage points (to 11% of the global population), with the majority of the population in sub-Saharan Africa (53%) expected to remain in poverty even in 2030.

As can be seen from Table 4(a), under the baseline pre-pandemic growth estimate, the total number of poor persons expected to remain worldwide in 2030 is 515 million people, with the total varying between 385 million and 696 million depending on the growth scenario. The vast majority of these are projected to be in sub-Saharan Africa under all of the scenarios. As shown in Table 4(b), the revised growth estimates as a result of the pandemic lead to much higher estimates of the number of poor, ranging from 470 million to 954 million, with 659 million projected in the baseline scenario.

**Table 4.** (**a**) Poverty headcount estimates for $ 1.90 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount estimates for $ 1.90 IPL in 2030 using post-COVID-19 growth estimates.

| **(a)** | | | | | |
|---|---|---|---|---|---|
| | Number of Poor (in millions) | | | | |
| | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 0.00 | 0.00 | 23.70 | 0.00 | 23.70 |
| Latin America and the Caribbean | 13.90 | 6.97 | 13.90 | 6.97 | 20.90 |
| Middle East and North Africa | 6.14 | 6.14 | 12.30 | 6.14 | 18.40 |
| South Asia | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sub-Saharan Africa | 495.00 | 427.00 | 564.00 | 371.00 | 633.00 |
| World | 515.00 | 440.00 | 614.00 | 385.00 | 696.00 |
| **(b)** | | | | | |
| | Number of Poor (in millions) | | | | |
| | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 0 | 0 | 23.76 | 0 | 23.76 |
| Latin America and the Caribbean | 20.83 | 13.88 | 27.77 | 6.94 | 41.65 |
| Middle East and North Africa | 18.35 | 12.24 | 18.35 | 6.12 | 30.59 |
| South Asia | 20.22 | 0 | 40.43 | 0 | 101.08 |
| Sub-Saharan Africa | 599.85 | 528.44 | 671.27 | 457.03 | 756.96 |
| World | 659.25 | 554.56 | 781.57 | 470.09 | 954.03 |

We also considered alternative poverty lines, recognizing that the $ 1.90 2011 PPP IPL may be inadequate for specific countries and regions, or globally. For each of these, we once again considered alternative global growth scenarios (the baseline aggregate GDP growth scenario plus or minus one or two percentage points per annum). The estimated poverty headcount ratios and headcounts for regions and for the world are reported for distinct poverty lines and, in each case, for pre- and post-pandemic growth estimates, in Tables 3–10.

The pattern that the majority of the poor remaining in 2030 are expected to be in sub-Saharan Africa does not change when the distinct growth scenarios are applied uniformly across regions (although the specific proportions do, with South Asia becoming a major contributor to the poverty total at the higher poverty lines and under the more unfavorable global growth scenarios. For the pre-pandemic growth estimates, even if the most favorable growth scenario for sub-Saharan Africa (baseline plus two percentage points) is compared with the most unfavorable growth scenario for South Asia (baseline minus two percentage points) and the highest poverty line is considered ($ 5.04 2011 PPP; see Table 10a), a greater number of poor are expected to be in sub-Saharan Africa (977 million) as compared to South Asia (913 million). The number of poor people in the world in this scenario, even if the other world regions experience strong growth, is more than two billion persons. Considering the various "pure" scenarios, including the baseline and those which raise or lower growth rates uniformly across all regions, leads to the conclusion that at least 2.7 billion people will remain in poverty in all of these scenarios. Even if we consider the lower $ 2.52 2011 PPP and $ 3.10 2011 PPP poverty lines, we find that, in all scenarios, at least half a billion people will remain in poverty in 2030. These are hardly circumstances in which poverty will have been 'eliminated'. Considering the less optimistic post-pandemic growth estimates only accentuates this conclusion.

**Table 5.** (**a**) Poverty headcount ratio estimates for $ 2.52 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount ratio estimates for $ 2.52 IPL in 2030 using post-COVID-19 growth estimates. Source: own estimates based on Global Consumption and Income Project data.

| (a) | | | | | |
|---|---|---|---|---|---|
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 1 | 1 | 1 | 0 | 3 |
| Latin America and the Caribbean | 4 | 3 | 6 | 2 | 8 |
| Middle East and North Africa | 3 | 2 | 4 | 2 | 6 |
| South Asia | 1 | 0 | 3 | 0 | 6 |
| Sub-Saharan Africa | 50 | 45 | 55 | 39 | 60 |
| World | 9 | 8 | 11 | 7 | 13 |
| **(b)** | | | | | |
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 1 | 1 | 1 | 0 | 3 |
| Latin America and the Caribbean | 7 | 5 | 9 | 4 | 12 |
| Middle East and North Africa | 6 | 4 | 8 | 3 | 11 |
| South Asia | 7 | 3 | 12 | 1 | 17 |
| Sub-Saharan Africa | 56 | 51 | 61 | 45 | 66 |
| World | 13 | 10 | 15 | 9 | 18 |

**Table 6.** (**a**) Poverty headcount estimates for $ 2.52 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount estimates for $ 2.52 IPL in 2030 using post-COVID-19 growth estimates. Source: own estimates based on Global Consumption and Income Project data.

| **(a)** | | | | | |
|---|---|---|---|---|---|
| | Number of Poor (in millions) | | | | |
| | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 23.70 | 23.70 | 23.70 | 0.00 | 71.20 |
| Latin America and the Caribbean | 27.90 | 20.90 | 41.80 | 13.90 | 55.80 |
| Middle East and North Africa | 18.40 | 12.30 | 24.60 | 12.30 | 36.90 |
| South Asia | 19.80 | 0.00 | 59.50 | 0.00 | 119.00 |
| Sub-Saharan Africa | 688.00 | 619.00 | 757.00 | 537.00 | 826.00 |
| World | 778.00 | 676.00 | 906.00 | 563.00 | 1110.00 |
| **(b)** | | | | | |
| | Number of Poor (in millions) | | | | |
| | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 23.76 | 23.76 | 23.76 | 0 | 71.27 |
| Latin America and the Caribbean | 48.59 | 34.71 | 62.48 | 27.77 | 83.30 |
| Middle East and North Africa | 36.70 | 24.47 | 48.94 | 18.35 | 67.29 |
| South Asia | 141.51 | 60.65 | 242.59 | 20.22 | 343.66 |
| Sub-Saharan Africa | 799.81 | 728.39 | 871.22 | 642.70 | 942.63 |
| World | 1050.37 | 871.98 | 1,248.98 | 709.04 | 1508.16 |

**Table 7.** (**a**) Poverty headcount ratio estimates for $ 3.10 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount ratio estimates for $ 3.10 IPL in 2030 using post-COVID-19 growth estimates. Source: own estimates based on Global Consumption and Income Project data.

| **(a)** | | | | | |
|---|---|---|---|---|---|
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 3 | 1 | 05 | 1 | 08 |
| Latin America and the Caribbean | 7 | 5 | 10 | 4 | 13 |
| Middle East and North Africa | 6 | 4 | 8 | 3 | 10 |
| South Asia | 6 | 2 | 10 | 1 | 15 |
| Sub-Saharan Africa | 59 | 54 | 65 | 49 | 69 |
| World | 13 | 10 | 16 | 9 | 19 |
| **(b)** | | | | | |
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 3 | 1 | 5 | 1 | 8 |
| Latin America and the Caribbean | 11 | 9 | 14 | 7 | 18 |
| Middle East and North Africa | 10 | 8 | 13 | 6 | 16 |
| South Asia | 16 | 11 | 22 | 7 | 29 |
| Sub-Saharan Africa | 65 | 60 | 70 | 55 | 74 |
| World | 18 | 15 | 21 | 12 | 25 |

**Table 8.** (**a**) Poverty headcount estimates for $ 3.10 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount estimates for $ 3.10 IPL in 2030 using post-COVID-19 growth estimates. Source: own estimates based on Global Consumption and Income Project data.

| **(a)** | | | | | |
|---|---|---|---|---|---|
| | Number of Poor (in millions) | | | | |
| | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 71.20 | 23.70 | 119.00 | 23.70 | 190.00 |
| Latin America and the Caribbean | 48.80 | 34.90 | 69.70 | 27.90 | 90.60 |
| Middle East and North Africa | 36.90 | 24.60 | 49.20 | 18.40 | 61.40 |
| South Asia | 119.00 | 39.70 | 198.00 | 19.80 | 298.00 |
| Sub-Saharan Africa | 812.00 | 743.00 | 894.00 | 674.00 | 949.00 |
| World | 1090.00 | 866.00 | 1330.00 | 764.00 | 1590.00 |
| **(b)** | | | | | |
| | Number of Poor (in millions) | | | | |
| | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 71.27 | 23.76 | 118.79 | 23.76 | 190.06 |
| Latin America and the Caribbean | 76.36 | 62.48 | 97.19 | 48.59 | 124.96 |
| Middle East and North Africa | 61.17 | 48.94 | 79.53 | 36.70 | 97.88 |
| South Asia | 323.45 | 222.37 | 444.74 | 141.51 | 586.25 |
| Sub-Saharan Africa | 928.35 | 856.93 | 999.76 | 785.52 | 1056.89 |
| World | 1460.60 | 1214.48 | 1740.00 | 1036.09 | 2056.03 |

**Table 9.** (**a**) Poverty headcount ratio estimates for $ 5.04 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount ratio estimates for $ 5.04 IPL in 2030 using post-COVID-19 growth estimates. Source: own estimates based on Global Consumption and Income Project data.

| **(a)** | | | | | |
|---|---|---|---|---|---|
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 16 | 13 | 20 | 10 | 24 |
| Latin America and the Caribbean | 22 | 18 | 26 | 14 | 31 |
| Middle East and North Africa | 18 | 14 | 22 | 11 | 26 |
| South Asia | 31 | 25 | 38 | 19 | 46 |
| Sub-Saharan Africa | 79 | 75 | 83 | 71 | 85 |
| World | 28 | 25 | 32 | 21 | 37 |
| **(b)** | | | | | |
| | Poverty Proportion (%) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 16 | 13 | 20 | 10 | 24 |
| Latin America and the Caribbean | 29 | 24 | 34 | 20 | 39 |
| Middle East and North Africa | 27 | 22 | 32 | 18 | 37 |
| South Asia | 47 | 40 | 55 | 33 | 62 |
| Sub-Saharan Africa | 83 | 80 | 86 | 76 | 88 |
| World | 35 | 31 | 39 | 27 | 43 |

**Table 10.** (**a**) Poverty headcount estimates for $ 5.04 IPL in 2030 using pre-COVID-19 growth estimates; (**b**) poverty headcount estimates for $ 5.04 IPL in 2030 using post-COVID-19 growth estimates. Source: own estimates based on Global Consumption and Income Project data.

| (a) | | | | | |
|---|---|---|---|---|---|
| | Number of Poor (in millions) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 380.00 | 308.00 | 475.00 | 237.00 | 569.00 |
| Latin America and the Caribbean | 153.00 | 125.00 | 181.00 | 97.60 | 216.00 |
| Middle East and North Africa | 111.00 | 86.00 | 135.00 | 67.60 | 160.00 |
| South Asia | 615.00 | 496.00 | 754.00 | 377.00 | 913.00 |
| Sub-Saharan Africa | 1090.00 | 1030.00 | 1140.00 | 977.00 | 1170.00 |
| World | 2350.00 | 2050.00 | 2690.00 | 1760.00 | 3030.00 |
| **(b)** | | | | | |
| | Number of Poor (in millions) | | | | |
| Region | Baseline Growth Estimate | Baseline Growth Estimate + 1% | Baseline Growth Estimate − 1% | Baseline Growth Estimate + 2% | Baseline Growth Estimate − 2% |
| East Asia and the Pacific | 380.12 | 308.85 | 475.16 | 237.58 | 570.19 |
| Latin America and the Caribbean | 201.32 | 166.61 | 236.03 | 138.84 | 270.74 |
| Middle East and North Africa | 165.17 | 134.58 | 195.76 | 110.11 | 226.34 |
| South Asia | 950.13 | 808.62 | 1111.85 | 667.11 | 1253.36 |
| Sub-Saharan Africa | 1185.43 | 1142.58 | 1228.27 | 1085.45 | 1256.84 |
| World | 2882.16 | 2561.24 | 3247.06 | 2239.09 | 3577.46 |

The alternative growth scenarios considered in the tables involve the application of the "same" poverty line in different world regions. However, there is a question as to whether or not the poverty lines involved are in fact the same in a meaningful sense, as a result of deficiencies in current PPPs as constant price indices for the cost of poverty avoidance. In the presence of these problems, poverty lines which, for different world regions or countries, capture the cost of poverty avoidance in terms of purchasing power over commodities necessary to avoid poverty locally according to a common criterion may correspond to *different* nominal PPP dollar amounts. It cannot be known what these discrepancies are without full-fledged studies leading to the construction of suitable country-specific poverty lines reflecting a common understanding of what poverty avoidance demands. The $ 1.90 2011 PPP poverty line is highly conservative for developed countries (such as the 'base country' for PPP price indices, the United States, where it is clearly inadequate to avoid poverty even according to absolutist standards such as those offered by the Thrifty Food Plan). There is therefore reason to think that more realistic poverty lines, when expressed in 2011 PPP dollars, would be higher for at least some countries. It is likely that more realistic poverty lines would be attained through adjustments that vary across countries and regions. Any appearance that different poverty lines (in $ 2011 PPP units) are being applied in different regions as a result of such modifications would be only an optical illusion, reflecting the need to correct for systematic mismeasurement of the PPPs being used at present, when applied to poverty lines, in order to ensure that they correctly measure the same thing everywhere.

**5. Poverty Reducing the Impact of Economic Growth, and Implications**

Where is the poverty-reducing impact of economic growth the greatest? The relationship between a change in the growth rate and the incremental reduction in poverty in each world region at each poverty line defines a "semi-elasticity". We report in Table 11 the impact of the growth rate being one percentage point less (baseline minus one) or one percentage point more (baseline plus one) at different poverty lines, and for different world regions. It can be seen that the impact of a one percentage point increase or decrease in the growth rate (from the baseline level) is greatest in terms of both headcount ratio and headcount in sub-Saharan Africa, at lower poverty lines. This changes, however, as the poverty line is raised, with South Asia becoming the world region where a change in the growth rate has the largest impact on both the headcount ratio and the total headcount of poverty. At the highest poverty line studied, a one percentage point change makes a difference in the headcount of 142 million in South Asia compared to 43 million in sub-Saharan Africa

(for post-pandemic growth estimates). Growth is poverty-reducing everywhere. A one percentage point increase in global growth makes a difference of between 105 and 321 million poor worldwide, depending on the poverty line chosen, for post-pandemic growth estimates. Growth benefitting sub-Saharan Africa and South Asia has a greater impact. The region where the impact is greatest depends on the poverty line.

At higher poverty lines, additional growth has a sizable impact on poverty in all regions, with its impact on poverty in East Asia rising considerably. At the highest poverty line, the impact of additional growth on the number of poor in East Asia surpasses that on the number of poor in sub-Saharan Africa (although the impact is less than in South Asia). These conclusions qualify the widespread presumption that addressing the problem of absolute poverty worldwide requires a singular focus on sub-Saharan Africa. Especially at higher poverty lines, income poverty is a global problem, and sustaining growth throughout the developing world is important for its reduction.

**Table 11.** (**a**) Headcount semi-elasticities of growth based on pre-COVID-19 growth estimates for different poverty lines (2011 PPP); (**b**) headcount semi-elasticities of growth based on post-COVID-19 growth estimates for different poverty lines (2011 PPP). Source: own estimates based on Global Consumption and Income Project data.

| (a) | | | | |
|---|---|---|---|---|
| **$ 1.90** | | | | |
| | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | 0 | 1 | 0.00 | 23.70 |
| Latin America and the Caribbean | −1 | 0 | −6.93 | 0.00 |
| Middle East and North Africa | 0 | 1 | 0.00 | 6.16 |
| South Asia | 0 | 0 | 0.00 | 0.00 |
| Sub-Saharan Africa | −5 | 5 | −68.00 | 69.00 |
| World | −1 | 1 | −75.00 | 99.00 |

**Table 11.** *Cont.*

| **$ 2.52** | | | | |
|---|---|---|---|---|
| | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | 0 | 0 | 0.00 | 0.00 |
| Latin America and the Caribbean | −1 | 2 | −7.00 | 13.90 |
| Middle East and North Africa | −1 | 1 | −6.10 | 6.20 |
| South Asia | −1 | 2 | −19.80 | 39.70 |
| Sub-Saharan Africa | −5 | 5 | −69.00 | 69.00 |
| World | −1 | 2 | −102.00 | 128.00 |
| **$ 3.10** | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | −2 | 2 | −47.50 | 47.80 |
| Latin America and the Caribbean | −2 | 3 | −13.90 | 20.90 |
| Middle East and North Africa | −2 | 2 | −12.30 | 12.30 |
| South Asia | −4 | 4 | −79.30 | 79.00 |
| Sub-Saharan Africa | −5 | 6 | −69.00 | 82.00 |
| World | −3 | 3 | −224.00 | 240.00 |
| **$ 5.04** | | | | |
| | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | −3 | 4 | −72.00 | 95.00 |
| Latin America and the Caribbean | −4 | 4 | −28.00 | 28.00 |

**Table 11.** *Cont.*

| | | | | |
|---|---|---|---|---|
| Middle East and North Africa | −4 | 4 | −25.00 | 24.00 |
| South Asia | −6 | 7 | −119.00 | 139.00 |
| Sub-Saharan Africa | −4 | 4 | −60.00 | 50.00 |
| World | −4 | 4 | −300.00 | 340.00 |
| **(b)** | | | | |
| **$ 1.90** | | | | |
| | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | 0 | 1 | 0 | 23.76 |
| Latin America and the Caribbean | −1 | 1 | −6.94 | 6.94 |
| Middle East and North Africa | −1 | 0 | −6.12 | 0 |
| South Asia | −1 | 1 | −20.22 | 20.22 |
| Sub-Saharan Africa | −5 | 5 | −71.41 | 71.41 |
| World | −1 | 1 | −104.69 | 122.33 |
| **$ 2.52** | | | | |
| | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | 0 | 0 | 0 | 0 |
| Latin America and the Caribbean | −2 | 2 | −13.88 | 13.88 |
| Middle East and North Africa | −2 | 2 | −12.24 | 12.24 |
| South Asia | −4 | 5 | −80.86 | 101.08 |
| Sub-Saharan Africa | −5 | 5 | −71.41 | 71.41 |
| World | −2 | 2 | −178.39 | 198.61 |

**Table 11.** *Cont.*

| **$ 3.10** | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
|---|---|---|---|---|
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | −2 | 2 | −47.52 | 47.52 |
| Latin America and the Caribbean | −2 | 3 | −13.88 | 20.83 |
| Middle East and North Africa | −2 | 3 | −12.24 | 18.35 |
| South Asia | −5 | 6 | −101.08 | 121.29 |
| Sub-Saharan Africa | −5 | 5 | −71.41 | 71.41 |
| World | −3 | 3 | −246.12 | 279.40 |
| **$ 5.04** | | | | |
| | Poverty Headcount Ratio (%) | | Number of Poor (in millions) | |
| Region | Baseline + 1% | Baseline − 1% | Baseline + 1% | Baseline − 1% |
| East Asia and the Pacific | −3 | 4 | −71.27 | 95.03 |
| Latin America and the Caribbean | −5 | 5 | −34.71 | 34.71 |
| Middle East and North Africa | −5 | 5 | −30.59 | 30.59 |
| South Asia | −7 | 8 | −141.51 | 161.72 |
| Sub-Saharan Africa | −3 | 3 | −42.85 | 42.85 |
| World | −4 | 4 | −320.93 | 364.90 |

## 6. Conclusions

Sustained economic growth in developing countries—especially the poorest—is required for global income poverty reduction. The likelihood of achieving the first Sustainable Development Goal of "ending poverty" has diminished, as a result of the economic setbacks experienced in the wake of COVID-19. Our picture of the likely extent of worldwide progress by 2030, and of where remaining poverty is likely to be concentrated, are both greatly dependent on specific assumptions, such as the

poverty line used. Even in the most favorable scenarios, the world will reduce but not "end" poverty. Under less favorable ones, mass poverty is likely to remain a significant concern.

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# SDG 1: The Last 3%

**Martin Ravallion**

## 1. Introduction

At the time of writing (in mid-2020), COVID-19 is wreaking havoc on the lives and livelihoods of people across the globe. This paper asks whether a return to "business-as-usual," post-COVID-19 will suffice to put the world on track in its efforts to reduce poverty.

The most widely used measure of global poverty is the proportion of people living below the World Bank's $1.90 a day line ($1.25 in 2005 ICP prices). The Bank's stated goal is to bring this poverty rate to 3% by 2030 (Ravallion 2013; World Bank 2015). In the subsequent process of formulating the UN's Sustainable Development Goals, the first of those goals (SDG 1) was deemed to be the "eradication" of extreme poverty by 2030, as judged by the Bank's international line.

Some observers have argued that the $1.90 line is too low. Another (related) concern is that we should allow for relative poverty. There are also other important factors missing from these measures, such as intra-household inequality and access to non-market goods and services. While acknowledging these points, surely nobody would doubt the attraction of finally living in a world in which nobody is as poor as the 40% of the world's population that lived below $1.90 a day 40 years ago. This would be undeniable progress even if it falls short of attaining other valued goals.

The paper focuses on the challenge of reaching the last 3% living below $1.90 a day. Some calculations are optimistic about our prospects of reducing the share of the world's population living below $1.90 a day to 3% or lower by 2030. Putting aside the shocks of the Global Financial Crisis and the COVID-19 pandemic, the new millennium has seen an appreciably higher rate of aggregate economic growth in the developing world. As Ravallion (2013) observed, if all income levels in the developing world as a whole were to grow (on average) at this new rate—leaving overall relative inequality unchanged—then the Bank's 3% target for the poverty rate would be reached by 2030.

That is consistent with a simple projection of the time series data for global poverty, which even suggests that (prior to the pandemic) we were on track to attaining the UN's more ambitious SDG 1. Figure 1 plots the latest available time series, for both the world as a whole and for developing countries (the world less the

high-income countries). The annual rate of decline in the poverty rate for the world is almost exactly 1.0% points per year (the regression coefficient of the poverty rate, as a %, on time in years is 0.96 with a standard error of 0.04).[1] Projecting forward linearly, the global poverty rate reaches zero in 2026, with a 95% confidence interval of (2024, 2028).

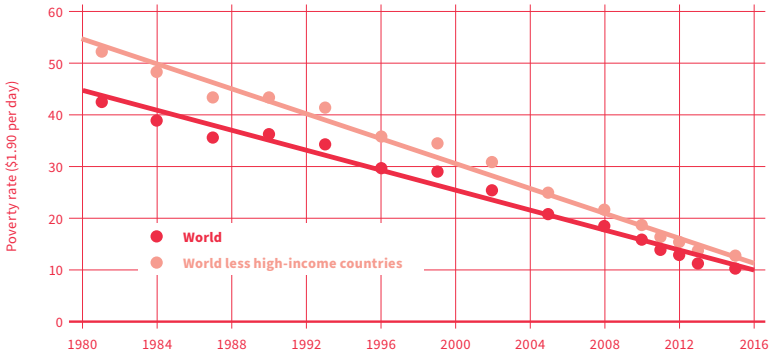


**Figure 1.** Global poverty rate, 1981–2016. Source: *PovcalNet*.

The 2020 pandemic has clearly increased global poverty rates, though how much is likely to depend heavily on the impacts on inequality. One careful estimate, based on the World Bank's mid-2020 growth projections for developing countries, suggests that an extra 60 million people in 2020 are living below the Bank's $1.90 line due to the pandemic (Lakner et al. 2020).[2] These calculations assume that the "COVID-contraction" is distribution-neutral. However, inequality could rise within many countries, given that poorer households are less able to maintain their earnings and consumption during the pandemic. As Lakner et al. (2020) also point out, even a seemingly modest increase in inequality within developing countries could push the COVID impact on poverty by 50% or more. Of course, this also comes with an even more worrying health-risk to poor people from this life-threatening disease.[3] Here, the focus is on the implications for income poverty.

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1 Here and elsewhere, the standard error only reflects the inter-temporal variability in the series of poverty measures, and not the sampling variability in those measures. Note, however, that the sample sizes are quite large (well over one million households sampled in recent years).

2 Downward revisions to the growth forecasts by the IMF can roughly double this estimate (Yonzan et al. 2020).

3 See, for example, the results of Brown et al. (2020) indicating that the vast majority of the developing world's poor will have little realistic hope of protecting themselves well from the virus.

Consider the lower estimate by Lakner et al. of an extra 60 million people living below $1.90 a day (which adds 0.8% points to the global poverty rate for $1.90 a day). Let us assume that this lasts for two years and that we return to the prior rate of decline of 1% point per year after that time. Then, the expected value of the global poverty rate would reach zero in 2029 (with a 95% confidence interval of 2026, 2032).[4] A less optimistic scenario would use the 90 million and assume that this lasts for three years; even then, the SDG is expected to be attained in 2030 (with a confidence interval of 2028, 2032). An even less optimistic case would entail an extra 120 million people living below $1.90 a day and a crisis lasting four years; then, the expected value of the $1.90 poverty rate reaches zero in 2032 (with confidence interval 2029, 2035). Thus, while there will be a substantial impact on poverty, one might be optimistic about the scope for a post-COVID "business as usual" strategy to attain the Bank's 3% goal and even the more ambitious SDG 1.

However, these calculations may well be deceptive. Even prior to the pandemic, a serious concern was emerging, given the signs of both a slowdown in rates of economic growth in the developing world and rising income inequality in many countries. There is a sign of a slowdown in the last year of Figure 1 (2015), with the rate of global poverty reduction falling to −0.61% points per year.[5] Of course, this is only one year, and slowdowns have happened before (2008, 1999, 1993, 1990), but they did not last.[6] Projections for growth and distributional changes over the coming decade have also suggested a slowdown in the pace of poverty reduction.[7] Even prior to the pandemic, the IMF's growth forecasts were being revised downward, implying slower progress for the poor, although Laborde and Martin (2018) argue that this effect is unlikely to be large. Of course, growth rates go through cycles, and a slow period need not last.

Another concern, that will persist post-COVID, is that the poorest few percent may be harder to reach with current development policies. In other words, the past

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4 Given that this calculation assumes that the pre-crisis annual rate of change is restored at the end of the two years, the revised data for reaching a zero poverty rate in expectation are obtained by simply shifting up the intercept by the amount of the increment to the poverty rate attributed to the crisis plus the 1% per years loss of poverty reduction over the two years.

5 The decline is −0.73% for the developing world as a whole. This global slowdown in the pace of poverty reduction is noted by World Bank (2018).

6 For the purpose of this calculation, I defined a "slowdown" as a rate of poverty reduction that is more than three standard errors below the trend rate over the period as a whole.

7 See, for example, World Bank (2015); Bluhm et al. (2018) and Lakner et al. (2020).

trend rate of decline will not be maintained. A number of possible reasons for this can be identified:[8]

- It is well known that there is transient poverty—people flow in and out of poverty in any time period, reflecting the imperfections of risk markets and the institutions (including governmental) for social protection. Insisting on "eradicating" poverty may then be a much harder goal than 3%;
- The crisis may have a lasting effect beyond the end of the pandemic, due to lower investments by poor families (including in their children's education) during the pandemic. School closures alone point to this possibility;
- Some of the poorest live in remote places with characteristics, such as poor infrastructure and/or natural conditions, that lower the productivity of their labor and capital. Thus, they may be caught in geographic poverty traps, whereby a poor location has a causal role in retarding the prospects of escaping poverty. The crisis may well have made escaping poverty even harder post-crisis;
- There may be social, political and/or economic constraints facing the poorest, associated with their identity and the discrimination they face in specific social contexts. Standard policies that work well for the majority may fail for these groups. Relatedly, refugees, undocumented migrants and stateless people may be harder to reach, and are probably both poorer than average and undercounted in our survey data used to monitor poverty;[9]
- The poorest may be caught in low-level attractors—a "dynamic poverty trap"—such that large idiosyncratic gains are needed to get onto a sustainable path out of poverty. Small gains will not succeed in assuring sustained poverty reduction. The crisis may well leave many households who were not poor previously in a dynamic poverty trap;
- Exposure to theft and violence associated with weak legal enforcement and other deficiencies in state capacity may create extra hurdles to escaping poverty, with reduced efficacy of standard policy packages for reaching the poorest.

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[8] There is literature on each of these arguments. On geographic poverty traps, see Jalan and Ravallion (2002). On poverty traps associated with income dynamics and group memberships, see the collection of papers in Bowles, Durlauf and Hoff (Bowles et al. 2006). On the prospect for a poor-institutions trap, see Ravallion (2016b, chp. 9).

[9] Indeed, when a poor person migrates but stays poor, and is not counted in the survey data for the destination, the measured global poverty count falls even though the true value is unchanged.

If any of these arguments are correct, then our progress in reducing numbers of poor may not come with much progress in reaching the poorest globally, even when a country reaches the last 3%. We can call this the "poorest left behind hypothesis".

Where might we look for evidence for or against this hypothesis? The present paper looks to the past performance of developing countries. There could be no surprise if countries that have not done well against poverty also had a harder time reaching their poorest. (For example, a number of observers have pointed to the challenges facing many countries in Sub-Saharan Africa in attaining SDG 1.[10]) The more interesting place to look is the set of countries that have made substantial progress against poverty. How well have they done in reaching the last few percent? Is attaining SDG 1 largely a matter of assuring that the countries that are not doing so well start to do as well as the relatively good performers?

An interesting example is Malaysia—one of the most successful countries in reducing poverty (Ravallion 2020). Based on *PovcalNet*, Malaysia's "$1.90 a day" poverty rate reached 3% (strictly 2.9%) in 1984. However, 32 years later, it was still not quite zero (0.1%). The last 3% took more than three decades! Possibly, the world's last 3% could take a similar time, even if other developing countries were as successful as Malaysia has been in reducing poverty.

Motivated by the example of Malaysia, the paper examines the records of countries that have been successful in getting their "$1.90 a day" poverty rate down to 3% or lower. One region of the developing world stands out in this respect, namely East Asia, where the poverty rate (by this measure) fell below 3% in 2015, having been around 40% at the turn of the Millennium, and over 80% around 1980.[11] There have also been some specific countries across the world that have been successful in this respect. The paper studies the record of the 18 developing countries across the world that have been successful in reducing the World Bank's $1.90 a day poverty rate from over 10% (the current global mean) to under 3%. The aim here is to see if there is any sign of a slowdown in progress against poverty once the last 3% is reached.

Two measures are used. The first is the familiar headcount index—the share of people living in households with consumption or income per person below $1.90 a day. The second is a measure of the "floor" to living standards, defined as a weighted mean of consumption or income below a threshold no less than $1.90 a day, with the

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[10] See Ravallion (2013); World Bank (2015, 2016); Bluhm et al. (2018) and Laborde and Martin (2018).

[11] Note that the $1.90 a day poverty rate in 2015 is also below 3% for Eastern Europe and Central Asia. However, the rate has been below 10% for all prior years in the *PovcalNet* series (though survey coverage is weak prior to 1990).

highest weight on the poorest (Ravallion 2016a). If poverty has been eliminated, then the floor will have reached $1.90 a day.

The paper finds that, for both East Asia as a whole and on average for the 18 countries that have been relatively successful against poverty over the longer-term, there was a slowdown in the pace of progress for the last 3%, even prior to the pandemic. The poverty rate was falling more slowly, and the floor was not rising much, if at all. This suggests that a return to "business as usual"—even by the standards of countries doing well against poverty—will not be sufficient to eliminate this form of extreme poverty post-COVID.

**2. Measures and Data**

The inadequacies of the standard headcount index of poverty are widely recognized in the literature, though less so in monitoring and policy making. An important limitation of the headcount index is its inability to reflect inframarginal changes in living standards among the poor, including the poorest.[12] Even among those deemed to live in "extreme poverty", some are much poorer than others. This has led to greater attention to the "ultra-poor" (a now popular term first coined by Lipton 1988).

Successfully reaching the poorest through economic development implies that the floor of living standards has risen over time (and clearly this can happen without any change in the headcount index). Focusing on the floor is interpretable as a Rawlsian approach to poverty monitoring, distinct from the traditional "counting" approach that focuses on numbers of people (unweighted or with higher weight on poorer people) below the poverty line.

There are limits to how well we could ever hope to measure the floor from standard surveys. The sampling frame is typically those who live in some form of dwelling, so homeless people and those living in institutions (such as worker dormitories or prisons) are under-represented or even excluded, and they could well be concentrated among the poorest stratum. For example, recent rural migrants living in urban dormitories or slums could well be under-represented. There has been progress in the design and analysis of survey designs that can better represent the homeless. However, practice using such methods has lagged.

One candidate for the floor is the empirical lower bound of the consumption levels measured in a survey. One might think of this as the limiting case of the

[12] For a survey of the literature on poverty measures, see Ravallion (2016b, chp. 5).

Foster, Greer and Thorbecke (FGT) (Foster et al. 1984) class of measures, as the FGT inequality-aversion parameter ($\alpha$) goes to infinity. However, this would not be satisfactory since there are almost certainly measurement errors and ignorable transient effects in the survey data. For example, all the members of one sampled household may have been sick during the (often short) recall period used by the survey, and therefore consumed very little in that period. However, one would be loath to say that such a sample point should define the floor. More generally, there are likely to be various transient effects in the data, whereby observed incomes (or consumption expenditures) in a survey fall temporarily below the floor, but recover soon after. We must also recognize the existence of measurement errors in the cross-sectional survey data available for most countries. Given the measurement errors and transient factors, we cannot be certain that the lowest observed consumption or income is, in fact, the floor. There is a non-negligible chance that the observed consumption or income of potentially anyone within some stratum of low observed values could, in fact, be the level of the floor. Some form of averaging is clearly necessary.

Ideally, one would use something like the lower bound of time–mean household consumption or income, measured accurately over a longer period than is typically measured with survey data. If we were to know the true consumption observed over a long enough period in panel data for a large-enough sample, we could reliably estimate the floor directly as this time–mean, loosely interpretable as "permanent income." However, this is not included in the normally available data.

This paper follows the approach to measuring the floor using the cross-sectional data proposed in Ravallion (2016a). That approach does not require panel data, but can be implemented with cross-sectional surveys, while recognizing the uncertainty as to whether the lowest observed consumption or income in such a survey is, in fact, the floor. Following Ravallion (2016a), I postulate that any observed income level within a stratum of poor people has some positive probability of being the floor. These probabilities are not data, but there are some defensible assumptions we can make in lieu of the missing data. While we are uncertain as to whether the lowest observed value is the floor, it is reasonable to assume that this value has the highest probability of being the floor—that our data are sufficiently good to believe that the probability is highest for the person who appears to be the worst off. It also seems reasonable to assume that the probability of being the poorest household declines (or at least does not increase) as the observed measure of income rises. Beyond some level of observed consumption or income—call this threshold level $z$—there is presumably no chance of finding the true floor.

The key parameter ($\alpha$) of this measure is allowed to take two possible values. In the first, the probability declines linearly ($\alpha = 1$) until the observed income reaches $z$, while in the second the probability is equal across all incomes below $z$ (implying that $\alpha = 0$). I do not consider the latter case to be plausible, but it is a natural benchmark for testing robustness. Results are provided for both parameter values. Ravallion (2016a) shows that when $\alpha = 1$, the floor can be written as $\left(1 - \frac{SPG}{PG}\right)z$, where *SPG* is the squared poverty gap index proposed by Foster et al. (1984) and *PG* is the poverty gap index. When $\alpha = 0$, the floor can be written as $\left(1 - \frac{PG}{H}\right)z$, which is the equally weighted mean income of those with income below the poverty line, where $H$ denotes the headcount index.

Notice that the parameter $z$ is not a "poverty line," as usually interpreted, but rather it is a threshold, above which the probability of being the poorest person is taken to be zero. This paper will take \$1.90 a day as the value of $z$. However, sensitivity to this choice is a potential concern, and a higher value of \$2.50 will also be considered.

The dataset I have constructed for this paper is entirely derived from the World Bank's *PovcalNet* interactive data site. I use the Bank's \$1.90 a day poverty line (Ferreira et al. 2016), which is an update to 2011 local prices of the \$1.25 a day line proposed by Ravallion et al. (2009). The methods used by *PovcalNet* are explained in Chen and Ravallion (2010). Since the data and methods are well known, they are not described further here. As discussed in the Introduction, I focus on both East Asia and a selected sub-sample of countries, namely those that have fewer than 3% living below \$1.90 a day in the latest available survey (in most cases, 2017). The sample is further selected according to whether, at a prior date in the *PovcalNet* series, the poverty rate was at least 10%. Therefore, the focus is on countries that have had, in the past, at least the current global poverty rate, but were successful in getting the rate down to 3% or lower.

**3. Results**

By way of background, it is of interest to first see how the floor has evolved in the world as a whole. For various parameter values, I find that the developing world has, to date, had very little success at raising the floor above something close to the biological level, despite the progress in reducing the number of people living near the floor. The world's poorest have gained disappointingly little over the last 30 years. To elaborate, Figure 2 compares my estimate of the floor in 2011 ICP prices (setting z = \$1.90) with the overall mean consumption in the developing world. We see that the overall mean has been on a new, steeper, trajectory since 2000. However,

this has done very little to lift the floor. The level of the floor at 2011 PPP is about $1.00, or $0.65 in 2005 ICP prices, which is almost exactly Lindgren's (2015) estimate of the biological floor. There is a (statistically significant) positive slope over time to how the floor has evolved, but the slope is very small. At this rate of progress, extreme poverty will not be eliminated until the year 2278 (with a 95% confidence interval of 2169 to 2387).

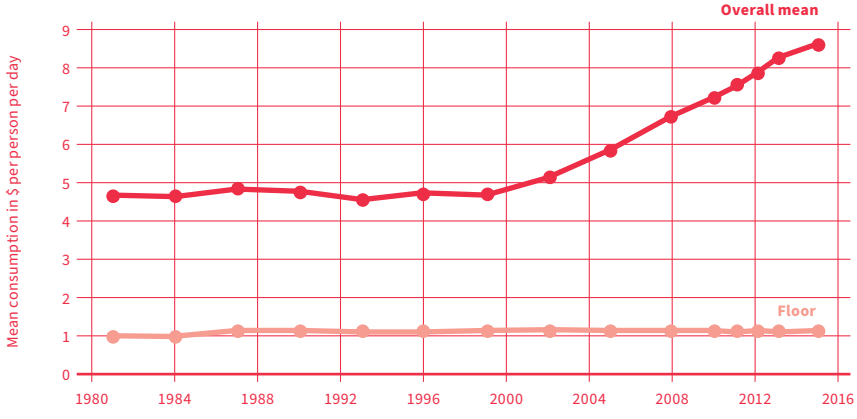


**Figure 2.** Consumption floor for the developing world. Source: Author's calculations (updating Ravallion 2016a).

From this perspective, we are way off-target to eliminating extreme poverty by 2030, as called for by SDG 1. The reason for this is clear: the developing world is not making enough progress in reaching the poorest—those living well below $1.90. Thus, we can reasonably say that the world's poorest are being left behind, or close to it.

The progress we see over time in reducing the incidence of poverty in Figure 1 stands in marked contrast to Figure 2. In short, the success of the developing world in recent decades has been to reduce the counts of people living near the floor, rather than to raise the floor.

Of course, one cannot rule out the possibility that, at some future point, the floor will move to a new and much steeper (positive) trajectory as the poverty rate moves toward zero. The global rate is well above zero now. Figure 2 might not be indicative of the future evolution of the level of the floor. It may be more instructive to look instead at the countries that have been relatively successful in reducing their poverty rate to under 3%.

As noted in the Introduction, the last 3% in Malaysia took over 30 years, and poverty (assessed by the $1.90 line) is still not fully "eradicated." Figure 3 plots the country's $1.90 a day poverty rate and the corresponding estimate of the floor ($\alpha = 1$). The floor has been rising since at least 2004, and reached $1.60 in 2016, and it will reach $1.90 when the last poor person reaches this level.

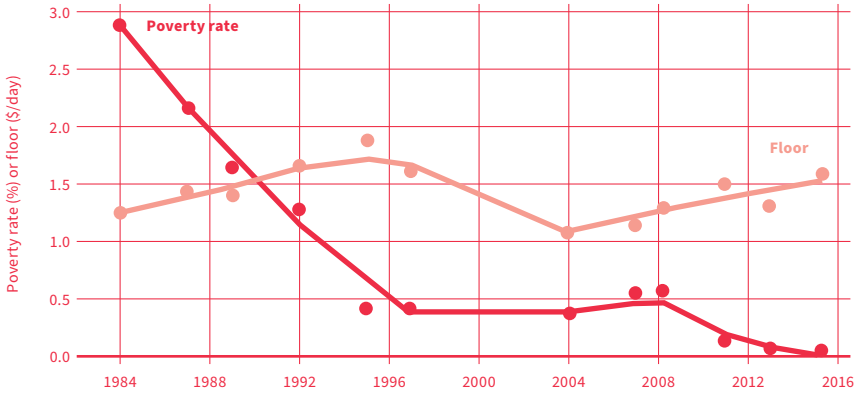


**Figure 3.** Poverty rate and floor ($1.90 a day) in Malaysia, 1984–2016.

Next, consider East Asia as a whole, which (as is well known) has made enormous progress against absolute poverty by the World Bank's measures.[13] Figure 4 plots East Asia's headcount index for $1.90 a day over the period 1981–2015. In 1981 (the earliest year in the *PovcalNet* series), 80.5% of the region's population lived below $1.90 a day; the latest estimate indicates that this is only true of 2.3% in 2015. That was the first year the East Asia poverty rate had fallen below 3%; in 2013, the rate was 3.6%.

However, this last period of poverty reduction witnessed a decline in the pace of progress in reducing the poverty rate or lifting the floor. Indeed, we even see a slight decline in the floor for East Asia, which fell from $1.26 in 2013 to $1.24 in 2015 (using $\alpha = 1$ and $z$ = $1.90; Figure 4 gives the floor). Clearly, one should not make too much of a decline of only one cent per year, but it does suggest a levelling off in progress in lifting the floor in East Asia once the last 3% was reached. By contrast, the floor in 1981 was $0.83, i.e., over the period 1981–2015 the floor rose by 1.3 cents per year on average.

[13] See the evidence and further discussion in Chen and Ravallion (2010).

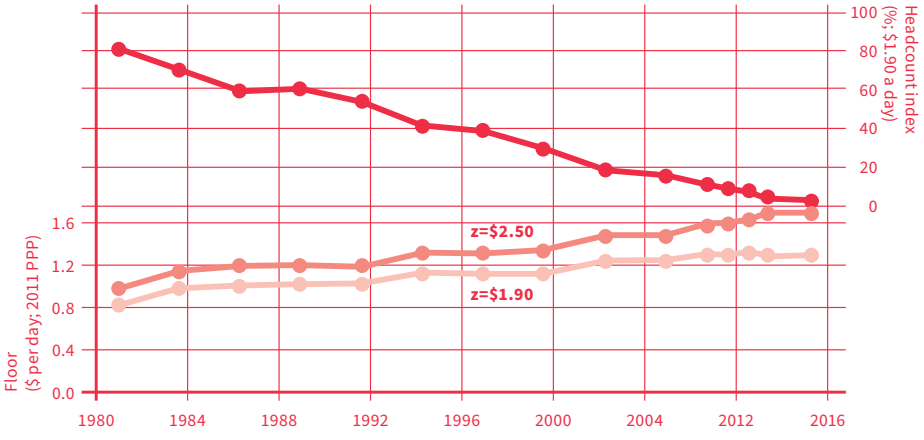


**Figure 4.** Poverty rate and floor for East Asia. Source: *PovcalNet*.

These calculations assume that the probability of living at the floor is zero above $1.90. To test sensitivity to this assumption, I also used a higher threshold of $2.50. The same pattern is evident, indicating a stabilization in East Asia's floor in recent years. Using $2.50, the floor again falls slightly in the most recent years, from $1.65 in 2013 to $1.64 in 2015, although it had been lower in 1981, at $0.93; Figure 4 also gives the floor for this higher threshold.

Given that economic growth has been so important for East Asia's long-term progress against poverty, it might be conjectured that a growth slowdown is the reason for these findings.[14] However, that is not what we see in the data. East Asia's recent slowdown in poverty reduction is not due to a lower growth rate in household income per capita. Indeed, the growth rate over 2013–2015 of 6.2% per annum is above the long-term trend, which is 5.4% (based on a regression of the log mean of year, the standard error is 0.2%). Rather, the cause is clearly the incidence of growth, which has not reached the poorest.

While these observations are suggestive, they put a high weight on just a couple of recent estimates for East Asia in *PovcalNet*. Maybe, a downward trend will reemerge soon. Further insights can be found if we turn to the country data. Again, it is the relative successes that we are interested in. Table 1 provides poverty measures for all the countries in the *PovcalNet* database that have a $1.90 poverty rate below 3% in the latest survey, but had a rate of at least 10% prior to that. There are 18 countries

[14] Overviews of the literature on growth and poverty reduction can be found in Ferreira and Ravallion (2009) and Ravallion (2016b, chp. 8).

satisfying these criteria. Table 1 provides the poverty measures referred to above—*H*, *PG* and *SPG*—as well as some basic data on the surveys used. Table 2 provides the estimated floor and mean consumption or income.

**Table 1.** Poverty measures for countries that reduced poverty rate from over 10% to under 3%.

| | Earliest Year above 10% | | | | | Closest Year to 3% Headcount Index | | | | | Latest Year | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Year | | H | PG | SPG | Year | | H | PG | SPG | Year | | H | PG | SPG |
| Armenia | 1999 | c | 16.88 | 4.07 | 1.49 | 2006 | c | 3.22 | 0.57 | 0.16 | 2017 | c | 1.35 | 0.24 | 0.07 |
| Bhutan | 2003 | c | 17.64 | 3.27 | 0.91 | 2012 | c | 2.17 | 0.41 | 0.11 | 2017 | c | 1.49 | 0.24 | 0.07 |
| Chile | 1987 | i | 11.67 | 4.05 | 2.23 | 2009 | i | 2.59 | 1.29 | 0.95 | 2017 | i | 0.75 | 0.43 | 0.33 |
| China | 1981 | I | 88.07 | 42.67 | 24.31 | 2013 | C | 1.86 | 0.35 | 0.13 | 2015 | C | 0.73 | 0.16 | 0.07 |
| Costa Rica | 1981 | I | 24.70 | 10.76 | 6.23 | 2005 | i | 3.14 | 1.1 | 0.63 | 2017 | i | 0.99 | 0.36 | 0.23 |
| Dominic. R. | 1989 | I | 13.38 | 3.36 | 1.16 | 2001 | i | 3.92 | 1.11 | 0.49 | 2016 | i | 1.64 | 0.45 | 0.25 |
| El Salvador | 1991 | i | 20.65 | 10.34 | 7.31 | 2014 | i | 2.97 | 0.64 | 0.23 | 2017 | i | 1.87 | 0.4 | 0.13 |
| Kazakhstan | 2001 | c | 10.30 | 2.54 | 0.96 | 2004 | c | 2.26 | 0.37 | 0.10 | 2017 | c | 0.02 | 0.01 | 0.00 |
| Kyrgyz Rep. | 1998 | c | 30.59 | 11.58 | 6.24 | 2012 | c | 2.92 | 0.74 | 0.30 | 2017 | c | 1.47 | 0.28 | 0.08 |
| Mexico | 1996 | c | 11.23 | 3.37 | 1.50 | 2006 | c | 3.41 | 0.84 | 0.31 | 2016 | c | 2.48 | 0.58 | 0.21 |
| Moldova | 1997 | c | 15.67 | 4.65 | 2.12 | 2006 | c | 2.41 | 0.59 | 0.25 | 2017 | c | 0.06 | 0.00 | 0.00 |
| Morocco | 1984.5 | C | 11.07 | 2.35 | 0.68 | 2006.9 | c | 3.12 | 0.6 | 0.19 | 2013.5 | c | 1.02 | 0.18 | 0.05 |
| Panama | 1989 | i | 23.92 | 16.32 | 13.71 | 2011 | i | 3.04 | 0.88 | 0.4 | 2017 | i | 2.52 | 0.93 | 0.54 |
| Paraguay | 1995 | i | 12.40 | 5.25 | 3.09 | 2012 | i | 3.28 | 0.92 | 0.37 | 2017 | i | 1.23 | 0.23 | 0.07 |
| Sri Lanka | 1985 | C | 13.27 | 2.55 | 0.78 | 2009.5 | c | 2.41 | 0.41 | 0.11 | 2016 | c | 0.83 | 0.09 | 0.02 |
| Thailand | 1981 | C | 19.58 | 5.02 | 1.73 | 1994 | c | 3.22 | 0.53 | 0.14 | 2017 | c | 0.03 | 0.00 | 0.00 |
| Tunisia | 1985 | C | 14.98 | 3.81 | 1.43 | 2005.3 | c | 3.33 | 0.71 | 0.24 | 2015.4 | c | 0.26 | 0.04 | 0.01 |
| Vietnam | 1992.71 | c | 52.90 | 16.55 | 6.97 | 2012 | c | 2.80 | 0.48 | 0.13 | 2016 | c | 1.97 | 0.39 | 0.12 |

Note: These are the countries in *PovcalNet* for which the latest year has a $1.90 a day poverty rate under 3%, for which an earlier year had a rate over 10%. The first main column gives the data for the earliest year in *PovcalNet* with a poverty rate over 10%. The middle column gives the survey year for which the poverty rate was closest to 3%. The third column gives the latest year in *PovcalNet*. C: grouped consumption data; I: grouped income data; i: unit-record income data; c: unit-record consumption data. Source: *PovcalNet*.

**Table 2.** Floor and overall mean in countries that reduced poverty rate from over 10% to under 3%.

| | Earliest Year above 10% | | | | Closest Year to 3% | | | | Latest Year | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Year | Floor ($\alpha$=1) | Floor ($\alpha$=0) | Mean | Year | Floor ($\alpha$=1) | Floor ($\alpha$=0) | Mean | Year | Floor ($\alpha$=1) | Floor ($\alpha$=0) | Mean |
| Armenia | 1999 | 1.20 | 1.44 | 4.02 | 2006 | 1.37 | 1.56 | 5.44 | 2017 | 1.35 | 1.56 | 6.94 |
| Bhutan | 2003 | 1.37 | 1.55 | 4.88 | 2012 | 1.39 | 1.54 | 8.08 | 2017 | 1.35 | 1.59 | 8.78 |
| Chile | 1987 | 0.85 | 1.24 | 9.84 | 2009 | 0.50 | 0.95 | 15.69 | 2017 | 0.44 | 0.81 | 23.91 |
| China | 1981 | 0.82 | 0.98 | 1.15 | 2013 | 1.19 | 1.54 | 9.47 | 2015 | 1.07 | 1.48 | 10.92 |
| Costa Rica | 1981 | 0.80 | 1.07 | 5.47 | 2005 | 0.81 | 1.23 | 16.39 | 2017 | 0.69 | 1.21 | 24.06 |
| Dom. Rep. | 1989 | 1.24 | 1.42 | 7.98 | 2001 | 1.06 | 1.36 | 13.63 | 2016 | 0.84 | 1.38 | 15.51 |
| El Salvador | 1991 | 0.56 | 0.95 | 7.33 | 2014 | 1.22 | 1.49 | 9.86 | 2017 | 1.28 | 1.49 | 10.25 |
| Kazakhstan | 2001 | 1.18 | 1.43 | 5.37 | 2004 | 1.39 | 1.59 | 6.46 | 2017 | 1.90 | 0.95 | 11.20 |
| Kyrgyz R. | 1998 | 0.88 | 1.18 | 4.25 | 2012 | 1.13 | 1.42 | 5.12 | 2017 | 1.36 | 1.54 | 5.32 |
| Mexico | 1996 | 1.05 | 1.33 | 7.80 | 2006 | 1.20 | 1.43 | 11.62 | 2016 | 1.21 | 1.46 | 10.25 |
| Moldova | 1997 | 1.03 | 1.34 | 4.52 | 2006 | 1.09 | 1.43 | 7.97 | 2017 | 1.90 | 1.90 | 9.42 |
| Morocco | 1984.5 | 1.35 | 1.50 | 5.49 | 2006.9 | 1.30 | 1.53 | 7.85 | 2013.5 | 1.37 | 1.56 | 10.03 |
| Panama | 1989 | 0.30 | 0.60 | 9.48 | 2011 | 1.04 | 1.35 | 20.43 | 2017 | 0.80 | 1.20 | 24.56 |
| Paraguay | 1995 | 0.78 | 1.10 | 13.19 | 2012 | 1.14 | 1.37 | 14.92 | 2017 | 1.32 | 1.54 | 17.11 |
| Sri Lanka | 1985 | 1.32 | 1.53 | 4.16 | 2009.5 | 1.39 | 1.58 | 6.72 | 2016 | 1.48 | 1.69 | 8.82 |
| Thailand | 1981 | 1.25 | 1.41 | 5.46 | 1994 | 1.40 | 1.59 | 8.08 | 2017 | 1.90 | 1.90 | 15.68 |
| Tunisia | 1985 | 1.19 | 1.42 | 5.69 | 2005.3 | 1.26 | 1.49 | 8.12 | 2015.4 | 1.43 | 1.61 | 10.99 |
| Vietnam | 1992.71 | 1.10 | 1.31 | 2.41 | 2012 | 1.39 | 1.57 | 7.83 | 2016 | 1.32 | 1.52 | 9.44 |

Comparing Tables 1 and 2, one point of note is that countries with higher growth rates tended to see faster rates of reduction in the headcount index; the correlation coefficient (r) is 0.69, and it is significant at the 1% level. This pattern in the data is consistent with past studies (as reviewed in Ravallion 2016b, chp. 8). Another observation from Table 2 is that the two measures of the floor (for $\alpha = 0$ and $\alpha = 1$) are highly correlated; r = 0.98 for both the first and second survey years, though the correlation coefficient falls to 0.62 by the third year.

Table 3 provides a summary of the differences between the two time periods, based on Tables 1 and 2. The average growth rate in mean household consumption or income per person is about 3% per annum, and this is similar between the two periods (only slightly lower in the "last 3%" period). As in East Asia, slower growth is not a plausible explanation for the slowdown.

However, progress in reducing poverty is very different between these two periods. Table 3 gives the mean rate of change in the headcount index. In the first period (prior to the poverty rate falling to about 3%), the rate of decline in the index was 1.26% points per annum, which is very close to the mean rate for the developing

world as a whole (Introduction). This dropped dramatically when countries reached the last 3%, to a mean rate of 0.24% points per annum. Given that the poverty rate is bounded below by zero, it is not too surprising that the rate of progress in reducing that rate declines, though it is still notable how much it declines by.

**Table 3.** Comparison of the two periods averaged over the 18 countries.

| | | Mean | Median | Max | Min | St. Dev. |
|---|---|---|---|---|---|---|
| Growth rate in mean (% per annum) | Whole period | 3.08 | 2.95 | 6.62 | 1.18 | 1.57 |
| | 1st period | 3.63 | 3.74 | 6.59 | 0.73 | 1.99 |
| | 2nd period (last 3%) | 2.84 | 2.94 | 7.13 | −1.26 | 1.93 |
| Annualized change in poverty rate (% point per annum) | Whole period | −0.85 | −0.61 | −0.35 | −2.57 | 0.63 |
| | 1st period | −1.26 | −0.92 | −0.35 | −2.69 | 0.82 |
| | 2nd period (last 3%) | −0.24 | −0.21 | −0.09 | −0.57 | 0.12 |
| Annualized change in floor ($\alpha = 1$; cents per annum) | Whole period | 1.18 | 0.79 | 4.49 | −1.48 | 1.67 |
| | 1st period | 1.25 | 1.18 | 6.82 | −1.60 | 1.91 |
| | 2nd period (last 3%) | 0.66 | 0.63 | 7.32 | −6.28 | 3.20 |
| Annualized change in floor ($\alpha = 0$; cents per annum) | Whole period | 0.74 | 0.65 | 2.82 | −3.01 | 1.37 |
| | 1st period | 1.22 | 1.22 | 5.25 | −1.30 | 1.48 |
| | 2nd period (last 3%) | 0.15 | 0.17 | 4.23 | −4.91 | 2.27 |
| Growth rate in the floor ($\alpha = 1$; % per annum) | Whole period | 1.00 | 0.73 | 3.44 | −2.20 | 1.59 |
| | 1st period | 1.21 | 1.04 | 5.58 | −2.43 | 1.99 |
| | 2nd period (last 3%) | 0.21 | 0.47 | 5.01 | −5.55 | 2.65 |
| Growth rate in the floor ($\alpha = 0$; % per annum) | Whole period | 0.54 | 0.45 | 2.45 | −2.56 | 1.16 |
| | 1st period | 0.94 | 0.84 | 3.66 | −1.20 | 1.20 |
| | 2nd period (last 3%) | −0.02 | 0.12 | 2.55 | −3.96 | 1.65 |

Turning to the floor (for $\alpha = 1$), we also see a marked decline in the rate of progress in lifting the floor when these countries reached the second period, starting with a poverty rate of around 3%. The annualized growth rate in the floor falls dramatically, from 1.22% per annum to 0.15% per annum. However, as can be seen from Table 3 and the scatter plot in Figure 5, there is a large variance in progress in lifting the floor in the second period. A number of countries actually experienced a drop in the floor, while five countries were able to lift the floor by more than 10% in the "last 3%" period (namely Kazakhstan, Kyrgyz Republic, Paraguay, Thailand and Tunisia). There is little correlation between the pace of progress in lifting the floor prior to reaching the last 3% with progress after that date (r = 0.21 for the scatter plot in Figure 5). Statistically, one cannot reject the null hypothesis that the floor was unchanged in the second period. The standard error for the change in the floor in the

second period is 0.75 cents per day (t = 0.87; prob. = 0.40) while the standard error for the first period is 0.45 (t = 2.77; prob. = 1.3%).

As was found for East Asia, the pattern is similar using a higher threshold of $z$ = \$2.50 (though keeping the poverty line the same, at \$1.90). Using the higher threshold, the rate of increase in the floor for the "last 3%" period is higher, at 0.64 cents per year, though less than half of the rate in the first period, which was 1.72 cents. Using $z$ = \$2.50, the (proportionate) rate of growth is 0.23% per year in the second period, as compared to 1.31% for the first.

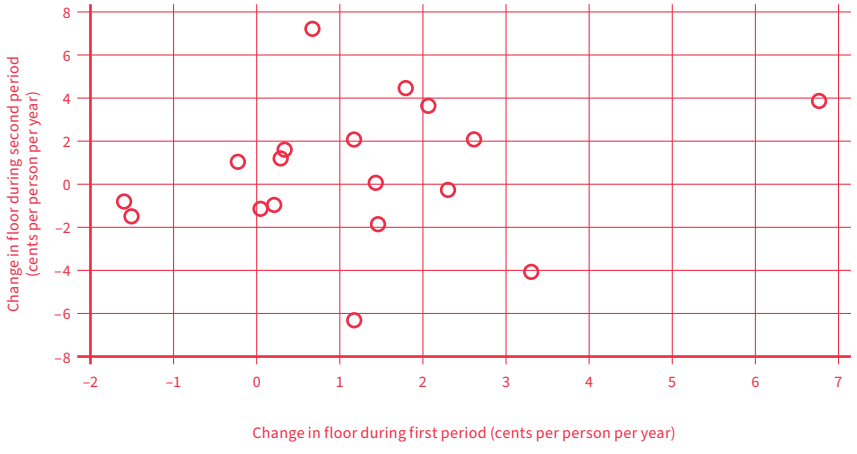


**Figure 5.** Comparison of changes in the floor between the two periods.

Two caveats to these results should be noted. First, the estimated floor is naturally bounded above by the threshold, which is set at the poverty line, \$1.90 a day, for the main calculations. Mechanically, progress in lifting the floor will go to zero when one reaches \$1.90. However, that is not what is happening here. We can see from Table 2 that the floor at the end of the study period is well below \$1.90 a day in most countries. The mean floor at the end of the period is \$1.28 (with a standard deviation of \$0.40).

Second, the "last 3%" period in the dataset tends to be shorter than the first; the mean gap between the second survey year and the first is 17.0 years, while it is 8.7 years between the last year and the second. The wider spread of estimates in the second period may reflect greater measurement error. One cannot do much about measurement error in this context. However, there is no sign of a higher variance in the growth rates of the overall mean in the second period than the first (Table 3). Measurement error may well be greater for changes in the floor than in the

mean, given that the floor estimate (for $\alpha = 1$) uses the squared poverty gap, which may be more contaminated by measurement error since it reflects the variance of incomes below $1.90. However (against this conjecture), essentially the same pattern is evident if one uses the equally weighted mean (the floor for $\alpha = 0$, which does not require SPG); Table 3 also gives the results for this measure.

The floor can be lifted by economic growth alone, without a change in inequality. However, the evident stickiness in the floor revealed by the above results is likely to reflect how inequality is changing—the incidence of economic growth. We see a pattern consistent with this conjecture in the data assembled here. Figure 6 plots the change in the floor (for $\alpha = 1$) against the change in the Gini index over the whole period; the correlation coefficient is −0.56, which is significant at the 1.5% level. (If one adds a control for the change in the (log) mean, the partial correlation is significant at the 0.7% level.) In the "last 3%" period, the correlation is even stronger; r = −0.66 (significant at the 0.3% level). As one can also see from Figure 6, inequality rose more often that it fell; indeed, the Gini index rose over the whole period in 14 of the 18 countries. This rise in overall inequality slowed progress in lifting the floor.

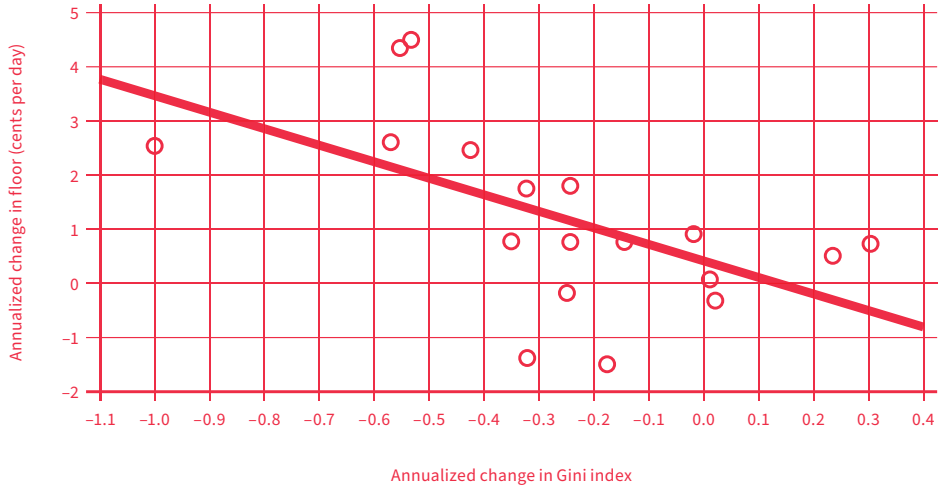


**Figure 6.** Changes in the floor plotted against changes in the Gini index of inequality.

## 4. Conclusions

Data have been yet another victim of the new Coronavirus, with many likely interruptions to household surveying and data processing. It may well be some time before we know with confidence how much the pandemic has increased poverty, but an increase is highly likely. There is still much hope that recovery from the crisis

will bring a return to the prior trajectory of poverty reduction, and even eventual success in attaining the first of the UN's Sustainable Development Goals, namely to eliminate extreme poverty, as judged by the World Bank's (frugal) $1.90 a day line.

Nobody could seriously claim that attaining SDG 1 suffices to "end poverty"; indeed, a great many of those people who escape the $1.90 poverty are still poor by the standards expected in the country they live in (Ravallion and Chen 2019). However, it would be undeniable progress for everyone to have reached a level of living that was not attained by 40% of the world's population 40 years ago.

The key issue is whether it will be possible to return to the pre-COVID trend rate of poverty reduction once the pandemic is over. A close look at the data does not suggest that we were on track to reaching SDG 1 even prior to the COVID crisis. Indeed, while the data (even pre-COVID) are far from ideal, they do provide some support for the "poorest left behind hypothesis." Prior to the pandemic, the floor to global living standards was rising, but very slowly, and at a rate well below the growth rate in the overall mean. There is little sign from the data assembled here that the new, markedly higher, growth rates we have seen in the developing world as a whole in the new millennium have been passed onto the world's poorest.

The paper has found that progress in reaching the poorest often slows considerably once a developing country reaches the (roughly) last 3% of the population living in poverty using the $1.90 line. Malaysia—one of the most successful developing countries in reducing absolute poverty—took over 30 years to get the $1.90 poverty rate from 3% to (nearly) zero. A slowdown for the last 3% was also happening in East Asia prior to the pandemic. The paper has also studied the 18 countries that had succeeded in getting their poverty rate below 3%, while it was over 10% previously (within the period covered by the *PovcalNet* series). For those countries, average progress in raising the floor has been close to zero once the last 3% was reached (and not statistically different from zero). However, this reflects a high variance in country performance, with some countries able to assure continuing progress in lifting the floor, while others saw a decline. Measurement error is a concern, but it does not (as best as can be determined) credibly explain these findings. Rising inequality is a plausible factor.

The results suggest that, for many developing countries, success in eliminating poverty post-COVID will not be attained by a "business as usual" approach that relies on past patterns of economic growth. While growth has come with huge progress in reducing counts of poor people in the developing world, it appears that eliminating extreme poverty will require that the future growth process in market incomes is more deeply pro-poor—reaching the poorest—and/or that the growth process in

market incomes is accompanied by more active, and effective, redistributive efforts. How that would be achieved remains an open question, and the answer almost certainly differs from country to country.

Although this paper has not said anything about the role of social policies, the findings of Margitic and Ravallion (2019) are relevant. Here, too, the message does not suggest that "business as usual"—though now referring to social protection policies—will be adequate. Across all developing countries (for which the required data are available), Margitic and Ravallion find that public spending on social protection did help lift the floor, but it was social insurance (mainly public pensions) that did the "heavy lifting". Social assistance—which is mainly cash-transfers targeted towards the poor—lifted the floor by only 1.5 cents per day on average, which is less than 10% of mean spending on social assistance.

Therefore, this is not an optimistic picture. By either channel—pro-poor growth in market incomes or pro-poor social policies—a change in development policy appears to be warranted if we are serious in aiming to eradicate extreme poverty over the coming decade. That change is likely to come at a cost, at least in the short-term.

The same reasons that it is harder to reach the poorest can generate ethically challenging trade-offs. That is indicated if success in truly eradicating extreme poverty were to slow progress for others, who are poor, but not as poor. This trade-off may well arise in some circumstances. However, there is surely ample scope for largely avoiding such a trade-off, notably through efforts to assure that it is the rich who carry the bulk of the extra cost. The rise in market-income inequality that appears to underly the slowdown in progress for the poorest, even pre-COVID, suggests that there is even more scope for such financing in today's world.

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# Part 2: Policies to End Extreme Poverty


# How Can the International Community Eradicate Poverty and Hunger by 2030?

**Stephan Klasen**

## 1. Introduction

The last 25 years have seen an extraordinary reduction in absolute poverty. Above all, the strong economic growth of China, India, and other populous Asian countries has led to unprecedented poverty reduction across the planet. In East Asia, absolute poverty, measured as the proportion of the population living on less than USD 1.90 a day, fell from over 60 percent in 1990 to under 3 percent in 2015 (World Bank 2016). In South Asia, poverty receded from 48 percent to around 12 percent. These tremendous successes in Asia led to the global Millennium Development Goal (MDG) of halving absolute poverty between 1990 and 2015 being more than met (from 43 percent in 1990 to 11 percent in 2015, see Figure 1). Of particular importance is the fact that this poverty reduction was accomplished even as inequality in some of these countries, especially China and India, rose drastically. As a result, poverty reduction was significantly slower than it would have been if income had risen equally for all income groups (Ravallion and Datt 2002). However, other regions—Latin America and sub-Saharan Africa—have also made notable contributions to poverty reduction since the mid-1990s, even if the goal of halving the poverty rate was not reached in Africa. Progress in reducing hunger and malnutrition has been slower, but still noteworthy.

Encouraged by these successes, the global community has committed itself, in the Sustainable Development Goals (SDGs), to the complete elimination of extreme poverty and hunger.

Is this a realistic goal? Is it possible? Which measures are necessary, and from whom, to achieve this ambitious goal?

I would like to address these questions in this short article. After briefly discussing some measurement challenges, I will argue that an entirely different approach than in the past will be necessary to reach this goal. It will not be possible to depend on economic growth in low-income countries, nor will development cooperation in its present form be able to play a major role. Instead, a much broader approach will be necessary, in which political and economic stability, the promotion of structural change, the development of social security systems in middle-income

countries, new trade policies, the reduction of inequality, a more active population policy in Africa, and investments to overcome country-specific challenges will have to play a central role.

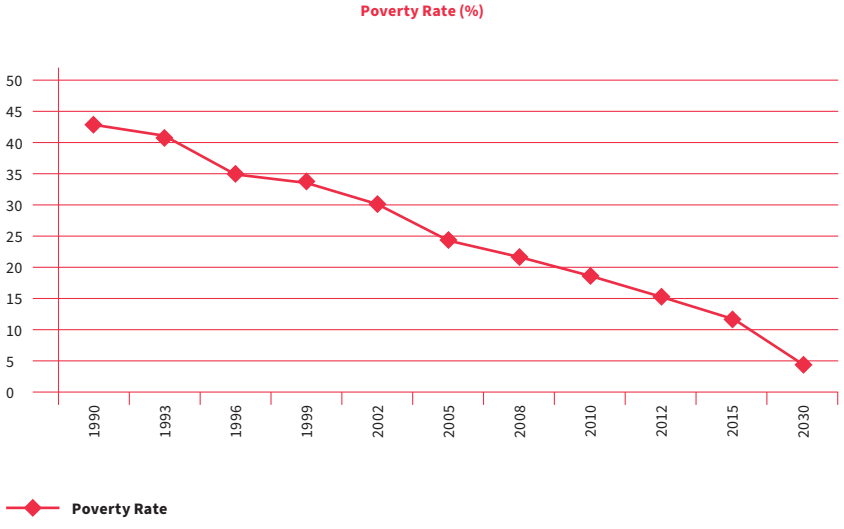


**Figure 1.** Percentage of population in the developing world living on less than International $1.90 a day. Source: Povcalnet, accessed 3 February 2020 and World World Bank (2016). Note: Based on the 1.90 poverty line and 2011 Purchasing Power Parity (PPP). Developing world excludes high-income countries in Europe, North America, and Australasia.

## 2. Measuring Poverty and Hunger

The SDGs, with their 17 goals, 169 targets, and 250 indicators, suggest a high degree of precision when it comes to monitoring the global development agenda. A closer look reveals, however, that many targets are impossible to measure, indicators are missing, and that the necessary data are often simply unavailable. This problem already arose with the MDGs, but is even more problematic for the SDGs, especially since far too little has been done in recent years to develop the necessary database for the SDGs.

These problems concern not only the new targets or particularly challenging indicators, but also the main indicators for extreme poverty and hunger. The absolute poverty numbers depend on the international poverty line, which is updated every five to seven years. The poverty line is based on infrequent international price comparisons that ensure that it reflects the same purchasing power everywhere.

Unfortunately, these updates often entail unforeseen changes. In 2008, as the USD 1.08 (in 1993 prices) poverty line increased to USD 1.25 (in 2005 prices), we learned that global poverty was about 50% higher than previously thought, even though both poverty lines were supposed to reflect the same purchasing power. With the latest increase in the poverty line to International $1.90 (in 2011 prices), the global poverty rate would have been significantly lower (by about 20 percent in 2010), had certain adjustments to the data not been introduced (Klasen et al. 2016a).

Although these periodic updates do not create any doubt about the reduction in poverty over time, the fact that there is so much uncertainty about the prevailing *level* of poverty is a major problem. If we now want to eliminate poverty altogether through the SDGs, such fluctuations in the measured level of poverty, which also vary from region to region, are very problematic, since they imply that the goalposts are constantly shifting. Thus, it is high time to translate the international poverty reduction goal into national poverty lines, which are not influenced by international purchasing power adjustments. This was suggested in Klasen et al. (2016a); the World Bank's Commission on Global Poverty recently made the same suggestion. This would make it possible to better reflect the progress made in each country with respect to the SDGs.

The situation is even more muddled when it comes to measuring hunger. A fundamental problem is that hunger is, to a large extent, measured using two different indicators, which sometimes lead to contradictory conclusions when observed in tandem. Moreover, both indicators are prone to methodological weaknesses. The indicator for malnutrition used by the Food and Agriculture Organization (FAO) is based on aggregated data and estimates the average number of people without access to sufficient calories. It finds that hunger is most acute in sub-Saharan Africa. It should further be noted that this indicator is frequently revised, and historical estimates have often been adjusted. While estimates until 2012 assumed that little progress in reducing the hunger rate had been made since 1990, calculations made after 2012 suggested that there had indeed been a substantial reduction, since the figures for 1990 had been adjusted upwards—resulting in a reduction over time (Pogge 2016).

The second indicator, used by the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), measures the number of children suffering from stunted growth and low weight. The data suggest that these problems are most pressing in South Asia and have been gradually improving globally over the last 25 years, though progress has been significantly slower than poverty reduction. As explained in De De Haen et al. (2011), there are problems with

both indicators and the estimates based on them. The FAO figures are based on very rough estimates and highly simplified (and probably erroneous) assumptions, while the figures on the nutritional status of children, which are generally more reliable, yield biased results for (small) genetic differences in height (see, for example, Klasen 2008; De Haen et al. 2011).

Based on these key indicators of poverty and hunger, then, we cannot say with any certainty *how many* people in the world suffer from hunger and/or poverty, or *where*. There is a considerable need for action when it comes to tackling these measurement problems (all of which can, incidentally, be solved). These uncertainties do not make it easy to come up with a course of action in the area of poverty and hunger reduction.

### 3. Challenges for Overcoming Extreme Poverty and Hunger

Aside from these measurement issues, there are a number of substantial challenges to eliminate poverty and hunger by 2030. Figure 1 would suggest that "only" a continuation of the existing trend of poverty reduction is necessary to bring the goal of overcoming absolute poverty by 2030 within reach. Gill et al. (2016) therefore propose a strategy for overcoming extreme poverty that continues past approaches and extends them by one additional policy. In particular, the focus should be on the two pillars of "labor-intensive growth" and "investments in the education and health of the poor", supplemented by a third pillar, "improved social security systems". It is argued that the success of poverty reduction over the last 30 years was mainly driven by the first two pillars in many fast-growing countries of Asia. This was enough to lift the bulk of the population out of poverty. To support those who remain poor due to various simultaneous occurring challenges (such as geographic remoteness, lack of education, ethnic minority status), and to successfully insure against local, national, and global shocks, social security systems need to be systematically be developed to provide the poor access to a subsistence minimum and protect them from economic shocks.

In theory, such a strategy sounds promising, and if the three pillars could be fully implemented, extreme poverty could indeed be eliminated by 2030. However, it is unclear *how* labor-intensive growth, investment in the human capital of the poor, and the development of social security systems are to be secured in many of the countries on which the achievement of SDG 1 depends.

Table 1 lists the countries in which the majority of the poor lived in 2015, using both the USD 1.90 line and the higher USD 3.10 poverty line. First, it should be noted that data for very poor countries with a (likely) high number of the extreme poor

are missing, simply because data are unavailable for these countries (Gill et al. 2016). These include Myanmar, Cambodia, South Sudan, Afghanistan, Somalia, Eritrea, Yemen, and Somalia. These countries have a total population of about 150 million people, of whom certainly more than 50 percent (i.e., more than 75 million people) live below the poverty line of USD 1.90 and more than 80 percent (more than 120 million) live on less than USD 3.10 a day. Of course, these blind spots in our poverty statistics point to much more serious problems in these countries, which I will discuss below.

Table 1 also includes data for 1990, and shows the extraordinary success of the Asian countries in reducing poverty since 1990. It also shows how the geography of poverty has changed since 1990. Whereas in 1990, 50 percent of the extreme poor lived in East Asia—and mostly in China and Indonesia—that figure is now less than 10 percent (World Bank 2016, see Figure 2). More than 50 percent of the poor now live in sub-Saharan Africa. Only the share of South Asians among the global poor has remained relatively constant over time, at around 30 percent. This means that to overcome poverty by 2030, in particular, poverty in Africa and South Asia must be reduced.

**Table 1.** Total population (in millions) living in extreme poverty, 2015 (and 1990).

| | $1.90 Poverty Line | | | $3.10 Poverty Line | | |
|---|---|---|---|---|---|---|
| Rank (2015) | Country | 2015 | 1990 | Country | 2015 | 1990 |
| 1 | India | 141.2 | 417.5 | India | 480.8 | 701.7 |
| 2 | Nigeria | 81.2 | 49.2 | China | 171.6 | 1012.6 |
| 3 | Congo, Dem. Rep. | 48.6 | 23 | Nigeria | 127.5 | 69.5 |
| 4 | China | 47.6 | 755.8 | Bangladesh | 102.2 | 99.2 |
| 5 | Bangladesh | 39.8 | 74.9 | Congo, Dem. Rep. | 61.1 | 29.2 |
| 6 | Madagascar | 19.1 | 6.9 | Pakistan | 56.1 | 93.8 |
| 7 | Tanzania | 17.9 | 17.4 | Ethiopia | 46.9 | 40 |
| 8 | Ethiopia | 14.4 | 29.1 | Indonesia | 46.5 | 152.4 |
| 9 | Mozambique | 14.0 | 11.7 | Tanzania | 35.1 | 22.4 |
| 10 | Malawi | 11.2 | 6.8 | Philippines | 29.1 | 32.7 |
| 11 | Uganda | 10.6 | 13.3 | Uganda | 22.5 | 15.9 |
| 12 | Kenya | 9.3 | 4.9 | Madagascar | 22.2 | 9.5 |
| 13 | Brazil | 9.3 | 30.8 | Mozambique | 20.8 | 12.8 |
| 14 | Indonesia | 8.8 | 102.3 | Kenya | 20.2 | 9.4 |
| 15 | Zambia | 8.7 | 4.4 1 | Brazil | 18.5 | 53.6 |
| 16 | South Africa | 8.2 | 10.2 | South Africa | 17.9 | 16.3 |
| 17 | Burundi | 7.6 | 4.8 2 | Mexico | 16.6 | 21.6 |
| 18 | Philippines | 7.5 | 16.3 | Uzbekistan | 15.1 | 0.7 3 |
| 19 | Mali | 7.0 | 6.7 | Malawi | 14.6 | 9 [a] |
| 20 | Burkina Faso | 6.7 | 7.4 | Niger | 13.8 | 8 2 |
| 21 | Niger | 6.6 | 6.7 2 | Sudan | 13.8 | 14.7 |
| 22 | Mexico | 6.4 | 9.3 | Burkina Faso | 12.1 | 8.2 |
| 23 | Pakistan | 6.4 | 62 | Mali | 12 | 7.4 |
| 24 | Rwanda | 5.9 | 3.7 ° | Zambia | 11.4 | 5.5 1 |
| 25 | Uzbekistan | 5.1 | 10.9 ⁻ | Cameroon | 10.9 | 10.4 * |
| 26 | Cameroon | 5.0 | 6.9 * | Angola | 9.6 | 10 ˆ |
| 27 | Sudan | 4.9 | 8.8 | Burundi | 9.6 | 5.6 2 |
| 28 | Senegal | 4.9 | 5.1 | Rwanda | 9.1 | 5.2 ° |
| 29 | Benin | 4.8 | 3.8 ∨ | Cote d'Ivoire | 9.1 | 6.1 2 |
| 30 | Angola | 4.5 | 5.5 ˆ | Senegal | 9 | 6.5 1 |

**Table 1.** *Cont.*

| | $1.90 Poverty Line | | | $3.10 Poverty Line | | |
|---|---|---|---|---|---|---|
| Rank (2015) | Country | 2015 | 1990 | Country | 2015 | 1990 |
| Total population of additional countries without data on extreme poverty | | | | | | |
| 31 | Eritrea | 6.0 | | | | |
| 32 | Afghanistan | 30.6 | | | | |
| 33 | Somalia | 20.0 | | | | |
| 34 | Yemen | 24.0 | | | | |
| 35 | Myanmar | 53.0 | | | | |
| 36 | Cambodia | 15.0 | | | | |
| 37 | South Sudan | 11.3 | | | | |

Note: [1] data from 1991, [2] data from 1992, [3] data from 1988, ° data from 1984, ⁻ data from 1998, * data from 1996, [a] data from 1997, ^ data from 2008, v data from 2003. Source: Povcal, Gill et al. (2016), UNDP (2015).

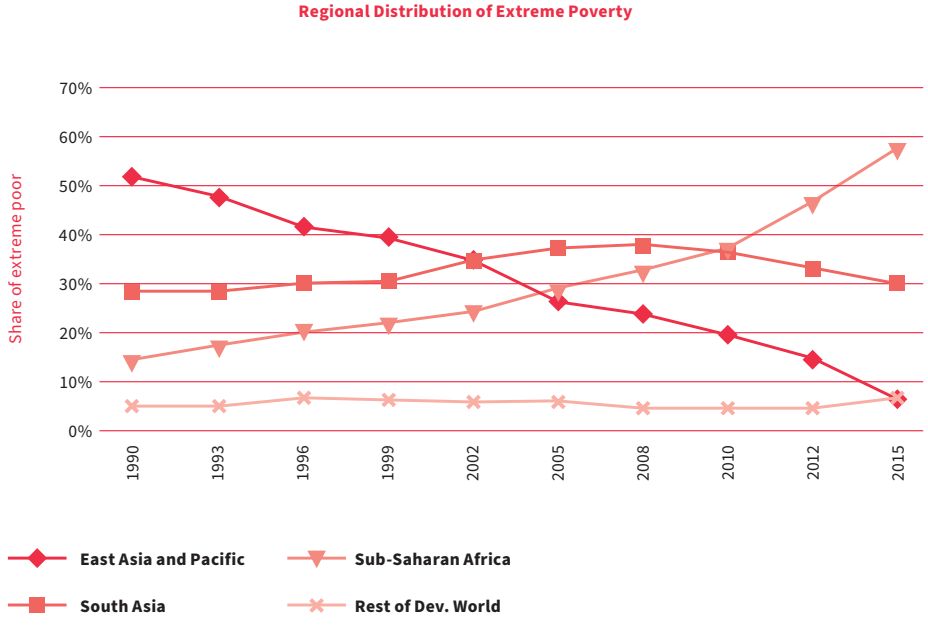


**Figure 2.** Regional Distribution of Extreme Poverty. Source: Povcalnet, accessed 3 February 2020. Note: Based on the 1.90 poverty line and 2011 PPP. Developing world excludes high income countries in Europe, North America, and Australasia.

The question that now arises is: which of the countries in Table 1 has the potential to follow in the footsteps of the Asian growth miracle countries and generate rapid and labor-intensive economic growth with high investments in education and health? It should first be noted that two elements were crucial for rapid, poverty-reducing growth in Asia. On the one hand, there was considerable success in increasing agricultural productivity, which raised the incomes of the poor rural population and freed up labor for industrialization; on the other hand, structural change towards industrialization, and above all, the development of a predominantly export-oriented manufacturing sector producing globally competitive products, was crucial (Gill et al. 2016; World Bank 1993).

Looking at the economic development of the currently poor countries over the last 10 to 15 years, very few are actually on track to meet these two components of labor-intensive growth. These include Bangladesh, Cambodia, the Philippines, and India. This is also true, to a degree, of Pakistan and Myanmar, and there is some evidence for this in Ethiopia and Rwanda, although it is still unclear how sustainable the improvements in agriculture and structural change really are. If structural change in these countries continues to progress and agricultural productivity improves steadily, there is hope that a large proportion of the approximately 230 million living in extreme poverty in these countries will have escaped poverty by 2030. Yet, as can already be observed in China and Indonesia (see Table 1), it is likely that a small base will continue to be unable to escape poverty by these two mechanisms alone.

There are also a number of countries on the list, including Mexico, Brazil, and South Africa, that have a major industrial sector that would meet the basic conditions necessary for generating labor-intensive industrial growth. However, structural change in these countries has slowed in the last 10 to 15 years, the industrial sector has dwindled, and these countries have become significantly more dependent on exporting commodities. This structural change in reverse has had much to do with China's role in the world market, which displaced these countries from global manufactured goods markets with their cheaper products on the one hand and significantly boosted demand for raw materials on the other. However, further poverty reduction through increasing commodity exports will become difficult, especially as this sector is now also ailing. In other words, we do not see any signs that these countries will be able to overcome their still-existent poverty in the near future.

The largest group of countries in Table 1 comprises African resource exporters, with an economy focused on a small number of agricultural or mineral commodities. These include Nigeria, Republic of Congo, Burundi, Tanzania, Democratic Republic

of Congo, Mozambique, Malawi, Uganda, Kenya, Zambia, Mali, Burkina Faso, Niger, Cameroon, Sudan, Senegal, Benin, Angola, and Southern Sudan. More than 300 million of the extremely poor live here, and their long-term fate depends largely on the development of commodity prices. Although there have been improvements in agricultural productivity in some countries, which also contributes to poverty reduction, these advances are often thwarted by the commodity sector, which leads to overvalued exchange rates and thus, cheap food imports. Additionally, the commodity sector often undermines good governance and leads to bloated government sectors. The high commodity prices of the last 15 years (and better management of the resource boom) have contributed significantly to poverty reduction, but without structural change we have reached "the end of the line", and indeed, there is now a risk of regression if prices fall. Here, lasting poverty reduction will only be possible if a sustainable structural change is initiated and, at the same time, further active investments are made in improving agricultural productivity.

Another group of countries with many extreme poor, which partly overlaps with the previous group, is in an even more difficult situation: here, the poor live in states where civil war is raging, autocratic dictators are in power, or the state is extremely fragile and thus, unable to carry out basic state functions. This group includes Nigeria, Ethiopia, Uganda, Burundi, Democratic Republic of Congo, Mali, Uzbekistan, Sudan, Somalia, Yemen, Eritrea, Afghanistan, South Sudan, and Myanmar. While in some of these countries, conflicts are regionally contained (as in Uganda, Ethiopia, or Myanmar, for example), in others they affect the development prospects of the entire country (see, for example, World Bank 2013; OECD and DAC 2009). In the so-called Fragile States Agenda, attempts have been made to identify the particular challenges for effective development cooperation in these situations, and to identify appropriate means of interaction. Designing better ways to channel aid will not be sufficient to overcome extreme poverty in these states. Without the pacification of conflicts and the establishment of functioning states, overcoming poverty will be impossible. Development cooperation can only play a very limited role here. Instead, the international community will need consistent political commitment, UN peace missions with sufficient resources and a robust mandate, and the long-term development of institutions.

Another group of countries must expect the effects of climate change to complicate efforts to overcome extreme poverty. On the one hand, it affects countries with large coastlines and low-lying areas threatened by rising sea levels and more intense tropical storms. The most prominent among these are Bangladesh, the Philippines, Indonesia, Myanmar, and Nigeria. For these countries, significant

measures will be needed to prevent and combat flooding. On the other hand, agricultural countries that are highly dependent on rainfall will be affected. These include almost all the African countries in Table 1. In these countries, it will be particularly difficult to maintain or improve agricultural productivity.

For the last group of countries, there is yet another challenge: drastic demographic changes. After 20 years of strong economic growth and a significant expansion of women's education across the globe, one would expect birth rates to have fallen sharply. In Asia, most of the Middle East, Latin America, and many countries in southern Africa, a considerable decline in birth rate can be observed. This has led to a favorable demographic composition, with a larger working-age population, fewer children, and a limited share of senior citizens (for now) (Bloom and Williamson 1998). In most of these countries, the number of children per woman has fallen to about two. However, in parts of Africa, this demographic transition has either hardly begun, or else has come to a standstill. Figures from the Demographic and Health Surveys show that in Angola, Burkina Faso, Uganda, Mali, Niger, and Mozambique, fertility has stabilized at the very high rate of six children per woman, and in Cameroon, Senegal, and Nigeria, it remains stable at over five. As a result, the population will double in the next 15 to 20 years in these countries, and quadruple in the next 30 to 40 years if fertility rates remain as they are. The pressure this will exert on ever scarcer land, scarce water resources, and public infrastructure such as schools and health care centers will be enormous, and will make poverty reduction much more difficult. It will be important to understand the reason for this slowdown in fertility decline and to take appropriate measures to support smaller families.

I have concentrated exclusively on overcoming extreme poverty in the preceding discussion and ignored the goal of zero hunger. However, the obstacles to achieving this goal are similar in many ways. It will be particularly difficult to meet this goal in fragile and conflict-affected countries; resource exporting countries will make conditions for agriculture more difficult due to elevated exchange rates, neglect of agriculture, and poor governance; climate change will make food security particularly difficult in affected countries; and demographic dynamics in some countries will make the hunger problem even more acute. At the same time, two additional aspects should be considered. First, economic growth alone is not enough to overcome hunger. Indeed, Vollmer et al. (2014) showed that economic growth only makes a very small contribution to reduce child malnutrition. Instead, it is more important to strengthen maternal education, strengthen local health care (especially in rural areas), and invest in access to clean drinking water and sanitation. Such interventions are generally difficult and are particularly complicated to implement in fragile and conflict-affected

countries. Second, agriculture plays a more direct role in a country's food security than in poverty reduction. The reason is not that hunger can only be overcome with higher domestic food production. A country can also reduce undernutrition through food imports, provided the population has enough purchasing power (Dreze and Sen 1989). Rather, agriculture is important because, in most countries where hunger is rampant, it is most dire among the poor rural population, who mainly derives their income from agriculture. Thus, if one succeeds in increasing agricultural productivity, especially that of small farmers, their increased incomes will provide greater food security and help reduce hunger overall.

**4. Conclusions for International Cooperation**

First, it is important to stress that, as with the MDGs, the achievement of the SDGs will depend first and foremost on the policies of the countries concerned. The economic success of the Asian tigers over the previous decades, and the poverty reduction that came with it, was mainly achieved through their successful economic policies. An increasingly open world market for manufactured goods has also helped, and development cooperation has certainly made a supporting contribution.

Since the goal has become "ending absolute poverty", poverty must now be eradicated in all countries worldwide. If MDG 1 could still be met thanks to certain "overachieving" countries offsetting persistently high poverty rates in other countries, this is no longer possible with SDG 1. Since only 11 of the 37 countries in Table 1 have achieved the MDGs (including only three from sub-Saharan Africa), it cannot be expected that a majority of the countries in Table 1 will be able to meet the even more ambitious goal of total poverty eradication. For this reason, the World Bank has decided that the goal of ending absolute poverty globally is to be considered attained once the poverty rate falls below 3 percent. This could mean that even after 2030, about 14 percent of the population in Africa would still be living in poverty (World Bank 2016). While less ambitious, this still means that countries which did not meet the poverty target for MDG 1 must reduce their poverty and hunger at a faster pace than during the last 25 years. A stronger international commitment will therefore likely be necessary.

But how can the international community and development cooperation contribute? I would like to distinguish here between development cooperation in a narrower and a broader sense. The distinctions between groups of countries that I have outlined above will also be relevant here.

Financial cooperation will no longer be relevant for many middle-income countries. Technical cooperation can, however, continue to play an important role in

these countries. In countries such as India, China, and Indonesia, the main focus will be on supporting the establishment of reliable, broad-based social security systems that succeed in reaching the extremely poor. In other middle-income countries, such as Nigeria, Kenya, or Angola, the main aim will be to create incentives for increased diversification of the national economy. This includes a macro policy that creates competitive exchange rates and mobilizes investment in infrastructure, agriculture, and small- and medium-sized enterprises in the manufacturing sector. It should also address governance problems in these resource export countries and strengthen civil society groups. However, this policy focus requires long-term commitment and whether development cooperation can be effective in improving economic and political institutions in these countries is far from certain.

Forward momentum must be sustained in those countries that have the basic prerequisites for labor-intensive growth. This includes the promotion of infrastructure, industrial and structural policy measures, investment in training and further education, and support for trade.

Finally, countries in which the demographic transition has come to a standstill need a health and population policy that favors a decline in birth rate. This includes universal access to reproductive health and family planning services, further investment in female education, the outlawing of child marriages, and support for national population policies. Countries such as Rwanda and Ethiopia show that a consistent commitment could certainly bear fruit there.

In my view, this has already pushed us to the limits of conventional development cooperation. For other groups of countries, it can provide support at best, but other international initiatives will be crucial. The many commodity-exporting countries, for example, need much more than trade-promoting development cooperation. Since they operate in a global marketplace in which they have to contend with extremely competitive suppliers, it will be very difficult for them to develop a competitive industrial sector through structural change. What can help, however, is the substantial expansion, broadening, and simplification of non-reciprocal trade preferences, which are intended to benefit least developed countries the most. As Klasen et al. (2016c) have shown, existing trade preferences have already had a positive impact on the exports of least developed countries. However, there are too many exceptions, too many restrictions, and too much bureaucracy. Changes in trade policy, which are set at the level of the European Union for European countries, are more important here than development policy.

Support for the poorest countries in dealing with climate change also calls for new—yet to be developed—approaches. On the one hand, the promised

funds for adaptation to climate change must be mobilized and made available on top of standard development cooperation. We also need to rethink how funds are used. For countries affected by rising sea levels and storms, comprehensive strategies must be developed, including infrastructure measures, resettlement and land reallocation, disaster prevention, and disaster control. For agricultural countries, the focus will have to be on international research to develop improved seeds and production technologies and the expansion of irrigation systems (where sustainable and practicable).

Fragile countries affected by conflict and dominated by anti-development dictators pose a particular challenge. Here, development cooperation alone can do very little, and conflict can quickly destroy decades of productive development cooperation. Unfortunately, the international community's involvement with these countries has so far been minimal. Involvement in the form of UN peace missions in many countries listed in Table 1 has often prevented worse things from happening, but is characterized by inadequate force and a lack of mandate and resources. Increased political and military commitment will be necessary if we are serious about overcoming absolute poverty. As demonstrated by events in the Balkans in the 1990s, but also in Sierra Leone in 2003 or in Cambodia in the 1990s, a robust political and military commitment can make a major contribution to peace. A similar commitment will be necessary for countries such as the Democratic Republic of Congo, Mali, Niger, South Sudan, and Burundi. The situation is even more difficult for countries afflicted by state collapse or authoritarian dictatorships. To bring about conditions for poverty-reducing policies, the international community will first have to make a stronger and more consistent political commitment. This would include, for example, international condemnation, entry bans, and sanctions concentrated on leadership cliques for governments such as those of Eritrea, Sudan, or Zimbabwe, strengthening opposition forces, and much more. Of course, this alone does not guarantee success, but it could increase the chance of change.

Lastly, reducing inequality can make an important contribution to poverty reduction. It directly reduces poverty and increases the poverty-reducing effect of economic growth. This requires comprehensive approaches: for instance, inequality can be reduced through targeted investments in health, education, and social security systems for the poor. Tax and public expenditure policies can also play a role. For example, development cooperation measures can promote higher, more progressive tax revenues through advisory services and targeted investments, and simultaneously support the reform and monitoring of government spending. Moreover, a more concerted international crackdown on tax evasion and tax avoidance

by rich individuals and multinational corporations in developing countries will also play an important role.

## 5. Outlook

The international community has set high objectives with SDG 1 to overcome extreme poverty and hunger in the near future—which is welcomed in a world where there is abundance in many places and no one would have to suffer globally from extreme poverty and hunger. But, as I have tried to point out, business as usual, even in the context of a favorable international economic environment, can only mean that we miss this target. Furthermore, the current economic and health crisis caused by the COVID-19 pandemic demonstrates that years of progress in poverty reduction can be reversed in an instant.

To accelerate poverty reduction, we not only need to tackle the measurement problems of poverty and hunger as quickly as possible, but we also need a new international development policy. In particular, we will not reach SDG 1 if only ministries of development cooperation address the challenges that I outlined above. If we are serious about overcoming global poverty and hunger, it must become one of the main missions of international politics for *all* actors, including the UN System as well as the G7 and G20. Coordinated by these fora, there must be consistent political, economic, and occasionally, even military engagement to pursue these goals. Moreover, these actors need to help especially poor countries deal with economic and health shocks by providing concessional funds, technical support, and debt relief. Hopefully, governments are aware of this challenge (Klasen et al. 2016b).

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# "Leave No One Behind" in Middle-Income Countries. A Review of Progress and Policies

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## 1. Introduction

The principle to "leave no one behind" (LNOB) is a central commitment of the 2030 Agenda. The idea to "leave no one behind" is a key part of the Sustainable Development Goal (SDG) 1 and 2 regarding ending poverty and hunger in all its forms, and SDG 10 regarding reducing inequality. Moreover, the terms "inclusive", "for all", "equitable" and "equitable access" are used repeatedly in the 2030 Agenda in relation to health (SDG 3), education (SDG 4), gender (SDG 5), water and sanitation (SDG 6), energy (SDG 7), economic growth (SDG 8), industrialization (SDG 9), cities and human settlements (SDG 11) and, more broadly, societies and institutions (SDG 16).

The objective of this chapter is to identify the main conclusions of recent studies measuring progress in LNOB and to showcase examples of public policies that are or could be most successful at addressing and implementing the principle of "leave no one behind" in middle-income countries. LNOB is of particular relevance in these countries because they have a significant population living in poverty and because the gains of economic progress tend to be unequally distributed.

## 2. "Leaving No One Behind" What Does It Mean?

However, what does "leaving no one behind" actually mean? A comprehensive UN report, "Leaving no one behind: the imperative of inclusive development" (UN 2016), emphasizes the concept of social inclusion to operationalize LNOB. Social inclusion is understood as a "process of improving the terms of participation in society for people who are disadvantaged on the basis of age, sex, disability, race, ethnicity, origin, religion, or economic or other status, through enhanced opportunities, access to resources, voice and respect for rights". The report's definition of social inclusion thus explicitly refers to people who are disadvantaged on the basis of certain characteristics that increase the risk of social exclusion, defined as "a state in which individuals are unable to participate fully in economic, social, political and cultural life" (UN 2016).

Stuart and Samman (2017) provide a more comprehensive interpretation of LNOB and see the concept of LNOB as addressing three dimensions of social progress: (1) addressing discriminatory barriers, which could arise from geography or aspects of social identity, (2) ending extreme poverty (in all its forms) and (3) reducing inequalities. LNOB thus assumes that progress does not automatically trickle down to all groups of society. This implies that existing gaps between the worse- and the better-off will grow without deliberate efforts targeting those left behind (Stuart and Samman 2017).

Following this approach, we also understand LNOB as a comprehensive principle that emphasizes social, economic and political inclusion and that extends beyond an anti-discrimination agenda. This interpretation of the LNOB principle implies that it is important to focus on development policy areas that are key for economic and political participation and on development policies that address areas where people are denied access to public services and are even discriminated against. Key arenas for LNOB-relevant policies are hence education, social protection (including universal health coverage), and the labor market. In all these areas, strong mechanisms of positive feedback are at work that keep people poorly educated, with low skills, bad health and in precarious jobs. In addition, inclusive institutions and corresponding cross-sectoral progress in legal frameworks are required, including constitutional anti-discriminatory provisions (gender, race, disabilities etc.), measures to protect minorities and affirmative action.

Further, we think it would be useful to stress even more than Stuart and Samman (2017) the dynamic element implied by "being left behind". "Being left behind" implies that the distance between the "left behind" and the rest of society grows larger over time, i.e., that future life chances are impaired. Examples include early childhood disadvantages, not being able to read and write, being in an informal job without training for too long.

Thus, LNOB is of particular importance in middle-income contexts, where inequalities are rampant and where the benefits of development are often unequally shared. In absolute numbers, many of the world's poor live in middle-income economies. India alone has about 175 million people living below the USD 1.90 (2011 PPP) poverty line (data for 2015[1]). By definition, the absolutely deprived will be relatively more deprived than they are in contexts that are poorer on average. This situation provides a rationale to keep engaging with middle-income

[1] www.worldbank.org (accessed on 30 May 2018).

countries through development cooperation with a focus on LNOB. Yet, the European Consensus on Development (EU 2017) does not explicitly mention LNOB or related concepts, such as social inclusion or inclusive development. Instead, it refers to cooperation, policy dialogue and partnerships with middle-income countries on sustainable development and other shared interests.

**3. Measuring Progress in "Leaving No-One Behind"**

As has become apparent from the above conceptual considerations, even a somewhat narrower understanding of LNOB encompasses many of the SDGs. Counting the SDG indicators that are either directly related to the LNOB principle (such as SDG 1 or SDG 10) or that are to be disaggregated by groups amounts to 82 indicators (of a total of 232 indicators in the SDGs). The number of indicators to be disaggregated by sex is 33, by age groups 24, and by disability status 10 (own calculations). Interestingly, only two indicators are explicitly stated to be disaggregated by ethnic/indigenous status and so are two indicators by migrant status.

This vast number of often-disaggregated indicators presents an important challenge to measuring LNOB progress: the production of (micro) data required to provide the LNOB-relevant indicators.

To overcome this challenge, a couple of authors of the Overseas Development Institute (ODI) (Greenhill 2017; Stuart et al. 2016) have proposed a LNOB index that measures governments' readiness for implementing LNOB.

- Data: Have surveys to provide for disaggregated data been conducted recently?
- Policy: Do countries have selected core policies in place: are health services free at the point of access; are there anti-discrimination policies in employment; and can women own land?
- Finance: Do governments meet agreed spending targets in health, education and social protection?

According to this LNOB index, about half (9 out of 17) of the middle-income countries are not on track to implement LNOB and this is despite the fact that the simple cumulative LNOB index is relatively generous in classifying countries as "ready".

Clearly, however, providing disaggregated data can only be a first step of addressing discrimination and inequality. Having policies in place does not yet mean that they are effectively implemented. Eventually, countries should not only be judged on their "preparedness" or their "intentions" to implement the LNOB principle, but on effectively delivering on it. Further, by not considering LNOB-relevant outcome

variables, including relevant SDG indicators, the LNOB index falls short of providing information on the order of magnitude of the challenges, for example, the presence of majorly disadvantaged and discriminated-against groups and the extent to which exclusion and the resulting inequalities leave them behind.

We hence use the remainder of this section to present some key indicators for measuring LNOB progress—albeit data limitations do not allow us to say much about developments over time. We provide an exemplary selection of indicators (for selected middle-income countries) that also illustrate some of the challenges in measuring progress. We chose indicators that we consider to represent key aspects of the major LNOB policy areas identified in Section 1: Education, social protection (including universal health coverage), and legal frameworks and anti-discrimination policies.

However, before we turn to these indicators, we briefly discuss the progress in extreme poverty reduction in middle-income economies.

### *3.1. Extreme Poverty in Middle-Income Countries*

Many of today's middle-income economies, i.e., middle-income economies as of 2015, have been very successful in combating extreme poverty. Figure 1 shows that all middle-income economies—except Yemen—saw extreme poverty decrease between 2005 and 2015. Yet, progress has been uneven: In East and South-East Asia, China and Vietnam stand out with poverty declines from levels around 20 percent to 5 percent or less. Considerable poverty reduction has also been seen in the middle-income economies of South Asia with India, Bangladesh and Sri Lanka starting from very different levels. In Indonesia (and the Philippines), progress has been somewhat slower with poverty rates still at about 10 percent (also down from 20 percent in 2005). Progress has been similar in many middle-income countries in Latin America, where the economic growth of this period also helped the very poor. Countries with initially lower poverty rates like Brazil, Mexico, or Nicaragua found it more difficult to further bring down poverty. In Africa, extreme poverty has proven to be much more persistent in both richer economies like South Africa and, even more so, in poorer ones like Cameroon, Nigeria or Zambia. Ghana stands out as the only African middle-income economy with recorded substantial poverty reduction.

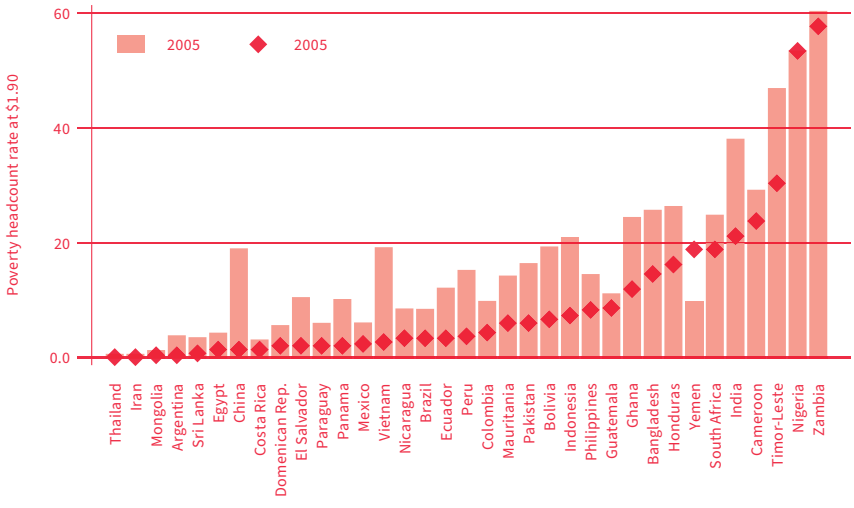


**Figure 1.** Extreme poverty in middle-income economies, 2005–2015. Source: World Development Indicators, World Bank (accessed on 30 May 2018), used with persmission. Notes: All non-European middle-income countries with data from 2003 to 2007 and 2013 to 2017. Exceptions: Ghana (2012), India (2011), Nigeria (2009).

For monitoring LNOB, these poverty headcounts should be reported by age, sex, location and employment status (SDG 1, target 1.1.1). However, these disaggregated data are not yet available on the World Bank website (the World Bank is the "data custodian" for these indicators).[2] This already indicates that quite some efforts are required to improve reporting on LNOB-relevant indicators.

### *3.2. Education*

Access to (high-quality) public services, and especially to education, is one key dimension of LNOB. Deficient education system puts many of the poor at risk of being left behind and not benefitting from growth in average incomes (World Bank 2017). If people lack education they are likely to end up in vulnerable employment that characterizes labor markets in many middle-income economies and it seems unlikely

[2] The World Bank (World Bank 2018a) has made some progress here, for example in its recent Poverty and Shared Prosperity Report (2018).

that a rapidly growing formal sector will absorb the informal workforce quickly (Stuart et al. 2018).

The fact that the lack of proper education impairs future life chances makes education central to LNOB and also explains why the indicators under SDG target 4.5 demand "parity indices" (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators [. . . ] that can be disaggregated" (UNESCO 2016).

Despite increasing enrollment rates, national education systems are failing worldwide to provide adequate learning outcomes for millions of children in low and middle-income countries. The (still patchy) data on learning achievements suggest that students in low-income countries and even middle-income countries often lack even the most basic skills in reading, writing and math. For instance, in rural India, about 75 percent of students in grade 3 could not solve a two-digit subtraction and by grade 5 half could still not do so. Students in Brazil, Indonesia, and Mexico clearly underperform their peers in the OECD, with the notable exception of China where students show learning achievements in both reading and in math above the OECD average (own calculations using data from www.oecd.org/pisa/data/). These poor learning outcomes hold in particular for disadvantaged children, be it because they are female, from poor families, disabled, or from rural or even conflict-affected areas (World Bank 2017). With the SDGs, the emphasis of measuring progress in education has therefore shifted from enrollment to learning achievement because "schooling is not the same as learning" (World Bank 2017).

Surprisingly, little data on learning outcome exist and the school enrollment rate can often not be disaggregated by the desired groups—except for gender gaps in education that are increasingly understood and addressed (Minasyan et al. 2019). As reported by UNESCO's Data Digest (UNESCO 2017) disaggregating education data by measures of wealth and disability status, for example, was possible in only 14% and 19% of countries, respectively.

Yet, some evidence for selected groups in selected countries is available. Figure 2 forcefully illustrates the extent of discrimination in access to education in some countries. In Latin America, for instance, the share of the indigenous population that has completed lower secondary schooling can be more than 30 percentage points lower than for other population groups. These differences can be observed despite major progress in increasing the school attendance of indigenous children between 2000 and 2010 in the region (UN 2014; UNESCO 2018). Figure 2 also shows lower secondary school completion by ethnic groups in Ghana, again showing considerable

differences across ethnic groups. For learning outcomes disaggregated data is even scarcer, but few studies exist. For instance, in Uruguay, poor children in grade 6 are five times as likely to be assessed as "not competent" in math than richer children. In general, the findings on learning differences tend to exacerbate the findings on school enrollment and completion rates, with disadvantaged groups seeing particularly large differences once learning outcomes are accounted for (World Bank 2017).

*3.3. Social Protection*

Social protection is an important target under SDG 1 and crucial for LNOB. Specifically, target 1.3 calls for the implementation of "nationally appropriate social protection systems and measures for all, including floors" and including "substantial coverage of the poor and the vulnerable". The corresponding SDG indicator 1.3.1 gives the percentage of the total population covered by at least one social protection benefit (effective coverage). The benefits considered include those for children, mothers with newborns, persons with severe disabilities, the unemployed, and older persons. Based on the sparse data that are available, among middle-income economies there has been quite some progress in achieving higher effective social protection coverage. One main reason for substantial progress in the past 25 years has been the rise of non-contributory cash transfer programs of various types across the developing world. In Latin America, the expansion of means-tested cash transfer program has improved coverage of child, maternity and family benefits among the poor. Yet, the situation has improved less for the somewhat better-off who are neither covered by cash transfers nor by contributory schemes.

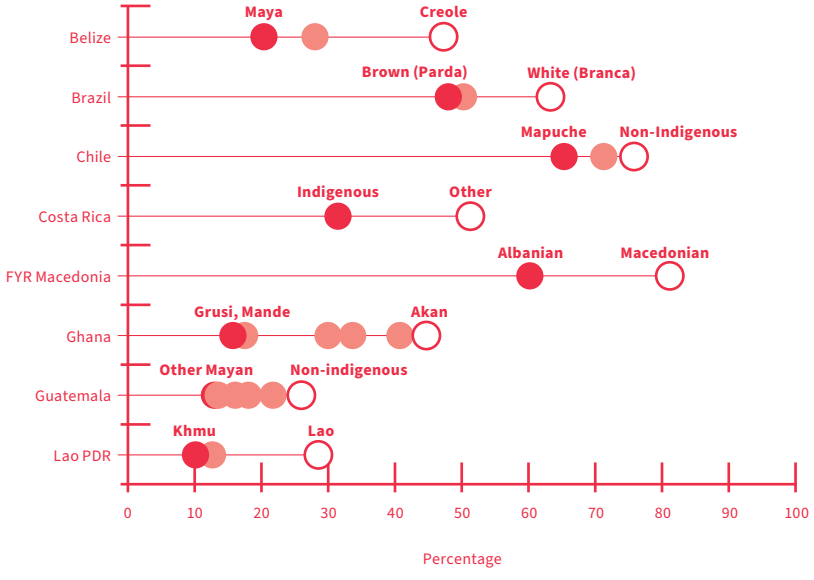


**Figure 2.** Youth who completed lower secondary education in rural areas, by ethnicity, latest available data since 2011. Source: UNESCO (2018). World Inequality Database on Education at www.education-inequalities.org.

On the other hand, huge variation remains. Indicator 1.3.1 (all figures taken from ILO (2017a)) varies between about 40 percent in Bolivia and Colombia and 67 percent for Argentina. In Asia, coverage can be as low as 19 percent in India and reaches its maximum with only 47 percent in the Philippines. In Africa, the Southern African middle-income economies of Botswana, Namibia and South Africa today reach parts of their poorer populations, in particular those at old-age and with children, through a comprehensive system of social transfers. Yet, average effective coverage is relatively low in Botswana with 15 percent and reaches 48 percent in South Africa. In other African middle-income economies, for example Cameroon (9 percent) or Nigeria (4 percent), there is very low effective coverage, while Ghana takes a middle place with 18 percent. Finally, unemployment remains uninsured for most people in most countries of the world. Often, the differences between countries in social protection are not necessarily related to income differences between middle income countries. Colombia has double the per capita income of Bolivia, and South Africa is slightly poorer than Botswana in per capita terms. This implies a very important role for policies, specific institutions, and political commitment (see Section 3.3).

A key indicator for social protection is also the Universal Health Coverage index (UHC index, SDG indicator 3.8.1). This index reports the coverage of essential

health services in percentage (defined as the average coverage of essential services that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access). The maximum value is 80. In Figure 3, we report this index for all non-European middle-income countries, for which the index is available, and, as can readily be seen, the index is available only for a limited number of countries (only 24 out of approximately 90). The Figure shows quite some variance among middle-income economies. While a number of countries, including Peru, Mexico, China, and Thailand are close to full coverage (index of 80), some countries have coverage sometimes well below 50 percent, including two major West African economies, Cote d'Ivoire and Nigeria.

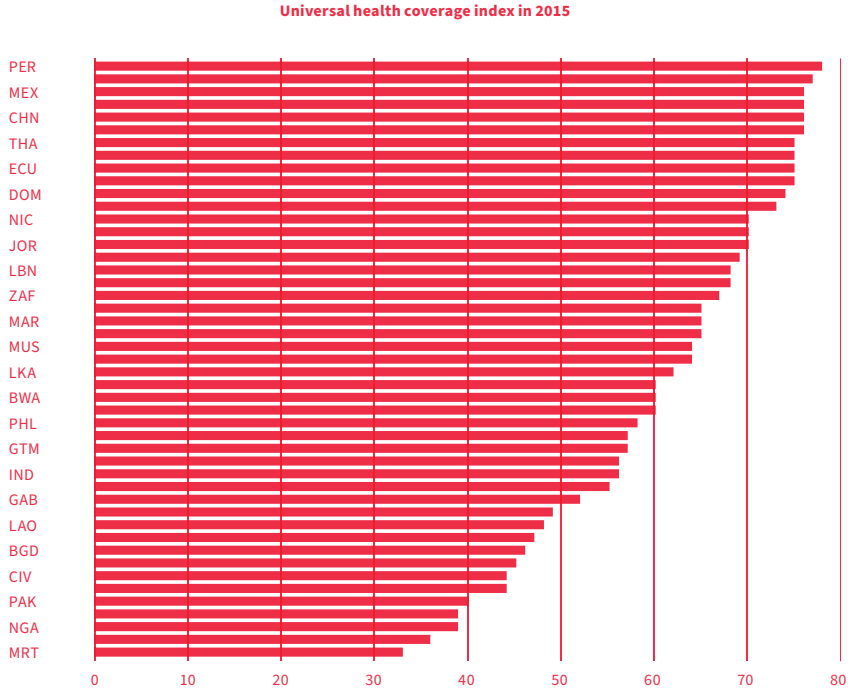


**Figure 3.** Universal health coverage index, 2015. Source: Authors' own compilation adapted from Development Indicators, World Bank (accessed on 30 May 2018). Note: All non-European middle-income countries with data.

According to the SDG indicator catalogue, the UHC index should also be reported for "the most disadvantaged population". In official databases, these indicators are not yet available by these groups, but Hogan et al. (2018) reports the UHC for the poorest wealth quintile (based on a DHS-based asset index) and the

national average for few selected countries. In this sample of countries, it becomes apparent that middle-income economies do not only differ in their average level of access, but also very much in the equality of access. For example, Colombia and Peru come close to an index of 80 (the maximum) on average. Yet, while the UHC index is around 65 for the poorest wealth quintile in Colombia, this figure is well below 60 for Peru.

*3.4. Legal Frameworks and Anti-Discrimination*

Legal frameworks and anti-discrimination measures matter for many dimensions of LNOB. A stock-taking exercise of LNOB-relevant SDG targets and corresponding indicators reveals that gender discrimination is the only dimension of discrimination that is explicitly referred to in terms of legal frameworks. Key indicator 5.1.1 will be used to monitor "whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex". The indicator, however, is (still) a tier III indicator, i.e., under development. Another gender-related indicator under SDG 5 monitors the "number of countries with laws and regulations that guarantee women aged 15–49 years access to sexual and reproductive health care, information and education" (5.6.2). Further, the means of implementation under the gender goal include references (and corresponding indicators) to women's equal rights to land ownership and/or control and the number of countries with systems to track and make public allocations for gender equality and women's empowerment. For all these indicators, no data are available to date, albeit the information can, in principle, be obtained (https://unstats.un.org/sdgs/metadata/).

With respect to the de-jure and de-facto discrimination gaps important regional patterns have been noted. While many countries in East Asia, South-East Asia and Latin America have often passed comprehensive legislation to protect women, there are still enforcement problems in a number of countries. In contrast, countries in the Africa, MENA, and South Asia regions even lack the legislative basis to protect women (Branisa et al. 2014). The Social Institutions and Gender Index (Branisa et al. 2014) that contains both legal (e.g., laws on marriage age, domestic violence, access to land, access to public space) and factual components (e.g., missing women, female genital mutilation incidence) shows the variance between middle-income economies also within the same region. In Africa, for example, Ghana and Nigeria are ranked as having high and very high levels of discrimination, while Namibia and South Africa are classified as having low level of discrimination.

With respect to national legal frameworks and policy documents (de-jure) it appears that developing countries are more ready to eliminate discrimination against

women, children, the elderly, the disabled, and the rural population compared to discrimination against indigenous/ethnic groups, refugees/migrants or LGBT people. Stuart et al. (2016) show that almost all of the national development plans from 39 low- and middle income countries refer to the rural population and women as marginal group. In total, 79% of the plans explicitly mention the disabled as a vulnerable group, while a focus on ethnic and indigenous minorities can only be found in 50%; only 21% countries list refugees/migrants and only 15% of countries LGBT people as marginal groups.

Interestingly, these two groups also receive little (migrants/refugees) or even no (LGBT people) explicit attention in the SDGs to start with. While many indicators are to be provided by sex, age groups, geographical location, and disability. Migrants are only referred to with regard to employment. Migrants and LGBT people are also not formally defined as "vulnerable group" in the agenda document (in contrast to the children, youth, and disabled), albeit they would fall under some of the general provisions of the SDGs, for example target 16.b ("Promote and enforce non-discriminatory laws and policies for sustainable development"). Far from anti-discrimination measures for LGBT people in place, many developing countries criminalize homosexual relations by law. In 76 countries and territories, homosexual relations are illegal, in seven countries they are punishable by death (UN 2017).

To conclude, discrimination based on sex and age have been addressed (also not completely) over the last years by national policies and are mainstreamed across the SDGs. In contrast, discrimination against migrants/refugees, ethnic and indigenous groups as well as LBGT people does not rank high in national agendas. This is despite the fact that these groups tend to be at particular risk of exclusion

While legal frameworks adhering to the principles of non-discrimination constitute an important pre-condition for living in societies without discrimination they do not guarantee the de-facto absence of discrimination in real lives. The gap between de-jure and de-facto discrimination in the realm of LNOB can have multiple causes such as lack of legal access due to poverty and illiteracy or the lack of state capacity to enforce non-discriminatory policies effectively in the context of deep-rooted prejudices and cultural norms (Fredman 2013). A case in point is "equal [...] rights to economic resources, as well as access to basic services, ownership and control over land [...]" (SDG 1, target 1.4). The "access to basic services indicator is a tier III indicator still under development. For the tenure rights and perceptions indicator ("total adult population with secure tenure rights to land" (by sex and type of tenure)), a methodology has been agreed upon, but data (through survey instruments and a corresponding module) remains yet

to be produced (https://unstats.un.org/sdgs/metadata/files/Metadata-01-04-02.pdf). An index on perceived tenure security, the PRIndex, has been piloted for a number of developing countries including a couple of middle-income economies (https://landportal.org/book/indicator/la-pri-pts). The results indicate that between a quarter and third of respondents perceive themselves to have insecure tenure (http://www.prindex.net/analysis). Moreover, some differences between men and women arise. Women in India, for example, are only half as confident as men to have secure tenure rights if they own their dwelling. These insights are very instructive and may bear general relevance for measuring (progress in reducing) discrimination. Aggregate outcome variables (even though measured at the micro-level through surveys) may still conceal important discriminatory practices.

## 4. Review of Key Policies to Implement LNOB

Starting from these observations, we now assess which policies in education, health, labor markets, social protection, and anti-discrimination have been successful in achieving progress in implementing LNOB. We highlight specific examples and best practices and examine context factors and institutions that condition success in specific cases or in middle-income economies in general.

### *4.1. Education*

Within the Asia region, for instance, the most successful countries both in terms of average learning outcomes and equity are from East Asia and they significantly outperform their peers from Indonesia, Malaysia, the Philippines, and Thailand. From this comparison, the World Bank (2018b) draws the general conclusion that the rigorous implementation of policies of "progressive universalism" with equal access at the primary and lower secondary school level has been key. While some lower middle-income countries, in particular in Africa, still need to address basic problems of education infrastructure (availability of and distance to schools, sufficient number of teachers, and school facilities; AAI (2015)), most of these policy challenges can be easily addressed in middle-income countries. They have achieved comparatively low fertility levels which puts less pressure on governments' budget to expand school construction and teacher hiring and training. Many crucial components of education systems in middle-income countries have already been established for longer periods. This and the fiscal space allows these countries to focus on fine-tuning these systems to focus more on the quality, universal access to secondary education, and reduction of educational gaps for vulnerable groups.

Replicating the success of some middle-income countries in implementing LNOB in education first of all implies to build-on and upgrade conditional cash transfer (CCT) systems that have considerably improved access to schooling among the poor in the past 20 years. Conditional cash transfer programs (CCTs) provide monetary transfers conditional on primary or secondary school enrollment and attendance (and/or other conditions). The beneficiaries of CCTs are usually the (very) poor with many programs focusing especially on women, mothers, children, and rural populations. Reviews on the impact of CCTs on schooling and learning find that these programs typically increase student enrollment (for example, Fiszbein et al. 2009). Schooling impacts are similar for men and women, at roughly 1.5 additional years (Parker and Vogl 2017). The success of the program has been attributed to conditioning money transfers to human capital investments. Likewise, the administrative capacity to build an accurate targeting database with moderate errors has ensured that the program was received by the poor (Parker and Todd 2017); www.gob.mx/prospera/documentos/componente-prospera-educacion). The results on the effectiveness of CCTs are usually not available for certain vulnerable groups, such as children with disabilities or by religion and ethnicity. Over the years, however, many CCTs were re-designed to focus on specific vulnerable groups. For instance, Bolsa Familia in Brazil achieved a substantial increase of coverage of Afro-descent families in social protection schemes and an increase of educational outcomes of children in participating families. Familias en Acción in Colombia incorporated suggestions by local indigenous groups in its project design and locally defined education services and accountability criteria. Red de Oportunidades in Panama, a program targeted specifically to indigenous groups, has helped closing educational gaps (ECLAC 2015).

Second, the available evidence suggests that early child care and education has to rank high on the education agenda, since children tend to be left behind at very young age. Early childhood education presents a window of opportunity to address inequalities and closing gaps in physical, cognitive, linguistic, and socio-emotional development between children from richer vs. poorer and rural vs. urban background (Behrman et al. 2013; Engle et al. 2011; Glewwe et al. 2013). Developing countries have expanded access to preschool provision in the past decade with all regions in the world increasing pre-school enrollment. Yet, in developing countries less than 20% of children have access to early childhood education with facilities facing quality problems with children from poor families and rural areas often being excluded from these (World Bank 2016). Evidence from both developed and developing countries has highlighted investment in early childhood education as one of the most cost-effective ways of providing education (World Bank 2016). For instance,

Gertler et al. (2014) find that in the context of an early childhood care and schooling intervention in Kingston, Jamaica, children later earned on average 25% more than children who did not receive the intervention.

Third, the quality of education and learning achievement have to improve not only on average, but in particular among the poor and disadvantaged. Here, teacher quality has been identified as a major cause of bad learning outcomes (World Bank 2017; UNESCO 2015) and its effect is exacerbated for poor children in poorer and disadvantaged areas and schools. Policies need to produce better teachers and distribute good teachers better. While most developing countries have professionalized their teacher management and training systems, almost all of these reforms have failed to improve teacher quality (Galiani and Perez-Truglia 2013; Ganimian and Murnane 2016). In general, it seems that in-service teacher training programs, which have been implemented in many middle-income countries in recent years, seem not be able to add important and relevant skills to teachers. One example is a two-year professional development program to pre-primary teachers in Chile that failed to improve student's cognitive abilities (Yoshikawa et al. 2015). Likewise, a national policy in Indonesia to double salaries of certified teachers found no effect of the program on student learning outcomes (De Ree et al. 2018). These disappointing results on in-service teacher training programs have highlighted the need for recruiting better and more suitable candidates in the first place (Pugatch 2017; World Bank 2018b). From a LNOB perspective, the improvement of education services in disadvantaged areas is key and many developing countries provide special incentives (financial, fast-track to become civil servant teacher, etc.) to locate to such areas. As pointed out in Luschei and Chudgar (2015) many of the existing teacher deployment schemes, such as Mexico's CONAFE, have only shown moderate benefits while cost concerns over these programs continue. Similarly, Gambia's hardship allowance which provided teachers with up to an extra 40% salary bonus for working in remote areas conditional on student learning improvements was found to have no impact on student learning outcomes (Pugatch and Schroeder 2018). On the other hand, Mexico's CONAFE program was reformed to focus stronger on hiring teachers who speak relevant indigenous languages which has shown some initial improvements in the effectiveness of the program in raising students' learning outcomes (Trevino 2013).

Finally, affirmative action programs have the potential to reinforce the effect of all these measures if successfully applied. Several developing countries have introduced some sort of affirmative action programs in education that directly address discrimination. The most studied country in this field is India, which

implements quotas based on caste or other social and income criteria in its educational system. Evidence on the success of the quota systems in education are mostly positive. According to Bertrand et al. (2010) India's affirmative action programs in tertiary education have led to substantial education increases for those low-caste families that benefited from the program while not lowering the quality of education provision. The same result was obtained by Cassan (2019) when studying primary school education. However, Cassan (2019) shows that among unscheduled caste families, only boys benefit. Similarly, success in raising enrollment and graduation rates was reported for Malaysia where various affirmative action programs are in place bumiputras, i.e., indigenous Malays. Enrollment in higher education of bumiputras has increased from 40% in 1970 to more than 80% in public universities (Marcus et al. 2016). We were not able to find examples of large-scale affirmative action programs in education for girls in middle-income countries, albeit the successes of CCTs reported above hold for boys and girls alike.

*4.2. Labor Policies*

LNOB-relevant labor market policies in middle income-economies will have to focus on generating decent employment, including social protection coverage, and better pay. Economic growth and structural change will drive employment generation, but complimentary policies can make sure that labor markets become more inclusive and protective. Examples are labor market policies that are relevant in addressing wage inequalities, under- and unemployment and labor market discrimination in middle-income economies, including minimum wages, public works programs and anti-discriminatory policies.

The available evidence suggests that formal employment cannot be easily increased by interventions aimed at formalizing firms. The effects of these policies have been shown to be negligible (Bruhn and McKenzie 2013). This is because the potential gains of formalizing—for example legalized access to infrastructure, legal processes, or access to social security systems—are not perceived by firms to outweigh the costs of registration and possible tax and social security contribution payments.

Public works programs have a long tradition in developing countries as a safety net instrument for the poor. Public works programs usually provide temporary employment at a wage rate below the minimum wage (often in the construction sector and sometimes only for rural areas) and have been shown to reduce poverty among those employed (Zimmermann 2014). Two well-known programs in middle-income countries are the Argentina's Jefes y Jefas program and India's Mahatma Gandhi National Rural Employment Scheme (MGNRES). Despite benefits for participants,

implementation problems regarding setting the right wage, rationing, corruption, and mismanagement have provided difficulties ensuring the success of public work programs. The programs have been shown to be extremely beneficial to the rural population and to post-conflict settings, which might render these programs a policy towards poorer and disadvantaged regions of middle-income countries (Subbarao et al. 2013). In most countries public works programs tend to attract mostly men. India's MGNRES, however, aims to foster women's participation by providing child care facilities, covered sanitary facilities, and equal wage policies. The evidence regarding female participation is mixed. While official figures put female participation rates above 50 per cent[3], others claim that MGNRES experienced low female participation rates due to problems in the implementation of the stipulated measures (Subbarao et al. 2013).

Minimum wages have been a main tool in the formal sector to ensure that workers and their families can achieve sufficient income to avoid falling into poverty (ILO 2018). For middle-income countries compared to poorer developing countries minimum wage legislation is more likely to be an effective policy tool because in former countries a larger share of the labor force works in the formal sector and governments possess the capacity to enforce enacted legislation (better monitoring, higher fines for cheating, tax reliefs). According to ILO reviews of the literature, minimum wages have generally been shown to benefit minimum-wage earners and decrease the gender pay gap albeit the overall effects are small and the effects on employment remain controversial (ILO 2016, 2017b). The most studied middle-income countries with respect to minimum wage legislation are Brazil (Cunningham 2006; Saltiel and Urzua 2017) and Indonesia (Driemeier et al. 2015; Hohberg and Lay 2015). In both countries, minimum wage policies were found to lead not only to higher wages among formal sector workers but as well for informal sector workers while no job displacement effects took place which seems to indicate that minimum wage legislation can be an effective policy tool to help the poorest workers.

Several developing countries have affirmative action policies in place that aim to increase inclusion of women, disabled, religious groups/castes, and ethnic groups. Affirmative action programs for women are increasingly adopted in developing countries but are mostly concentrated on specific vocational training and entrepreneurship schemes while quotas are still rarely used to enforce employment and wage equality except for special cases, for example parliament seats or positions

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[3] See https://pib.gov.in/newsite/PrintRelease.aspx?relid=186368 (accessed on 20 May 2018).

in government (Marcus et al. 2016). With respect to race and caste, the most famous programs in this context come from India, South Africa and Malaysia. In South Africa the passing of Employment Equality Act in 1998, the Black Economic Empowerment Act in 2003, and the Codes of Good Conduct in 2007 set the objective to increase African descent's employment at all sectors and job levels. The policies were not found to have increased employment prospects as intended among the general black population. However, for women the policies seemed to have led to a small improvement in employment prospects for top positions. In general, weak enforcement, high unemployment rates and a lack of qualified applicants has been blamed for the limited success of South Africa's affirmative action legislation (Klasen and Minasyan 2017). In contrast, Malaysia's experience to empower the indigenous bumiputras starting in the 1970s by imposing employment and equity ownership quota has contributed to lowering wage, employment and asset inequality between the different ethnic groups. Similarly, positive impacts of quotas on civil and public service in India for scheduled and unscheduled tribes and other backward castes were found to have slowly increased the share of persons from scheduled and unscheduled tribes in the country's public sector (Marcus et al. 2016).

The most widely applied affirmative action instrument with respect to disability is the use of mandated quotas for formal sector enterprises in the private and public sector. Although very little evidence for developing countries exist, it seems that many countries do not fulfil these quotas. For instance, South Africa requires firms to employ 2% disabled persons and Tanzania's quota is at 3%. However, in both countries the actual employment share for disabled is less than 1%. Somewhat higher formal sector employment shares are reported for China which in addition to quotas provides tax incentives, and penalties for companies that fail the quota of 1.5%. Due to weak formal inspections, the target of 1.5% is not reached either, however. There is no reliable study yet that looks at the impact of disability quotas on wages and welfare outcomes of disabled persons (Marcus et al. 2016).

### *4.3. Social Protection*

How to achieve universal social protection, including universal health coverage, is a key policy question to implement LNOB. In many middle-income countries, a bottom-up non-contributory approach targeted towards the poor and vulnerable has considerably advanced social protection coverage. The policies and programs (UHC, CCTs, social pensions, and unconditional family benefits) that have overcome the regressive nature of previous health and social transfer systems offer important insights for countries that have not yet introduced them and for further development

of these systems. With regard to LNOB, a first key remaining challenge in many middle-income countries is the significant lack of protection of the "informal non-poor" who are covered neither through social insurance nor through non-contributory programs. How large this group is depends on the size of the informal sector as well as the generosity and effectiveness of non-contributory programs (Bonfert et al. 2015; Cotlear et al. 2015; ILO 2017a). A second challenge remains equity of access despite the progress made, in particular for women, migrants and the disabled[4].

We first examine UHC policies. McKee et al. (2013) points out that many countries achieved UHC while still being quite poor. Although legislation that guarantees UHC is important, it does not automatically translate into access to health services or insurance coverage. McKee et al. (2013) point out that of 75 countries that had de jure UHC, only 58 had de facto UHC in 2009. Countries committed to achieving UHC have adopted a multitude of strategies (focusing on supply-side vs. demand-side constraints, voluntary vs. mandatory health insurance, separate schemes for the poor and informal workers vs. schemes embedded in existing social insurance for the formal sector, financing through contributions vs. general revenues, universal vs. targeted schemes). In very general terms, most countries provide non-contributory health care to the poor and aim at collecting some contributions (often subsidized) from non-poor informal workers (Nakhimovsky et al. 2017). A synthesis of 24 case studies of health care expansion in developing countries (a sample of countries with a strong political commitment to achieving UHC) argues that the success in increasing health coverage of the poor and vulnerable is based on combining supply- and demand-side interventions that prioritize the poor (Cotlear et al. 2015). These interventions include upgrading health care services in poor areas, a focus on primary care, as well as removing economic barriers and providing incentives for the poor (for example, through conditions in CCTs). Cotlear et al. (2015) conclude, however, that there is no "best model". Success does not depend on whether programs target the poor or the entire informal sector nor whether programs are embedded in existing formal sector health insurance or operate autonomously. Rather, enrollment rates of the poor depend on quality of implementation and maturity of the programs. These findings indicate a strong role of political and institutional factors, a view confirmed by McKee et al. (2013). Moreover, effective UHC is highly political because it is redistributive. This implies

[4] Note that we do not address the interrelated issues of (minimum) benefits and financial sustainability, which have of course an important bearing on the viability of the efforts to achieve inclusive social protection systems in emerging countries.

that technical solutions hence need to be aligned with the national political economy context (Kelsall et al. 2016; Reich et al. 2016).

One option to extend the coverage of social protection is to accelerate formalization, but we have discussed the limited potential of deliberate formalization policies in Section 3.2. The second option is to open social insurance schemes to informal workers. In general, voluntary enrollment in social insurance schemes is very low if they are not adapted to the needs of informal sector workers. Many informal sector workers cannot (do not want to) afford even small contributions particularly when these are flat (as opposed to contributions that are sensitive to income). Their income may be irregular and they are often sensitive to time and administrative costs related to enrollment. This explains the low uptake of contributory schemes by informal sector workers (Bonfert et al. 2015). Programs that let beneficiaries choose which risks they want covered according to need and contributory capacity, allow for flexible contribution payments, and untie schemes from employment contracts and residency are more successful (ILO 2017a). For example, in several Latin American countries (Uruguay, Argentina, Brazil, Ecuador), a simplified tax and social security contribution collection mechanism called monotax has been introduced for small contributors. A single payment covers taxes as well as social protection contributions and has been found to facilitate formalization as well as social protection coverage. Indonesia is also set to expand health coverage using a contributory system (see Annex). A third option to reach informal workers is by expanding non-contributory systems to a broad population such as in the case of Mexico's and Brazil's CCT or South Africa's social pension (ILO 2017a). Albeit, potentially the most effective way to increase coverage the feasibility of such an approach depends, of course, on fiscal space. Further, the co-existence of a generous non-contributory system and contributory social insurance can generate disincentives to becoming formal (Aterido et al. 2011). Economic growth may help: The expansion of health coverage to the non-poor informal sector has been more successful in richer countries with a smaller informal sector, lower poverty ratios, and larger government revenues (Cotlear et al. 2015).

Women and migrant workers in informal employment are at particular risk to be excluded from social protection (Holmes and Scott 2016; Hopkins et al. 2016; Ulrichs 2016). They tend to work in the lowest paid, most vulnerable occupations (for example, women in domestic services) and social insurance schemes fail to cater their needs. In particular, social protection systems typically do not accommodate interruptions in employment, a problem for women who face longer periods dedicated to caring for others, and benefits are non-portable, which implies that migrant workers

cannot claim benefits when they return to their home country. Some policies address these problems. For example, in South Africa, labor regulations regarding maximum working hours, sickness benefits and annual leave have been extended in the early 2000s to cover agricultural workers as well as seasonal and temporary workers (Ulrichs 2016). The rights of domestic workers have been strengthened in the past 10 years in quite a number of middle-income countries, including Brazil, South Africa and Thailand (Ulrichs 2016). Bolivia has introduced child credits in its pension system that value the birth of a child with a certain number of months contributed towards pensions. In the same vein, the minimum vesting period to access pension benefits can be reduced to account for interruptions in employment histories of women (Ulrichs 2016). Moreover, women (widows, women in old age, pregnant and lactating mothers) are often specifically targeted by social assistance or UHC programs—they are usually among the first targeted groups before programs are extended to the wider population (Dodlova et al. 2018).

Many countries provide social assistance to disabled persons or families with a disabled member through specifically targeted programs or general social assistance. Yet, little is known about whether these programs reach the disabled in practice. The World Report on Disability (WHO 2011) acknowledges that there is little research on what works in providing safety nets for the disabled but cites anecdotal evidence that the disabled may face barriers in access to existing programs. The report notes that information on programs may be inadequate, welfare offices physically inaccessible, or the design characteristics of programs may fail to account for specific needs of disabled people (disabled children in CCTs, adjusted means testing formula, possibility to designate a person on behalf of the disabled person). A more recent systematic review implies that little progress has been made in the past 5 years, albeit some efforts can be observed in selected countries (for example, in Indonesia, see Annex). The study (Banks et al. 2017) finds that access to social protection appears to fall far below need with benefits from participation limited to maintaining minimum living standards. The review confirms the dearth of high-quality, robust evidence in this area.

## 5. Summary, Conclusions and the Role of Development Cooperation

We show that LNOB can be a meaningful guiding principle for national development policy as well as development cooperation in middle-income economies, as very unequal progress may threaten the gains for the poor of countries graduating from low to middle-income status.

There are two key lessons to be learnt from our review of measuring LNOB progress. First, the LNOB index is helpful to compare country commitments and performance, in particular with regard to data provision and policy formulation. It has, however, clear limitations. In particular, it is an index measuring preparedness rather than implementation. Further—and this also applies to an index that would focus more on outcomes—the condensation of multiple indicators into one number means that the same weighting is applied to all countries. Yet, country priorities for implementing LNOB will be and should be different because the challenges of left-behind groups and discrimination have very different causes and consequences. Second, our review clearly illustrates the huge data gaps that remain for key LNOB indicators. Disaggregated data are needed to identify the left behind, including children, women, youth, persons with disabilities, people living with HIV, older persons, indigenous peoples, refugees, internally displaced persons and migrants. For a number of these groups, in particular persons with disabilities and migrants, data are simply not yet available.

Our brief and selective review of LNOB-relevant policies and approaches in middle-income countries shows a very rich foundation for evidence-based policy-making (and this is only the tip of an iceberg). This is particularly so in education, health and social protection where major policy shifts and experiments, which were well documented and assessed, offer important lessons learnt. Importantly, these are lessons from middle-income countries for middle-income countries, which offers scope for more South-South knowledge-sharing and cooperation. In education, health, and social protection, the targets and (disaggregated) indicators of the Agenda 2030—aside the abovementioned problems—provide clear guidance to the objectives of implementing LNOB and thus the objectives of the relevant policies. This is much less the case for the labor market that is, however, equally relevant for implementing LNOB in middle-income countries. It is well understood that the labor market has a key role in how the poor benefit from growth. While our review of policies on labor markets illustrates some interesting findings on the effectiveness of selected labor market policies in terms of employment outcomes, the link of these policies to inclusive development remains vague. Partly, this is because developments on labor markets are driven by macroeconomic developments and structural change, which, in turn, are influenced by many factors and policies that we have not reviewed here.

With these caveats, a number of challenges and potential policy solutions stand out in terms of substantive sectoral policy issues: (1) In education, progressive universal policies should emphasize equity in learning achievements. There is an

important role for data on learning achievements to uncover differences between the average (or the top) and those left behind. Our review clearly shows the limits to demand-side policies that remain ineffective if some supply-side factors, in particular teacher quality for disadvantaged students remain unaddressed. (2) In social protection, a very clear conclusion is that a universal approach to social policy is possible if there is the political will and commitment. Ideally, this approach is complemented by special or targeted measures to address the distinct obstacles faced by disadvantaged, marginalized or otherwise excluded social groups. Countries can choose different pathways towards expanding coverage and a key issue will be to address the needs of "informal non-poor". (3) With regard to labor market policies, no clear conclusions emerge. This is also since most policies tend to have modest effects. Clearly, labor market policies need to account for structural realities, i.e., in particular a (still) high share of informal employment.

Our sectoral approach in reviewing key policies should not encourage thinking in silos. In fact, the review forcefully illustrates that the challenges of implementing LNOB are closely interlinked, which calls for integrated solutions. Informality, for example, does not only affect and needs to be addressed by labor market policies. Policies to expand social protection coverage will influence formalization rates. Similarly, many social policies targeted towards to poor, in particular CCTs, combine education, health, and labor market components. Such integrated approaches also offer opportunities to mainstream anti-discrimination efforts, in particular women and girls. LNOB thus cuts across sectors and is not only, but also an anti-discrimination agenda.

This is why we support the idea of Risse (2018) who calls for countries to include a specific chapter on LNOB in VNR reporting. In such a chapter, it should be highlighted how policies and programmes are being adapted to reach the people who are furthest behind first. Further, the chapter should provide information on the status of data collection or plans to improve data availability.

Our review shows that anti-discriminatory measures can be found in all sectors, but that they tend to focus on discrimination of girls and women, in line with a review of affirmative action policies (AEPs) in developing countries by Marcus et al. (2016). According to Marcus et al. (2016), only few countries such as Vietnam, China and Malaysia have AEPs in education and labor markets for specific ethnic/indigenous groups. In light of the apparent discrimination against ethnic groups (for example in education), in particular in Africa, but also South-East Asia, this lack of anti-discriminatory measures is alarming. Similarly, discrimination against migrants/refugees and LBGT people is hardly addressed—be it in terms of

legal framework or policies. Some few countries start to address discrimination against the disabled. For all these groups, there is not only a lack of disaggregated data to assess the degree of discrimination in different dimensions. There is also very limited evidence on the policies required to implement this important aspect of LNOB.

Development cooperation for "inclusive development" faces important challenges as redistribution and in particular discrimination are highly political. Where groups are actively discriminated against (as opposed to "merely" not being prioritized), a powerful (political) majority or elite is likely to benefit from this discrimination (exploitation of cheap labor, social status). In such cases, a strong political will and a profound change in societal attitudes are prerequisites for inclusion of the left behind (Stuart et al. 2016). Sometimes, the role of cooperation may thus be limited to support to put in place these political and societal prerequisites.

These findings have important implications for development cooperation. First, cooperation in LNOB-related issues will be more political than in other spheres of cooperation. We have only briefly touched upon the challenges related to the involvement of external actors regarding the sensitive issues of inequality, redistribution, and discrimination, which will have to be kept in mind when engaging with middle-income countries.

A case in point is the lack of anti-discriminatory action for LBGT people. In our view, development cooperation should focus on the international level and encourage decriminalization of homosexuality and anti-discrimination legislation. At the same time, cooperation "on the ground" needs to adhere to the do no harm principle and abstain from donor-driven initiatives that may be incompatible with local priorities and values. Where feasible, development cooperation should support local advocacy groups through capacity building and finance (USAID 2013). A similar approach should be followed regarding ethnic/indigenous groups.

An important instrument for increasing awareness for not leaving behind these groups is the identification and quantification of inequalities and discrimination as an important first step in implementing LNOB. The deficits of measuring progress exist at the national level, but also at the level of the global data custodians. At the national level, new data collection efforts need to start which result in higher survey costs and investments into administrative processes that not all countries, especially poorer countries, might be able to afford (UNESCO 2017). Development cooperation can play a key role in supporting data collection and analysis at these various levels.

Building on the many substantive policy experiences from various middle-income countries, development cooperation can support South-South

cooperation engage in triangular cooperation. This can take various forms, including knowledge transfer from middle-income countries to poorer developing countries or knowledge platforms where exchanges between middle-income countries are facilitated.

Finally, it should not be forgotten that a very large number of those left behind live in middle-income countries, and increasingly so. The "threshold" model of eligibility to receive development cooperation for certain types of support may not be suitable for this situation.

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# SDG 1 and Women's Work: Ignoring the Needs of Women and History—The Case of Sri Lanka

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## 1. Introduction

In this chapter, we assess SDG 1 from the perspective of working women in post-war Sri Lanka. As the breadth of SDGs may help frame policy and offer the possibility to look at the interconnectedness of its multiple aspirational goals, we want to evaluate its effectiveness with regards to labour reform policies under consideration in the country. Yet, we argue that, as SDGs remain grounded in the expansion of market interests, uneven development trajectories are a recurrent feature. Hence, attempting to meet SDG 1 without acknowledging these structural facets of uneven development are unlikely to bring meaningful changes to communities that need it. Furthermore, we emphasize that each SDG cannot be viewed in isolation. For their successful implementation, the SDGs must be viewed as interconnected; as we highlight via linking SDG 1 to SDG 5, SDG 8 and SDG 10.

Historically, Sri Lanka has been a paradigmatic case of high social development despite low economic growth, holding an enviable place within development circles as a positive outlier in human and social development. By 1980, Sri Lanka's life expectancy was higher than that of South Korea, a nation five-fold richer in terms of per capita GNP (Sen 1983). Within this backdrop, Sri Lankan labour was also favourably placed—benefitting from strong labour legislation and labour struggles from the late colonial period (Jayawardena 1972; Candland 2002; Ruwanpura 2016). During this time, capital made concessions, such as union rights and ameliorating hazardous work conditions, to manage labour unrest (Kearney and Robert 1971; Jayawardena 1972). Yet, the advent of open market policies combined with ethnic divisions from 1977 saw the country become embattled in a three-decade war—violently ending in 2009 (Venugopal 2018). It is also within this epoch that labourers initially experienced the unravelling of relatively secure labour rights that they had previously enjoyed.

As Sri Lanka emerges from three decades of war and violence, its integration into the global economy has proceeded undeterred. Venugopal (2018) notes that the Sri Lankan polity since 1977—and despite changing governments of various political

hues—remained firmly committed to an open economy. It is within this context that there is a current attempt at consolidating its multifarious labour laws via reforming labour legislation. Using the on-going initiatives at labour reforms as a point of departure, we aim to question its relationship to SDG 1 through considering the specificity of Sri Lanka. In particular, we focus upon gender and ethnicity to illustrate how vulnerable groups may be left behind by efforts by labour reform initiatives that are pro-market friendly as a means to achieving SDG 1.

Arunatilake (2013) observes that women are placed in vulnerable positions in the name of enhancing 'national competitiveness' because they are overrepresented in labour intensive, low-paid work. Not long after the turn of the century, women constituted four-fifths of the garment industry, serving to propel it to the second highest source of foreign exchange in 2007 (Attanapola 2003; Hancock et al. 2015). The introduction of economic liberalisation policies within Sri Lanka served to drastically restructure the nature of employment, and thus workers' lives. Arunatilake (2013) notes that confronted with global competition, workers were faced with increased job insecurity and a work environment, which sought to increase productivity but decrease costs. The structuring of the economy is what matters for the type and quality of labour force (Seneviratne 2019). In 2017, women made up 53.1% of the informal work force, although labour force participation rate for women is only 36.6%, in comparison to 74.4% for men (Department of Census and Statistics 2018). Hence, Hettige (2017) notes that it is the informal sector that provides women with a primary source of income, which is concerning because the nature of work has direct bearing upon social security. In particular, the high proportion of women within the informal sector indicates their vulnerability and potential job insecurity.

Whilst Sri Lanka's 2025 'Vision' policy document considers the problems of social protection for the informal sector, this is done in isolation from the discussion of improving women's labour participation or their conditions of work (Vision 2025 n.d.). This can, in part, be explained by the infusion between patriarchal structures and ethno-nationalist facets that underline Sri Lankan women's labour market experiences (Withers and Biyanwila 2014). The evidence seems to suggest that Sri Lanka's adoption of open market policies only coalesced together with previous colonial projections of women as holding subservient roles (De Mel 2007).

The arguments that we present here are based on a decade of fieldwork on the topic by Ruwanpura (2012, 2016, 2018). These are supplemented with more recent interviews conducted during July 2019 with three officials from the relevant state bodies—the international labour office in Colombo, union representatives, the National Employers Organisation and labour rights organisations. This recent

empirical material is complemented by archival research done for this paper by Todd into pertinent policy document from the United States Agency for International Development (USAID), the Sri Lankan Wages Board Ordinance, Office of the Cabinet of Ministers and various newspaper sources.

We start this chapter by providing further historical contextualisation of Sri Lanka's development trajectory. It will help us to appreciate how extreme poverty was reduced considerably, although relative inequality has either remained the same or worryingly exacerbated. For instance, studies estimate poverty level to be around 52% in 1970 (Visaria 1979). We will then consider the place of women workers and ethnic minorities in the labour force, and how the vector of social justice continues to evade them. After this, we will briefly account for Sri Lanka's proposed labour reforms and underline how it may risk reversing the benefits that Sri Lankan workers have collectively fought for since colonial times and continued, despite the advent of market reforms. Or, to say the same differently, aiming to achieve SDG 1 of ending extreme poverty by 2030 without recognizing the importance of gender inequality and decent work is unlikely to offer "sustainable" poverty reduction (Rai et al. 2019). Negating that women's work is segregated within the labour market, or often does not contribute to GDP growth within labour reforms, acts as a critical barrier to realizing poverty alleviation for minority groups. In our paper, we want to highlight that objectives of SDG 1 are also intricately connected to other goals—and so any policies that worked through need to be cognizant of these connections. These concerns will be looked at through the perspectives of women and ethnic groups within the garment sector before providing some concluding thoughts. Considering that the case of Sri Lanka specifically offers insight into the troubling trend of external influence—further forcing the question as to whether the achievement of SDG 1 is attainable.

## 2. SDG 1 and Sri Lanka's Development

Sri Lanka's history can be loosely categorised into colonialism, post-1948 independence; development and under development in the 1960s and 1970s; and 'ethnic conflict' from the 1980s onwards (Gamage 2009 cited in Venugopal (2018)). Rhetoric may have morphed through time, but the ideologies which hinder poverty alleviation and inequality have, in large, remained—including in more recent times, a violent ethnic war. We will explore how ethno-nationalist politics have not only shaped recent Sri Lankan history, but also threatens to "define the parameters of a post-war future" (Venugopal 2018, p. 2).

The ethnic conflict in Sri Lanka has spanned nearly three decades in the country's political history, but it is impossible to separate this from uneven development processes, where divisions and social fractures are salient. The ascendance of the United National Party (UNP) in 1977, often composed of Western-oriented elite Sinhalese, catalysed the war between geographically concentrated ethnic divisions (Figure 1) (Venugopal 2018). In juxtaposition to the Sri Lanka Freedom Party (SLFP), who were defeated during this election and promoted strong social welfare, subsidies and trade protective mechanisms between 1956 to 1977, the UNP introduced swift neoliberal market economic policies after their ascension to power (Gamage 2009 cited in Venugopal (2018)). This shift in economic policies also had social consequences. Gunasinghe (1984) has noted that the opening up of the economy brought quick benefits to the capitalist classes, most of whom tended to be Tamil—at a time when subsidies were being withdrawn to the populace, who were predominantly Sinhala. In his view, instead of class solidarity—because all low-income groups across the ethnic groups were affected—this escalated to anti-Tamil sentiment and led to the 1983 ethnic riots that killed ~3000 Tamils. For Dunham and Jayasuriya (2000), it had been readily assumed that the greater inequality inherent within market economies would be accepted by the country's undergoing transition; for them, the case of Sri Lanka illustrates the significant impacts of such inequality, compounded by people's own perceptions of inequality.

The variety of theories attempting to link liberalisation to the civil war are a mix between contradictory to complementary that miss tracing the complete chain of events (Moore (1990) cited in Venugopal (2018)). Venugopal (2018) investigates the political history of the UNP itself. He argues that the ruling party aggravated ethnic divides by failing to offer concessions during the early stages of the conflict due to re-electability struggles. In his view, "they found a way to render the narrow economic interests of a party of traditional elites electorally viable by fusing it with populist electoral appeal on issues, such as imperial fervour or religious bigotry" (ibid., p. 86). They appealed to the Sinhalese masses via appropriated Buddhist tropes, and gained new support from rural hinterlands with their core free-market economic reform policies enshrouded in socialist discourse.

Within the context of liberalisation, public sector jobs, which are generally perceived as more secure and stable, became scarce and were instead replaced by the increased creation of jobs within the free trade zones, in particular within the garment industry. It was women garment workers and other poorly paid service sector work that largely filled these new positions (Lynch 2007; Dunham and Jayasuriya 2000). Due to the civil war, from the 1990s onwards, the military absorbed employment

creation for public sector jobs and, as of 2017, over 1.4 million people (out of the 8.2 million in the labour force) were employed in the public sector, compared to 1.03 million in 1977 (Venugopal 2018; ILO 2018). The military, along with garment sector work or informal sector employment, were the main job sources in Sri Lanka and accounted for ~15% of the labour force (ILO 2018; Department of Census and Statistics 2019).

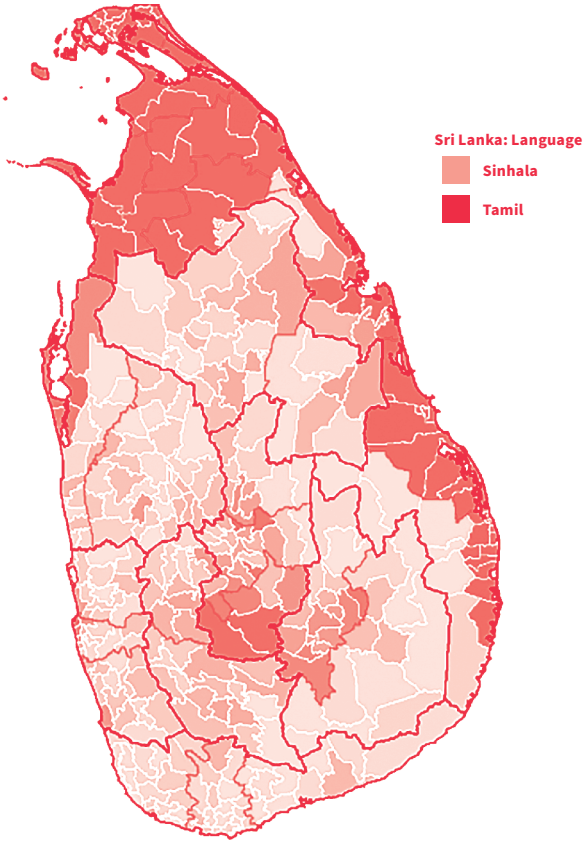


**Figure 1.** This map illustrates the highly geographic ethnic demographics of Sri Lanka (South Asia Blog 2014).

Sri Lanka is also a curious exception for continued war-time economic growth (Stewart and Fitzgerald 2001). Between 1983 to 1998, real GDP growth averaged 4.6% per annum and Sri Lanka's garment industry developed into a two billion dollar export industry (World Bank (2001) cited in Venugopal (2018)). The geographical separation of the conflict can be offered as one explanation of this unique situation;

the North and the South experienced the worst political violence and turmoil, forcing these regions to be on the economic periphery (De Mel 2007). However, Venugopal (2018) contests that rather than 'separate spheres', conflict and growth "co-evolved, finding sustenance in each other" (p. 104). According to him, military life not only occupied an important space in the Sri Lankan economy but, by the mid 1990s, served to cushion the impacts from market reforms similar to that of the expansion of social programmes. Crucially, then, militarisation remains closely threaded to society in post-war Sri Lanka and has played a role in structuring state–society relations, becoming a hallmark of the country's political economy (De Mel 2007; Jayasundara-Smits 2018; Ruwanpura 2018).

## 3. Vectors of Social Justice: Labour, Gender and Ethnicity

Informal work represents two-thirds of the labour force within Sri Lanka (ILO 2018). To aspire towards SDG 1, and, in particular, the aspiration for the equal rights to access economic resources as ascribed in Target 1.4, it is crucial to consider women as informal sector workers and the barriers to protections that they encounter. Even though there is a conventionally held belief that creating opportunities enables empowerment, we want to illustrate that this may not necessarily be the case. We do this via the study of Sri Lankan garment workers. Despite women workers having high education levels, combined with over forty years of open economic policy, the lives of everyday women have yet to improve in any tangible way (Gunawardana 2016). This is especially the case for women in the North and East of the country who have been affected by decades of ethnic conflict, mirroring inconsistencies of the participation rates of women within other emerging economies (Seneviratne 2019). In order for SDG 1, within its relative income and regional inequalities, to be eradicated, Sri Lankan labour reforms must consider the gendered and post-war context under which they are actioned.

Whilst striving for SDG 1, women's challenges are often not contextualised within SDG 5 or SDG 10, both of which speak to gender equality issues. It has previously been identified that SDG 8 falls short of its own ambition by failing to address gender equality because of its inability to realise the interconnected nature of the SDGs (Rai et al. 2019). As such, for SDG 1 to be realised, it is critical that this minority group be situated within their specific circumstances. Traditional modes of development can fail to recognise the precarious place of women in the labour workforce, because their voices are neglected. Within the garment sector, they are never socially uplifted, despite the economic upgrading that the sector has witnessed (see Selwyn 2013; Ruwanpura 2016).

Sri Lanka again presents itself as a peculiar case as it embarked upon value added production within the garment sector by capitalising upon Western concern for ethical codes of conduct within the supply chain. The 'Garments without Guilt' campaign, for instance, has been a crucial process in upscaling the Sri Lankan garment sector. This process is highly intertwined with the country's history of strong labour movements and laws (Jayawardena 1972; Ruwanpura and Wrigley 2011). Trade unions and political parties grew from the colonial context and influenced regulations to varying degrees of success in the immediate pre-independence years. Sri Lanka was thus well positioned to participate in the upscaling of its garment sector due to the history of reinforcing and monitoring labour rulings (Ruwanpura and Wrigley 2011). However, discourses purporting ethical superiority have tended to ignore how gender divisions of labour impact labour practices. Within Sri Lanka, it has been shown that inequality remains rife, raising questions surrounding the ability of ethical rhetoric to actually challenge the structural conditions that disempower women and workers more generally (Ruwanpura 2016). Lynch (2007), for instance, illustrates the negative social effects upon young rural women looking for work in urban factories. Nicknamed *juki girls*, after the Japanese-made sewing machines that they used, these women were viewed as less respectable due to living away from their villages (ibid. 2007). Regulations may enable these workers to access the shop floor, but they do nothing to challenge the socially held views of what women should do.

The inability of codes of conduct to adequately consider gender dimensions is further emphasised by Gunawardana (2016). Based upon ten years of ethnographic fieldwork, the author emphasizes the hardships encountered within the workplace via investigating the depletion that women encounter through the market economy. Depletion occurs "when there is a critical gap between the outflows—domestic, affective, and reproductive—and the inflows that sustain their health and wellbeing" (Rai et al. 2014, p. 86). So, Rai et al. (2014) are concerned that there is not enough acknowledgement of the physical and emotional depletion experienced by workers as they toil and labour. These processes also occur within the factory setting due to increasing competitive pressures from the global market. Stemming from a gendered recruitment process that situates women in the lower-paying and physically demanding jobs, the study emphasizes the conditions accumulating in the inability to work anymore and "highlight the processes that maintain inequality in the global economy" (Gunawardana 2016, p. 862). Labour laws have thus far failed to ensure that women's work is structured such that they can be a force of empowerment and greater equality. Specifically, worsening inequalities and uneven development

clearly manifest in the failure to provide a living wage for garment workers, or this only being provided as a result of coercive overtime work; making moot the claim of 'garments without guilt' (Ruwanpura 2016; see also Gunawardana (2016)).

In the immediate post-war Sri Lankan context (circa 2009), the garment sector was offered incentives, such as tax holidays and fast-tracked development approvals, to bring branch factories in the war-torn North and East of the country. With poverty-ridden and unemployed youth abound in the region, they provided the surplus workers needed for an industry facing labour shortages (Goger and Ruwanpura 2014; Ruwanpura 2018). Yet, how women were affected in conflict-ridden regions is also important to understand.

Women-headed households are part of the social fabric in areas that faced severe conflict; though, matriarchal inheritance and households have predated the conflict, other factors, such as conflict-related deaths and disappearances together with male out-migration for work have precipitated the surge of women-headed households (Ruwanpura and Humphries 2004). For Eastern Sri Lanka, Ruwanpura and Humphries (2004) have documented how relations of dominance and inequality manifest within these household formations. Moreover, Thaheer et al. (2013) have recorded the considerable trauma and insecurity that affected communities went through. Alongside this, Sri Lanka's militarised landscape provided the support to expand the apparel sector (Goger and Ruwanpura 2014; Ruwanpura 2018). The creation of factory jobs had initially been aimed at young men to steer them away from involvement within political violence; contradictorily however, these positions attracted more women (Lynch 2007). In post-war Sri Lanka, given a greater awareness that women too were former para-military combatants, this contradiction became less pronounced and points to the continued military presence in the lives of women workers (Goger and Ruwanpura 2014). The post-war government then pursued their peace via development by getting industrial capital and the military to collude and, in doing so, ignored underlying tensions between war-torn communities and, in fact, may have potentially exacerbated these.

Post-war Sri Lanka's inability to acknowledge the need for political reconciliation and instead enact economic policies to redress political and ethnic grievances has meant human rights violations, in the form of interpersonal and structural violence, continue to be neglected (Thaheer et al. 2013). Examining the interaction between Sinhalese and Tamil women garment workers from various factories in the post-war region further illustrates how ethnicity, combined with the complex post-war context, impedes the realisation of social justice. This holds especially true as the entry of Tamil workers to the garment sector is primarily a post-war feature. A study conducted

by the Women's Centre (2013) details the difficulties prevailing ethnic relations and tension caused amongst women workers. They emphasize how each group perceives the other and this leads to unbridgeable tensions. A crucial perception for Tamil workers is that they do not receive as much leave as the Sinhalese. They also thought that factory managers preferred the Tamils, as they are not able to demand work benefits due to their low position of power (see Table 1). Derogatory language, such as 'Tigers' and 'Mongols', were reportedly directed at Tamil workers, representing just one type of the ethnic discrimination that was reported by almost 50% of the sample. These differences alone illustrate the prevalent differences that Tamil and Sinhalese women face in the workplace.

**Table 1.** Examples of the forms of ethnic discrimination experienced by the 139 Tamil workers interviewed by the Women's Centre (2013).

| Instances That Can Be Termed Areas of Ethnic Discrimination (as Mentioned in the Tamil Survey Questionnaire: Question Numbers 12.1 to 12.8) | Numbers of Respondents Who Identified That They Were Subjected to These in Instances and Areas (%) |
|---|---|
| Relatively reduced salary or benefits because of my ethnicity. | 3 |
| I have a different dress code in order to be identified ethnically | 3 |
| I do not receive leave when necessary unlike my Sinhalese counterparts. | 13 |
| I have been given a different type of treatment, facilities and food. | 10 |
| I have been cornered or isolated by other ethnic counterparts. | 7 |
| Other ethnic counterparts have joked and made fun of me because of my ethnicity. | 10 |
| Other ethnic counterparts have abused, threatened or intimidated me because o my ethnicity. | 7 |
| I am not as yet a member of a Trade Union, as my ethnic group is not currently welcomed to the Trade Unions. | 8 |
| Not answered | 38 |
| Total | 100 |

The Women's Centre publication also reports that 38% of the women remained silent to questions related to ethnic discrimination, hinting at the fear underlying ethnic relations. It appears that ethnic tensions have been exacerbated by the arrival of

Tamil workers to garment factories considering Sinhalese responses: "We resent them because [ . . . ] they are willing to do limitless hours of overtime, we too are compelled to do so". This illustrates the cycle that fixes garment workers in a precarious position. Due to decades of ethnic conflict and discrimination this attitude continues in the factory setting, which negatively affects all workers, irrespective of ethnicity, to work collectively to champion their collective interests (see also Biyanwila (2011)).

It is evident, therefore, that gender and ethnicity have intersected with each other to cause clear challenges within the garment sector. Some problems exist within the garment industry as a whole, such as preconceived notions as to what women workers can do (Lynch 2007). However, it is evident that nuances exist within the Sri Lankan case. Whilst industrialists have successfully capitalized upon an increased concern for ethical supply chains, which are voluntarily governed, limits to corporate self-governance are revealed, as they have not necessarily protected women workers. The ethnic conflict and the legacies that remain have further added another layer to consider. It is within this context that we now examine Sri Lanka's proposed labour laws and their ability to contribute to SDG 1, especially with regard to Targets 1.3 and 1.4, given that they talk about providing greater economic security for workers.

## 4. Proposed Labour Law Reform in Sri Lanka

Sri Lanka is a signatory to multiple ILO conventions, of which 43 have thus far been ratified, including the eight fundamental agreements in which the Discrimination (Employment and Occupation) Convention, 1958 (No. 111) is a part. Tripartism is a central feature at the national level, with the National Labour Advisory Council being the primary platform that guides labour policy discussions and reforms. The ILO (2018) has, however, noted the importance of mechanisms being established for dispute resolution between workers and employers. The Ministry of Labour and Trade Union Relations joins with other ministries to guide labour governance, especially as unions within Sri Lanka are protected by the Constitution of Sri Lanka (1978) and the Trade Union Ordinance (1935). Whilst on paper establishing and joining trade unions is possible, the management has tended to react defensively to unionisation through harassment and/or ensuring loyalty through utilising worker's economic insecurity in much of South Asia (De Neve 2008; Hensman 2011; Ruwanpura 2015).

The Sri Lankan government provides several labour and social protections, such as determined holiday breaks, with these provisions accompanied by increasing reprimands for employers' lack of compliance, which are often viewed as superior to other low- and middle-income countries. Existing labour laws benefit those working in the formal sector, but the ILO (2016, p. xii) has viewed that "existing ordinances

lack compliancy" with relevant conventions. In particular, minority groups, including women, are inadequately protected within such schemes, given contentious gender and ethnic politics in the country, which may partly explain their low participation rates in the labour market.

With a pro-market policy environment in Sri Lanka, which is particularly pronounced at the moment, addressing entrenched inequities within the labour market has meant that policy reforms have given precedence to economic and corporate concerns rather than the labour standpoint. It has resulted in the involvement of the USAID who say that the current labour policy represents a "rigid, fragmented and outdated labour regime" (Zezulin and Stanislaus 2017, p. 7). In their view, it is such onerous labour laws that hinder the country's growth and, as such, they have been fundamental in instigating and drafting the currently proposed labour reforms (2019). It is not just such bare external influence that is troubling in any post-colonial country, within Sri Lanka decades of ethnic war and violence add another inflection to this interference. Whilst the government claims to be focusing on a reconciliation process for the benefit of the country, the fact that it is USAID who have been instrumental in the drafting process begs questions as to the motivations behind this.

Taken at face value, the proposed policy change appears to benefit informal workers, especially women, as it aims to consolidate prevailing fragmented labour laws within a single act. The official discourse also purports to get the "inactive labour population" to contribute to the economy (Office of the Cabinet Ministers 2018). Such rhetoric aspires to offer informal sector women workers greater prominence and protection, and there is also explicit reference to sexual harassment within the draft bill (Government of Sri Lanka 2019). The rejection of both physical and verbal forms of sexual harassment is a welcome signal, given that this abuse has been reported within garment factories and there are no explicit laws on curbing sexual harassment (Hancock et al. 2015). Safeguards against excessive overtime are similarly applicable to the situation of garment workers, with Part IV of the draft bill detailing protections and the enforcement of this. An employer must provide workers with a 12 h break in-between shifts, and overtime pay is one and a half times the base hourly rate. The proposed laws, however, provide employers with the power to ensure that these principles are upheld. In expecting them to be the arbiters upholding the law, crucial oversight is removed from the state or unions—i.e., the core constituents of tripartite mechanisms. In other words, two core institutions that provide workers with protections can now be ignored by employers. Hence, while it may appear that substantial steps have been taken to provide informal workers with greater

protections, by disconnecting other tripartite bodies that should be involved, workers' rights are to be wholly upheld by the employer—not the state or the unions.

Moreover, the draft act does not mention either the extent of external influence or the lack of ILO involvement—raising important questions on the impartiality of the process in preparing a draft act. Interviews from the ILO, unions, labour rights organizations and labour officials have all highlighted the ideological baggage attached to USAID's involvement. As summed up by one interviewee from the ILO, "the larger project is about to make Sri Lanka investor friendly". Such a perspective becomes clearer when realising that USAID did not want the involvement of the ILO or the unions or the relevant department of labour. The lack of ILO involvement runs deeper than just consultation, as one union respondent reasons, "they [the Sri Lankan government] have totally violated all" previously signed ILO agreements. It is thus necessary to consider the precedent this act may be setting, and future governments may have to sidestep ILO agreements, which are in place to protect the workers. Despite the emphasis upon tripartite values, in actuality, this draft agreement has not been created via a bottom-up process, but by vested external interests. The main focus, then, is to make Sri Lanka more accessible to foreign investors rather than improving labour rights, as evidenced by the emphasis placed upon removing the high costs employers have to bear due to Sri Lankan laws. Even an interviewee from the national employers' organization commented, "follow a normal process. Don't rush it"; thus, implicitly acknowledging that due process has been sidestepped.

Making Sri Lanka more accessible for foreign investment, however, neglects Sri Lanka's persistent inequality and the lack of living wages for the working classes. Within the Sri Lankan garment sector alone, workers toil under an uneven working landscape—some rights, such as no use of child labour or providing health and safety is upheld, while others, such as paying a living wage or upholding the rights of workers to unionize and collectively bargain, remain largely unmet. We have also traced how the movement of garment factories to the North and East of Sri Lanka, to ensure that the capital has a sustained labour force, has concealed ethnic tensions or discriminatory practices. To make employers the main arbiters within the context makes it questionable how this policy will manifest in terms of protection for workers or addressing post-war Sri Lanka's unresolved political grievances.

The proposed labour changes may have a flattening element to them but, as many of our respondents, including the ILO respondent records, it will "equalise downwards". Or, workers may be provided with equal rights, but such rights do not offer the same protections previously provided to formal workers. A recurring element found in the interviews was concern over the changes to how the minimum

wage is set. The proposed changes detail the disbanding of the Wages Ordinance Board, with this also comes the disbanding of a collective function to set wages. Employers are then able to dictate their own minimum wage, as there is no fixed wage in the draft act. A scenario may be encountered whereby the minimum wage is set lower to counter the time and a half overtime pay. No mechanism has been provided to revise the wage in line with current economic conditions, nor are there set wages for each industry. It is thus unlikely that women garment workers would encounter a higher degree of economic or social security. Such insecurity is compounded by loose overtime protections; for instance, employers will no longer have to go to the Labour Department every six months to authorize overtime work.

Whilst purporting to focus upon the inactive labour market, it is questionable whether the structuring of such laws truly understands the everyday challenges women workers face. The inability to understand the position of women can be seen by the way the act discusses sexual harassment, which has been critiqued for using language that is too restrictive and could prevent persons from being adequately guarded. For instance, when discussing what may be classed as sexual harassment, the draft act consistently relates this to work threats, rather than accepting complex forms of sexual harassment. It is thus unlikely that women garment workers will be offered more protections; in this regard, SDG 1 will continue to be hindered. Alongside this, and as we and others have shown, poor labour conditions are prominent features effecting women garment sector workers (see also (Ruwanpura 2016; Mezzadri 2017; Prentice and de Neve 2017)). As such, SDG 5 and SDG 8 are interconnected with the ability to realise SDG 1; these goals must be aligned within policy to ensure a genuine move is made to alleviate the position of women in poverty (Rai et al. 2019). The case of Sri Lanka's women garment workers then, connects to the questions raised by Lay in chapter five—without an inclusive labour market that focuses on wider caveats than just poverty eradication, these women will be left behind.

## 5. Conclusions

Through considering Sri Lanka's proposed labour reforms, contextualised by prior labour experiences, it is evident that the ability to end poverty for women is hindered by enduring gender inequalities in the labour force and lack of social protection in the labour market. Whilst Sri Lanka has been celebrated for its progressive social development and poverty reduction, we have shown that this has followed an uneven trajectory. Protracted ethnic conflict served to accentuate the injustices, which hold a complex history, felt by specific groups. This manifested

most evidently in geographic differences within the North and East of the country, with gender and ethnicity continuing to permeate socio-economic relations.

As a case study, we have investigated women garment workers and have shown the continued everyday barriers they face in realizing social and economic security. Ranging from innately held views, which place women in precarious work roles, to global demands which obligate unsafe work conditions, we have shown that social injustices remain rife. Ethnic discrimination adds another dimension for women garment workers, with perceived differences continuing to play a crucial role in workplaces and little attempt at resolving this by managers. We thus have shown that current labour laws are undermined by the proposed reforms without considering the context and differences that underline Sri Lankan society—especially as all oversight is to be placed on employers and not the unions or the state.

Taken at face value, the proposed labour reforms appear to consider gender and social protections for informal workers. As demonstrated, however, the reality of this act is balanced in the favour of the corporate sector and global investors due to the external influence of USAID and the pro-market emphasis of the proposed bill. The ability of the Sri Lankan government to ignore prior ILO conventions sets a troubling precedent for valuing market objectives over the lives of everyday people, contrary to the aims of SDG 1. Specifically, the ability of Sri Lanka to reduce their poverty levels by half (Target 1.2) and aim toward social protections for all (Target 1.3) is questioned in light of this analysis. If Sri Lanka is truly to make steps towards SDG 1, any proposed labour laws must recognize the contentious political terrain and long-lasting labour struggles which contextualize society.

Below we provide some policy recommendations to aid in the realisation of SDG 1:

1. Situate minority groups into their specific contexts. Understanding differing background will enable policy makers to realize the interconnections between the SDG goals, which are crucial for SDG 1 to be accomplished.
2. Structural conditions that hamper SDG 1 must be fully taken into consideration and it must be realized that people's and communities' experiences are not homogenous.
3. For women in labour intensive industries specifically, meaningful efforts must be made to prevent depletion, and, in turn, long-term deterioration of health and well-being.
4. In countries that have faced pronounced conflict, tensions and dichotomies between groups must be fully integrated into initiatives to enable long-term stability. For Sri Lanka, whilst hard policies (such as developing infrastructure)

have been pursued as a means of reconciliation, soft policies must be followed to invest in the welfare of people and communities, which may help alter harmful ethnic perceptions.

We now provide further recommendations specific to the case of Sri Lanka's labour reforms:

1. Ensuring compliance to labour and social protections together with provisions towards living wages may facilitate increased participation of women within labour markets.
2. The safeguarding of workers against, for instance, verbal or sexual harassment must be placed under the control of, primarily, the unions and state, rather than the employer. Disconnecting these tripartite institutions puts the upholding of these safeguards at risk.
3. The government must state its connection to USAID and other external bodies and shift towards the involvement of tripartite actors and the ILO office in the country to ensure due process is followed. Otherwise, the elected government continues to risk losing the trust of key constituents, including unions, state officers and international organizations, such as the ILO, where the country is a member state that has ratified core conventions.
4. Whilst USAID argues that the current system is "outdated", by removing organizations, such as the Wages Ordinance Board, there are less safety nets to protect workers from exploitation, both internal and external. Labour laws should not be streamlined for the sake of pro-market policies and easy governance that may expose working class communities to exploitative labour practices and feeding social inequality.
5. Critically, for SDG 1 to truly be achieved within Sri Lanka, people and communities' well-being must be placed at the heart of social development, before capital accumulation.

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# Social Protection in Ghana—History, Equity-Driven Reforms, Financing and Sustainability

**Edward Asiedu and Anita Baku**

## 1. Introduction

Social protection, until recent decades, has been a critical tool for addressing vulnerability, poverty and inequality in many developed countries (see Norton et al. 2001). However, the adoption of social protection policies in sub-Saharan Africa has increased drastically in the past two decades, with Ghana leading as one of the dominant countries. Forty-three programs in Ghana are categorized loosely as social protection programs, with some of such programs touted as having their core mandate as social protection (International Labour Organization 2014). These programs include the Social Security and National Insurance Trust (SSNIT) (implemented in 1965); the National Health Insurance Scheme (NHIS) (implemented in 2003); the National School Feeding Programme (implemented in 2005); the Capitation Grant for Basic Schools (implemented in 2005); the Livelihood Empowerment Against Poverty (LEAP) program (implemented in 2008); the Labour-Intensive Public Works Programme (implemented in 2008); the Free School Uniform program (implemented in 2009); and the Free Exercise Books program (implemented in 2009). The increasing inequality both within Ghana (due to skewed sectoral growth) and across countries, increased unemployment in Ghana, demographic transition due to long-term changes in dependency ratios arising from an improving life expectancy but, at the same time, accompanied by a low pension coverage and the generally increased vulnerability of persons with low education and skills have necessitated the increased attention to social protection programs in Ghana.

Ghana is one of the fast-developing countries in sub-Saharan Africa, with real GDP growth of 6.3 in 2018. In 2011, Ghana attained status as a middle-income country (MIC) and, in 2018, achieved a per capita income of $ 2201. Yet, the data and poignant news stories remind us that many Ghanaians still live in poverty and some face the risk of falling into poverty, despite the growth of the economy and the numerous social protection policies implemented. Specifically, the Ghana Statistical

Service (2018) categorizes poverty levels into two groups: an upper poverty line and a lower poverty line (poverty and extreme poverty, respectively). The poverty line is pegged at a level corresponding to an adult not being able to meet their essential food and non-food needs at an annual budget of GHS 1760.8 a year, translating into USD 1.15 a day. Extreme poverty is defined as a condition in which an adult is unable to meet their essential food items at an annual budget of GHS 982.2 a year, translating into USD 0.64 a day (Ghana Statistical Service 2018). The seventh round of the Ghana Living Standard Survey (GLSS7) indicates that about 6.8 million Ghanaians are poor, out of which 2.4 million are extremely poor (Ghana Statistical Service 2018). In terms of the effect of growth on poverty reduction, the poverty elasticity of growth, which was around 2 between 1991 and 2006, has, in recent times, reduced to 0.7 (Molini and Paci 2015), raising significant questions regarding the prospects of Ghana's growth for its poverty reduction strategy. Thus, although Ghana was able to reduce the two types of poverty between 1990 and 2006, in order to enable it to achieve the Millennium Development Goal of reducing poverty, the chances of alleviating poverty at the current rate appear impossible unless social protection strategies are designed and well targeted towards the purpose.

Bonilla Garcia and Gruat (2003) identified two types of risks that put people in a vulnerable state and create an environment of impoverishment. These are individual exposures and group exposures to economic and social risks. Individual exposures include social factors such as home-based violence, aging, disability and death (most often of the breadwinner). Group exposures include health-related epidemics, political uncertainty, environmental crises (as a result of climate change) or general economic downturns. The negative effects of globalization such as increasing inequities, high unemployment and underemployment levels among a certain group of people and the inability of governments to tax capital and rather tax labor and consumption have all compounded risks that have resulted in increased poverty levels (Bonilla Garcia and Gruat 2003). The extent of the impact of social protection policies implemented by Ghana to address poverty and vulnerability depends, to a large extent, on the type of policies designed and implemented, improved targeting and sustainability strategies implemented by the country. As it was well articulated by Molini and Paci (2015), tackling poverty and inequality in outcomes and opportunities is, therefore, a long-term development challenge for Ghana, but very critical for consolidating Ghana's middle-income status. Growth alone cannot be depended on to address poverty and vulnerability in Ghana. This chapter explains the history of social protection policies in Ghana, with a view to highlighting the various forms they have taken over time from the 1980s to the present, and broadly

discusses the sustainability of these policies in line with the key sources of financing for social protection in Ghana.

## 2. Brief History and Categorization of Social Protection Policies in Ghana

Social protection generally, and in Ghana, can be grouped broadly into three headings: social insurance, social assistance and labor market regulation. As defined and described by a number of researchers including Norton et al. (2002), Barrientos and Hulme (2008) and Devereux and Sabates-Wheeler (2004), *social insurance* includes programs that provide protection against risks arising from life course contingencies such as maternity and old age, or from work-related contingencies such as unemployment or sickness. *Social assistance* includes safety nets and policies that provide some level of support to poor people and also help reduce future risks of those in poverty. Examples of the latter also include policies that enable the poor to keep children in school. A broader concept of social protection is one that includes *labor market regulations* designed towards setting labor standards to reflect the needs of particular groups, such as women, children, the youth and disabled persons.

Prior to the colonial period, Ghana's social protection system was rooted in the Ghanaian culture where families, households and communities assisted in taking care of the less privileged such as orphans, disabled persons, mentally unstable persons, widows or widowers and old aged persons (Kalusopa et al. 2012). This system, although still practiced, has been weakened by urbanization and globalization (Abebrese 2011). The first form of social protection during the colonial period prior to independence in 1957 was the introduction of the social security system by the British for formal sector workers who were in the British Colonial government (Kuyini 2015).

When Ghana became a republic in 1960, the developmental strategy of the government took the form of social policy (de-Graft Aikens et al. 2015). It can be said that providing free education to the three northern regions was a social protection strategy right after independence. During Ghana's second republic (1969–1972), a number of social protection programs were rolled out. Notable amongst them were the Aliens Compliance Act which saught to free up the small-scaled retail business sector for Ghanaians and the introduction of student loans to university-level students who had, until then, received free education (de-Graft Aikens et al. 2015). After a period of five military governments between 1972 and 1979, the next democratically elected government focused its social protection programs on supporting farmers and developing cottage industries.

The economic downturn of the mid-1970s and early 1980s as a result of poor economic management, severe drought, increased oil prices, the return of over a million Ghanaians from Nigeria, the fall in world commodity prices and high international financial market interest rates (Baah-Boateng 2004) led to the military government at the time turning to the International Monetary Fund and the World Bank for assistance. This action led to the introduction of a structural adjustment program (SAP). The SAP was a program of fiscal discipline that witnessed government subsidies to various ministries decline drastically. Ghanaians paid more for health services and education. Subsidies to the agriculture sector such as those for fertilizers also declined, which led to a fall in agricultural production. This was followed by retrenchments and redeployments (ODI 1996). The effects of the SAP were instantaneous, with increased poverty levels to about 36% between 1987 and 1988, and extreme poverty was at 7% (Stewart and Van Der Geest 1995).

To put a 'human face' to the SAP, the government introduced a social protection program known as the Programme of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) in 1987. According to the ODI (1996), this was a joint initiative by the Government of Ghana, the United Nations International Children Education Fund (UNICEF) and the World Bank. An amount of about USD 83 million was budgeted to be spent under the program to assist vulnerable households in various ways including helping them address nutritional shortfalls (supplementary food program) (see Barimah 1993). The five key action areas under the program were: to help retrenched workers, employment generation, education, provision of the basic need of vulnerable groups and community initiatives (ODI 1996). This program is considered the first social protection program designed to address poverty perceived to have been induced by SAP implementation in Ghana.

According to Stewart and Van Der Geest (1995), the action to help retrench workers involved training and provision of start-up advice. Employment generation activities involved food for job initiatives, public works, credit facilities for small-scale farmers, labor-intensive feeder roads, entrepreneurship training for women, support for small-scale mining and rehabilitation of school buildings. The employment generation activities primarily targeted the poor in the northern regions of Ghana and urban slums. The education interventions of that era focused on the provision of schoolbooks and food for boarding schools. The community-level initiative involved social and economic infrastructural developments within communities across the country. Basic needs provided under the program included the provision of primary healthcare services, deworming of school children, education on nutrition, food

supplements (food-for-work schemes), provision of water and sanitation services and rehabilitation of houses in rural areas. The program ended in 1990.

In 1996, the Government of Ghana introduced Vision 2020, a 25-year medium-term development plan (MTDP), aimed at raising the country to a middle-income country by the year 2020 with a focus on poverty reduction. The first part of this development strategy lasted four years (1996–2000) (Ewusi 2013). Under the plan, inequity in incomes and standard of living between urban and rural areas was to be bridged with public investment in rural areas. Human and infrastructural development was also undertaken during the period. Except for the service sector which experienced growth as a result of telecommunication, most growth in other sectors of the economy was eroded (Ewusi 2013). For instance, inflation increased three times from 13.8% to 40.5%, and the growth rate fell from 4.7% to 3.7% in 2000, exacerbating poverty and inequality. Typical of development plans in sub-Saharan Africa, Vision 2020 was curtailed after a change in government in 2000 and a decision to apply for debt relief by the new government under the Highly Indebted Poor Countries (HIPC) initiative.

Between 2002 and 2005, Ghana launched a strategy called the Ghana Poverty Reduction Strategy (GPRS I). The strategy was part of the requirements under the HIPC initiative where debts owed by Ghana were cancelled and monies meant to finance the debts were to be redirected into economic growth and poverty reduction activities (Osei and Quartey 2001). The decision to opt for debt relief was a result of the downturn of economic gains made from the first step of the Vision 2020 agenda. The strategies to combat poverty under this strategy included fiscal discipline, creation of an enabling environment for private sector growth and employment creation, assisting agricultural-based industries, provision of basic services to the poor and vulnerable groups, access to justice, government transparency and accountability and zero tolerance for corruption. The Government of Ghana (2007) report indicates that GPRS I was generally successful as there were macroeconomic stability, growth in agriculture and expenditure on education, and water and health were increased. The growth rate recorded for the period was 5.8%, suggesting steady economic growth.

Between 2006 and 2009, when GPRS I ended, the government decided to pursue GPRS II, with a focus on private sector development for poverty reduction and addressing the fragility in the social structure, focusing on women and youth empowerment. The pursuit of GPRS II was partly in recognition of the weak link between the attained growth and poverty reduction. Improvement in the social structure included activities directed at improving health, education and housing. GPRS II was also successful but faced some economic difficulties in the election year

of 2008. For instance, the inflation rate increased from 12.8% at the beginning of the year to 18.13% by the end of the year. Interest rates in 2008 increased, and the cedi depreciated against the US dollar (Ewusi 2013).

In 2010, a 'new economic growth poverty reduction strategy' was introduced known as the Ghana Shared Growth and Development Agenda (GSGDA) (Ewusi 2013). The main objectives of the GSGDA were to create macroeconomic stability, increase private sector participation and ensure oil and gas development, human resource and infrastructural development and agricultural modernization. Under macroeconomic stability, fiscal policy was to focus on critical infrastructural development, job creation and poverty reduction. Concerning private sector participation, policies aimed at reducing the risk of doing business, a more responsive financial sector to the needs of private businesses and developing human resources to assist in the growth were implemented. The creation of decent jobs and ensuring standards in the oil and gas industry were of international repute as the focus of strategies under oil and gas development. Under human resource development, improvements in education, health, income inequality, poverty reduction and social protection were the focus. The main focus of agriculture modernization was the use of scientific methods in food production, leading to employment creation and linking the agricultural sector to industry and marking of the produce. Under the GSGDA strategy, an increased growth rate of 14.4% was recorded in 2011, up from a rate of 7.7% in 2010, the inflation rate remained at 8.58 from 2010 and there was a lower budget deficit from 2010 (Ewusi 2013).

With the macro-based poverty reduction strategies not achieving their set goals, there was the need to strengthen bottom-up approaches to poverty reduction. In 2007, Ghana promulgated the National Social Protection Strategy (NSPS) to serve as an umbrella strategy for all social protection programs and provide a framework to ensure coordination and complementarity between programs. As it has been argued, a strong legal and institutional framework for social protection programs is a critical basis for sustainability. The development of the NSPS provided a strong institutional framework for the holistic implementation of Ghana's social protection policies. The NSPS mentions (1) the establishment of a new social grant scheme to provide a basic and secure income for the most vulnerable households, culminating in the introduction of the Livelihood Empowerment Against Poverty (LEAP) program, (2) better poverty targeting of existing social protection programs, which is still yet to be attained, and (3) packages of complementary inputs.

In more recent times (the 2000s), several programs were implemented by the government, some implemented prior to the NSPS coming into effect, whilst others

emerged out of the formulation of the NSPS. Social protection policies in Ghana in the 2000s—unlike those of the 1980s that were designed to address vulnerabilities created as a result of structural adjustment—were designed to address the widening gap in income and wealth due to skewed sectoral growth and inequality in opportunities, particularly educational opportunities. Growth in the agricultural sector took a dramatic dip in the 2000s, despite overall higher growth in the economy. Ironically, in the same year that Ghana attained middle-income status (2011), it also recorded one of the lowest agricultural growth rates of 0.8%. Many of the recent programs are designed to offset gaps within society. Thus, even though some sectors are not performing as well as expected, others such as the oil and gas sectors are performing extremely well, and therefore there is the need to support others, particularly rural dwellers who rely on agriculture as their main source of livelihood.

We now turn to the categorization of the post-2000s social protection policies in Ghana into the textbook classification of social insurance, social assistance and labor market interventions. Social insurance programs implemented in recent years include the conversion of the Provident Pension Fund to a fully fledged pension scheme in 1991 and the introduction of a three-tier scheme in 2008 that provides an avenue for informal sector workers who were initially not covered under the fully fledged pension to also contribute towards their pensions; the introduction of the National Health Insurance Scheme (NHIS) in 2005 to provide health coverage for the poor, the majority of whom under cash-and-carry did not have access to health services; and the introduction of the Ghana Agricultural Insurance Programme (GAIP) in 2011 to offset the debilitating effect of climate change on farmer yields and improve overall farm households' welfare.

With regard to social assistance programs, Ghana, in recent years, has introduced an array of policies to provide direct assistance to the poor. Notable among these policies are the Livelihood Empowerment Against Poverty (LEAP) program introduced in 2008 to serve as the country's flagship social protection program; the National School Feeding Programme introduced in 2005 to provide food supplements to children at school; the Free School Uniform program implemented in 2009; Free and Compulsory Universal Basic Education (FCUBE) implemented in 1995; and, lastly, the recent Free Senior High School Education (Free SHS) policy implemented in 2017. The evidence thus far shows that Ghana's social protection policies in recent times have been quite heavy on the provision of assistance, with little contributions from beneficiaries. For example, under Free SHS, in addition to the free tuition, the government provides books, meals and all other associated educational materials to senior high schools with very little or no contribution from parents.

Labor market interventions have also, in recent times, become a prominent component of Ghana's social protection policies. For example, Ghana established a government microfinance institution in 2006 called the Microfinance and Small Loans Centre (MASLOC) with seed money of about USD 50 million, with the object of providing microloans targeted at reducing poverty and creating jobs. The MASLOC also provides training programs to beneficiaries on financial management. The Youth Enterprise Support (YES) fund was established in 2014 to support the youth in creating businesses by the government. In 2017, the National Entrepreneurship and Innovation Programme (NEIP) replaced the YES fund, but with the same mandate of supporting youth entrepreneurship. As of July 2019, 1350 young entrepreneurs received funding for their business ideas with amounts ranging from GHS 10,000 to GHS 100,000). To (temporarily) address the increasing problem of graduate unemployment, the government established the Nation Builder Corps (NabCo) in 2018 to provide immediate temporal employment for graduates from tertiary institutions for three years after graduation. There are various modules under the NabCo focusing on specific sectors. The modules include: Educate Ghana, Heal Ghana, Feed Ghana, Revenue Ghana, Digitize Ghana, Civic Ghana and Enterprise Ghana. The expectation is that participants under the NabCo will gain employable skills to enable them to gain permanent positions elsewhere after the three years.

The labor market intervention directly linked to the poor is the Labour-Intensive Public Works instituted in 2011. This is a program aimed at providing temporary employment to the poor in rural areas during the off-cropping seasons to reduce the incidence of poverty as a result of seasonal unemployment. The program is implemented by the Government of Ghana, with assistance from the International Development Agency and World Bank as part of the Ghana Social Opportunities Project (Honorati 2015; Osei et al. 2015). An impact assessment performed by Osei et al. (2015) in 2013 revealed a reduction in poverty for beneficiary households from 62.4% before the intervention to 55.5% after the intervention. Thus, the 2000s saw an avalanche of social protection policies implemented in Ghana. The sustainability of these policies is broadly described in the next section.

**3. Financing and Sustainability of Social Protection in Ghana**

Whilst Ghana has an array of social protection interventions, expenditure on social protection as a percentage of the GDP has been, historically, relatively low. Ghana spent a total of 0.5% of its gross domestic product (GDP) on social protection programs in 2014 (World Bank 2016). As shown in Figure 1, that percentage increased to 0.76% in 2015, increased marginally to 1% in 2016 and decreased to 0.63% in

2019. This amount is less than half the average spent by other lower-middle-income countries in the same category which averages 1.6 (world) and 2.16 (sub-Saharan African countries). As it has been argued, more open economies call for more pro-active governments and higher social protection expenditure (see Rodrik 1997). However, the bigger question is not just how much is spent but rather what the source of the financing is. Thus, behind the façade of the number of social protection policies implemented by Ghana, the question is to what extent are these policies sustainable.

Unlike social protection interventions in the 1980s that were spearheaded heavily with funding mainly from international organizations, protection programs in the 2000s were mainly government-funded programs with support from development partners. The discovery of oil in Ghana placed the government in a better position to fund many of its social protection policies. Worth mentioning is the strong role of the government in funding the LEAP program as well all the post-2008 social protection programs. As it has been argued by Niño-Zarazúa et al. (2012), social protection programs that are largely supported by development partners may not be sustainable when the interest of these partners shifts.

Figure 2 shows the relative role of the government vis à vis donors in the funding of social protection in Ghana. The figure shows how the country's budgetary allocation to its flagship social protection program—LEAP—increased significantly from GHS 50 million in 2015 to over GHS 160 million in 2018, signaling an increased commitment to social protection. On the side of donors, we find a drastic reduction in monetary support for LEAP over the years.

Considering the traditional social protection programs implemented by Ghana (excluding the latest Free Senior High School policy), in the School Feeding Programme (SFP) budget allocation of the social assistance budget, in 2018, a whopping 64% of the social assistance budget went to the SFP, whilst 26% went to the LEAP program (UNICEF 2018). Thus, the data on the allocation of the social protection budget show a higher commitment to expansion in educational opportunities and increase in outcomes. The key theory of change of the SFP is the expectation that the SFP can lead to increased school attendance and retention of and improvement in children's cognitive skills, and for that matter, the government was willing to spend a big chunk of the social assistance budget on the SFP.

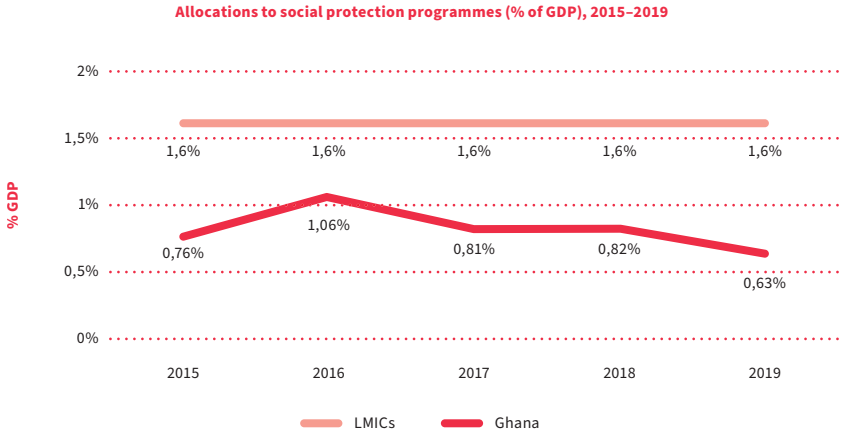


**Figure 1.** Allocations to social protection programs. Source: UNICEF Ghana Social Protection Budget Brief.

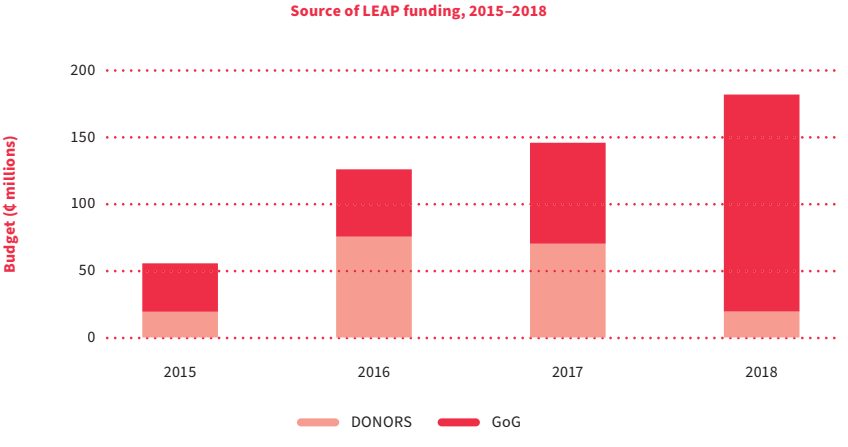


**Figure 2.** Source of LEAP funding, 2015–2018. Source: UNICEF (2018). Ghana Social Protection Budget Brief.

In 2017, the government implemented one of its latest large-scale education-based social assistance policies—the Free Senior High School Policy (Free SHS). The program provides free tuition, textbooks and meals for high school children in all public schools throughout the country and lacks any form of targeting of beneficiaries. Unlike other countries where private secondary schools are considered superior to that of public, in Ghana, the reverse is the case. Ironically, private basic and junior high schools are considered better than public schools; therefore,

rich families take their children to the best private schools at the lower levels, and because of the quality of the schools, these students end up with the best grades, which allows them to enter the best free public schools. Thus, even though the government policy free SHS is targeting universal access to education for all children, it could indeed exacerbate inequality by allowing rich households to channel their savings on secondary education into investments and accumulation of land and other economically important assets. In 2018 alone, Ghana allocated GHS 414 million to the program, which is three times the allocation to the LEAP program. Improving the targeting of social assistance programs can lead to reducing costs and improving the overall wellbeing of those who really need support.

Some authors (see Azeem and Adamtey 2004; Stewart and Van Der Geest 1995) indicated failure for some social assistance programs implemented in Ghana in the 1980s. Azeem and Adamtey (2004), for instance, argued that poverty and unemployment continued to persist under the PAMSCAD program due to poor targeting. Evaluation of the program revealed that there was a high number of underserved beneficiaries and a high number of none-receiving poor excluded from the scheme (see Stewart and Van Der Geest 1995 for details). Whilst some 4% of redeployed households were impoverished before the introduction of the SAP, a review of PAMSCAD indicated the number of impoverished had increased to 22%. Azeem and Adamtey (2004) and Stewart and Van Der Geest (1995) were, however, of the consensus that lessons from PAMSCAD assisted in the implementation of subsequent social protection programs in the country.

Studies conducted on the LEAP program, for instance, have revealed immense benefits to beneficiaries, reducing poverty levels and improving their livelihood. For example, Fisher et al. (2017), in a study conducted on beneficiaries in two districts in two regions in Ghana, found that there was improvement in their general livelihoods in terms of preventing hunger, ability to make better job choices, investment in education for their children, reducing destructive coping strategies and improvement in the self-dignity of the beneficiaries. On the flip side, the study found that the amount given to beneficiaries was not enough to invest. However, heterogeneity in impacts was observed. Older beneficiaries under the LEAP program were observed to have engaged in petty trading.

Daidone et al. (2015), in their assessment of the LEAP program, observed that the program assisted in providing input for agriculture, improved on- and off-farm activities for males, increased the ability to hire labor for farm work, increased cash savings and improved paying off debts. The LEAP program, however, similar to the PAMSCAD, has also been fraught with targeting challenges of potential beneficiaries,

with some reported cases of political interferences in the selection of beneficiaries (Jaha and Sika-Bright 2015; Ragno et al. 2016). Aside LEAP, evidence of political interferences has been observed in other programs. Alhassan et al. (2016) and Fusheini (2016) articulated evidence of political interference in the management of the NHIS, whilst Aryeetey et al. (2016) questioned the sustainability of the NHIS due to political commitment to reducing delays in payment to healthcare facilities.

The issue of the inability to properly target beneficiaries is still the main problem of social protection programs in Ghana. We argue that the wave of digital innovation can be harnessed to improve the targeting of social protection initiatives. Ghana successfully implemented the Taxpayer Identification Number (TIN) in 2018, which, unlike the previous tax regime, where people had to go to tax offices to obtain TINs, is easy to generate by individuals and corporate entities via a mobile phone. It has become mandatory to indicate one's TIN on all documents for a wide range of services. Thus, without a TIN, people cannot access a number of important services. The new TIN, by design, is required to register a business, open a bank account, register a vehicle, buy land, obtain a passport, collect goods from ports and airports, obtain payment from a government agency, bid for a contract, etc. Good data are required for improving the targeting of social protection interventions, and therefore having data on the economic activities of the majority of people in a database could be harnessed to improve targeting. For example, owning landed properties in certain neighborhoods in Ghana should exclude such persons from certain social assistance programs. Ghana has also introduced a large-scale National Barometric Identification System (Ghana Card) meant to improve the collection and use of administrative data; therefore, this system, together with the TIN, can help to improve the targeting of social assistance programs. Therefore, the integration of technology highlights the role of data science in transforming the targeting of social assistance programs, in line with the attainment of the SDGs of reducing poverty (SDGs 1 and 2) and inequality (SDG10). The next decade should see an improvement in the targeting of social assistance programs in Ghana if the technology is harnessed to generate improved data and therefore improved identification of the needy in society.

Table 1 provides a summary of the key social protection policies implemented in Ghana from the 1980s to the 2000s, highlighting the year of introduction and main source of financing.

**Table 1.** Summary of key social protection policies in Ghana.

| Social Protection Policies and Interventions in Ghana | Year Introduced | Source of Financing | Governance (Supervisory Ministry) | Current State |
|---|---|---|---|---|
| SSNIT | 1965—Stated as a provident fund<br>1991—Became pension scheme<br>2008—The scheme became a three-tier scheme, encouraging more savings and enrobing informal sector workers | Workers contributed 5.5% of their salaries and the employer contributed 13% | Social Security and National Insurance Trust | Ongoing |
| Programme of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) | 1987 across all regions | Government of Ghana, UNICEF and the World Food Programme | Ministry of Local Government | Ended in 1990 |
| LEAP | 2007<br>Started 2008 | Government of Ghana, Department for International Development (DFID), World Bank and UNICEF, ILO, Government of Brazil | Ministry of Gender, Children and Social Protection | Ongoing |
| NHIS | Enacted in 2003<br>Piloted in 2004<br>Started in 2005 | 2.5% VAT levy on goods and services<br>2.5% of pension contributions<br>Investment income on monies collected | Ministry of Health | Ongoing |
| Ghana Agricultural Insurance Programme (GAIP) | 2011 | Initial money?<br>10% of the cost of items as premium from farmers | Ghana Insurers Association—Governance structure includes the Ministry of Food and Agriculture, Ministry of Finance, Farmer Representatives and their Development Partners | Ongoing |
| Capitation Grant | 2003 | Government of Ghana, World Bank | Ministry of Education, Science and Sports | Ongoing |

**Table 1.** *Cont.*

| Social Protection Policies and Interventions in Ghana | Year Introduced | Source of Financing | Governance (Supervisory Ministry) | Current State |
|---|---|---|---|---|
| Ghana School Feeding Programme | 2005 | Government of Ghana (GoG), with the support of the Netherlands, World Food Programme, Catholic Relief Service, Partnership for Child Development, Bill and Melinda Gates Foundation, Dubai Cares | Ministry of Local Government, and other collaborative ministries | Ongoing |
| Free School Uniform Policy | 2009 | Government of Ghana | Ministry of Education | Stopped |
| Labor-Intensive Public Works | 2011 | Government of Ghana World Bank | Ministry of Local Government and Rural Development | Ongoing |
| National Entrepreneurship and Innovation Programme (NEIP) | 2017 | $10 million seed funding from government | Ministry of Business Development | Ongoing |
| Free and Compulsory Universal Basic Education (FCUBE) | 1995–2005 | Government of Ghana Support from World Bank | Ministry of Education | Ongoing |
| Free Senior High School Education (Free SHS) | 2017 | Government of Ghana | Ministry of Education | Ongoing |
| Microfinance and Small Loans Centre (MASLOC). | 2004 Started operations in 2006 | Government of Ghana | Office of the President | Ongoing |
| Youth Enterprise Support (YES) Fund | 2014 | Government of Ghana | Office of the President | Replaced in 2017 by NEIP |
| Nation Builder Corps (NabCo) established in 2018 | 2018 | Government of Ghana | Office of the President | Ongoing |

Proper institutional coordination is needed for the success of social assistance programs. A better understanding and coordination of theories of change for the individual programs is needed considering the fact that some programs have similar and sometimes complimentary expected outcomes. Such coordination will reduce the overall cost of programs and bring about efficiency in social protection delivery in Ghana. What Ghana's experience has also shown is that a strong national social protection strategy which is linked with a national identification system is critical for the attainment of the social assistance objectives of reducing poverty and inequality.

Additionally, as noted by Banerjee and Esther Duflo (Banerjee et al. 2011), there will be a poverty trap whenever the scope for growing income or wealth at a very fast rate is limited for those who have too little to invest but expands dramatically for those who can invest a bit more. The numerous programs implemented by the government should be designed focusing not just on educated graduates, as in the case of the NabCo or NEIP, or wholesale, as in the case of Free SHS, but also the poor, as they should be one of the important focal points of these programs if the country is to make any significant gains in reducing the current level of poverty by 2030. One cannot also take out the effect of politics on the sustainability of social protection initiatives. In recent times (post-2000s), there has been a tendency for social protection initiatives to have been extracted from political parties' manifestos. Effort should be devoted to still link these initiatives to the national social protection strategy of the country. If not, the country runs the risk of introducing new initiatives every 4 or 8 years (based on the political cycle) and abandoning older programs by predecessor governments. Such a situation can erode the gains made on the social protection front. It is also important that the benefits promised under politically drafted social protection initiatives are reasonable considering resources and attainable over the long haul. There should be a national-level strategy to empower the youth devoid of political party programs embedded in bi-partisan youth policy.

## 4. Conclusions

Social protection is an investment in the social and economic development of societies and individuals. Investment in social protection is crucial for poverty reduction and can play an enormous role in reducing both economic and social vulnerability. Ghana's social protection policies have moved from an over-reliance on outside institutions and partners to self-reliance, which is needed for a sustainable social protection ecosystem. Donors' roles in funding social protection have reduced significantly over recent decades, with the discovery of oil and its associated revenues playing an important role in the government financing of social protection.

With the introduction of the National Social Protection Strategy (NSPS), the detrimental impact of political change in the commitment to social protection should be minimal, and if this is actually the case going forward, then Ghana's social protection should have a formidable future with increased assurance of reduction in future inequality and poverty consistent with the sustainable achievement of SDG1, SGD2 and SGD10. Thus, historically, Ghana is not short of poverty reduction strategies, as evident in the number of such strategies implemented from the 1980s. The country, however, must do more in moving from mere strategies to achieving outcomes, by guarding implementation and improving targeting.

Budgetary allocation to social protection programs in Ghana still lags behind that of other similar developing countries. To this effect, there is the need to increase social assistance to the very vulnerable and improve the targeting of programs, particularly wholesale education-based assistance. Precisely, there is a need to improve the targeting of the Free Senior High School program. As it stands now, children from rich homes are enjoying the same level of coverage as those from poor homes. With proper targeting, resources can be moved to programs that directly benefit the poor such as the LEAP program and the School Feeding Programme in deplorable schools. Lastly, to achieve adequate coverage of social protection programs in Ghana in the midst of reduced donor support, the private sector, if targeted and assured of transparency in targeting and implementing policies, could be an important source of financing for social protection policies.

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# Education Access and "Learning Poverty" in Seven Southern African Countries

**Servaas van der Berg**

## 1. Introduction

There are many different ways to think about poverty and education. Education, as human capital enables individuals and societies to be more productive, and as an essential capability, in Amartya Sen's sense, is instrumental in improving economic prospects for individuals and societies. Education also has social benefits, such as fertility decline from initially very high levels, reduction in labour market inequality or contributing to political stability, that improve conditions for economic growth and thereby poverty reduction. Poverty can limit education's impact because of the strong association between educational outcomes and home background factors such as socio-economic status, home resources and parental support. The concept "learning poverty"—the inability to read and understand a simple text by age 10—is another conceptual link between education as capability and poverty.

The major success of the educational MDGs was the rapid expansion of access to primary and even secondary education. The primary net enrolment rate (NER, the number of primary-aged pupils actually in school per 100 of the primary-aged population) rose from 83 in developing countries in 2000 to 91 in 2015. Africa saw the most progress, with primary NER rising from 52 in 1990 to 60 by 2000 and a remarkable 80 in 2016 (United Nations 2015, p. 4). However, despite rapid improvement in access and children staying in school longer, progress in terms of how much children learn at school was disappointing. As a result, education quality became an increasingly important focus, as reflected in the 2005 Education for All Global Monitoring Report's focus on what they termed "the quality imperative" (UNESCO 2004). This view grew stronger as the extent of the learning deficit became clearer. The 2019 report on the Sustainable Development Goals (SDGs) (United Nations 2019, p. 30) pointed out that "an estimated 617 million children and adolescents of primary and lower secondary school age—more than 55% of the global total—lacked minimum proficiency in reading and mathematics in 2015." Two-thirds of this was not related to school access, but to low levels of learning in schools.

It is thus not surprising that there was a shift in emphasis, as reflected in Goal 4 of the new Sustainable Development Goals, to "Ensure inclusive and equitable quality

education and promote lifelong learning opportunities for all", and especially in sub-goal 4.1, by 2030 to " . . . ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes" (United Nations 2015). The SDGs' emphasis on learning outcomes and equity were major departures from the MDGs (Crouch and Gustafsson 2019).

The countries of southern Africa considered in this chapter—South Africa and its six neighbours—share a common economic history. They are all affected by the recent weakening of the South African economy through their common links to the regional labour market and through the customs union that five of them belong to. They cover a wide economic development range: Mozambique is a low-income country, Lesotho, Zimbabwe and Eswatini (the former Swaziland) are lower-middle income countries, and Namibia, South Africa and Botswana are upper-middle income countries. Botswana's per capita income of $ 8259 is almost 17 times Mozambique's $490, and extreme poverty rates range between Namibia's 13% and Mozambique's 62% (see Table 1). Additionally, the expansion of school enrolment has taken different courses in these countries, reflecting their institutional backgrounds and history. This has given rise to varied challenges in the field of education and institutional responses to such challenges.

**Table 1.** The countries of southern Africa in a development perspective.

| | GDP per Capita in Current $, 2018 | Poverty Headcount Ratio at $1.90 a Day, 2015 | Gini Index, 2015 | Total Fertility Rate, 2015–20 | Projected Growth Rate of Population 6–17, 2020–30 |
|---|---|---|---|---|---|
| **Botswana** | $8259 | 16.1 % | 53.3 | 2.9 | 0.8% |
| **South Africa** | $6374 | 18.9% | 63.0 | 2.4 | 0.5% |
| **Namibia** | $5931 | 13.4% | 59.1 | 3.4 | 1.5% |
| **Eswatini** | $4140 | 42.0% | 51.5 | 3.0 | −0.2% |
| **Zimbabwe** | $2147 | 21.4% | 43.2 | 3.6 | 0.6% |
| **Lesotho** | $1324 | 59.7% | 54.2 | 3.2 | 0.6% |
| **Mozambique** | $490 | 62.4% | 54.0 | 4.9 | 2.3% |
| **Sub-Saharan Africa** | $1574 | 41.4% | 53.3 | 4.7 | 2.0% |
| **Low income** | $813 | 45.0% | 63.0 | 4.5 | 1.9% |
| **Lower middle income** | $2219 | 14.1% | 59.1 | 2.7 | 0.3% |
| **Upper middle income** | $9200 | 1.6% | 51.5 | 1.9 | 0.0% |
| **High income** | $44,715 | 0.7% | 43.2 | 1.7 | −0.3% |

Where data for the year indicated were not available, data for the most recent year were used. Poverty headcount calculated as 2011 PPP dollars. Sources: Authors' compilation based on data from World Bank (2019b); United Nations Population Division (2019).

The central tenet of this short chapter is that educational policies and institutions in these countries overwhelmingly focus on expanding school and even post-school education. The institutional response to expanded enrolment or increased resources is typically a deepening rather than qualitative change in education policy, while there is a surprising absence of policies strongly focused on improving educational quality. By and large, this seems equally true for the education landscape in most developing countries: the emphasis has shifted little beyond those reflected in the goals of the MDGs, i.e., expanding access, while attention to education quality is seldom found in policies and debates within developing countries. This is the case despite efforts by international institutions such as UNESCO, the UN and the World Bank to improve and drastically expand the measurement of cognitive outcomes, in recognition of the fact that the MDGs largely failed to improve education quality.[1]

In the next section, I provide a very brief perspective on the economic and educational situation in these countries and discuss education access in the context of southern Africa. Section 3 then turns to case studies by discussing a few major education issues and the policies instituted to address them in some of these countries. Section 4 presents the conclusions.

## 2. The Countries of Southern Africa in Perspective

### *2.1. An Economic Perspective*

The countries in this group share most of the features of developing countries. Extreme poverty is still above 40% in Eswatini, Lesotho and Mozambique, while the lower estimate for Zimbabwe of 21% is probably incorrect or dated, considering that the country has experienced great economic upheavals. South Africa and Namibia have extremely high levels of inequality, with Zimbabwe's being quite low. Total fertility rates in South Africa and Botswana are markedly lower than in the rest of the group, yet still high when compared to other upper-middle income countries.[2] Mozambique's total fertility rate of 4.9 is very high compared to countries in the region, though not much above the sub-Saharan average. The growth of the school-age population is high only in Namibia (1.5% per annum for the next decade)

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1 Spaull and Taylor (2015) suggest a way to measure both access and quality.

2 The total fertility rate is the total number of children that would be born to a woman if current age-specific fertility rates were to hold. Conventionally a total fertility rate of 2.1 is regarded as replacement level, the level at which the current population would simply replace itself in the absence of migration. This 2.1 replacement fertility rate allows for some early mortality.

and Mozambique (2.3%) and quite low for the other countries, holding the promise of deepening investment per child.

*2.2. A Perspective on Educational Access*

Table 2 shows net and gross enrolment rates for different years, based on demographic and health surveys and AIDS indicator surveys.[3] No data are available for Botswana from these sources. The NER indicates whether children are enrolled at the right level of education. For the most recent years, the primary NER is only 74 in Mozambique, 84 in Eswatini and Namibia, 88 in South Africa, 91 in Zimbabwe and a surprisingly high 94 in Lesotho. Compared to the NERs, primary gross enrolment rates (GERs), the total number of children in primary school expressed per 100 children in the population that are of primary school age, are quite high—121 in Lesotho, 120 in Eswatini, 116 in Namibia and 115 in South Africa. This is mainly due to children who are too old for primary school still being enrolled at that level, either because they entered school late or because of high repetition rates in primary school. It is also indicative of limited drop-out in primary school.

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[3] Net enrolment relates to the number of children of the appropriate age actually being enrolled in that phase per 100 population in that age group, whereas gross enrolment expresses the number of children in a particular school phase per 100 population in that age group.

**Table 2.** Net and gross enrolment ratios derived from surveys.

| | | Primary NER | | | Primary GER | | | Secondary NER | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Source | Girls | Boys | Total | Girls | Boys | Total | Girls | Boys | Total |
| **Eswatini** | 2006–7 DHS | 86 | 83 | 84 | 117 | 124 | 120 | 41 | 33 | 37 |
| **Lesotho** | 2004 DHS | 87 | 81 | 85 | 127 | 129 | 128 | 27 | 16 | 21 |
| **Lesotho** | 2009 DHS | 91 | 87 | 89 | 123 | 122 | 122 | 40 | 26 | 33 |
| **Lesotho** | 2014 DHS | 95 | 92 | 94 | 119 | 124 | 121 | 51 | 34 | 42 |
| **Mozambique** | 2003 DHS | 57 | 63 | 60 | 86 | 105 | 96 | 7 | 9 | 8 |
| **Mozambique** | 2011 DHS | 75 | 74 | 74 | 98 | 105 | 102 | 23 | 24 | 24 |
| **Mozambique** | 2015 AIS | 74 | 75 | 74 | 96 | 100 | 98 | 27 | 26 | 26 |
| **Namibia** | 2000 DHS | 78 | 77 | 78 | 107 | 112 | 109 | 39 | 30 | 35 |
| **Namibia** | 2006–7 DHS | 85 | 83 | 84 | 112 | 116 | 114 | 53 | 40 | 46 |
| **South Africa** | 2016 DHS | 87 | 90 | 88 | 109 | 115 | 112 | 76 | 77 | 77 |
| **Zimbabwe** | 1999 DHS | 92 | 91 | 91 | 122 | 128 | 125 | 42 | 44 | 43 |
| **Zimbabwe** | 2005–6 DHS | 92 | 91 | 92 | 121 | 125 | 123 | 45 | 45 | 45 |
| **Zimbabwe** | 2015 DHS | 92 | 90 | 91 | 106 | 110 | 108 | 51 | 50 | 50 |

Source: Demographic and health surveys and AIDS indicator surveys, access through ICF/USAID (2019).

The secondary school NER is strongly influenced by the fact that many children have repeated or dropped out before getting to or completing secondary education. South Africa's secondary NER of 77 stands out, followed by Zimbabwe (50) and Namibia (46).

The earlier surveys shown in the table make it possible to discern some trends:

- Lesotho's primary NER rose from 85 to 94 between 2004 and 2014, whilst GER fell only marginally from 129 to 124, indicating high rates of repetition or late enrolment in schools and limited primary drop-out. The higher NER and lower GER of girls is because they repeat far less frequently than boys. Secondary NER doubled from 21 to a still low 42, with girls enjoying a much higher rate of 51 as against 34 for boys.
- Mozambique's primary NER rose from 60 to 74 between 2003 and 2015, eliminating the gender difference favouring boys. Secondary NER is still low at 26, although there has been a considerable improvement since the eight in 2003. Inequality is extremely high: amongst children aged 15–19, only 15.1% had completed grade 9, with large urban–rural differences (30.2% as against 5.8%) and large differences between children from the richest and the poorest household quintiles (40.5% as against 1.4%) (Filmer 2016).

- In Namibia, primary NER rose by 6 points to 84 between 2000 and 2006/7. The substantially higher GER of 114 is an indication of late enrolment and high repetition, which affect boys more than girls. By 2006/7, the secondary NER had already risen to 46, one of the highest in the region, with a quite large gender difference favouring girls (53 against 40).
- South Africa's primary NER in the 2016 DHS is lower than indicated by other sources, while the primary GER of 112 results from high grade repetition. Despite this, continuation to secondary education is high, with the secondary GER at 77.
- Zimbabwe's primary NER remained unchanged at 91 from 1999 to 2015, whilst GER fell from 125 to 108, reflecting declining repetition (official policy is that there should be no repetition). Secondary NER rose from 43 to 50. There are hardly any gender differences, except for the slightly higher primary GER amongst boys.

Bashir et al. (2018, p. 9) group 45 education systems in sub-Sahara Africa into four groups. They place six of the seven countries considered here in Group 1, the established group. In this group, "the primary GERs are high in the baseline year (2000) and close to 100% circa 2013; the out-of-school rates for children of primary school age are low in the latest year of available data; and primary retention rates are close to 100% in 2013". It is surprising that the group of southern African countries considered in this chapter constitute six of the 13 countries referred to as "established", given the wide differences within this group. Mozambique is the exception: it is categorised into Group 3, the emerging group, "where the GERs are low in the baseline year and high by circa 2013; the out-of-school rates for children of primary school age are high in the latest year of available data; and primary retention rates are low in 2013".

*2.3. Historical Patterns of Access*

Information on the highest grade completed by age/birth cohort from censuses and surveys allows approximations of historical patterns of educational access.[4] Table 3 shows that more than half of the 1930 birth cohort in Botswana, Eswatini and Mozambique never entered school. Access increased markedly in the subsequent four decades: for the 1970 birth cohort, only Mozambique had more than 20% that never entered school. In most countries, fewer than 5% of cohorts born in the late

[4] Though selective mortality introduces some sample selection bias, as higher income individuals amongst older cohorts would have had better chances of survival.

1990s did not enter school, with Mozambique still the laggard. South Africa's lead in primary school completion had largely disappeared among cohorts born in the 1970s due to rapid expansion of primary completion in other countries. For the most recent cohorts, Mozambique (49%) and to a lesser extent Lesotho (77%) show lower primary completion rates.

**Table 3.** Estimated proportion of birth cohorts that never entered school or that completed primary education (grade 7).

| | % That Never Entered School | | | | % That Completed Grade 7 | | | |
|---|---|---|---|---|---|---|---|---|
| | 1930 | 1950 | 1970 | 1997 | 1930 | 1950 | 1970 | 1997 |
| **Botswana** | 63.2% | 40.1% | 11.7% | 1.8% | 7.0% | 33.2% | 77.3% | 92.7% |
| **Eswatini** | 53.1% | 29.5% | 12.1% | 3.0% | 16.3% | 38.1% | 70.4% | 86.4% |
| **Lesotho** | 27.6% | 13.4% | 9.5% | 2.6% | 8.0% | 29.3% | 62.2% | 76.5% |
| **Namibia** | 57.4% | 37.7% | 15.4% | 6.2% | 16.3% | 31.6% | 65.1% | 86.2% |
| **Mozambique** | 77.2% | 59.7% | 42.8% | 22.5% | 3.3% | 9.0% | 22.2% | 48.9% |
| **South Africa** | 41.0% | 21.8% | 6.6% | 1.4% | 39.3% | 54.2% | 81.2% | 95.8% |
| **Zimbabwe** | .. | 18.7% | 2.4% | 0.3% | .. | 44.6% | 84.3% | 90.5% |

Sources: Authors' calculations based on data from censuses and household surveys.

## 3. Issues and Policy Responses

A number of education issues and policy responses in these seven countries are of interest from the perspective of inclusion. Because of space constraints I will discuss four, drawing examples from some of these countries:

- resources and priorities;
- serving remote communities;
- repetition, high stakes examinations and dropout;
- cognitive performance, testing and measurement.

### *3.1. Resources and Priorities*

Resource constraints bind strongly in all seven countries, even in Botswana, which for a long time could expand education spending without fiscal stress. One prioritisation issue is the spending balance between school and tertiary education; these countries have high tertiary education unit costs and high tertiary spending levels. Within schools, the tendency to provide many electives at secondary schools

raises unit costs far above those in primary schools, shifting the spending balance towards secondary schools.

Fiscal constraints now bind so strongly in Zimbabwe that most schools have received no new textbooks since 2012. Adopting a new curriculum and a change in the language of teaching and learning in the first years of primary school from English to Shona or Ndebele, the two dominant indigenous languages, exacerbated textbook scarcity. Without appropriate textbooks geared at the new curriculum and the new language policy and with no funding to train teachers to deliver the new curriculum, learning necessarily suffers. Moreover, the strong emphasis on offering many electives raised unit costs in secondary schools to four times those for primary schools. High dropout also prevents economies of scale in some schools.

In Mozambique the big issue remains expansion of the school system. The civil war from independence in 1975 to 1992 caused death and destruction, including the destruction or closure of 58% of schools (Mozambique Ministry of Education 1996, p. 40). This affected educationally lagging regions most; more than 80% of all schools in the central region were destroyed or closed, but none in Maputo City, the capital (Van der Berg et al. 2017). Free primary education, greater financial support to schools, free textbook provision, appointment of more teachers and investment in classroom construction led to rapid expansion of enrolment, from 3.6 million in 2003 to 6.7 million in 2014 (UNICEF 2017). Clearly, supply side rather than demand side factors had been holding back this expansion. The expansion, though, had serious implications for teacher quality.

Today, Mozambique's school network is still inadequate. While 12,291 schools offer grade 1 classes, only 6,624 offer grade 7, the final primary grade. Much fewer schools offer secondary grades: 854 grade 8, and only 435 grade 12. In the Zambezia Province, this problem is most severe: 3252 schools offer grade 1, though only 85 offer grade 12. In the country as a whole, grade 8 enrolment is only 21% and grade 12 enrolment a meagre 12% of that in grade 1. This favours urban children, who make up 11% of students in grade 1, but 37% in grade 12. Hostels offer the only option for many rural students to attend secondary school (see Section 3.2 below).

Understandably, Mozambique's priority is to expand the school system's reach, but they face a lack of qualified teachers in rural areas. The junior primary pupil–teacher ratio was 75 to 1 in 2006, but the appointment of many thousands of new teachers reduced this to a still high 63 to 1 in 2011 (Mozambique Ministry of Education 2013, p. 27). It is especially difficult to entice qualified secondary school teachers to teach in rural schools.

Lesotho's secondary school network also has a limited reach. Primary NER is high, 95 in 2009, ranging between 97 amongst children in the richest quintile of households and 91 in the poorest. Secondary net enrolment is much lower at 34, both because many children are at earlier school phases than they should be due to late school entry and repetition, and because many children drop out before secondary school. There are ten times as many primary schools as secondary schools, which makes access to secondary schools difficult. High education costs to parents and distance to schools reduce access to secondary schools (see Section 3.2.1 below). The government offers some scholarships to poor secondary students, though these are inadequate in amount and in number.

For Lesotho's government, the costs of providing textbooks and teachers are already quite onerous, in part because of high teacher salaries. School feeding is provided with international assistance at primary schools, yet, despite high poverty levels, not in secondary schools. A new curriculum adds to training and textbook needs and makes it difficult for the government to provide textbooks, particularly at secondary level. It appears that the costs of curriculum change have not really been planned for.

The bigger problem, though, lies with the lack of secondary schools. Expanding the school network would be costly, with high costs of construction and teacher salaries. A recent report (World Bank 2019a) makes a case for extending the grades offered in primary schools as a way of retaining children who live far from secondary schools in school longer. Thus, instead of offering grades 1 to 7 only, some primary schools could evolve into combined schools, adding grades 8 to 10 to their offering. This would reduce the cost of expansion by utilising existing facilities better.

Botswana has more fiscal resources than other southern Africa countries, but fiscal constraints have become tighter. While educational outcomes are very unequal, resource allocation between schools is quite egalitarian. For instance, there is a close relationship between enrolment and teacher numbers in secondary schools: 93% of variation in teacher numbers can be explained by enrolment—i.e., the randomness index is only 7% (though data from TIMSS, the Trends in International Mathematics and Science Study, point to some differentials in availability of textbooks and school furniture).[5] The primary teacher–pupil ratio is 26 to 1 and the secondary school ratio an extremely favourable 12 to 1. Despite this, class sizes are often not small.

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[5] This index is effectively simply 1 minus the coefficients of determination (R-squared) in a regression that fits the enrolment of a number of teachers employed per school. Thus, such a regression for Botswana had an R-squared of approximately 0.93.

Ninety percent of students in secondary school attend classes with more than 32 students in their core subjects and one-third are in classes of more than 40 students. In the 2011 TIMSS assessment of grade 9, the average core class size was 37.6, with a standard deviation of 8.4. The low pupil–teacher ratio is the result of a favourable fiscal situation and many electives being offered at upper secondary level, thus large classes are split for elective subjects. The average secondary school teacher teaches only two hours per day (World Bank/UNICEF/Ministry of Education and Skills Development 2020, p. 47).

While Botswana's pupil–teacher ratios at secondary level would indicate that fiscal resources are adequate, the full picture is not as rosy. There is a stark shortage of classrooms, 15% at primary level and even larger at the secondary level, especially for specialist classrooms (e.g., laboratories, libraries). Many classes take place under trees. This shortage is at least to some extent the result of the fact that the budget for teacher salaries and for classroom construction is split between ministries. There is currently pressure to appoint even more teachers in the face of rising numbers of trained teachers remaining unemployed. Moreover, there is even a shortage of textbooks: only two-thirds to three-quarters of the required textbooks are available (World Bank/UNICEF/Ministry of Education and Skills Development 2020, p. 81).

A report by the Ministry of Education and Training of Eswatini indicates that the average pupil–teacher ratio is only 31 to 1 in primary and as low as 13 to 1 in secondary schools. Yet, teacher allocation across schools is not particularly equitable: the pupil–teacher ratio at primary level ranges from 20 to over 60 (Ministry of Education and Training 2016, p. 14; Van der Berg et al. 2018) and Eswatini's allocation of teachers across primary schools had a fair degree of randomness in 2007, with a randomness index of around 20% (Bashir et al. 2018, p. 258).

### *3.2. Serving Remote Communities*

Providing educational opportunities for children in remote rural communities is difficult—for instance, in large and sparsely populated countries such as Namibia and Botswana and in the mountainous areas of Lesotho. Botswana is larger than France or Thailand, but has a population of only $2\frac{1}{2}$ million compared to 82 million and 66 million, respectively. This makes it difficult to bring schools close to the population and to attract good teachers to rural areas. In Kavango, a Namibian region, almost half the schools offer education only up to Grade 4, or even less (UNICEF 2015, p. 71), so children need to move to new schools as they progress to higher grades. Mozambique faces similar problems due to the limited accessibility of secondary schools.

### 3.2.1. School Hostels and Rented Accommodation versus Expanding the School Network

One option for serving isolated communities is to provide schools closer to the population, but that is not always possible. In some locations, the number of children may be too small; in other cases, the cost of constructing schools or providing teacher housing may be astronomical—e.g., in the desert regions of Namibia, where water provision is often unpractical or prohibitively expensive. At the secondary level, ministries often prefer larger secondary schools that make more electives viable. As transport (commuting) is costly or impractical, this necessitates school hostels, which are expensive for poor rural parents, and governments cannot always afford to subsidise them. Evidence to a Namibian Parliamentary Committee supported that "School hostels around the country are still faced with many challenges ranging from deplorable physical facilities, poor food preparation, lack of sanitation and poor hygiene" (UNICEF 2015, p. 73). In the absence of hostels, many secondary students are placed in rented accommodation near schools, but this is expensive and social conditions are sometimes appalling.

As discussed in Section 3.1, many children in Lesotho, especially those located in poor mountainous areas, live far from secondary school, and transportation options are limited or costly. The costs for an average secondary student have been estimated at between USD 650 and USD 900 for a child living in a hostel, with hostel costs constituting up to a quarter of these amounts. Costs include various fees, textbooks/stationery and uniforms (World Bank 2019a, p. 46). These costs are unaffordable to most parents in a country where 60% of the population lives in extreme poverty (see Table 1). Consequently, the net secondary enrolment rate in the richest quintile is 61%, as against only 11% in the poorest quintile (World Bank 2019a, p. 28). Currently, 11% of girls and 5% of boys are in school hostels, with a further 16% of both boys and girls enrolled in secondary school living in rented accommodation. School authorities try to vet the rented accommodation, but this does not completely prevent some serious problems accompanying such accommodation.

As discussed earlier, one of the options of dealing with the access issue at the secondary level is to extend primary schools to incorporate higher grades. This would make it possible for students to continue attending school to a higher level while still living in their own homes. Moreover, this would be cheaper than building completely new schools, and such capital spending would save the recurrent costs for maintaining school hostels. However, an issue that then would come into play is the availability of qualified teachers. This issue is addressed next.

#### 3.2.2. Teacher Assignment: Rural Incentives versus Deployment

Two alternative models of teacher assignment have vastly different consequences. Some countries, such as Botswana and Mozambique, apply a highly centralised system of allocation, often referred to as "deployment", whereas others, such as South Africa and Namibia, have a decentralised system where individuals apply for advertised positions at particular schools. In the latter case especially, incentives are often used to make remote schools more attractive for teachers to choose to go to. However, the fiscal constraints limit the size of incentives that can be offered, and in some countries incentives are regarded as taxable benefits, thus reducing their effect.

Teachers are often highly frustrated with forced deployment to remote areas. In Botswana, many rural teachers complain about what they refer to as "over-staying", a situation where they are initially deployed in rural areas and after many years still do not have the opportunity to move to more attractive locations. Such deployment is also sometimes socially very disruptive—e.g., cases where husband and wife have been deployed in different far-flung parts of this vast country.

A study of the effect of incentives in remote schools in Namibia concluded that incentives for teachers in remote schools may have helped to retain and attract qualified teachers and therefore proposed a modest rise in these incentives: "This places a small additional burden on the education budget, raising incentive costs... This may further improve teacher allocation, signal to teachers in remote schools their contribution is valued, and be a sign to parents in such areas that the education of their children is a concern for the government" (UNICEF 2014, p. 9). Another recommendation that was also accepted was to provide more teacher housing in the most remote areas.

### *3.3. Repetition Policy, High Stakes Examinations and Dropout*

#### 3.3.1. Repetition in the Literature

The international literature is still divided over the issue of repetition as against automatic promotion. Much education research holds that grade repetition may increase the risk of negative outcomes for students. Individuals who repeat face potential stigma, which may contribute to dropout. There is no clear evidence that repetition improves learning, and it is expensive, as it increases the time it takes a student to progress through school. On the other hand, some see repetition as evidence that the school system is promoting learning. There is some evidence that automatic promotion reduces student efforts. A strong argument for repetition in developing countries is that large variation in student capacities in a class complicates

the task of teachers. Setting grade promotion thresholds ensures that all students meet some minimal standard. Yet, repetition tends to increase age ranges within grades. Repetition is much more common in developing countries than high-income countries, and in Francophone as opposed to Anglophone African countries (UNESCO Institute for Statistics 2012; Eisemon 1997).

Automatic promotion need not mean that learners are held to a lower standard, but it should be accompanied by increased quality in other inputs and remediation to support low achieving students (Van der Berg et al. 2019).

### 3.3.2. Repetition in Southern Africa

Promotion policies in southern Africa vary widely between countries. Eswatini, Lesotho, South Africa, Namibia and Mozambique have high repetition rates, while there are stronger limitations on repetition in Botswana and Zimbabwe.

Zimbabwe formally has automatic promotion, yet their Annual Statistics indicate that more than 25,000 children repeated in primary schools (0.75% of enrolment) in 2018 and 12,600 in secondary schools (1.16% of enrolments) (Zimbabwe Ministry of Primary and Secondary Education 2019). Repetition rates have been declining. Especially in primary schools, boys are more likely to repeat than girls are. The Primary School Leaving Examination, which used to be a high-stakes examination that determined access to secondary school, no longer serves this function; all children taking the examination are promoted to grade 8 (Form 1), the beginning of secondary school, although many do not continue (only 80% of 2017 Grade 7 students continued to Form 1). The effect of the high-stakes grade 11 O-level examinations is much more severe, though: this determines access to senior secondary school—Forms 5 and 6 in Zimbabwe's 13-year school system—and also entry into some colleges. The majority of students fail this examination, and less than one-quarter proceed to senior secondary.

Botswana also practices automatic promotion, but with reservation. Officially, it is said that children only repeat when parents agree that they should. Grade repetition is concentrated in the earliest grades of primary school. In 2017, just over 14,000 primary (4.2%) and 719 secondary students (0.4%) repeated (World Bank/UNICEF/Ministry of Education and Skills Development 2020, p. 49). High failure rates in the Grade 10 Junior Certificate Examination result in a small number of students in senior secondary schools. In 2014, the senior secondary GER was 62, while the NER, the proportion of the senior secondary age group that was in fact in this school phase, was only 29 (World Bank/UNICEF/Ministry of Education and Skills Development 2020, p. 9)

Each year, about 15% of Eswatini's primary learners are not promoted to the next grade (UNICEF 2018, p. 11), despite official policy limiting repetition to 10% per grade per school (UNICEF 2016). Due to repetition and dropout, the number of students not overaged in grade 1 was just under 30,000 in 2011, while the number not overaged in grade 7 in 2017 was less than 10,000 (UNICEF 2018, p. 38). Low promotion rates (as low as 60% to 70%) are experienced in the grades before external examinations take place in grades 7, 10 and 12. Ministry officials ascribe this to accountability pressure on schools to perform well in the external examinations. This leads to weaker students being held back in the previous grade, something that also encourages high dropout rates in these grades. The effect of this high repetition rate in combination with high dropout can be seen in Table 4, which shows enrolment by grade for a number of years. By following diagonally downwards and to the left, one can observe a "pseudo-cohort", as, for instance, shown in the table by the highlights for the 2009 grade 5 cohort. These are not actual cohorts. For the highlighted diagonal, the number of students in grade 6 in 2010 was less than in grade 5 in 2009, due to dropout and repetition, but some of the 31,200 grade 6 students in 2010 were repeaters from 2009, so they were not part of the original 2009 grade 5 cohort. Following this diagonal further, it transpires that the Form 5 (grade 12) "pseudo cohort" in 2016 was less than 13,000, only 39% of the number of students in grade 5 in 2009. In a similar way, one can follow cohorts from earlier years in earlier grades, but they would not yet have reached the highest grades. The second panel offers another way of following a real cohort: the cohort of 11-year-old children in 2011[6] was reduced by dropout and repetition so that there were fewer 12-years-olds in 2012, 13-year-olds in 2013, and so on. Of the original age cohort, only 63% were still in school at age 18, but many of these would have repeated one or more grades. The 63% reflects the high dropout between ages 11 and 18; repetition cannot be observed in this panel.

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[6] Age data are not available for the earlier years.

**Table 4.** Eswatini "pseudo-cohort" versus actual cohorts, 2009–2016.

| Panel A | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **2009** | **2010** | **2011** | **2012** | **2013** | **2014** | **2015** | **2016** |
| **Grade 1** | 37,091 | 411,843 | 37,034 | 36,348 | 36,211 | 36,305 | 34,791 | 32,491 |
| **Grade 2** | 35,805 | 36,622 | 37,631 | 35,610 | 34,696 | 35,097 | 35,412 | 33,812 |
| **Grade 3** | 37,158 | 37,457 | 38,478 | 38,889 | 37,181 | 36,833 | 36,968 | 36,873 |
| **Grade 4** | 34,822 | 35,180 | 34,831 | 36,670 | 36,896 | 36,248 | 36,003 | 35,997 |
| **Grade 5** | 32,971 | 34,078 | 34,389 | 34,074 | 35,846 | 36,888 | 35,978 | 35,680 |
| **Grade 6** | 30,081 | 31,206 | 32,085 | 32,574 | 32,419 | 34,337 | 35,886 | 35,023 |
| **Grade 7** | 23,183 | 24,260 | 24,246 | 24,254 | 25,055 | 24,324 | 25,909 | 27,679 |
| **Form 1** | 22,059 | 23,800 | 24,784 | 24,940 | 25,448 | 26,975 | 27,080 | 27,664 |
| **Form 2** | 20,811 | 22,303 | 22,648 | 22,451 | 22,954 | 24,182 | 25,185 | 25,214 |
| **Form 3** | 14,343 | 14,952 | 14,179 | 13,994 | 15,077 | 14,185 | 15,549 | 16,873 |
| **Form 4** | 15,553 | 17,293 | 18,177 | 17,398 | 17,273 | 18,901 | 19,261 | 19,836 |
| **Form 5** | 10,307 | 10,626 | 10,556 | 11,093 | 11,144 | 11,134 | 12,007 | 12,753 |

| Panel B | | | | | | |
|---|---|---|---|---|---|---|
| **Cohort** | **2011 age 13** | **2012 age 14** | **2013 age 15** | **2014 age 16** | **2015 age 17** | **2016 age 18** |
| **Enrolled** | 27,605 | 26,002 | 24,595 | 23,147 | 21,748 | 17,357 |

Note: the highlighted figures show how one can track a pseudo-cohort across years and grades, as shown here for the 2009 grade 5 cohort. Source: Authors' compilation.

Due to late enrolment and early repetition, 29% of grade 1 students in Namibia are overaged. High repetition rates throughout primary and junior secondary grades raise the overage proportion to 72% in grade 9, but thereafter this proportion declines as dropouts exceed the high repetition rate, especially among the overaged. Thus, the overaged proportion declines, but is still as high as 51% in grade 12. As part of a major curriculum change, the grade 10 examination, which currently acts as a high barrier, is being abolished and replaced by a grade 11 examination, which is regarded as the end of secondary school for most children. Those who wish to continue further, especially those with university ambitions, have to write a new school-leaving examination at the end of the new grade 13.

*3.4. Cognitive Performance, Testing and Measurement*

To improve educational outcomes in line with Goal 4.1 of the SDGs requires measuring and monitoring of cognitive outcomes. Regular participation in international assessments offers a convenient way to do this, where performance of a representative sample of children in a country is measured against that of other countries. Further analysis of such data can also offer insights into shortcomings in learning, thus potentially allowing policy to address specific learning deficiencies. SACMEQ, the Southern and Eastern Africa Consortium for Monitoring Educational Quality, is the only such international assessment that all seven our countries participate in, along with eight other countries in southern and eastern Africa. However, SACMEQ only takes place at quite long intervals and the last data that have been released are for 2007. Botswana and South Africa on occasion participate in other international assessments, TIMSS (a mathematics and science assessment) and PIRLS (Progress in International Reading Literacy Study, a reading assessment).

Gustafsson (2012) used all international cognitive evaluations available in 2012 and a nonlinear programming approach to convert country average scores to a common "Pisa scale". These scores are shown for a selection of countries in Table 5, arranged from lowest to highest. Our seven southern African countries are marked with asterisks. The Pisa setpoint (average) was originally set to 500 with a standard deviation of 100. Lesotho and Namibia performed more than two standard deviations (roughly equivalent to 5 years of learning) below this Pisa setpoint. Even the two best performing countries in our group, Eswatini and Botswana, performed more than 1.3 standard deviations below the Pisa setpoint. Assuming a year's learning to be around 40% of a standard deviation, the average student in the seven southern African countries discussed in this chapter is between 3 and 6 years behind students in the average Pisa country. The extremely low scores of Botswana and South Africa on TIMSS and PIRLS confirm the large gap compared to developed countries. More recent international tests have given some cause for optimism that South Africa is making good progress, but even so it will take many decades for the countries of southern Africa to achieve an education quality similar to that in developed countries today.

**Table 5.** "Pisa scale scores" for a selection of countries based on Gustafsson (2012).

| Country | "Pisa Scale Score" |
|---|---|
| Malawi | 260 |
| Lesotho * | 288 |
| Namibia * | 289 |
| South Africa * | 317 |
| Ghana | 331 |
| Mozambique * | 332 |
| Zimbabwe * | 345 |
| Botswana * | 367 |
| Eswatini * | 368 |
| Brazil | 387 |
| Kenya | 388 |
| Chile | 407 |
| Malaysia | 437 |
| United States | 485 |
| England | 487 |
| Germany | 491 |
| Finland | 543 |

Note: The asterisks indicate countries discussed in this chapter. Source: Gustafsson 2012, Appendix 1.

In 2012, the South African Department of Basic Education introduced the Annual National Assessments (ANAs), which tested *all* children in identified grades (grades 1 to 6 and also grade 9) in both language and mathematics. Although nationally drawn up, the tests were administered by the schools themselves. This initiative offered the potential of providing information on student performance and on specific weaknesses in learning *by school*; thus, the National Development Plan saw the ANAs as a potentially important monitoring and accountability tool. However, there were reservations about the quality of the tests themselves, i.e., their calibration, an issue related to capacity of the education system. An even bigger problem was fierce teacher union opposition, especially to the accountability aspect of the tests, which led to their abolition in 2015. After long negotiations between teacher unions and government, there are now new plans for sample-based systemic evaluations to provide information about system performance in grades 3, 6 and 9, but these would

not provide the school-level results needed for accountability. This is particularly needed at the primary level, as South Africa is one of only a few countries in southern Africa without a standardised primary school examination that could provide some accountability pressure.

In President Cyril Ramaphosa's state of the union address in 2019, he committed the South African government to the goal of every child being able to read for meaning by age 10. This is directly in harmony with the SDGs and with international attention to eliminating "learning poverty", by acknowledging the reality of weak learning outcomes. Yet, thus far there is little indication that the government will be measuring and monitoring progress to this goal.

Although Botswana is one of the richest SACMEQ participants, it performs near the regional average. Poor children perform particularly poorly. The gap between the scores of the poorest quarter of students and the average is almost as large as in South Africa, a country known for its high inequality. Botswana's performance on other international assessments (TIMSS and PIRLS) is also far below the average of middle-income countries. The weak performance on Pre-PIRLS indicates that learning deficits start early. There has also been no improvement in performance on internal examinations in recent years (World Bank/UNICEF/Ministry of Education and Skills Development 2020, pp. 9–10, 12). A report for the education ministry found school monitoring and support services to be ineffective and stated that the country has made little progress in " ... producing an assessment system that enables the government to monitor at a national level what the quality of the national education outcomes are" (Botswana, Ministry of Education and Skills Development 2014, p. 40). Botswana's three national examinations, as well as the international assessments it participates in, are not systematically used to provide information to assist teachers in their work or to direct in-service training. Moreover, there is almost no information on performance in grades that do not have standardised examinations (World Bank/UNICEF/Ministry of Education and Skills Development 2020, p. 72).

Eswatini scored higher than all the other countries considered in this chapter in SACMEQ 2007 in grade 6. High repetition rates may perversely have contributed to this by "weeding out" weaker students (UNICEF 2018, p. 12). It is interesting that the social gradient as measured by the difference in scores between the poorest and the richest quarters of children participating in the test was only 18 points in mathematics and 39 points in reading (the standard deviation across all SACMEQ countries is 100 points). In contrast, these differentials are a massive 119 and 159 in South Africa and 70 and 83, respectively, in Zimbabwe (Spaull 2012).

While Mozambique performed slightly above the SACMEQ average in 2000, in the 2007 version of the tests the average performance of Mozambican grade 6 pupils fell by more than 40 points (40% of a SACMEQ standard deviation) in both reading and mathematics. This deterioration is not surprising, given the massive enrolment growth that brought more pupils from poor backgrounds into schools and increased pressure on resources (infrastructure, textbooks and teachers). However, despite the large increase in students that performed at the bottom end of performance and caused the average decline, there was also growth in the numbers of students performing at higher levels, despite the pressures brought about by expanding enrolment (Taylor and Spaull 2015).

A service delivery indicator survey used by the World Bank for Mozambique points to severe teacher issues. It found that 45% of primary teachers were absent from school on the day the survey was administered, while another 21% were not in class teaching. Thus, only one-third of teaching time was available for teaching. Moreover, the absenteeism amongst school directors (principals), at 44%, is not significantly lower than amongst teachers. In addition, teachers were found to have poor subject knowledge (only 60% of lower-primary teachers could provide the correct answer to a simple subtraction question, 86 minus 55), and teacher pedagogy was found to be weaker than in other African countries where service delivery indicators had been measured (Molina and Martin 2015).

Absenteeism amongst children is also a grade problem. In a Portuguese comprehension test administered to a sample of grade 3 children in 2016, at least half of the students were absent in one-quarter of all schools tested (Mozambique, Ministério de Educação e Desenvolvimento Humano, Institute Nacional de Desenvolvimento da Educação (INDE 2017)). This was especially the case in the central region, one of the most disadvantaged areas. Performance in the south exceeded that in the other two regions—only 19% and 28%, respectively, of students (present or absent) in northern and central regions attained at least the top two performance levels, against 53% in the south.

## 4. Conclusions

The policy dilemmas and initiatives described above show a strong emphasis on issues of educational access, but generally speaking, cognitive outcomes have received little attention. Where these are discussed, there is often simply a presumption that other policies will somehow lead to better learning in classrooms: improved textbook availability, teacher training, information and communications technology (ICT), or better laboratories are regarded as the tools through which better learning will

happen, or even simply continuing with business as usual. There have been few attempts to see whether training actually leads to better teaching and learning, and whether textbooks are actually used; there is little enthusiasm for participation in international tests; available test data are hardly ever used to inform teaching practice or teacher training; internal school assessments or standardised examinations are taken as the measure of learning. The international community may have shifted their emphasis from access, as in the MDGs, to greater attention to cognitive outcomes and equity, as in the SDGs, but this is receiving scant attention in education ministries in southern Africa. "Learning poverty" is still widespread, but largely ignored compared to issue of access and performance on internal standardised examinations. Moreover, as ministries usually measure performance in terms of pass rates, limiting access to such examinations is widely practiced as a means of improving pass rates. The total number who pass has not received much attention.

While this is the case, it is unlikely that there will be much progress with learning, especially early learning. If the measure of learning simply remains how many children reach a certain grade or what proportion passes a standardised examination, too much attention is given to the wrong outcomes. Indeed, "schooling ain't learning", to paraphrase Lant Pritchett, but this does not appear to have sunk in yet in most southern Africa countries. This may be very similar in many other developing countries, especially poorer ones. There is a large schism between the insights of the international community (e.g., the UN organisations and the World Bank) and the policies and practices of many developing countries (often supported by some development partners). It is still easier to acquire support for implementing a new curriculum than to test regularly, and to use test results for accountability purposes. While 2030, the target date for the SDGs, is getting closer, it may still take some time for the fundamental shifts in the educational development goals from MDGs to SDGs to sink in as an integral part of education thinking, policy and practice.

In terms of policy, one would therefore want to see more emphasis on measuring education quality and introducing measures to improve this. Central to such improvements must be teachers—what they know, how they teach, how much effort they put into their work. Measures to improve teacher quality, such as both preservice and in-service training, should be evaluated regularly and rigorously. Participation in international educational evaluations should be expanded—not one of these countries participates in the Pisa for Development initiative—and results from internal evaluations need to be central issues in public debates. The countries discussed here have now fully engaged with the MDG objective of improving

educational access, and they continue to implement this. Similar enthusiasm is now needed for the SDG objective of improving quality. Only the combination of broadening access and improving quality can ensure that "learning poverty" is reduced—and this remains an essential component in all efforts to reduce poverty.

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# Early Childhood Development: Current Status and Gaps

**Günther Fink**

## 1. Introduction

The period between conception and a child's entry into the formal schooling system is increasingly recognized as critical for early and later life outcomes (Walker et al. 2011; Britto et al. 2016). The early childhood period is unique in terms of the pace and diversity of new skills learnt and acquired, and lays the foundation for later physical and mental wellbeing (Grantham-McGregor et al. 2007). Through an interactive and highly heterogeneous process, children acquire a remarkable share of their perceptual, motor, cognitive, language, socio-emotional, and self-regulation skills in the first years of life (Grantham-McGregor et al. 2007; Black et al. 2017; Harman et al. 2018). These skills are not only important for subsequent educational attainment, but also highly predictive of adult outcomes more broadly, including measures of general wellbeing, crime, marital status and income (Oreopoulos 2007; Kamal and Bener 2009; Heckman et al. 2013; Chan et al. 2017).

Recent work comparing long term costs and benefits of various policy programs suggests that the early childhood period may constitute the most cost-effective time interval to ensure that all children achieve their developmental potential (Heckman and Tremblay 2019), with estimated returns of up to $17.7 for each dollar invested (Chan et al. 2017). Despite this, global gaps in early childhood development remain large. More than 250 million children under age five are currently estimated to not reach their developmental potential (Li et al. 2016; Black et al. 2017); 22% of children under age 5 in LMICs experience physical growth faltering (United Nations 2018), and 37% of 3- and 4-year-olds growing up in low- and middle-income countries display deficits in their cognitive or socioemotional development (McCoy et al. 2016). All primary risk factors for early development are directly linked to poverty: exposure to infectious disease, lack of access to early life health services, lack of access to early learning materials and personal support, as well as chronic malnutrition, have been consistently associated with poor developmental outcomes in the literature (Engle et al. 2011; Walker et al. 2011; Black et al. 2017).

Governments around the globe are increasingly recognizing the benefits of investing in early childhood development (Pelletier and Neuman 2014), and early

childhood development (ECD) is now considered a foundation for sustainable development (Daelmans et al. 2017).

In this article, we first summarize the evidence on what is known regarding the current gaps in early childhood development, and then discuss the most promising intervention strategies. We conclude with some general reflections.

## 2. Materials and Methods

The materials presented in this article mostly represent previously published work. The primary data sources for each of the tables and figures are provided below.

## 3. Results

### *3.1. Global Gaps in Early Childhood Development*

Data on children's early development at a national or global level remain remarkably scarce. In 2007, the Lancet launched its first "*Early Childhood Development Series*", which synthesized the then available evidence on child development (Grantham-McGregor et al. 2007). While it was rather obvious that large developmental gaps existed across socioeconomic groups within and across countries, comparable data on the actual skill sets or developmental levels of children under the age of three were not available. In order to create a first estimate of global gaps in early childhood development (ECD), the author team thus decided to focus on quantifying children's exposure to risk. In the ECD literature, the two most salient risk factors for healthy development are chronic malnutrition and exposure to poverty. Combining all available data, the author team estimated that 219 out of 559 million children under age five globally were at risk of poor development (Grantham-McGregor et al. 2007). With slightly better data, these numbers were revised to 249 million, or 43% of all children under the age of five globally at risk of not reaching their potential in the subsequent Lancet ECD series (Black et al. 2017).

Even though these numbers have been important in shaping global policy in this area, it is not clear how well stunting- and poverty-based estimates approximate the actual number of children displaying delays in their development. Among the primary challenges in the area of global ECD research is that, to date, "normal development" has not been defined at a global level. While the global nutrition community was able to establish a first set of reference growth tables in the early 2000s (WHO Multicentre Growth Reference Study Group 2006), the same still has to happen in the area of ECD. The lack of a global standard or reference norms makes an objective assessment of gaps challenging. There are two main reasons why global references

for early development have been difficult to establish: First, there is a substantial body of literature suggesting that children's trajectories are highly context-specific, and thus should not be directly compared. According to this logic, comparing children across different settings does not make sense conceptually—if reference tables are needed (which is still questioned by many researchers), these should be country specific, and thus only compare children to other children from the same country. "Developmental delay" would then be defined as a child developing significantly slower than others in their own environment.

Similar arguments were made up to the early 2000s in the field of nutrition. Many researchers felt that children's early growth was genetically driven, and should thus not be compared across settings with different genetic pools. This notion was, however, soundly rejected in the original 2006 WHO study (WHO Multicentre Growth Reference Study Group 2006) as well as the larger subsequent INTERGROWTH 20th century study (Villar et al. 2013). Both studies followed groups of newborns in a very diverse set of high- and low-income countries. Rather than assessing representative samples of children, these studies focused on children that lived in comparable conditions that were assessed as suitable for healthy growth. While this definition of "healthy homes" varied slightly across countries, the idea was to compare children that did not have any obvious genetic defects and had access to a safe home, clean water and sanitation. Given that adult height varies substantially across those sites—British adults are about 5cm taller than Chinese adults and about 10cm taller than Indian adults—large differences in early childhood growth were expected. However, no such differences were found, suggesting that differences in adult height emerge only in later childhood or adolescence among children growing up in safe and supportive environments. While these findings were not necessarily anticipated, they were important for the field, since they meant that comparisons of population-level outcomes across countries or regions were valid, and that a standardized set of growth references could be applied to all children globally.

As shown in Karra et al. (2016), reference populations similar to those sampled in these two highly influential studies can be created from standard survey data by restricting the analysis to households that can offer similarly safe environments to children. In the pooled Demographic and Health Survey (DHS) used in their paper, the average height for age z-score in the general population is −1.41 (SD 1.66), which implies that on average children in low- and middle-income countries (at least those countries sampled in the DHS) had heights that were almost 1.5 standard deviations below the international reference median. The overall distribution of height for age z-scores is illustrated in Figure 1: both the reference population and the actual

distribution roughly follow a normal distribution—the entire distribution of height in the actual DHS sample is, however, shifted by 1.45 z-scores to the left, and wider, with an estimated standard deviation of 1.66.

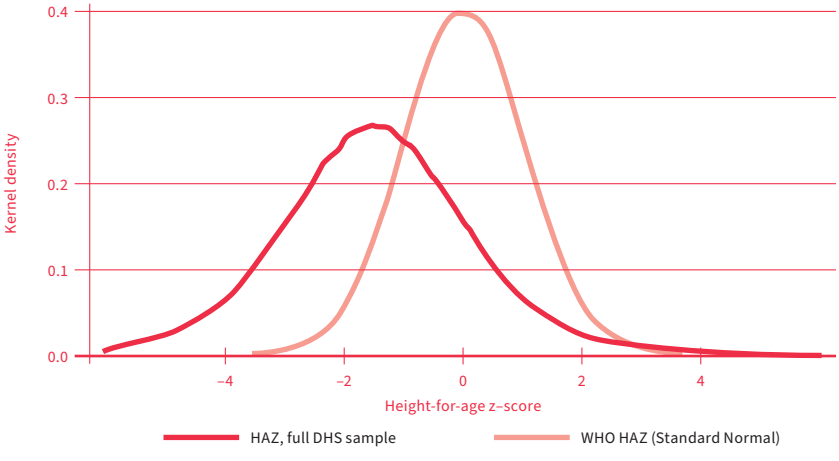


**Figure 1.** Height-for-age z-score distribution among children in pooled demographic and health survey files used in Karra et al. (2016). Red dotted line shows standard normal HAZ distribution in WHO reference norm sample. Pink line shows empirical distribution of HAZ in the pooled sample.

This distribution of height in the pooled sample masks a remarkable amount of heterogeneity, however. When the analysis was restricted to children who live in households that match those of well-off Western families, these gaps disappeared. As Figure 2 shows, the distribution of HAZ in this selected subsample looks rather similar to the reference population, with slightly less density at the center of the distribution and slightly wider tails. These wider tails likely capture, at least partially, errors in height measurement; they may, however, also represent slightly larger (genetic) variance in the more diverse DHS sample compared to the six sites in the original WHO study.

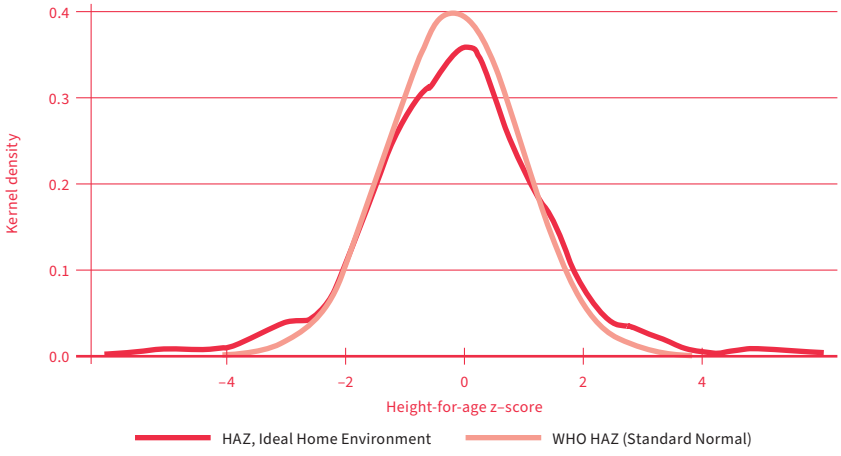


**Figure 2.** Height-for-age z-score distribution among children with ideal home environments in demographic and health surveys. Red dotted line shows standard normal HAZ distribution for WHO reference norms. Pink line shows empirical distribution in ideal home environments. Children in ideal home environments were defined as children with (1) access to safe water and sanitation; (2) living in households with finished floors, a television, and a car; (3) raised by highly educated mothers; (4) single births; and (5) delivered in hospitals. More details on the sample are available in Karra et al. (2016).

While similarly comprehensive and normalized data are not available yet for any other domain of early childhood development, several new tools to assess child development in low- and middle-income countries have emerged and also been used in a growing number of contexts in recent years. Most tools focus on four main domains of development: (fine and gross) motor skills, cognitive skills, language skills and socioemotional skills. Using a sample of over 10,000 healthy children from four middle-income countries, Ertem et al. show that on average the age at which children achieve developmental milestones under the age of three varies very little across sites (Ertem et al. 2018). The only domains where substantial differences were found were "self-help" or "life skills", such as brushing teeth, using toilets or dressing, which tend to be strongly influenced by local customs and habits, and likely do not reflect true differences in children's inherent ability.

Using a more diverse sample of children under age 3 living in selected high-, middle-, and low-income countries, substantial developmental differences were, however, found across sites (Fink et al. 2019). In the six low- and middle-income

countries analyzed, average cognition z-scores for children under the age of 3 was −0.52, with an SD of 1.28 (Figure 3).

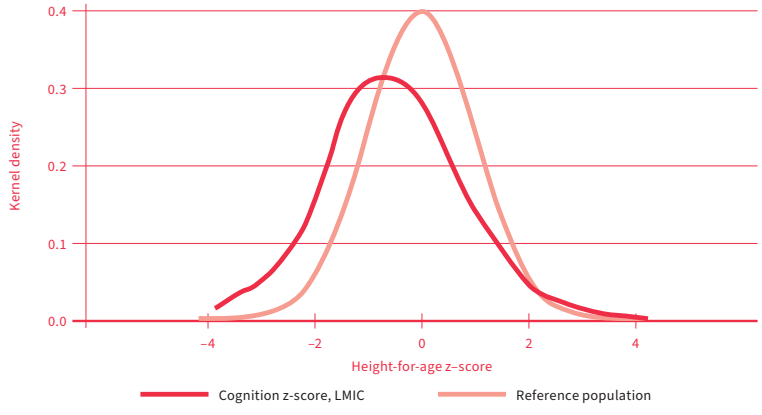


**Figure 3.** Based on a sample of 3447 children under the age of three used in Fink et al. (2019). Children in the LMIC sample are from Cambodia (N = 410), Ghana (N = 1512), Guatemala (N = 197), Lebanon (N = 376), Pakistan (N = 238) and Philippines (N = 714).

When the sample was restricted to children growing up with a mother who had completed high school or higher education, this gap once again disappeared (Figure 4, mean z-score −0.06, SD 1.27).

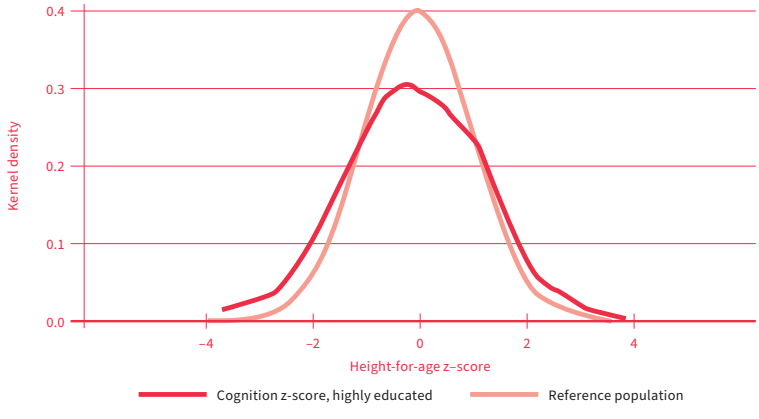


**Figure 4.** Based on 621 children with highly educated mothers from Cambodia (N = 20), Chile (N = 170); Ghana (N = 42), Guatemala (N = 19), Lebanon (N = 59), Pakistan (N = 11) and Philippines (N = 300).

Both the nutrition and the cognition analyses suggest that current developmental gaps in low-income settings are substantial. These gaps are neither driven by genetic nor geographical or climate-related reasons, but rather seem to be the result of (poverty-related) factors in the home environment. In general, for child health and development, maternal education is the single most important predictor of outcomes; once we compare mothers with completed secondary education or higher education, differences in health and developmental outcomes across countries become small; once differences in living conditions are also adjusted for, differences disappear completely.

Table 1 shows the global distribution of educational attainment according to the data collected by Barro and Lee (2013). While in developed countries (advanced economies), the large majority of women had at least secondary education in 2010, substantial gaps remained in several other regions, with particularly large gaps in South Asia and Sub-Saharan Africa, where secondary or higher education remained limited to a minority. Major efforts have been made in the past two decades to increase primary and secondary schooling enrollment; these efforts will undoubtedly improve children's home environment and support in the decades to come; for the time being, the lack of maternal education remains among the most critical concerns.

**Table 1.** Educational attainment in the female population age 15 and older in 2010. Source: Author's compilation based on data from http://www.barrolee.com/ (accessed on 9 September 2021).

| Region | Percentage of Female Population Age 15 and Older with.. | | | | |
|---|---|---|---|---|---|
| | Number of Countries | ..No Education | ..Primary Education | ..Secondary Education | ..Tertiary Education |
| Advanced Economies | 24 | 3.1 | 18.7 | 51.4 | 26.9 |
| East Asia and the Pacific | 19 | 13.6 | 26.4 | 45.3 | 14.7 |
| Europe and Central Asia | 20 | 1.3 | 7.1 | 69.8 | 21.8 |
| Latin America and the Caribbean | 25 | 8.5 | 33.6 | 46.3 | 11.6 |
| Middle East and North Africa | 18 | 22.7 | 20.9 | 41.2 | 15.2 |
| South Asia | 7 | 42.2 | 18.7 | 34.3 | 4.8 |
| Sub-Saharan Africa | 33 | 39.3 | 31.5 | 27.0 | 2.1 |
| *Total* | *146* | *17.6* | *23.8* | *44.7* | *13.9* |

Table 2 shows the percentage of 3- and 4-year-old children that benefit from interactions with their caregivers or other adults in their household. In most middle-income countries, adult engagement is substantial, with a large majority of adults engaging in at least four out of the six activities captured by the Multiple

Indicator Cluster Surveys (MICS). In many low-income settings, and particularly in many African countries, that is, however, not true, with quite a few countries where less than one third of caregivers indicate that they engage with these child activities on a regular basis.

*3.2. Interventions to Improve Early Childhood Development*

Early life interventions are increasingly recognized as key for creating the environments that children need for a healthy development (Nores and Barnett 2010; Hoddinott et al. 2013; World Bank Group 2015; Richter et al. 2017), and for ensuring children's long-term economic and general well-being (Heckman 2006). In all likelihood, the most successful model for improving child health and well-being in low-income settings is home visiting programs to support parents; such programs have been successfully implemented in Bangladesh (Hamadani et al. 2006), Colombia (Attanasio et al. 2014), Peru (Hartinger et al. 2017), Jamaica (Grantham-McGregor et al. 1991; Walker et al. 2005), Pakistan (Yousafzai et al. 2014) and South Africa (Cooper et al. 2009). The main logic of home visiting programs is that trained child development or community agents meet with mothers or parents on a weekly, biweekly or monthly basis to discuss the child's overall well-being and needs, as well as to provide practical guidance for parents on how to provide a healthy and developmentally stimulating environment for the child. Home visiting programs are typically based on a tightly structured curriculum, which contains key topics of child health and development to be covered during each home visit. Through the regular interaction with caregivers, home visiting programs are designed to improve early childhood health and development (Engle et al. 2011; Yousafzai and Aboud 2014), but can also improve maternal well-being (Carta et al. 2013; Tandon et al. 2013).

Despite their remarkably large and consistently positive impact on child well-being (Yousafzai and Aboud 2014; Aboud and Yousafzai 2015), home visiting programs have not been adopted at scale by most countries, which is mostly due to the large cost and logistical efforts associated with these programs. To date, the only countries that have attempted the rollout of home visits are Brazil and Colombia; evaluations of both programs are still ongoing; given the scale and cost of these programs, and it not clear yet whether they will be sustainable in the long term.

**Table 2.** Percentage of children with appropriate home stimulation in low- and middle-income countries. 95% confidence intervals in parenthesis adjusted for two-stage cluster-sampling used in Multiple Indicator Cluster Surveys (MICS). Home stimulation was defined as adults engaging in the following activities with the child in the past 3 days: reading books or looking at pictures; telling stories; singing songs; taking the child outside; playing with the child; and naming, counting, or drawing with the child. Following previous work, using data from McCoy et al. (2018), we totaled the number of activities that adults engaged in with the child, and defined adequate home stimulation as exposure to at least four out of six activities.

| Percentage of Children with Appropriate Home Stimulation | | | | | |
|---|---|---|---|---|---|
| Afghanistan | 73.6 | (72.3, 74.9) | Malawi | 30.1 | (28.6, 31.6) |
| Algeria | 79.7 | (78.3, 81.2) | Maldives | 97.7 | (96.7, 98.6) |
| Argentina | 84 | (81.9, 86.1) | Mali | 54.9 | (53.4, 56.4) |
| Bangladesh | 79.1 | (78.0, 80.1) | Mauritania | 45.5 | (43.6, 47.4) |
| Belarus | 96.1 | (94.5, 97.7) | Mexico | 77 | (73.7, 80.2) |
| Belize | 89.9 | (87.5, 92.3) | Moldova | 89.4 | (86.9, 91.9) |
| Benin | 28.1 | (26.6, 29.6) | Mongolia | 55.2 | (53.1, 57.4) |
| Bhutan | 54.5 | (51.9, 57.0) | Montenegro | 98.7 | (97.8, 99.6) |
| Bosnia and Herzegovina | 95.2 | (93.4, 97.1) | Nepal | 67.9 | (65.4, 70.4) |
| Burundi | 59.8 | (59.0, 60.6) | Nigeria | 63.6 | (62.4, 64.8) |
| Cameroon | 45.5 | (43.3, 47.7) | Palestine | 79 | (77.5, 80.5) |
| Central African Republic | 74.1 | (72.3, 75.9) | Panama | 73.7 | (70.7, 76.8) |
| Congo, Rep. | 59.8 | (57.5, 62.2) | Paraguay | 64.9 | (62.0, 67.8) |
| Costa Rica | 68.9 | (63.2, 74.7) | Rwanda | 43.6 | (42.0, 45.3) |
| Cote d'Ivoire | 28.9 | (26.9, 30.8) | Senegal | 27.9 | (26.5, 29.2) |
| Dominican Republic | 60.8 | (59.1, 62.5) | Serbia | 95.5 | (94.2, 96.7) |
| El Salvador | 60.6 | (58.4, 62.9) | Sierra Leone | 51.9 | (46.6, 57.2) |
| Gambia | 48.3 | (46.2, 50.4) | Suriname | 73.6 | (70.7, 76.5) |
| Ghana | 40.4 | (37.7, 43.1) | Swaziland | 39.7 | (36.2, 43.2) |
| Guinea | 31.2 | (29.4, 33.0) | São Tomé and Principe | 64.9 | (61.0, 68.8) |
| Guinea-Bissau | 33 | (30.9, 35.1) | Thailand | 93.9 | (92.8, 95.1) |
| Guyana | 89.5 | (87.7, 91.3) | Timor-Leste | 84.4 | (81.8, 86.9) |
| Iraq | 72.6 | (64.9, 80.3) | Togo | 62.4 | (59.7, 65.1) |
| Jamaica | 88.6 | (84.7, 92.5) | Trinidad and Tobago | 96.7 | (94.9, 98.5) |
| Jordan | 80.4 | (78.8, 82.0) | Tunisia | 71.2 | (68.0, 74.4) |
| Kazakhstan | 87.3 | (84.4, 90.2) | Turkmenistan | 96.2 | (95.1, 97.2) |
| Kosovo | 68.2 | (64.5, 72.0) | Uganda | 51.7 | (50.6, 52.9) |
| Kyrgyzstan | 73.6 | (71.2, 76.1) | Ukraine | 99.2 | (98.7, 99.6) |
| Lao PDR | 63.4 | (60.7, 66.1) | Uruguay | 93 | (90.1, 95.9) |
| Lebanon | 85 | (82.4, 87.7) | Vietnam | 77.7 | (75.1, 80.4) |
| Macedonia | 91.8 | (89.2, 94.5) | Zimbabwe | 45 | (43.3, 46.7) |

From a conceptual perspective, home visiting programs were designed to support children in settings where they spend most of their time with their caregivers and families. In practice, the period in which this is true will likely shorten over the coming decade. In many middle-income countries, a large majority of mothers are engaged in the informal or formal labor market now, and often return to work within a relatively short period of time (typically within less than six months). After this period, children either have to be supported by other members of the family or by formal daycare centers. These centers are emerging rapidly around the globe now and should ideally provide suitable environments to children from all socioeconomic backgrounds. From a scientific perspective, the long-term impact of daycare and preschool programs remains somewhat unclear. Despite some very positive initial findings (Garces et al. 2002), the large US Head Start program has increasingly become criticized over time, with benefits rapidly fading over time as children enter primary school (Lee and Loeb 1995; U.S. Department of Health and Human Services 2010). From a societal perspective, the main benefits of government-supported early childhood programs go beyond long-term educational benefits, since they are essential for parental labor market participation; in the long term, early center enrollment may simply become the norm. Today, one or two years of kindergarten are becoming fairly standard in many settings; it will be interesting to see whether this will be further extended to even younger children over time.

**4. Discussion**

In this article, we reviewed the literature and data available on early childhood development globally today. The natural, medical and social sciences have created a rather substantial body of literature over the past twenty years to document and confirm the critical importance of the early childhood period for later life outcomes. The first years of life are not only the period when children learn to walk and talk but also the period when basic neurological, cognitive and social skills are developed that shape individual lifetime trajectories. As we have shown in this chapter, there is also agreement that the development of children in low- and middle-income countries is on average delayed compared to children in high income settings. The magnitude of these delays is well documented for physical growth, where more than one in five children growing up in LMICs continue to suffer from growth faltering. For other domains of child development, including language, cognition, socio-emotional and executive functioning skills, data availability is still very limited. The few studies that have attempted developmental comparisons across sites have often found sizeable gaps between high-, middle- and low-income countries. The

good news is that these gaps are generally not found when children from safe home environments are compared: several studies show that children growing up in similarly endowed households around the globe—children living in decent houses with access to decent water, sanitation infrastructure and benefitting from engaged parents—follow roughly the same trajectories everywhere. This is of course not to say that all children develop at the same pace; it is quite obvious that some children learn to talk or walk earlier than others. The main finding of the comparative literature is simply that the distribution of developmental outcomes is very similar across countries once analysis is restricted to children growing up in similar environments. While this is good news overall, large gaps do clearly remain today, with many children growing up in highly resource-constrained environments, without access to clean water or sanitation, safe play spaces or adults that can support them in their development. Global efforts to reduce poverty and to increase education will undoubtedly have large benefits in terms of the early environment of children growing up in LMICs. Additional government support for high quality early education as well as parental support programs may also help to bring us closer to a world where all children can fully reach their developmental potential, and become adults not facing extreme poverty in the future. In countries such as Brazil, home visiting programs supporting vulnerable families in the first two years of children's lives are now standard, and can hopefully inspire other countries. Government involvement in the pre-school and kindergarten period (ages 3–5) has also increased substantially over the past decade, with a growing number of countries offering free access to early learning opportunities. Even though the quality of some of these programs is certainly not ideal yet, overall policy efforts definitely appear be following in the desired direction at a global scale.

## 5. Conclusions

Large gaps in children's physical, cognitive and socioemotional development are common in low- and middle-income countries today due to poverty, lack of maternal education and lack of early learning opportunities. Major governmental efforts will be required to close these gaps and to offer all children globally a chance for a healthy and productive life.

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# Part 3: Resources to End Extreme Poverty


# Mobilizing Resources for the Poor †

**Kathleen Beegle and Alejandro de la Fuente**

† This book chapter builds on a previously published work: Beegle, Kathleen, and Alejandro de la Fuente. 2019. Mobilizing Resources for the Poor. In *Accelerating Poverty Reduction in Africa*. Edited by Kathleen Beegle and Luc Christiaensen. Washington, DC: The World Bank Group.

## 1. Africa's Poverty Financing Gap Remains Large

Beyond shifting development priorities and policies, the agenda to accelerate poverty reduction in Africa requires harnessing more resources. The message about spending more and spending better to address the critical needs for the poor is essential to meet SDG goals. Assessing a country's poverty financing gap requires a sense of the needs of the country's poor, as well as of the country's capacity to mobilize the resources to meet them. This is challenging, conceptually and in terms of data. One metric regularly used to gauge needs is the aggregate poverty gap (APG). It is the monetary value of the gap between the income of the poor and the international poverty line aggregated across the poor population. It gives an estimate of the amount necessary to mechanically lift all the poor out of poverty through redistribution. As such, it provides a first (and imperfect) benchmark.[1]

In 17 out of 45 countries with data, who have over one-third of the poor in Africa, at least 10 percent of GDP (in 2016 prices) would be needed to fill the aggregate poverty gap. All but two (Lesotho and Zambia) of these are low-income countries. For Burundi, the Central African Republic, the Democratic Republic of Congo, Madagascar, Malawi, and Mozambique, the gap requires over 50 percent of the country's GDP. By way of comparison, government tax revenues were only 9 percent on average in Africa's low-income countries. Filling the poverty income gap

[1] One downside is that the APG does not provide a direct estimate of the amount of public investments and support needed to strengthen the earning capacity of the poor today, and of their children in the future (through human capital investment today), nor an estimate of the amount needed to prevent those around the poverty line from falling back. Still, it is a frequently used starting point for considering a country's poverty financing needs and whether it has, in principle, the domestic means to meet them. For applications of this method, see, for example, Chandy et al. (2016), Olinto et al. (2013), Ravallion (2009), and Sumner (2012).

would leave nothing for public good provision, so clearly not a realistic option. Not surprisingly, the APG is 3 percent or less of GDP (in 2016) for most middle-income countries (17 out of 20 countries), with Lesotho, Nigeria, and Zambia being exceptions. In most of the non-low-income countries, the challenge is not so much the amount of resources required by the poor to reach the poverty line, but the decision and effort to redirect resources to the poor to raise incomes.

Using a different, but related metric, closing the poverty gap would also imply an infeasibly high tax rate on the non-poor in many countries (Figure 1). In 22 (mainly middle-income and resource-rich) countries out of the 43 for which there are data, it would imply a rate of less than 10 percent on the income of the non-poor above the poverty line. Due to the depth of poverty and the number of poor, even redistributing the income from a country's billionaires would only have a modest impact on poverty (Chandy et al. 2016). Despite rapid growth in natural resource revenue, for most countries in Africa, natural resource revenue is also not sufficiently large to address the poverty gap, even in theory (Figure 2). Only in five African countries (Angola, Botswana, Gabon, Mauritania and the Republic of Congo) would a direct transfer of 7 percent (or less) of resource revenues fill the poverty gap.

These numbers are indicative that, particularly, Africa's low-income countries are unlikely to have the financial capacity to overcome poverty, and that international financial assistance will continue to be required. Other direct estimates of the cost of making some core social services available or so-called financing of the SDGs confirm the large gap (Development Finance International and Oxfam 2015; Greenhill et al. 2015; Schmidt-Traub 2015).


**Figure 1.** High levels of poverty imply high tax rates on the non-poor to cover need. Source: Authors' calculation.

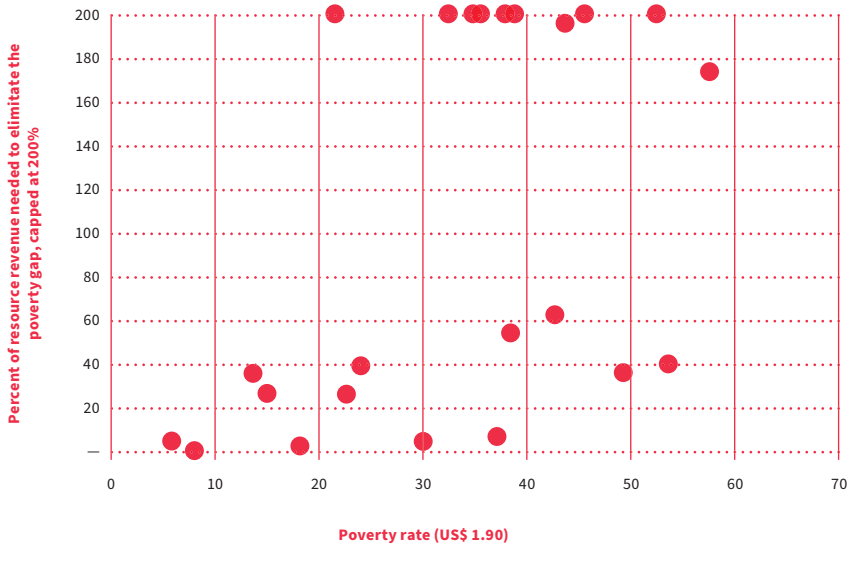


**Figure 2.** Resource revenues are not sufficient to eliminate the poverty gap. Source: Authors' elaboration with inputs from Nga Thi Viet Nguyen and Rose Mungai. Subset of 23 countries out of 48 with resource revenues and complete data on the level of resources.

## 2. Fiscal Systems in Africa

### *2.1. Revenue and Spending Space*

States get tax revenues directly (e.g., personal and corporate income tax) and indirectly (e.g., value added tax (VAT), excise taxes, and customs duties). Some governments obtain further revenues through grants from donors and international organizations and natural resources, when available. These different revenue sources as well as the ability of governments to manage arrears and borrow, and to draw in private capital for public–private partnerships determine the fiscal space for African governments to spend. There are huge challenges to both raising revenues domestically and increasing other sources of revenue, including from international aid, which is in fact decreasing, or international financial markets, given rising debt levels.

In most of Africa's low-income countries, the domestic revenue imperative remains stark. Most have tax revenues relative to GDP under 13 percent (that is revenues net of grants) the 'tipping point' below which executing basic state functions and sustaining one's development becomes problematic (Figure 3) (Gaspar et al. 2016). For Africa's low-income countries, the average 2013 tax revenue share of GDP was in fact only 9 percent. It was slightly larger for lower–middle-income countries (19 percent). The Organisation for Economic Co-operation and Development (OECD) average in 2015 was 34.3 percent (OECD  Organisation for Economic Co-operation and Development).

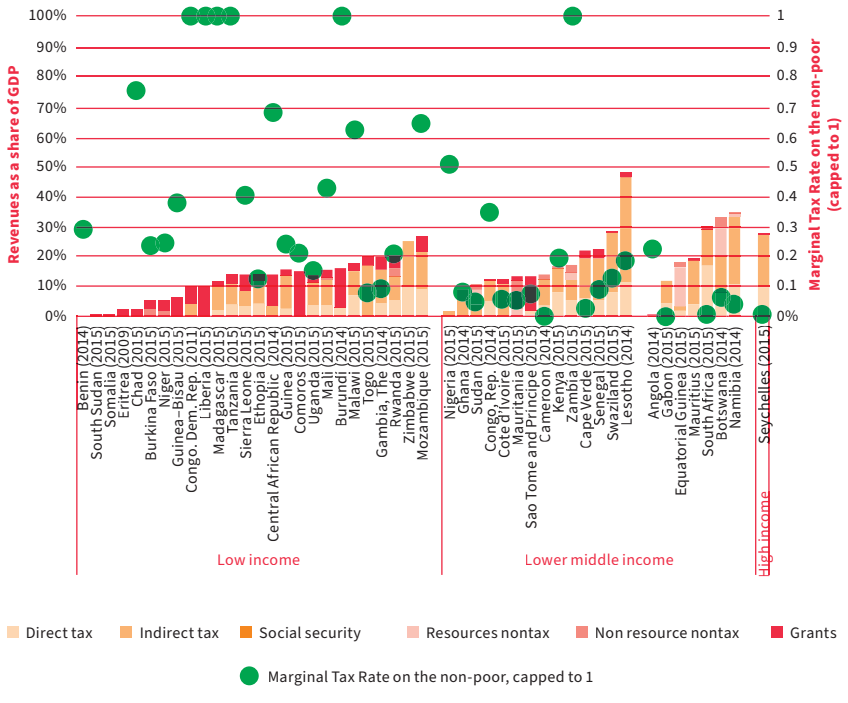


**Figure 3.** Most African countries have a domestic revenues deficit. Source: de la Fuente et al. (2018) based on the International Centre for Tax and Development (ICTD)/United Nations University—World Institute for Development Economics Research (UNU-WIDER), Government Revenue Dataset, June 2016.[2]

However, a country's level of economic development does not fully predetermine its capacity to raise revenues. Government revenue as a percentage of GDP was more than 20 percent in Mozambique and Zimbabwe, both low-income countries. Lately, there has also been an improvement in domestic revenue collection across Africa. The region experienced the largest increase in tax revenue across the globe since the turn of the century (IMF 2015). As already stated, however, this improvement is beginning from a low level, and, disconcertingly, projections find that the countries with the lowest domestic resource mobilization levels are also expected to grow these revenues at lower rates, further widening the gap (Development Initiatives 2015).

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2 https://www.wider.unu.edu/project/government-revenue-dataset (accessed on 22 September 2021).

Most African countries rely heavily on indirect taxes levied on the sale of goods and services. This includes VAT, trade taxes paid at the port, and excise taxes (such as fuel taxes). VAT, in particular, has led the way to a raise in domestic revenues. Indirect taxes are often also invisible to consumers, and, if kept simple, easier to administer. This makes them a preferred tax instrument in many lower-income countries, where administrative capacity is limited. In addition, informal businesses are widespread in low-income countries; they are generally cash based and hard to tax. Therefore, lower-income countries rely more on indirect taxes than middle-income countries, but this has pernicious consequences on welfare, as Section 2.3 shows.

Direct taxes are the second main source of revenues for African countries. Yet, total revenues from personal income taxes amount to only 2 percent of GDP in sub-Saharan African countries (excluding South Africa). The main direct taxes are personal and corporate income tax. Their contribution as a share of GDP has not been improving either because governments discouraged marginal increases in corporate and personal income taxes. Or simply because income earners avoided complying. Property taxation contributes very little (recorded at 0.1–0.2 percent of GDP, for those countries where reliable information exists) (Moore and Prichard 2017).

Some countries in Africa also generate substantial revenues from natural resources. Out of 37 countries for which data are available, 22 are considered resource rich: from oil-rich countries like Chad and the Republic of Congo to diamonds in Botswana and minerals in Niger or Mauritania. In these countries, revenues from natural resources make up between 10–20 percent of GDP (Figure 3). Tax revenues in developing countries with substantial natural resources tend to be higher than for countries at the same income level that lack such resources. So, in principle, resource revenues can enhance spending on pro-poor sectors such as the social sectors (for example, health and education), agricultural and rural development, as well as social protection programs including cash transfer schemes strengthening the poor's risk management capacity. However, often revenues go directly from extracting companies to governments, without citizen involvement. This weakens the ability of citizens to scrutinize government expenditures. As a result, poverty reduction is slower and multiple human development indicators are worse in resource-rich countries in Africa than in other countries at the same income level (Beegle et al. 2016; de la Brière et al. 2017).

Taken together, the low base on which to tax, the limited capacity to tax more, and the political inability to channel national income from natural resources to pro-poor spending result in a large poverty financing gap. Low-income countries face the greatest needs, have the lowest taxable base and are least efficient in

mobilizing revenues. Financing from foreign donors or international organizations will remain a critical source of funding for many of the poorest African countries in the foreseeable future.

While domestic resources are the largest resource available to African countries in aggregate, aid makes up more than 8 percent of gross national income (GNI) for half the low-income countries in Africa (Figure 4).[3] It is often geared towards pro-poor sectors such as health, agriculture, and education. For example, aid finances three quarters of public health spending in Rwanda (Development Initiatives 2015) and donor funds finance 90 percent of public agricultural spending in Burundi (Pernechele et al. 2018). The sectors of education, health and financial support to the poorest through safet nets account for around a third of all donor aid.

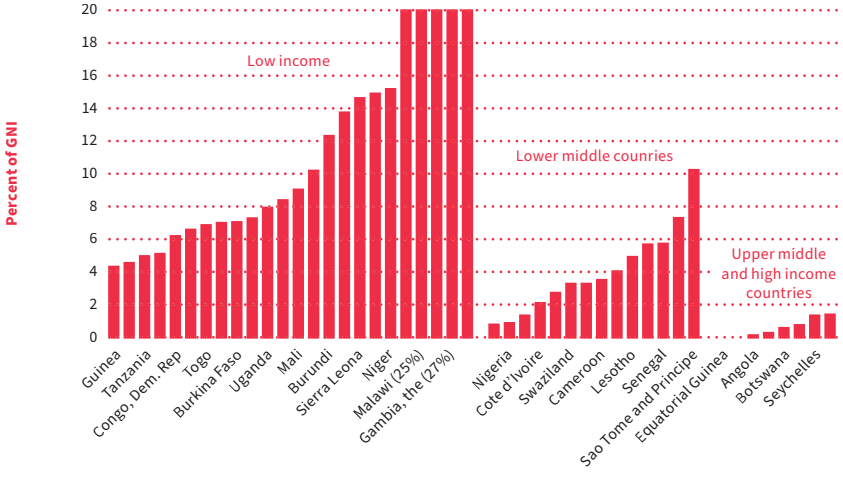


**Figure 4.** ODA is a large share of GDP in low-income countries. Source: OECD database (2017).

Unfortunately, while global ODA has been increasing, reaching an all-time high of USD 140 billion in 2016 (at current prices)—ODA to African countries increased marginally in nominal terms from USD 45.8 billion in 2013 to USD 46.3 billion in 2017 (after a dip to USD 42.5 billion in 2016). In per capita terms, though, it has declined in nominal terms from USD 48.3 to 42.6 given population growth. The decline is, at

[3] We lack estimates of aid inflows from international charities, international nongovernmental organizations (NGOs), and private donations.

least in part, because donor countries were spending more in their own countries on refugees and asylum seekers. Such spending more than doubled in three years, from less than 4 percent of total donor spending before 2013 to 11 percent in 2016. Germany and Italy spent more on in-country costs than they gave in aid to Africa; Norway and Switzerland had increases in in-donor refugee costs and decreases in aid flowing to developing countries. Four Development Assistance Committee (DAC) donors—Greece, Italy, Austria, and Hungary—allocated more than 50 percent of their bilateral assistance in 2016 to in-donor refugee costs. When in-donor refugee costs are excluded, only three countries—Norway, Luxembourg, and Sweden—out of the 29 DAC donor countries reached the United Nations target of 0.7 percent of ODA/GNI in 2016 (Sebany 2017).

The combined resources from domestic revenue and ODA at current levels do not suffice to reach the SDGs goals related to universal education, universal health, and scaled up safety nets in developing countries; billions more are needed (Greenhill et al. 2015; Manuel et al. 2018). The costs for education, health and financial support needed for the poorest in Sub-Saharan Africa totals USD 262 billion (in 2017 prices) (Manuel et al. 2018). Some target getting an extra trillion (Development Finance International and Oxfam 2015). In light of the shortfalls, ODA is increasingly also being used to catalyze private sector investment in developing countries, though the jobs and poverty impact of blended finance needs to be better understood (Sebany 2017). Donors should recommit to the original ODA target of spending 0.7 percent of their national income on development aid overseas and reverse the trend of a declining share of ODA to Africa. In 2015, DAC countries spent 0.3 percent of ODA/GNI globally and 0.1 percent in Africa. If donors met aid targets (0.7 percent of GNI), the financing gap in low- and low–middle-income countries would be met (Greenhill et al. 2015).

Governments could in principle also borrow, domestically and internationally. Yet, many will find it difficult. Lenders may be unfamiliar with small countries who do not normally borrow. Countries that do borrow may have large existing debts and may not be able to raise additional sums.[4] Standard & Poor's has downgraded four African countries since the start of 2017, namely, Gabon, Namibia, the Republic of Congo, and South Africa. Additionally, for those with an International Monetary

[4] As such, between 2010 and 2017, seven countries accounted for over three-fourths of the total African bond debt issued: Angola, Côte d'Ivoire, Ghana, Kenya, Nigeria, South Africa, and Zambia (World Bank 2017).

Fund (IMF) program, there may be additional restrictions related to taking on debt.[5] A few countries are facing repayment problems, for example, Mozambique and the Republic of Congo. Additionally, even those with low debts may find it difficult to borrow when they most need to, due to the move to normalization of the monetary policy in advanced countries, a decrease in other sources of funding, and rising sovereign risks in the region.

*2.2. A Mixed Record on Spending on Pro-Poor Sectors in Africa*

Many measures to tackle poverty are embedded in the provision of basic services and direct transfers (for example, schools, clinics, or cash transfers that help to build human capital and manage risks) as well as in the sectoral allocation of public spending towards sectors that are more likely to benefit the poor, such as agriculture. As such, tracking pro-poor spending is usually sectorally focused even though, importantly, within-sector spending choices can also have quite different effects on poverty (Owori 2017).

Five key points emerge. First, while a number of countries are close to meeting or exceeding global targets for pro-poor sectoral spending as a share of GDP or government expenditures, absolute (per capita) spending levels are very low, often with room for expansion through reallocation, for example through a reduction in energy subsidies. Second, within-sector spending is often ill-targeted to the needs of the poor and, implementation is inefficient. Third, as a result of both these factors, many poor still pay for access to basic services critical for human development; out-of-pocket expenditures are high, or lack the public goods needed to increase their earnings (e.g., agricultural innovation and rural infrastructure). Fourth, resource-rich countries spend less on education and health than other African countries of similar income level, and spending is less efficient. Finally, in health and education, as well as agriculture and risk management (humanitarian aid), a large share of funding in many countries comes from donors, questioning government commitment and independence as well as the sustainability of pro-poor spending.[6]

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[5] Seventeen countries have an IMF Extended Credit Facility and/or Extended Fund Facility (Benin, Burkina Faso, Cameroon, the Central African Republic, Chad, Cote d'Ivoire, Gabon, Ghana, Guinea, Guinea-Bissau, Madagascar, Mali, Mauritania, Niger, Sao Tome and Principe, Sierra Leone, and Togo). Two countries have IMF Stand-By Agreement and/or Stand-By Credit Facility (Kenya and Rwanda).

[6] For a discussion on exploring how, when, and why poverty can be a priority in the national budget, see Foster et al. (2003) which summarizes five African country case studies that explore this.

Among the social sectors, governments consistently spend more on education (4.3 percent of GDP on average across low- and middle-income countries in Africa), typically followed by health (1.8 percent of GDP), and social safety nets (1.4 percent of GDP) (Figure 5). On average spending is in the target range for education (4–6 percent of GDP per capita or at least 15% to 20% of public expenditure to education) under the Education for All (EFA) initiative. However, spending is below the target for health spending (about 4 percent of GDP per capita since the Abuja Declaration target is 15% of public expenditure to health). Spending on social safety nets is lowest, but much lower in most countries, given there is a concentration of social safety net spending in Southern Africa. This is also well below the share spent on energy subsidies (3.8 percent of GDP on average). Agriculutral spending as a share of GDP is 1.4 on average. Given low levels of GDP per capita, the absolute levels of pro-poor spending per person can be strikingly low, especially in low-income countries. Additionally, there is important heterogeneity across country groupings and sectors. Resource-rich countries, for example, spend less on critical social services (education, health, social safety nets) as a share of their GDP (i.e., given their income level) than their non-resource rich counterparts.

Spending is not usually tracked subnationally, although one could make the case that this should be carried out in many sectors. Some evidence suggests that the poorest places are not getting equal, let alone greater, spending. Recent work, using geo-tagged aid data and data sources as a proxy for poverty (night lights, other remoteness measures, and health outcome estimates) finds that aid specifically is disproportionately going to richer areas (Briggs 2018). Country-level studies often show disparities in public spending suggesting the same. Government health expenditure in the Democratic Republic of Congo were 1.8–3.5 times higher in Kinshasa than in provinces with lower poverty rates, and, though not adjusted for price-level differences, this disparity is reflected in starkly unequal access to service and health outcomes (Barroy et al. 2014). In Ghana, government spending per pupil is higher in regions with lower poverty rates (Abdulai et al. 2018). Even when spending data are not readily available, since the bulk of health and education spending is salaries, disparities in staffing per capita between poor and less-poor areas (which is well documented in many studies) reflects, in large part, overall unequal spending. Unequal investments in social sectors partly explains why geography is one of the strongest predictors of within-country inequality (Beegle et al. 2016).


**Figure 5.** There is diversity in spending, but education dominates. Source: Country average spending as a percent of GDP among low- and middle-income countries in Africa; education, public health, and mililtary from WDI; energy subsidies from IMF (2015); social safety nets from Beegle et al. (2018); agriculture from the SPEED database.

### *2.3. Are Africa's Fiscal Systems Impoverishing?*

Fiscal systems can have an impact on poverty and inequality, both through the government's overall fiscal situation and through the distributional implications of tax policy and public spending. Many policies can enhance equity. Governments can use taxes and transfers to redistribute income ex post and they can use public spending—through the provision of public goods and services—to reshape the distribution of 'opportunities' and foster mobility within and across generations (Bastagli 2016; Inchauste and Lustig 2017; Lustig 2018).[7]

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[7] The provision of quality public goods and services can help individuals increase their stock of assets—for example, in terms of human capital such as education, health, or skills; their financial capital; or their physical capital such as land or machinery, thereby equalizing opportunities. Promoting an environment of investment and innovation can expand access to opportunities as individuals use their capital and labor to generate income—for example, utilizing their skills to participate in the labor market or using their land for agricultural production. Social protection systems—including safety nets, subsidies, and transfers—also act as a mechanism for equity, redistributing resources to the most vulnerable.

One increasingly used tool to assess who bears the burden and benefit from the different instruments upon which domestic resource mobilization and government spending depend, is Fiscal Incidence Analysis (FIA). A summary and expansion of the FIA tool applied to 11 African countries through Commitment to Equity (CEQ) Assessments shows that many fiscal systems in the region are at best neutral in terms of poverty impacts or, at worst, sometimes, poverty increasing (de la Fuente et al. 2018). South Africa and Namibia are exceptions, as the fiscal systems of these two countries deliver significant additions to income through direct transfer spending (Figure 6). Yet, even when the poverty rate is unchanged or has fallen like in Namibia and South Africa, African fiscal systems may still create burdens for some poor and vulnerable households. That is, some poor and vulnerable individuals may end up paying more in taxes than they receive in transfers—a phenomenon known as 'fiscal impoverishment' (FI) (Higgins and Lustig 2016).[8] The FI index summarizes the number of poor[9] individuals who are estimated to have experienced net losses from fiscal policy (i.e., they have paid more into the fiscal system in taxes than they are estimated to have received from it as benefits). The FI index is expressed as a rate among either the overall population or the poor population. When FI is stated in terms of the latter, it demonstrates how well the fiscal system did at protecting poor and vulnerable households from experiencing losses. The proportion of poor households who are disadvantaged by the fiscal system can exceed 80 percent in countries that deliver very few cash benefits directly like Comoros, Ghana, Mali, Togo, Uganda, and Zambia (Figure 7). This does not correct, however, for the proportion of poor households that are net beneficiaries of the fiscal system and escape poverty as a result.

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[8] Note that this holds in the aggregate, as those who benefit and those who pay may not be the same poor or vulnerable individuals.

[9] The FI index estimates the net losses experienced by those who are "post-fisc" poor, or those would be classified as poor given their CEQ Consumable Income levels. The Fiscal Gains to the Poor (FGP) index, meanwhile, estimates the net gains experienced by those who are "pre-fisc" poor, or those who would be classified as poor given their CEQ Market Income levels.

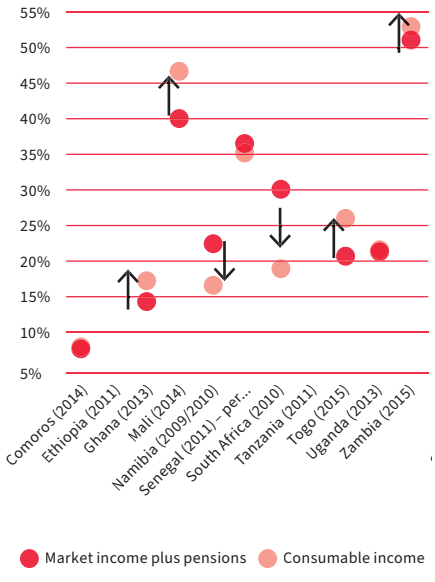


**Figure 6.** Fiscal Policy in Africa Frequently Increases Poverty. Source: de la Fuente et al. (2018).

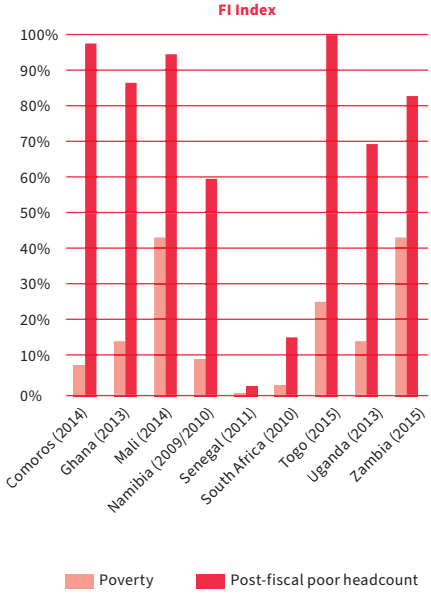


**Figure 7.** Fiscal systems create net losses for the poor even when incidences of poverty are reduced. Source: de la Fuente et al. (2018).

Underpinning these patterns are three proximate causes or drivers of this FI in Africa. First, there is heavy reliance on consumption taxes like VAT to raise revenues and compensate the low levels of taxes collected from other sources, including corporate, income, and property taxes. Second, some governments spend large amounts on energy subsidies which fail to reach most poor households and agricultural subsidies which have low returns compared to other agricultural investments. Third, social protection systems provide only limited targeted, direct transfers to the poor, either because few households are covered, or transfer amounts are relatively low or both. For these reasons, it is further anticipated that the group of poor people who escape poverty by virtue of being net fiscal receivers is also small.

Note also that the FI index and the discussion directly below refers to reductions in the cash-based financial position or in the purchasing power of individuals. The FI index does not attempt to include the benefits provided by the provision of in-kind benefits like education, health, or infrastructure services as in-kind benefits cannot be "eaten"; i.e., they neither increase nor decrease purchasing power over other goods and services.

Direct taxes create very small burdens for the bottom 40 percent while indirect taxes paid by the bottom 40 percent often represent 10 percent or more of pre-fiscal income (Figure 8). Subsidies—even when they are extensive—provide little benefit to poor and vulnerable households who often do not access the subsidized services as much as the wealthy (such as electricity and transport fuel). Direct transfers provide compensation (for the bottom 40 percent) equal or greater than taxes paid only in South Africa and Namibia.

In the aggregate, the total cash benefit transferred to the poorest 40 percent of the population through subsidies and direct transfer programs is smaller in absolute magnitude than the burden created (for the same population) by direct and indirect tax instruments. In other words, most individuals in the bottom 40—including most poor individuals—can expect to be net payers instead of net recipients.[10]

Even if the fiscal system makes a portion of the poor net payers, one could argue that this would be fine as long as this may be the only way to finance strongly progressive and extensive public expenditure on sectors that benefit the poor such as education and health. However, is this the case for Africa? It is not clear that the

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[10] To repeat: we refer here to the cash-based financial position purchasing power of individuals and we are not including the value of in-kind benefits like education, health, or infrastructure services.

poor benefit from in-kind spending in education and health as much as they could, given the problems with the quality of the services received.

It is important to note that a limitation of the fiscal incidence analyses reported here is that it does not account for infrastructure spending which in some countries may benefit the poor in terms of higher quality of life and/or more access to markets.

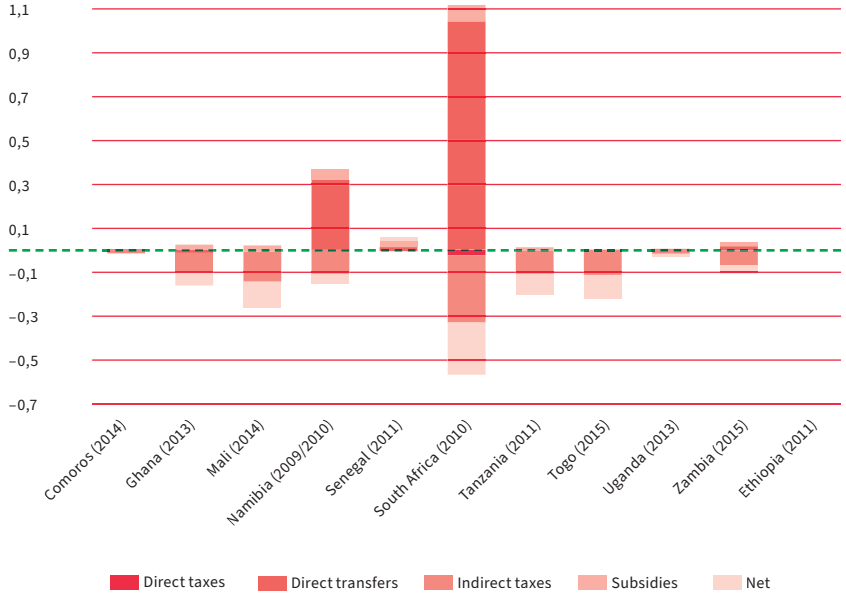


**Figure 8.** Indirect taxes paid outweigh subsidy and transfer benefits for the bottom 40 percent of national populations. Note: Direct transfers and subsidies represent 104 percent and 7.0 percent (respectively) of market income plus pensions in the bottom 40 percent of South Africans (in 2010). The vertical axis in this figure is truncated at 40 percent so that fiscal systems in the non-South African countries are more clearly comparable. Source: de la Fuente et al. (2018).

## 3. Mobilizing More and Less Harming Revenues

### *3.1. Heavy Reliance on Indirect Taxes and Unreliable Direct Taxes*

As the previous section demonstrated, how taxes are raised matters to poverty as much as the amount raised, with the Bottom 40 often significantly affected by indirect taxation. VAT is preferable for efficiency and effectiveness reasons, but it can hurt the poor. Tax exemptions on goods and services primarily consumed by the poor provide a way to mitigate the negative effects. Yet, such goods and services are

few and far between. Additionally, often the goods and services exempted from VAT are consumed in significant quantities by the non-poor, implying important foregone tax revenues. Furthermore, the revenues raised through VAT and other indirect taxes will need to be properly channeled to the poor or vulnerable so that they become net receivers of the fiscal system. Targeted cash transfers provide are an alternative way to compensate the poor. However, the amount of resources that are dedicated to cash transfers is often insufficient (both because of insufficient coverage and low levels of transfers) and needs to be weighed against other competing needs (spending on education, health, WASH, infrastructure, security, and so on). Section 4 sketches some ideas to inform those decisions.

Direct taxes, on the other hand, tend to be progressive because richer people more often have formal jobs. However, economists are quick to diagnose that direct taxes can affect efficiency and long-run growth—by disincentivizing investment, human capital acquisition, and innovation. Yet, the evidence suggests that for low-income countries, shifting away from consumption taxes (e.g., VAT) in favor of income taxes appears to have no negative effect on growth (McNabb and LeMay-Boucher 2014).

More importantly, the small formal sector in many African countries limits the scope for collecting more revenues through direct taxation. Personal income tax is generally limited in economies with large informal sectors as there are few formal employers. Nevertheless, there is room for direct taxation of a wider base of taxpayers, including from the informal sector. Inducing tax compliance also fosters good governance more widely; it comes along with a demand for state institutions that are more responsive, accountable, and competent.

Taxpayer noncompliance is a continual and growing global problem, but studies suggest that developing countries, many of them in Africa, are the hardest hit (Cobham 2005; Fuest and Riedel 2009). Part of the reason is that it often does not seem to pay to taxes. If taxpayers perceive that they do not obtain corresponding benefits from government collectors, tax compliance decrease (Junquera-Varela et al. 2017; Ali et al. 2014; Mawejje and Okumu 2016).

### *3.2. Taxing the Rich*

In many African countries, the numbers of wealthy are growing fast (McCluskey 2016), as are the prices of real estate—one of the major assets held by the rich. Yet, many rich people pay relatively low taxes on their assets and incomes/enterprises. In Ghana, income tax revenue could have been higher by 22 percent (equivalent to 0.5 percent of GDP) if everyone who filed income tax in 2014 had paid full amounts of income tax due (Asiedu et al. 2017). Wealthy individuals often have significant

investments in local land and property and underdeclare their income from such activities. Out of 71 high-ranking Ugandan government officials owing large domestic business assets (like hotels and schools), only one had ever paid personal income taxes between 2011 and 2016 (Kangave et al. 2016).

The barrier to collecting more property taxes may be largely political, but some technical measures can also widen the base for these taxes. Recent experiences in Sierra Leone point to at least three options for improvement.[11] First, simplified valuation methods that rely primarily on observable features of properties (as opposed to sophisticated, often imported, information technology systems). Second, transferring the responsibility for valuation and property tax collection away from central tax agencies through hands-on and continuous training of local staff (instead of high cost, but short term, training programs). Additionally, third, long-term partnership at the local level is needed and should include continuous support to, and pressure on, political leaders when they have inevitably confronted political resistance (Jibao and Prichard 2016). Relatedly, concentrating the responsibility of collecting property taxes into those with stronger incentives to collect revenue can yield great results. In Lagos, Nigeria the local government undertook an overhaul of governance and property taxation since the early 2000s with the determination of Lagos' leaders to realize their 'mega-city ambitions', in part to attract increased investment (Goodfellow and Owen 2018).

### *3.3. Corporations and Cross-Country Competition*

Without overlooking domestic policies and revenue sources, additional revenues could further be raised from multinationals. A large portion of the tax bill of multinationals is domestic (through levies, payroll taxes and import taxes). However, multinational companies can minimize their tax bill on profits through transfer mispricing. Simply put this takes place when a company can appear to lose money—or to make very little profit—in the country it is operating in, while making money in secrecy jurisdictions—trading with a subsidiary—where there is no real production and sales activity going on, and remarkably low-tax or no tax applied.[12] Trading goods that are mispriced to avoid tariffs is not illegal, but there

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[11] Property tax collection increased at least threefold from 2007 to 2011 in nominal terms, or at least doubling in real terms in the four mid-sized city councils of Bo, Kenema, Makeni, and Koidu-New Sembehun.

[12] First, a corporation working in a developing country sets up a subsidiary in a tax haven. Second, they sell their product at an artificially low price to this subsidiary—enabling them to declare minimal

is widespread agreement that multinationals should refrain from this type of tax minimizing behavior.

However, evidence shows that multinational companies do give in to this temptation. A recent study using confidential tax return data of South African firms with connections to tax havens with no corporate tax, report 47 percent lower profits and have a 7 percent higher likelihood of reporting a loss (Reynolds and Wier 2016). The size of these responses is roughly twice as large as what have been observed in developed countries. This supports the commonly held view that multinational firms operating in developing countries are more aggressive in their tax planning.

When adding it all together—aggressive tax planning by multinationals, high reliance on the corporate tax and increasingly lower corporate tax rates, increased exposure to multinational activity, and increased complexity in multinational corporate activity—the future does look dire for African corporate tax revenues.

### *3.4. Tapping Mining Income*

For some countries, a major cause of revenue losses is related to revenues generated in extractive industries. Natural resources as a prominent source of government revenues remains relevant despite recent downturns, given the prospects of new mineral resource discoveries and the eventual bounce back of falling commodity prices (Roe and Dodd 2017). At the same time, there is now a shared consensus that government revenues from extractive industries are far too small.

According to the IMF, the effective tax rate in mining is typically 45–65 percent of export value (cited in Africa Progress Panel 2013). In 2010–11, Sierra Leone, Ghana, and Zambia received only between 2 percent and 12 percent from natural resource taxation and royalties (Christian Aid and Tax Justice Network Africa 2014). A conservative estimate of the losses in concession trading in the Democratic Republic of Congo in copper and cobalt mining found USD 1.36 billion in losses for 2010–2012, compared to the budget in health and education of USD 698 million (Africa Progress Panel 2013).

The failure of African countries to capture income from the extractives sector is driven by a mix of factors. These include overly generous tax incentives and tax

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profits and consequently pay very little tax to the government of the developing country. Thirdly, their subsidiary in the tax haven sells the product at the market price—for comparatively huge profits coupled with a low tax rate (or none at all). In other words, corporations are manipulating prices to pay minimal taxes. See blog post of 7 March 2014, on the "Africa at LSE" blog (http://blogs.lse.ac.uk/africaatlse/2014/03/07/tax-evasion-the-main-cause-of-global-poverty/) (accessed on 22 September 2021).

dodging, as well as weak tax revenue authorities and the corruption of elites. In some cases, governments give generous tax concessions to extractive companies which undercut its own revenue code and the government lacks the capacity or will to properly track what the industries should be paying (as an example see the discussion on Liberia in Sustainable Development Institute 2014). African state companies in the extractive sector lack transparence and the problem is compounded by the 'global governance deficit' in some international extractive companies that are major investors in Africa (Africa Progress Panel 2013). Levying appropriate royalty payments and corporate taxes from private companies has helped countries like Ghana and Zambia to raise more revenues in the recent past.[13]

## 4. Towards Better Spending for the Poor

The fiscal agenda to reducing poverty in Africa is not only about greater revenues and spending more. Improving the efficiency and equity of that spending, to be more impactful for poor and vulnerable households is equally critical. This means getting more for each dollar spent, but also spending more in the sectors and sub-sectors as well as the places that improve the lives of the poor more effectively within the given budget.[14]

### *4.1. Overspending on Subsidies*

Consumer price subsidies are one way to 'pay back' consumers some of their taxes. They are almost always regressive: those with assets or services to subsidize are generally better off than the poorer segments that often pay indirect taxes that pay for the subsidies. For instance, less than 15 percent of kerosene subsidies in the region are received by the bottom 20 percent—the fuel type most used by the poor (3 percent in the case of liquified petroleum gas and gasoline). For African countries, on average, providing USD 1 to the poorest 40 percent of households through untargeted gasoline subsidies is accompanied by spending USD 23 to the top 60 percent of households (Coady et al. 2015). Two-thirds of global poverty in 2012 based on USD 2.50 per day would have been covered with redistribution of national fossil-fuel subsidies to the poor (Sumner 2016). Subsidies are, hence, a very

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[13] See Natural Resource Governance Institute (2014) for more discussion on taxing and revenue collection from natural resources.

[14] This also relates to finding the right sources of financing, including crowding in private sector finance and public-private partnerships (often in infrastructure), to enable governments to allocate more resources to pro-poor investments.

inefficient way of increasing the consumption of the poorest households. Replacing energy subsidies with a basic income guarantee could both save money and have health and environmental benefits (Coady et al. 2017; IMF 2017).

Within agriculture, farm input subsidies were almost phased out in the 1990s, during a period of structural adjustment in Africa, but they have made a strong comeback due partly to residual support for subsidies among African leaders and partly to the uncertainties about food supply during the 2007/2008 global food and fertilizer price instability. Ten African governments spend roughly USD 1.2 billion annually on input subsidies alone, primarily on fertilizers (Goyal and Nash 2017). In principle, farm input subsidies could make a dent on poverty by making available key inputs to a large population of poor farmers and potentially raise their productivity thereby promoting household and national food security and enhance rural incomes.[15] However, have farming input subsidies delivered?

The existing body of research shows modest impact of fertilizer subsidy programs on yields and overall production;[16] this, in turn, attenuates the subsidy programs' contribution on retail food prices or poverty reduction (On poverty: see Ricker-Gilbert 2016 for a review in Malawi; Mason and Smale 2013, Mason and Tembo 2015 in Zambia; and Jayne et al. 2016 for Africa). This lack of impact of input subsidies on productivity and poverty gets magnified because countries in Africa do not spend much on agriculture. Farm input subsidy programs have crowded out other complementary public investments that have proven more efficient drivers of agricultural productivity growth. Take the cases of Malawi and Zambia—two of the largest spenders on agriculture in the region: in 2014, the budget allocation to fertilizer and seed subsidies was over 40 percent of the total budget to the Ministry of Agriculture (Goyal and Nash 2017).

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[15] Farm input subsidies, particularly on inorganic fertilizer, have been justified on the basis that soil nutrients, particularly nitrogen, are essential for maize production, and that most smallholders lack the cash resources or access to credit that would enable them to purchase inorganic fertilizer at commercial market prices.

[16] There is no one-size-fits-all rule for deciding what is an optimal response rate; but in Malawi and Zambia—the two countries in Africa where input subsidies are the largest relative to agricultural spending—estimates suggest modest returns to fertilizer use at best. Burke et al. (2012) found that, on average, the response of maize is 2.7 kilograms (kg) of grain per kg of subsidized fertilizer acquired by households, which is only 50 percent of the Government's expected maize-fertilizer response rate of 5 kilograms. In Zambia, participation raises maize production by 1.88 kg of maize per kg of fertilizer, which is considerably smaller than similar application in other countries, like Kenya, where participation in a similar scheme NAAIAP raises maize production by 361 kg on average, other factors constant (Mason et al. 2016).

Removing subsidies and shifting that spending to public goods and services could improve efficiency and possibly equity. Such reform creates winners and losers and thus brings political pressures to the government. Vested interests and populist pressures exist in all countries. Transport leaders, mining companies, and politically connected firms will want to hold on to energy subsidies, for example, to maintain the preferential treatment in their business as well as to raise barriers to entry for newcomers. The political economy of agricultural subsidies is no less real. Political influence concentration is associated with more subsidies (Figure 9). Nonetheless, some countries have managed to remove subsidies (Inchauste and Victor 2017). To address the politics of reform, it may be necessary to compensate affected groups to preempt opposition. Such compensations may not be cost-efficient, but failing to compensate them (for instance, in the Dominican Republic, transporters and middle classes for removing the fuel and electricity subsidies) could have stopped the reform from passing altogether. Secondly, consumers need to see what they get in exchange for rising prices if the process is to be sustained. Strong communication on the need for price liberalization and trust in the ability of government to handle competing interests is important to sustain price increases.


**Figure 9.** Greater concentration of political influence can result in more subsidies. Source: Bolch et al. (2017). Note: The index is measured by an index of how many individuals at the bottom of the income distribution (the potential winners from more redistributive policies starting from the poorest) would need to come together to outweigh the opposition from the top of the income distribution by accounting for the wealth owned by those individuals.

When, and if, subsidies are scaled back, it needs to happen with a scaling-up of social protection systems. Redistribution has been shown to significantly increase the odds that reforms will succeed. A review of reforms in the Middle East and North Africa classifies all reforms that are combined with cash and in-kind transfers as successful, as opposed to only 17 percent of those without such transfers (Sdralevich et al. 2014). However, greater revenues for government do not 'automatically' lead to higher allocations for safety net programs as Ministries of Finance come under many competing demands to reallocate the savings. A concerted effort from civil society or from external financiers to ensure that as part of the subsidy reform, safety nets are funded adequately, is vital. In recent years, IMF has suggested introducing or expanding social protection programs to compensate vulnerable households during price subsidy reforms (Feltenstein 2017). Equally useful, politicians could earmark part of those savings to build credible commitments to carry out the reform as intended.

*4.2. Boosting Pro-Poor Spending within Sectors*

Certainly, increased government spending on sectors that are critical for the poor—such as agriculture, WASH, education, health, and safety net systems is part of the solution. However, at the same time, current spending could be made more impactful for the poor. In two dimensions, the spending in these sectors underperforms for the poor: in terms of within-sector allocations and in terms of the productivity of spending.

Within-sector spending is not neutral with regard to the poor and non-poor. For example, in education inequality in public sector spending in Africa is common and means that children from wealthier households benefit more from public resources allocated to education. This results from two channels. First, children from poor households are less likely to attend post-primary schools for which per pupil spending is higher (Darvas et al. 2017). Second, within school levels, more public resources go to schools in wealthier areas (often urban) (Bashir et al. 2018). This is, in some cases, due to horizontal imbalances in funding resulting from decentralization of service delivery. Partly, this reflects the fact that teacher salaries are by far the largest category of public expenditures on schooling. The distribution of teachers, especially trained and experienced, is biased toward urban schools leaving rural schools with higher pupil/teacher ratios. Additionally, urban public schools have better infrastructure and learning materials.

In health, government expenditures are skewed toward tertiary services. In the Democratic Republic of Congo, 87 percent of government health expenditure were

focused on hospitals, used disproportionately by the wealthy (Barroy et al. 2014). The unequitable spending relates to both staffing and non-staff costs. Again, in the Democratic Republic of Congo, the modest operating budget almost entirely goes to hospitals. Though hospitals can presumably help people avoid large health costs and income shocks, evidence suggests this spending is off target from a poverty perspective. Capital investments in both education and health services need to be rebalanced toward primary education and care, which are usually more cost-effective. Public investments in curative care are especially regressive, driven by the lower use of such services by the poor (Castro-Leal et al. 2000). Lower usage is attributed to several factors, including the perceptions of poor households about illness as well as low access and quality of services for poor householids.

Spending more on services that are needed and utilized more by the poor, does not necessarily imply it is effective. The effectiveness of spending is as important as its magnitude; but the quality of public schooling, health care, and other service provision is generally low, even when adjusted for spending levels. A handful of African countries are relatively efficient with respect to early grade education and are also managing to improve their efficiency (Figure 10 upper-right quadrant). The bottom-left quadrant of the figure shows these countries have a current high level of inefficiency and the index has deteriorated over time. Beyond primary, there are large inefficiencies in spending in secondary education in Africa. These are largest in low-income countries where the consequences are arguably greatest in terms of poverty reduction (Grigoli 2015). Globally, health care systems in Africa are the least efficient and this is also the region with the neediest people (Sun et al. 2017).

In agriculture, ample evidence shows that rebalancing the composition of public agricultural spending in Africa could reap massive payoffs for reduicng poverty and increasing agricultural productivity. While studies often show low returns to spending in the sector, specific types of spending (such as investments in core public goods related to R&D, technology generation and diffusion, and market linkages) yield high returns for productivity. The inevitable conclusion is that choices about how to allocate public agricultural spending matter significantly (see the detailed discussion in Goyal and Nash 2017).

There is no single solution to mis-targeted resources and poor quality of services. A number of approaches can be identified. Improved financial accountability is one avenue in health (CMI 2006) and in education (Hubbard 2007). There are a range of other avenues to improve pro-poor investments, such as better financial management, results-based financing approaches, private provision, decentralization, better inputs and support to civil servants, and information/social accountability. Many of these

have been detailed in other reports (for example, see the discussion in de la Brière et al. 2017). Technology can serve an important role (see Technology Spread).

How best to improve efficiency in spending remains an exigent space for further experimentation and learning.

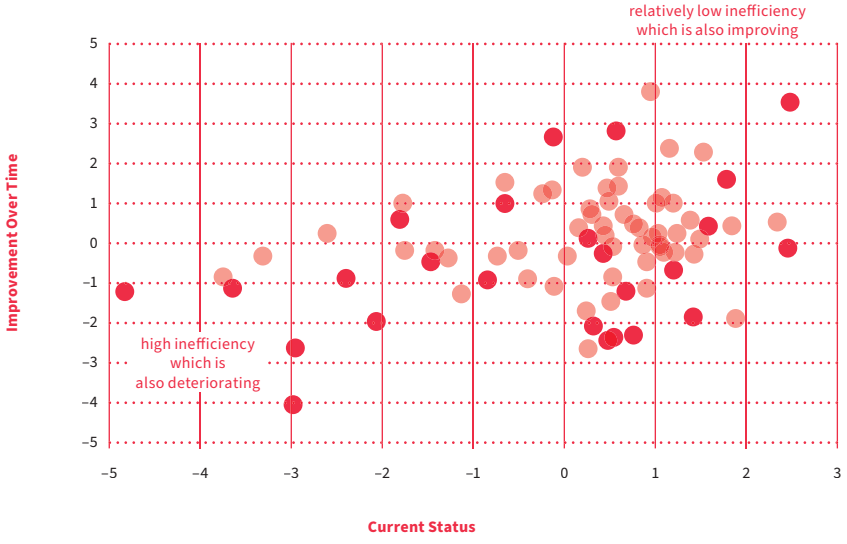


**Figure 10.** Internal Efficiency in Education Remains a Challenge. Source: Bashir et al. (2018). Note: African countries in red. Figure plots the current value of the internal inefficiency index and its improvement over a 35-year period. Positive values indicate less inefficiency.

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# Development Cooperation, Growth and Poverty Reduction: A Survey of the Evidence

**Rainer Thiele**

## 1. Introduction

Over the first decades of its existence, the modern system of development cooperation, which was established in the 1960s under the auspices of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC), was mainly concerned with achieving higher economic growth in developing countries. The intellectual underpinning came from the well-known two-gap model (Chenery and Strout 1966), which assigned to donors the role of providing external resources in order to overcome developing countries' savings and foreign exchange gaps. The structural adjustment programs that dominated the development discourse of the 1980s also aimed at putting recipient countries on a higher growth path by implementing macroeconomic and structural reforms.

Only in the 1990s did a consensus emerge that poverty reduction should be regarded as the ultimate objective of development cooperation. While this shift was associated with an increased use of instruments directly targeting the poor, such as cash transfers, it still left ample room for growth-promoting activities, because growth has been shown to lead to lower poverty in most instances. The literature on pro-poor growth (e.g., (Ravallion and Chen 2003)) added considerations of inequality to the agenda, either stating that the reduction of excessive inequality is a goal in itself or stressing that lower inequality raises the poverty-reducing potential of economic growth. Finally, with the adoption of the Millennium Development Goals (MDGs) in September 2000, helping improve non-monetary poverty indicators such as child and maternal mortality became a new priority among donors, prompting a significant shift in aid allocations from production sectors and physical infrastructure to social infrastructure.

The present paper provides an overview of the empirical evidence regarding the impact of international development cooperation on economic growth, (monetary and non-monetary) poverty and inequality in order to assess whether donors have directly or indirectly contributed to achieving internationally agreed poverty reduction targets.

This might also give an indication of what to expect from development cooperation when it comes to moving towards the very ambitious Sustainable Development Goal (SDG) of completely eliminating absolute poverty.

## 2. Aid and Growth

This section first looks at the relationship between development cooperation and economic growth in recipient countries, which is arguably the most controversially debated topic of the aid effectiveness literature. It then highlights donors' recent efforts to help recipients raise exports and inflows of foreign direct investment (FDI), which can be regarded as one particular mechanism through which foreign aid might spur recipient growth.

### *2.1. Direct Growth Effects*

The vast existing empirical literature on the effectiveness of foreign aid in raising economic growth and development in recipient countries has so far yielded ambiguous results (e.g., (Qian 2015)). In an influential set of meta-analyses surveying the aid effectiveness literature, Doucouliagos and Paldam (2009) conclude that aid has failed to significantly improve economic growth. In contrast, reviewing a range of empirical aid–growth estimates published since 2008, Arndt et al. (2016) conclude that the large majority of studies have found positive impacts, particularly when effects are assessed over longer time periods. An important strand of the aid–growth literature argues that foreign aid can only be expected to be growth-enhancing under specific conditions. Most notably, Burnside and Dollar (2000) suggested—and confirmed empirically—that donors could contribute to economic growth in developing countries only if they focused their engagement on recipients with reasonable levels of governance. This finding shaped policies by the World Bank and other donors for quite some time, even though Easterly et al. (2004) showed early on that Burnside and Dollar's estimates are not robust in the presence of minor changes such as the use of an updated and enlarged dataset. Even studies that find a positive growth effect of foreign aid generally point to moderate magnitudes. Clemens et al. (2012), for example, estimate that raising economic growth by one percentage point per year in the average recipient country would require aid in the order of 10 percent of GDP.

The observation of results varying strongly across different studies can be due to a number of reasons. One key difficulty is that much of the existing literature examines aggregate foreign aid, which comprises a set of very heterogeneous components. While some components such as emergency assistance are not at all expected to

affect economic growth rates, others may do so through widely differing mechanisms (Qian 2015). Cash transfers to the poor, for instance, are likely to have immediate and direct income effects, whereas the process that eventually leads to income effects of projects supporting women empowerment is much more complex and time-consuming. The aggregation of aid also increases the difficulty of developing credible strategies for the identification of causal effects. It has been almost impossible to find an exogenous source of variation that fulfils the exclusion restriction, i.e., does not affect growth through channels other than aid.

The few studies that carefully address the endogeneity of aid have not been able to resolve the empirical ambiguity. Dreher and Langlotz (2020), for example, instrument foreign assistance with a shift-share instrument along the lines of Nunn and Qian (2014), interacting donor-government fractionalization and the probability of each recipient country to receive aid from a particular donor. Their results suggest that the effect of foreign aid on economic growth is insignificant. Galiani et al. (2017) apply an approach that resembles the quasi-experimental regression discontinuity design. They exploit the fact that some of the poor countries receiving aid from the World Bank's International Development Association (IDA) crossed the income threshold over the period under consideration and thus became ineligible for IDA grants. Their identifying assumption of this approach is that countries above and below the threshold only differ in that those above receive less aid. Consequently, the authors employ as an instrument for aid, whether a country is above or below the threshold. They find that foreign aid increases growth. Specifically, according to Galiani et al. (2017), "a one percentage point increase in the aid to GNI ratio from the sample mean is shown to raise annual real per capita growth in gross domestic product by approximately 0.35 percentage points", which is a sizeable but still moderate effect.

### *2.2. Impact on Foreign Trade*

Trade is one specific area in which donors have pledged to commit additional resources, especially since the aid-for-trade initiative was launched at the Hong Kong Ministerial Meeting of the World Trade Organisation in 2005. The reason this area has received particular attention is that trade and trade liberalisation can make a substantial contribution to economic growth and poverty reduction (e.g., (Winters et al. 2004)). However, a range of factors may prevent low-income countries in particular from taking advantage of trade opportunities. Among the obstacles are trade restrictions adopted by industrialised countries and the developing

countries themselves as well as structural weaknesses on the supply side such as low levels of human capital and an insufficiently developed infrastructure.

By tackling such supply-side bottlenecks, aid for trade holds the potential to foster exports from developing countries. This is not to deny, however, that the donors may provide foreign aid mainly to support their own exports to aid-recipient countries (e.g., (Hoeffler and Outram 2011; Nowak-Lehmann et al. 2009)). Hühne et al. (2014) integrate the recipient and donor perspectives in a nested gravity model where they test for differences in the effects of aid for trade on the trade flows in opposite directions. According to their empirical estimations, aid for trade promotes trade in both directions, with moderate quantitative impacts: A doubling of aid for trade means that exports from recipient to donor countries increase by about five percent, while imports by recipients from donors increase by about three percent. Hence, the results do not support the skeptical view that donors grant aid for trade primarily to promote their own export interests.

The results obtained by Hühne et al. (2014) point to "important limitations in the effectiveness of aid for trade. Strikingly, the significantly positive effects on recipient exports do not hold for the low-income group of recipient countries. Aid for trade rather [appears to promote] the exports of middle-income countries, most of which are probably less dependent on aid to overcome supply constraints." Likewise, as Hühne et al. (2014) show, aid for trade turns out to be "more effective in promoting the exports of countries in East Asia and Latin America than the exports of countries in Sub-Saharan Africa, even though the need for support appears to be most pressing in large parts of Sub-Saharan Africa".

Several studies (e.g., (Calì and te Velde 2011; Helble et al. 2012; Hühne et al. 2014) show that the impact on trade is positive for all three component parts of aid for trade, namely aid for 'economic infrastructure', aid for 'productive capacity', and assistance in 'trade policy and regulations'. As one might expect, the third and most directly trade-related component of aid for trade exhibits the strongest trade-enhancing effect. For policy makers, it could thus pay off to put a stronger emphasis on support in the area of trade policy and regulations. This subcategory is so far fairly small and includes, for example, assistance in trade negotiations and technical support for meeting sanitary standards, which could turn out to be particularly beneficial for poor countries with weak administrative capacities.

### *2.3. Impact on Foreign Direct Investment*

FDI has the potential to transfer technology, provide well paid employment opportunities, and promote economic growth and reduce poverty in developing

countries, but it has remained strongly concentrated in a few large and relatively advanced emerging economies (e.g., (Nunnenkamp and Thiele 2013)). Hence, the challenge of spreading the potential benefits of FDI across developing countries as envisioned in the Monterrey Consensus of the United Nations persists.

There are several channels through which foreign aid might foster FDI in developing countries. Aid can, for example, be expected to increase the productivity of private investment if it improves complementary factors such as economic and social infrastructure (Selaya and Sunesen 2012) or the regulatory environment. The small existing empirical literature on the relationship between aggregate aid and FDI is inconclusive. According to the pioneering cross-country study by Harms and Lutz (2006), the effect of aggregate foreign aid on foreign direct and portfolio investment was not significantly different from zero in the 1990s. Donaubauer et al. (2020) report a significantly positive impact of aid on FDI for lower-middle-income countries, but an insignificant one for low-income countries. Asiedu et al. (2009) find even negative effects of aid on FDI in low-income recipient countries. Kimura and Todo (2010) use bilateral data in a gravity-type setting to investigate the relationship between aid and FDI. Estimating gravity equations for the top five donor countries (France, Germany, Japan, the United Kingdom, and the United States) in the period 1990–2002, they find that foreign aid, in general, does not have any significant effect on FDI. The only exception is a positive impact of Japanese aid on Japanese investment in recipient countries, which the authors call a "vanguard effect".

A clearer and more positive picture emerges when considering specific aid categories rather than the very heterogeneous aggregate aid figures. Selaya and Sunesen (2012) confirm their hypothesis that donor support for complementary factors such as human capital formation is associated with more FDI, whereas aid invested in physical capital comes at the expense of lower private investment. In substantive terms, the regression results suggest that one aid dollar invested in complementary factors draws in around two dollars of FDI in the long run. Donaubauer et al. (2016) provide evidence that aid for physical infrastructure has promoted FDI over the period 1990–2010. Lee and Ries (2016) explore whether aid for trade has promoted greenfield investment by lowering operating costs. According to their estimates for the period 2003–2013, this has indeed been the case at least in the more advanced recipient countries. Examining the sector-specific transmission mechanisms in a structural gravity framework, Donaubauer et al. (2020) find that aid for physical infrastructure, post-primary education, and governance as well as aid for trade remove investment barriers and thereby increase FDI stocks.

Accordingly, donors could become more effective in supporting FDI by putting a stronger focus on the aid categories that help improve the provision of inputs complementing private investment.

## 3. Aid, Poverty, and Inequality

Foreign aid could help mitigate poverty and inequality within recipient countries if two critical conditions were met. Donors would have to allocate aid in line with their rhetoric on pro-poor growth, by targeting the most disadvantaged population groups. At the same time, the authorities in the recipient countries would have to ensure that aid actually reaches the poor. Both conditions are likely to be violated to at least some extent. From the literature on aid allocation across recipient countries, it is well known that donors pursue a mix of motives, being motivated partly by developmental concerns and partly by commercial and political self-interest (e.g., (Hoeffler and Outram 2011)). Commercial donor interests may have as a consequence that foreign aid, e.g., in the area of physical infrastructure, is concentrated in industrial clusters rather than remote areas where the poorest people are living. Likewise, using aid as a means to buy political support by the local elite implies that it favors the rich and influential rather than the poor within a particular country. On the recipient side, aid may be used to provide goods and services that benefit the poor, but it has also been shown to induce rent-seeking and elite capture (e.g., (Reinikka and Svensson 2004; Andersen et al. 2020)).[1]

### *3.1. Impact on Poverty*

#### 3.1.1. Monetary Poverty

The first MDG, which simply states that the share of people living in absolute income poverty should be cut by half between 1990 and 2015, has been reached globally if not in all developing countries. Whether aggregate foreign aid has contributed to the decline in poverty is hard to assess due to the same reasons discussed above for the case of economic growth. Still, the consensus is that, on average, foreign aid has been associated with falling monetary poverty. The soundest empirical studies so far, by Hirano and Otsubo (2014) and Arndt et al. (2015), confirm this view using per capita income of the poorest quintile and the poverty headcount (at $1.25 and $2 per

[1] This paragraph closely follows Box 3.5 in Stephan Klasen et al. (2018).

day) as poverty indicators, respectively. According to Arndt et al. (2015) estimates, a doubling of aid reduces poverty by around 15 percentage points.

Kaya et al. (2013) go beyond the aggregate perspective and look at the poverty impact of one specific category, aid for agriculture. Employing a fixed effects panel approach they estimate that a one percent increase in agricultural aid reduces the headcount poverty ratio by 0.2 percent in the aid recipient countries. The study also found that the growth elasticity of the headcount poverty ratio ranges from 1.7 to 3.5 across different specifications, which leads to the conclusion that agricultural aid is effective in poverty reduction directly and indirectly through growth. In a similar vein, Hirano and Otsubo (2014) show that social aid significantly and directly benefits the poorest quintile in society, while economic aid increases the incomes of the poor through growth.

### 3.1.2. Non-Monetary Poverty

While the objective of cutting monetary poverty by half may have attracted the strongest public attention, OECD Development Assistance Committee (DAC) donors appear to have put even more weight on achieving the non-monetary MDGs if one judges them by their aid allocation decisions: the average share of overall aid budgets devoted to supporting social infrastructure investments rose substantially from about 20 percent in the early 1990s to over one third throughout the 2000s.

The existing empirical evidence tends to show that aid targeted at the social sector has helped improve various MDG-related indicators. According to cross-country studies at the macro level, more aid for education has been associated with increased primary school enrollment, less repetition and higher completion rates (D'Aiglepierre and Wagner 2013; Dreher et al. 2008). Likewise, aid for health has been shown to lead to lower infant mortality (Bendavid 2014; Mishra and Newhouse 2009).

More recent studies for several Sub-Saharan African countries (De and Becker 2015; Odokonyero et al. 2018; Kotsadam et al. 2018), which are based on geocoded data at the sub-national level and thereby mitigate the methodological problems that arise in particular from the unobserved heterogeneity prevalent in cross-country settings, corroborate the previous findings.

For the case of Malawi, De and Becker (2015) estimate significant, positive effects of education aid on raising school enrolment, of health aid on decreasing disease severity and of water aid on decreasing diarrhea incidence based on a combined propensity-score matching and difference-in-differences approach. The estimated effects are modest but non-negligible: an average health project, for example, leads to close to one fewer work day lost due to illness, per person per year.

Furthermore, employing a difference-in-differences estimator, Odokonyero et al. (2018) find that aid allocated to Uganda's health sector had a fairly "strong effect on reducing the productivity burden of disease indicated by days of productivity lost due to illness but was less effective in reducing disease prevalence".

Kotsadam et al. (2018) match geographic aid data with available georeferenced survey data from five Nigerian Demographic and Health Surveys. Their difference-in-differences estimates suggest "that children born to mothers who live in locations close to one or more aid projects have a lower risk of dying before the age of 12 months". In substantive terms, aid is estimated to lower the infant mortality rate by about one percentage point, or more directly by 10 children per 1000 born, which is again a non-negligible effect. The mortality-reducing potential of foreign aid seems to be particularly strong for less privileged groups like children of Muslim women, and children living in rural areas.

### *3.2. Impact on Inequality*[2]

As in the case of poverty, the expected impact of foreign aid on inequality depends on the extent to which funds are well-targeted and aid capture is avoided. The latter tends to be inequality-increasing as rents are typically captured by local elites endowed with a disproportionate share of a country's economic and political power (Angeles and Neanidis 2009).

Given these counteracting factors, the question of whether foreign aid has reduced within-country inequality is an empirical one. The evidence so far—all obtained using the Gini coefficient as the indicator of inequality—is limited and ambiguous. Herzer and Nunnenkamp (2012) find that foreign aid exerts an inequality-increasing effect on income distribution. According to Chong et al. (2009) as well as Arndt et al. (2015), there is no robust association between aid and inequality. Shafiullah (2011) as well as Hirano and Otsubo (2014) conclude that aid reduces income inequality.

The mixed results of these studies may partly be due to differences in country samples and time periods as well as differences in the panel data techniques employed. Yet, the most recent analysis by Hirano and Otsubo (2014) also points to a more substantive explanation. The authors detect a considerable heterogeneity of the estimated impacts across aid sectors. Specifically, aid given to the social sector, which increased disproportionately over the period covered by their study, is shown

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[2] This subsection closely follows Box 3.5 in Stephan Klasen et al. (2018).

to have the strongest and most robust inequality-reducing effect. This is in accordance with the evidence of effective support for social infrastructure presented in the previous section. Yet, even for social sector aid the impact on inequality as measured by changes in the Gini coefficient is not significant in quantitative terms.

Overall, the part of foreign aid dedicated to the social sector appears to be effective in improving social indicators that matter for the poorest segments of the populations in recipient countries. This is even though the targeting of social sector aid towards primary services—while having improved—still leaves much to be desired. The share of educational aid budgets allocated to post-secondary education, for instance, is still roughly equal to the share primary education receives (Lanati and Thiele 2020). Further improvements in targeting may be seen as a realistic next step towards increasing the poverty- and inequality-reducing potential of foreign aid.

## 4. Concluding Remarks

The evidence presented in this paper suggests that development cooperation can help achieve growth and poverty reduction in partner countries, even though the effects are likely to be modest in many cases. Most confidence can be put into the finding that, in accordance with the MDGs, aid for social infrastructure has contributed to achieving non-monetary goals such as higher school enrollment and lower infant mortality. It remains to be seen whether donors will continue to play a positive role when it comes to reaching more ambitious SDGs such as ensuring quality education for all. The evolution of educational quality has so far clearly fallen short of the improvements realized in quantitative indicators (e.g., (Bold et al. 2017; The World Bank 2018)). For instance, many pupils leave primary school without being able to read simple sentences and solve basic mathematical problems (The World Bank 2018, p. 2). To help overcome the quality problems in social infrastructure and come closer to meeting the respective SDGs, donors need to shift their strategy. While building schools or health facilities was mainly a matter of providing resources, quality improvements will require much more nuanced interventions. These include technical support in curricula development as well as training programs for school teachers and health personnel. Governance reforms such as performance-enhancing incentives for teachers will also play an increasing role.

Foreign aid specifically targeted at facilitating integration into international trade and attracting FDI has also shown to be effective in most existing empirical studies, even though its positive effects tend to largely miss low-income countries. In contrast, it is inherently difficult to empirically identify income effects of foreign

aid at the macro level, which the long-standing and still unresolved debate about the aid–growth relationship illustrates in a forceful manner.

In any case, if the aim is to bring poverty close to zero in accordance with SDG1, the potential of measures that mainly work through "trickle down" growth is likely to be more limited than in the past. This is because many of today's poor live in a fragile state and/or face multiple development obstacles such as belonging to a discriminated minority, lacking assets or having limited access to markets and public services. Any donor response to this kind of structural poverty has to be multi-dimensional, including support for building state capacity and targeted interventions such as land-tenure reforms and the establishment of road connections to remote areas.

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# A Safety Net for You, a Safety Net for Me? Donor Promotion of Social Protection Schemes Faces Policy Coherence Issues

**Fritz Brugger**

## 1. Introduction

Social protection schemes are increasingly recognized to be pivotal for preventing and reducing poverty, as they provide a safety net for the most vulnerable (Fiszbein et al. 2013). During crises, they are even more important to prevent people from falling into poverty, as the COVID-19 pandemic has demonstrated. While social protection was not even mentioned in the Millennium Development Goals (MDGs), it has gained prominence in the Agenda 2030 discourse to the point that "achiev[ing] substantial coverage of the poor and the vulnerable" with social protection schemes was established as one target under the Sustainable Development Goal on ending poverty in all forms (SDG 1.3). In the Addis Ababa Action Agenda, governments committed to a "social compact", pledging to deliver social protection to their citizens, including social protection floors (UN 2015).

New protection schemes are beginning to emerge. For example, Tanzania, Kenya, Ethiopia, and Senegal are starting to create welfare systems and distribute cash to poor households. Receiving USD 43 every three months in Senegal and USD 13 per month in Tanzania is not a fortune, but it is a start. Today, 90% of the bill of Tanzania's program is picked up by donors such as the World Bank and the British and Swedish governments (Economist 2019). This may work for kick-starting protection schemes but relying on donor money is not a sustainable solution.

To finance social protection schemes over the long-term, the availability of sufficient government income through domestic tax collection is indispensable (Adaba 2016; Fiszbein et al. 2013). In 2016, 55% of the world population—as many as 4 billion people—were not covered by any social protection cash benefits, with large variations across regions: from 87% without coverage in sub-Saharan Africa to 14% in Europe and North America. Rolling out social protection across sub-Saharan Africa is an even bigger challenge, with 41% of people subsisting on less than USD 1.90 a day (UN 2019).

The approach of donors to support domestic resource mobilization is inconsistent. On one side, donors have pledged to provide strong international support for social protection initiatives and to explore "coherent funding modalities to mobilize additional resources, building on country-led experiences" (UN 2015, p. 6). Donors have also signaled an appetite to support capacity building for tax authorities more vigorously and have stepped up their commitments (ATI 2019).

On the other side, donor countries are defending international tax rules that benefit their business communities, and which, to a degree, work against the ability of developing countries to obtain a fair share of taxes from multinational corporations operating in their jurisdictions. Foreign direct investment into developing countries increased twentyfold between 1990 and 2015, twice the growth rate of global foreign direct investment (FDI) (UNCTAD 2019). This is not least because donor countries through the 'beyond aid' agenda of the Organization for Economic Co-operation and Development (OECD) have long promoted FDI as an effective way to create jobs and generate tax revenues in low income countries.

Balancing the promotion of tax revenues in developing countries while at the same time protecting domestic economic interests is a classical policy-coherence-for-development dilemma. The basic idea behind policy coherence for development is to align non-aid policies with development goals. In the best case, policies across government are mutually reinforcing (positive coherence). In the minimum case, policy coherence for development avoids that public policies have an adverse impact on developing countries.

Better coherence between donors' aid and non-aid policies is expected to have a greater impact than—in this case—simply increasing aid budgets for capacity building of tax authorities and for supporting social safety nets (Brown 2015; Siitonen 2016). The OECD declared in its 2012 Strategy on Development that "enhancing policy coherence for development is one of the primary objectives" while the SDGs (Goal 17, target 17.13 and 17.14) recognize greater policy coherence as an issue of systemic relevance to the successful implementation of the Agenda 2030 (OECD 2016, 2012a; Spencer 2012; Verschaeve et al. 2016).

The remainder of the chapter analyzes how donor countries deal with the policy coherence dilemma. It first reviews the evolution of domestic resource mobilization on the donor agenda over the last two decades and particularly since the financial crisis of 2008. Next, we turn to the reform of the international corporate taxation agenda. More precisely, we review the reform of the transfer pricing rules in the Base Erosion and Profit Shifting (BEPS) reform process that was initiated in 2012. Then, we consider whether the institutional platform on which international

tax rules are negotiated—the OECD—affects policy coherence outcomes. The last section concludes.

## 2. The (Re-)Discovery of Domestic Resource Mobilization Programs

Tax revenues in low- and middle-income countries are significantly lower compared to the OECD average measured as share of GDP. While the OECD countries collect taxes at the level of 34% of GDP, the respective average value for Africa is only at around 18% (OECD 2018a). According to the International Monetary Fund, countries collecting less than 15 percent of GDP in taxes are assumed to be below a tipping point to make a state viable and put it on a path to growth. As of 2015, 35 of the world's 75 poorest countries are below this threshold. Domestic public resources are lowest where extreme poverty is highest (Gaspar et al. 2016).

Although the collection of tax requires substantial administrative capacity that is missing in most low-income countries, the topic received relatively little attention from development agencies until a decade ago. Domestic resource mobilization was mentioned for the first time in the Financing for Development (FfD) conference in Monterrey in 2002 but it was particularly after the financial crisis in 2007/8 that domestic resource mobilization was discovered as a previously "neglected factor in development strategy" (Culpeper and Bhushan 2008). Aid skepticism and budgets under pressure sparked interest in increasing tax capacity as an exit strategy to the point that the 2008 FfD conference in Doha put domestic resource mobilization center stage (UN 2008). Later, it became one of the SDG targets (SDG 17.1) and the first out of seven action areas adopted at the third FfD conference in Addis Ababa in 2015 (UN 2015).

The high-profile support for tax capacity building is not (yet) met by financial commitment of bilateral donors. Tax activities were estimated to amount to some 0.15 per cent of total development assistance only in 2015 (PCT 2016). Starting from this low baseline of USD 224 million of effective disbursements in 2015, donors pledged to double spending for tax projects by 2020 in the framework of the Addis Tax Initiative (ATI 2019).

In light of the rapidly growing tax-related activities (for a mapping of donor activities, see e.g., Avis 2017; PCT 2016, p. 13f), an effort was made to improve the coordination of actors and programs and to "better frame technical advice to developing countries". The Platform for Collaboration on Tax, established in 2016, brings together the four largest multilateral organizations active in tax matters: International Monetary Fund (IMF), United Nations (UN), World Bank Group (WBG), and Organization for Economic Co-operation and Development (OECD).

Particularly noteworthy is the presence of the OECD, which signals a change that the OECD has undergone related to developing countries. The OECD is a membership-based organization of currently 37 high-income countries and at the same time, the key institution for the negotiation and dissemination of international tax rules. Now, the OECD has declared to become a key actor in the domestic resource mobilization agenda and "to mainstream development across all of our work" (OECD 2018b, p. 4). In contrast, the UN, IMF and World Bank are not promoters of the international corporate taxation soft law but do advise developing countries on tax. Hence, their mandate makes them more concerned with protecting source taxation, which is not necessarily aligned with the position of the OECD (Picciotto et al. 2017, p. 10). For example, the IMF pointed out in its influential paper on spillovers in international corporate taxation that tax treaties, which are typically based on the OECD brokered model convention, significantly restrict the rights of countries to tax activities where they take place ("at source"), reducing the corporate tax base of capital-importing states, which are mostly developing countries (IMF 2014). The IMF concludes that developing countries should sign double taxation treaties "only with considerable caution" and expresses the need to "protect and expand their corporate tax bases in the face of challenges in applying the [arm's length principle]" (IMF 2014, p. 10, 34). From this perspective, the Platform for Collaboration on Tax can be seen as an attempt to increase policy coherence among multilateral organizations towards developing countries. Less clear is on whose terms this coherence will settle.

A more technical attempt to facilitate the coordination of external support for reform is the Tax Administration Diagnostic Assessment Tool (TADAT) to vet the health of a country's tax administration and evaluate the progress of tax policy reform and capacity building initiatives by way of subsequent repeat assessments. Unfortunately, of the 94 national performance assessments carried out by mid-2020, only 19 are publicly available, making it hard to assess the effectiveness of technical assistance for domestic resource mobilization.

The most recent international effort is the Tax Inspectors Without Borders initiative by OECD and the United Nations Development Programme (UNDP). The program takes a "learning by doing" approach whereby experts from OECD countries work directly with local tax officials on audits and audit-related issues concerning international tax matters such as abusive tax avoidance by multinational enterprises (MNE), including transfer pricing and thin capitalization. The roughly USD 500 million in tax revenue recovered in four years and 59 deployments in Africa, Latin America, Eastern Europe, and Asia (TIWB 2019) stand against the USD 100–240 billion in lost revenue annually that developing countries suffer due

to avoidance (Crivelli et al. 2015). Corporate tax planning contributes to this loss with an estimated USD 30–52 billion in trade misinvoicing, USD 5–50 billion through transfer pricing manipulation and USD 3–9 billion via treaty shopping arrangements (UNCTAD 2020).

All efforts of the international community to support domestic resource mobilization at the technical level are—sooner or later—confronted with the fact that tax is deeply political. The collection of tax not only requires substantial administrative capacity, but more importantly, requires a state to be considered legitimate since the vast majority of tax is collected when there is a high level of voluntary compliance (Di John 2011, 2010). Changes in a country's tax policy and administration are largely driven by domestic economics, politics, and institutions (Di John 2010; Fjeldstad and Heggstad 2011; Fjeldstad and Moore 2008). This means that technical support for tax authorities is confronted with the capacity of elites to influence tax policy formulation and administration, as well as the involvement of tax collectors and public servants themselves in rent-taking (Forstater 2018, p. 10). Property taxation is a case in point. Land and property are among the most visible indicators of personal wealth and property tax is widely recognized as efficient, administratively straightforward, and a progressive way to collect revenue (Ali et al. 2017; Ramírez et al. 2017). Nevertheless, property taxes are rarely used in low-income countries, they amount to 0.1–0.2 per cent of GDP, while in most OECD countries, property taxes account for 1–2 per cent of GDP. Property taxes tend to target the economic and political elites who have the power to prevent tax policies being enacted or enforced (Moore and Prichard 2017, p. 16). While challenges to domestic resource mobilization posed by domestic politics are important, this chapter focuses on the policy coherence dimension that donor countries face.

### 3. Reform of the Cross-Border Taxation Rules

The global financial crisis has not only triggered donor interest in domestic resource mobilization. The financial crisis has equally triggered the OECD/G20-led BEPS project, claimed to bring about the "most fundamental changes to international tax rules in almost a century" (OECD 2015). Such reform processes are prime opportunities to increase policy coherence.

Based on the findings of a recent research project (Brugger and Engebretsen 2020), this section summarizes the outcome of—and political economy behind—the deliberation over the reform of the OECD transfer pricing rules. What sounds—and is—very technical guides not only transactions between related entities but, in essence, defines the scope for shifting profits from high to low tax jurisdictions.

### *3.1. Why Low-Resource Countries Struggle to Tax Multinational Enterprises*

The allocation of taxing rights between capital importing and capital exporting countries is based on the "separate entity" concept. This means that each permanent establishment of an MNE in a country is taxed as a separate entity. Furthermore, transactions between related entities (i.e., controlled by the same MNE) should be priced "at arm's length", i.e., as if they were market-based transactions between non-related entities (Langbein and Fuss 2016; Perry 2017).

In tax jargon, this is called "transfer pricing". A transfer price is the price charged by a company for goods, services, or intangible property to a subsidiary or other related company. Transfer pricing therefore allocates the tax base generated by the profits of MNEs among the national jurisdictions within which those enterprises operate.

Whilst transfer pricing is a legitimate feature of the commercial activities of MNEs, abusive transfer pricing occurs when income and expenses are improperly applied, distorting the allocation of profit among the countries in which multinationals operate for the purpose of reducing overall taxable income of the enterprise (CITCAR 2020; De Mooij and Liu 2018; OECD 2020a). Transfer pricing is one of the most complex global tax planning tools employed by MNEs.

Transfer price manipulation not only reduces a country's tax base, but also provides a substantial advantage to MNEs in comparison with single-country firms because only the former can use this type of international tax planning strategy. In fact, it is comparable to a subsidy which MNEs receive but domestic enterprises do not (Baistrocchi 2013; Cooper et al. 2017; Rixen 2011). Drawing on evidence from different industrial sectors for a group of OECD countries, Bartelsman and Beetsma (2003) estimate that at the margin, more than 65% of the additional revenue resulting from a unilateral tax increase is lost because of income shifting towards lower tax jurisdictions. The bulk of profit shifting seems to be done by the largest companies (Wier and Reynolds 2018). In addition to denying a country's essential tax revenue and putting local businesses at a competitive disadvantage, transfer pricing contributes to harmful competition at a global level among tax jurisdictions, as countries attempt to lower their tax rates to attract MNEs to their own jurisdictions in a race to the bottom dynamic (Baistrocchi 2013).

Developed countries, through the OECD, have become the authority on transfer pricing over the preceding decades. The OECD issues the Transfer Pricing Guidelines (TPG) for Multinational Enterprises and Tax Administrations that define acceptable methodologies to implement the arm's length principle (ALP), i.e., to establish market prices for cross-border transactions of MNEs (OECD 1995, pp. 1–6).

Although the OECD Guidelines on Transfer Pricing are not legally binding, they have attained "canonical" status (Picciotto 2018, p. 19) due to the unique combination of international "soft law" regulations (TPGs and the OECD Model Tax Convention endorsing the ALP) and their translation into national "hard law" through bilateral tax treaties, building on the OECD Model Convention (Rixen 2008a).

The crux of the matter is how the arm's length price is best established. The OECD guidelines accept five standard methods which all rely on an assessment of facts and circumstances of the individual transaction to determine the final price that should correspond to comparable market transaction. Conducting such a comparability analysis requires considerable technical capacity and expertise, something that is often lacking in resource-constrained low-income countries (Solilová and Nerudová 2015). Even where this capacity is available and sophisticated techniques for adjusting data from other regions for use as comparators are deployed, it produces a wide range of putative comparables at best (e.g., Gonnet et al. 2014). The Platform for Collaboration on Tax concludes that "a comparability analysis provides only an approximate answer and that some flexibility is needed to determine a principled answer" (PCT 2017, p. 66). Individual adjustments on a case-by-case basis offer considerable discretion to both taxpayers as well as the officials in charge of establishing transfer pricing. This makes the exercise vulnerable to manipulation, increases the risk of legal disputes, or translates tax assessment into a negotiation with the taxpayer "to achieve a sensible, arm's length result" (Ibid., p. 67).

The ALP is evidently complex and difficult to apply for resource-constrained countries, and simpler alternatives exist. Why do the OECD guidelines not recognize and promote simpler alternatives?

The most far-reaching alternative concept to the ALP is the idea of taxing MNEs as single firms instead of treating each subsidiary as separate entity. The corporation's total worldwide profit (or loss) is then attributed to each jurisdiction, based on factors such as the proportion of sales, assets, or payroll in that jurisdiction. Such formulary apportionment—also known as unitary taxation—would be a systemic change to how international corporate taxation works (Clausing and Avi-Yonah 2007).

The middle ground is occupied by so-called "simplified methods" to establish the price of a transaction. Simplified methods still rely on separate entity accounting, but instead of assessing the circumstances of each transaction, they define rules to establish the price for a transaction with no or only very limited adaptation possibilities. Such simplification looks like an attractive option to resource-constrained tax administrations in the Global South. An example is Argentina's so-called sixth method, which applies benchmark prices to commodity trading and which was later

adopted by a few other Latin American commodity producers and Zambia for its copper sector (Durst 2018; Grondona 2018). More comprehensive is the Brazilian fixed margin method which specifies the profit margins to be applied to each type of transaction (Rocha 2017). While Brazil's fixed margin method clearly opposes the OECD recommendation of considering the specific facts and circumstances of each transaction, it achieves administrative simplicity as well as a low level of tax disputes (Picciotto 2018, p. 33), a fact that is acknowledged by MNEs such as Shell operating in Brazil: "We find that fixed margins provide a level of certainty to the results of an inspection, which simply assessing risks and functions would not. In essence, fixed margins are easier to follow, regulate and inspect" (Gasper 2016).

In 2013, when the BEPS reform was launched after the global financial crisis and the subsequent public outcry over exposés detailing the aggressive international tax planning schemes employed by some of the world's biggest MNEs, the OECD Secretary General together with the Head of Tax declared that it was "essential to simplify and strengthen the transfer pricing rules for the benefit of both developed and developing economies" and to "alleviate the compliance burden for both tax authorities and taxpayers" (OECD 2012b).

Yet in 2019, after the reform, the global tax system continues to rely on the ALP, notwithstanding its limitations (Okauru 2018). Unitary taxation has so far failed to challenge the dominance of the ALP (De Robertis 2018). Even less far-reaching proposals to move from the discretionary-based ALP approach towards a more rule-based settlement of transfer prices as the Brazilian or Argentinian methods have been met with fierce resistance. Facing the pressure from low-income countries, the OECD included (but not endorsed) in the 2017 revision of the transfer pricing guidelines the so-called sixth method in addition to the five recommended methods. At a closer look, however, it comes with the condition that a detailed comparability analysis was to be conducted between the economically relevant characteristics of the controlled transaction and the specification of the quoted price (Collier and Andrus 2017, p. 249)—a requirement that essentially removes whatever merits the sixth method has in ease of administration (Picciotto 2018, p. 25).

Even this "uneasy compromise" (Büttner and Thiemann 2017; Perry 2017), which largely satisfied OECD member countries and business community demands, was criticized by tax practitioners and the big accounting firms in particular (Ernst and Young 2015; PWC 2015). Developing countries, academics, and civil society deplored the missed opportunity for reform (ICRICT 2019a) and former senior OECD tax officials noted that, after all, the transfer pricing guidelines have become not simpler but even more complex to implement (Collier and Andrus 2017; Andrus

and Oosterhuis 2017). What explains this outcome? A discourse network analysis covering the period from the mid-1990s to the end of 2018 sheds light on the deliberative dynamics during the BEPS reform (Brugger and Engebretsen 2020).

*3.2. The Perseverance of the Arm's Length Principle*

It is well documented in the academic literature that the driving force behind the transfer pricing guidelines has been an epistemic community centering around the OECD tax network and consisting of the organization's staff, experts from member countries' tax administrations, and the private tax law and accounting community since the mid-1990s (Büttner and Thiemann 2017; Seabrooke and Wigan 2016). As corporate taxation has become an increasingly politicized topic after the financial crisis, devising rules for transfer pricing could no longer take place in closed groups of like-minded specialists. In response, the OECD started to invite public consultations on reform proposals. In these consultations, the epistemic community defended its policy project by reaffirming the accuracy of the ALP and its positive effect on FDI and international cooperation. Even more importantly, those defending the status quo managed to activate their constituency to the degree that accounting companies, tax lawyers, and MNEs firmly dominated the public debate as well as public consultations around the 2017 reform of the transfer pricing guidelines. As Figure 1 illustrates, their share of the debate grew from 27% right after the financial crisis to over 56% between 2014 and 2018. Over time, the statements of the "pro ALP camp" also grew more hostile towards simplified methods, with an increasing share of the statements demanding modifications to simplified methods, claiming that they would cause double taxation or putting into question the legitimacy of alternatives to the hegemonic transfer pricing methodologies altogether.

In contrast, the "reform camp" that advocated for simplified TP methods, mainly civil society organizations and think tanks, was clearly on the defense (Figure 1). They were not able to effectively break the epistemic community's ranks nor build a broader coalition in support of reform, resulting in their share of the debate becoming marginalized over time; it always remained below 15% (Figure 1) (Brugger et al. 2019; Brugger and Engebretsen 2020).

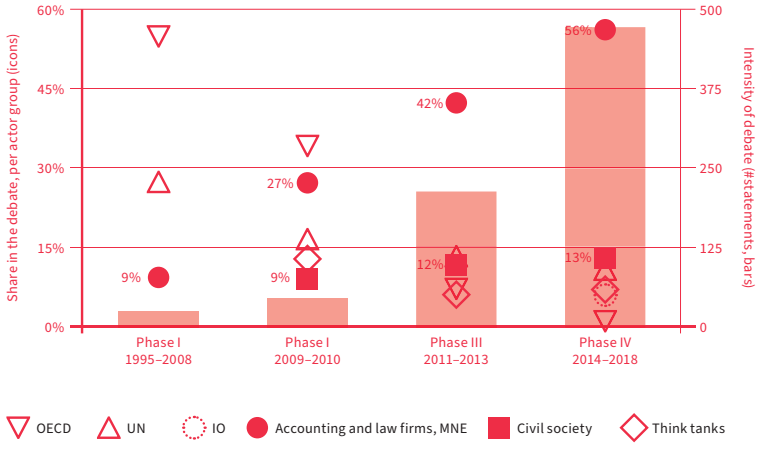


**Figure 1.** Intensification of the debate on simplified methods (bars represent the overall number of statements in a time period, right *y*-axis) and changing actor dynamics over time (icons represent the share of statements per actor group, left *y*-axis). Source: (Brugger and Engebretsen 2020).

## 4. Legitimacy Deficits in International Corporate Taxation Governance

In addition to the discursive struggle over the technicalities of transfer pricing, negotiations over international corporate taxation also have an institutional dimension. For the last few decades, the OECD established itself as the platform that largely defined international tax governance. The institution has derived its global legitimacy from providing solutions that are accepted because of their problem-solving capacity, typically called output legitimacy. The OECD's Achilles' heel is its lack of input legitimacy. As a membership-based organization, it represents only a small number of high-income economies and is perceived as "the rich countries' club" (Rixen 2008b, p. 148), as the statement of an Indian representative to the UN illustrates:

> [The] OECD Model Tax Convention and the OECD Transfer Pricing Guidelines have been developed on the basis of consensus arrived at by the Government of 34 countries (all developed countries). These guidelines only protect the interests of the OECD countries which are partial to such Convention. Since the Governments of developing countries are not party to the OECD Guidelines, it is improper to suggest that they represent internationally agreed guidance knowing fully well that concerns of developing countries have not been taken care of in the OECD Model Convention and OECD Transfer Pricing Guidelines. (Spencer 2012, pp. 25–26)

The more representative UN has not (yet) been able to establish itself as a meaningful counterweight to the OECD in international tax matters (Hearson 2017; Mosquera Valderrama et al. 2018; Rixen 2008a; Zagaris 2005). Its "Committee of Experts on International Cooperation in Tax Matters" (UNTC) comprises 25 members (15 from developing and 10 from developed countries) acting "in their expert capacity" rather than directly representing their government's interests; they meet twice per year for four days (UN ECOSOC n.d.). In contrast, the OECD Centre for Tax Policy and Administration (CTPA) has a 155-person strong secretariat supporting the various OECD committees, work programs, task forces, and dialogue platforms (OECD 2018b).

The UN committee has published its own UN Practical Manual on Transfer Pricing for Developing Countries. It is largely consistent with the OECD approach but has a more user-friendly focus (Collier and Andrus 2017; Soong Johnston 2017). There is also a dominance of OECD representatives in the UN tax body observable. At one stage, 48% of the members of the UNTC were from OECD member countries, including its chairman, and some of them serve both on the OECD and UN tax committee (Spencer 2012). While it may be an overstatement that the "OECD has had in effect operational control of the UN Tax Committee" (Spencer 2012, p. 23), a notable overlap in personnel is apparent.

Since the beginning of the century, repeated efforts to upgrade the UN Tax Committee of Experts to an International Tax Organization have failed. Initially, a more representative and legitimate global tax body under the auspices of the UN has been suggested by the UN High-level Panel on Financing for Development and outlined in the 2001 Zedillo Report in preparation of the FfD conference in Monterrey (UN 2001). The International Tax Organization was supposed to "take a lead role in restraining tax competition designed to attract multinationals with excessive and unwise incentives . . . , sponsor a mechanism for multilateral sharing of tax information . . . [and] most ambitious of all, an International Tax Organization might in due course seek to develop and secure international agreement on a formula for the unitary taxation of multinationals" (UN 2001, pp. 28, 65).

However, global tax issues were not even been discussed in Monterrey (2002) or in the follow-up conference in Doha (2008) (Lesage et al. 2010). The only result was a slight upgrading of the UN tax Committee from an Ad Hoc Group of Experts to a Committee of Experts and the increase from one to two meetings per year.

In 2015, the international community agreed at the 3rd FfD conference in Addis that "efforts in international tax cooperation should be universal in approach and scope" (UN 2015, p. 13) and that the representation "of developing countries in

decision making in global international economic and financial institutions" must be enhanced "in order to deliver more effective, credible, accountable and legitimate institutions" (SDG 10.6).

This consensus did not translate into support for an International Tax Organization. A respective proposal was promoted by the G77, the group developing countries at the UN. The proposal was frustrated by the strong opposition of OECD member countries and the EU in Addis and a year later at the UN Conference on Trade and Development in Nairobi in 2016 (Deen 2016; G77 2015, 2017; Picciotto et al. 2017, p. 8ff).

In parallel, the OECD took steps to bolster its own input legitimacy by opening up and rendering the policy-making processes more inclusive (Christensen and Hearson 2019). From 2012 to 2015 the OECD engaged in a "dialogue-by invitation only" through the Global Forum on Transfer Pricing. Criteria on who was invited and governance mechanisms of the forum remained classified (Christians and Apeldoorn 2018). In 2016, the mandate to work on the "development of guidance on transfer pricing" moved to the newly created "Inclusive Framework" (IF) (OECD 2017a, p. 13). The IF is open to all jurisdictions that commit to the BEPS reform package and its consistent implementation, and pay a membership fee. BEPS Associates "participate on an equal footing" but what that exactly means remains opaque as agreements with "Associates", governance structures of the IF, and procedural information are not public.

The core mandate of the IF is monitoring the implementation of tax reform measures that have already been agreed on by the G20 and OECD members (Hearson 2017). Hence, the process of broad-based implementation of the BEPS minimum standards will roll out the governance mechanism largely devised by the OECD at the global level (Fung 2017; ICRICT 2019b). As the number of countries willing to implement policies originating in the OECD advances (137 as of January 2020), so does the organization's standing and legitimacy as a forum for technical problem-solving and diffusion of international tax standards (Christians 2010; Sharman 2012; Vega 2012).

There has been an opening up of the OECD over the last decade, which demonstrates institutional learning about the need for inclusivity in establishing a broadly accepted global tax policy mandate. However, several facts raise doubts about the sincerity of this move to create a level playing field, particularly with respect to decision making power. First, the IF was created after the substantial discussion on the BEPS actions was already over and the focus shifted to implementation. Second, the Council delegated to the Committee for Fiscal Affairs (CFA)—in which IF members

are supposed to participate "on equal footing"—the authority to approve future amendments to the TPGs in 2017, but only after the 2017 revision of the TPGs was approved by the Council (OECD 2017a, 2017b). Third, the same Council can at any time unilaterally take back the competencies delegated to the CFA. Fourth, as long as the full terms of the partnership engagement, governance structures, and procedural information of the IF are not publicly accessible, it is not possible to empirically analyze and evaluate the stake of developing countries in the IF (Christians and Apeldoorn 2018; OECD 2003). Finally, the OECD Council has retained a gatekeeper role by approving the formal invitation to new BEPS Associates (OECD 2017a, p. 18).

After all, the IF is operating in the shadow of the OECD hierarchy and only full membership in the OECD signifies actual decision-making power. The OECD is vigilant that the policies of potential new members do not stray too far away from the organization's principles and guidelines so as to unbalance the existing settlement. Brazil, as the only major economy that does not follow the OECD TPGs, is a case in point. The country officially submitted its bid for membership in 2017 (Hearson and Prichard 2018). Angel Gurría, the OECD Secretary General, made clear that the candidate's alignment with the OECD TPGs is a condictio sine qua non for accessing the OECD: "Transfer pricing is one of the key areas where alignment with the OECD's internationally accepted standard is necessary. This constitutes a core principle and a benchmark that needs to be met by any new Member wishing to join the OECD" (Gurría 2018; OECD and Federal 2019).

## 5. Conclusions

Stronger domestic resource mobilization is recognized as essential to build social safety nets and fight poverty. While the development discourse tends to focus on technical support to tax administrations, this article highlighted donor countries' policy coherence gap in the area of tax and development. With FDI promotion being a pillar of the development agenda, the question of cross-border taxation cannot be excluded.

The topic is of broader relevance because domestic revenue management, FDI, and policy coherence for development are all part of the "beyond aid" agenda, a term that signifies the changing role of development cooperation against the backdrop of a growing critique against development aid, a changing donor landscape, stalling official development assistance (ODA) budgets, and the importance of global governance (Janus et al. 2015).

Zooming in on the reform of transfer pricing technicalities, the article finds that the announced simplification that would benefit low-income countries has not

materialized so far. A strong coalition behind the ALP managed to fend off calls for simpler and more rule-based methodologies that narrow the room for discretion and profit shifting. What appears to be primarily technical OECD policy generation is highly political. Interest politics trump policy coherence (OECD 2016, p. 40).

This finding renders obsolete the often-voiced fear that an International Tax Organization—or any other more inclusive forum to deliberate over international corporate tax governance—would unduly politicize international taxation. Yet, a more inclusive global tax governance architecture would certainly alter the balance between OECD members and developing countries.

SDG 10.6 calls for the "enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions". Yet, a closer reading of the indicator monitoring SDG 10.6 reveals that this target does not include global tax governance. It considers developing countries' membership and voting rights in the Bretton Woods institutions, the African, Inter-American and Asian Development Bank, UN, WTO, and the Financial Stability Board. Inclusiveness in international tax governance is not considered, and tax policy-making is kept at the discretion of the OECD.

The aim to maintain its role as a pivotal actor in global tax policy provision might lead to more organizational reform of the OECD in the future, when new events shake the existing settlement. The next such impetus for reform is the digitalization of the economy. The fact that the "platform economy" does not need a "permanent establishment" to conduct business in a country removes a key pillar of the current international corporate taxation. Moreover, with most of the platform economy operating out of the US, their interest is by and large opposed to that of the EU and other OECD member countries. This rift among OECD countries might impede even the so far prevalent lowest common denominator agreements among its leading member countries that are home to large multinationals. This opens the possibilities for unprecedented alliances between jurisdictions across income groups that stand to lose out on the digital economy (Fung 2017).

The IF is mandated with the work on the digitalization of the economy (OECD 2018c). Most of the substantive work is undertaken by the Task Force on the Digital Economy, a body under the OECD Committee of Fiscal Affairs. The first proposals submitted for public consultation in 2019 break new ground: they consider solutions that go beyond the arm's length principle, including a minimum tax rate and some formulary components (OECD 2019a, 2019b, 2019c). However, in January 2020, the program of the IF was replaced by the more moderate reform proposals authored

by the OECD Center for Tax Policy and Administration (OECD 2020b). The final agreement on the response to the tax challenges arising from the digitalization of the economy will bring more clarity regarding the inclusiveness of the IF and the extent to which low-income countries can exert influence on the coordination of cross-border taxation. If this is not the case, calls for an International Tax Organization are unlikely to disappear.

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