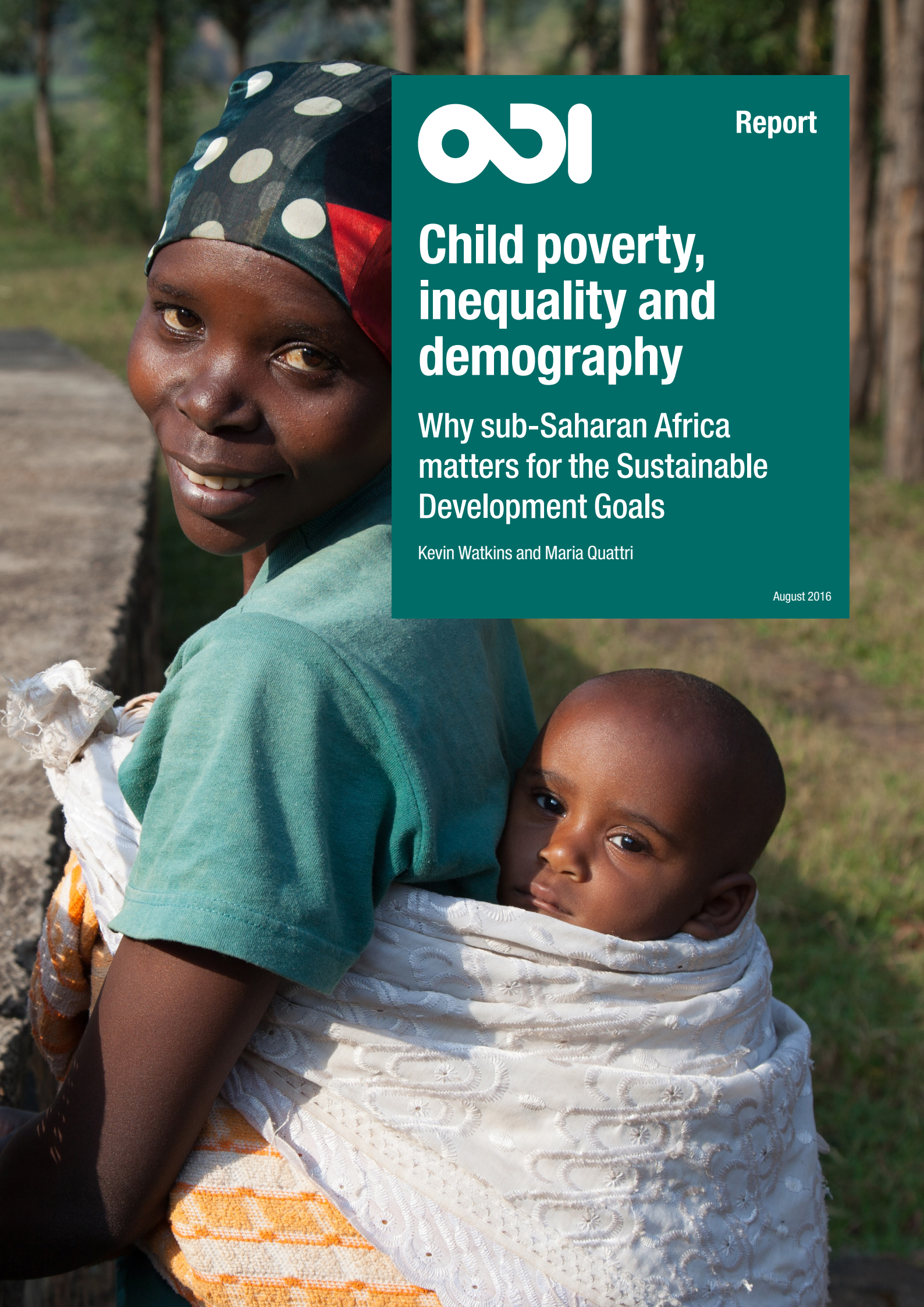# Child poverty, inequality and demography

Why sub-Saharan Africa matters for the Sustainable Development Goals

Kevin Watkins and Maria Quattri

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Cover photo: 27 year old Devota Nyampinga, sells avocadoes at the local market. She carries her baby, 9 month old, Terreza Mukanikundo on her back.
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Executive summary

Sub-Saharan Africa's children account for a large and fast-rising share of world poverty. Scenarios developed for this paper suggest that by 2030 – the Sustainable Development Goal (SDG) target date for eliminating extreme poverty – around one-in-five sub-Saharan African children will be living in poverty, and that these children will account for 43% of global poverty. The emerging face of residual world poverty is the face of an African child.

Changing this picture will take more than ambitious declarations at global summits. If Africa's governments and the wider international community are serious about ending extreme poverty in a generation, as envisaged under the 2030 goals, strategies for combating child poverty in sub-Saharan Africa must be brought centre-stage.

The rising profile of sub-Saharan Africa's children in global poverty can be traced through three powerful drivers. First, the region's poor are further from the World Bank's $1.90 poverty threshold than the poor in other regions: they have further to travel to cross the line. Second, high levels of inequality and resource-intensive growth have weakened the conversion of economic growth into poverty reduction. Wealth trickles down to sub-Saharan Africa's poor too slowly. Third, the region is in an earlier stage of demographic transition than other regions. Despite a marked decline in child mortality, fertility rates remain high by international standards. Women in sub-Saharan Africa have on average 4.7 children – twice the number in South Asia.

The upshot is that a rapidly increasing share of the world's children will be born into the region registering the slowest pace of poverty reduction. Sub-Saharan Africa's share of world births will increase from 29% to 35% by 2030. Nigeria alone will account for 6% of all global births between 2015 and 2030. While the under-five population is shrinking in both absolute and relative terms across other developing regions, in sub-Saharan Africa it will increase by around 43.4 million or 26.6% over the same period. At the turn of the millennium, sub-Saharan Africa's under-18 population was equivalent to less than 60% of populations of a similar age in East Asia and South Asia. By 2030, it will be the largest of any region.

This report presents a scenario for child poverty in 2030. Merging demographic data with a World Bank poverty scenario, we develop detailed regional and age profiles for extreme poverty. Among the key findings:

- Around 22% of sub-Saharan Africa's children – 147.7 million in total – will be living below the $1.90 poverty threshold (including 46.3 million in the 0-4 age group)

- These children will account for 43% of total global extreme poverty – almost twice the level in 2012
- The region will account for almost 90% of extreme poverty among the world's children, up from around 50% today
- Modest levels of redistribution in which the incomes of the poorest 40% rise at 2 percentage points above the average, would lift significant numbers of sub-Saharan African children above the poverty threshold: projected child poverty for sub-Saharan Africa in our scenario falls by 68 million, or almost 50%.

Any poverty scenario for sub-Saharan Africa in 2030 comes with large margins of error. Much of the data used to develop projections for the region is partial, of poor quality or missing altogether. Even so, our scenario is indicative of a plausible set of outcomes – and the conclusions merit urgent consideration in the context of the SDG commitments. The poverty levels projected by our scenarios have implications not just for promise to eliminate extreme poverty, but for progress in other areas. While monetary poverty is just one aspect of deprivation, it is associated with elevated risks of malnutrition, ill-health, delayed cognitive development, failure at school, early entry into labour markets and, in the case of girls, early marriage and child-bearing.

We stress that poverty scenarios do not chart the destiny of nations. Policy interventions have the potential to change sub-Saharan Africa's 2030 scenario. Many of the measures required are well-known. Human capital investments have a critical role to play. Expanded access to high quality child and maternal health care, including reproductive health provision, could enable women to act on preferences for smaller family sizes. Investments in education have the potential to generate the triple benefit of keeping girls out of early marriage, changing social attitudes and improving the quality of the future work force. Given that consumption poverty is the product of monetary deprivation, one of the tools for eradicating $1.90 poverty is cash transfers to the poor. Here, too, there is evidence that well targeted programmes can generate multiples benefits, for nutrition, education and improved resilience.

Evidence from other regions points to the critical role of human capital investments in reaping a 'demographic dividend'. Sub-Saharan Africa's youth bulge will see a marked increase in new entrants to the labour market: the 15-24-year-old population will increase by around 94 million. Harnessing the energy of this emerging labour force to decent education and skills development would act

as a powerful catalyst for growth. Conversely, failure to equip Africa's youth with educational opportunities and to create jobs has the potential to transform a demographic opportunity into a social time-bomb.

Policies aimed at accelerating demographic transitions should also feature with greater prominence. There is some tentative evidence of a lag between Africa's progress in improving child survival on the one side, and reducing fertility rates on the other. Expanding access to high quality reproductive health care, including contraception, could enable women to exercise greater choice. At the same time, persistently high fertility rates may also reflect concerns over household insecurity, labour supply considerations, and social and cultural practices that perpetuate early marriage.

Introduction

Governments around the world have pledged to eradicate extreme poverty by 2030. This commitment is one of the central pillars of the SDGs. The SDG framework also includes an explicit commitment to ensure that targets are met 'for all nations and peoples and for all segments of society,' with an endeavour 'to reach the furthest behind first' (UN, 2015). Delivering on these ambitions will require a marked acceleration in the pace of poverty reduction in Africa, along with a greatly strengthened focus on the African children who are being left furthest behind.

This paper looks at the critical interaction between demography, economic growth and inequality in shaping sub-Saharan Africa's prospects for 'ending poverty'. Coupled with high and, by global standards, deep levels of initial poverty, extreme inequality weakens the link between economic growth and poverty reduction in Africa. Meanwhile, Africa's demography has global consequences. Over the period to 2030 and beyond, the region will account for an increasing share of global births and the population of children. An obvious corollary is that more of the world's children will be born into a region that is registering the slowest pace of poverty reduction. As we show in this report, the emerging face of world poverty in 2030 is increasingly the face of an African child.

Changing this picture will demand decisive action on the part of African governments and the wider international community. There is some cause for optimism. Demographic dividends associated with the transition from high to low fertility and child death rates can act as the catalyst for accelerated economic growth and social development. As the region in the earliest stages of the demographic transition, sub-Saharan Africa stands to reap potential windfall benefits.

An accelerated demographic transition could yield multiple dividends, with benefits for economic growth, jobs, gender equity, health and education. However, few African governments have developed integrated strategies for securing the demographic dividend. Population-related issues continue to be seen for the most part as the domain of social ministries rather than the core business of political leadership, finance ministries and economic planners. This may reflect a view that demographic trends are not amenable to policy influence – a perspective that is both misplaced and profoundly damaging to Africa's development prospects.

For the wider international community, Africa's demography matters on many levels. In the absence of a concerted drive to address the underlying causes of child poverty in sub-Saharan Africa, the global poverty eradication target will not be achieved – and the credibility of the SDG project will be called into question.

1. Africa is rising – but making slow progress on poverty reduction

The past quarter century has seen extraordinary progress in poverty reduction. The Millennium Development Goals (MDGs) set a target of halving the global share of people living in extreme poverty from its 1990 level. That target was achieved well ahead of the 2015 target date, albeit largely as a result of developments in China, which contributed 65% of the global reduction in extreme poverty, and India, which contributed an additional 20%. Success on the MDGs, however partial and uneven, may have informed the decision to raise the level of ambition under the SDGs, which envisage the elimination of extreme income poverty by 2030 (UN, 2015).

Headline numbers capture both the achievements registered in recent decades and the distance still to be travelled. In 2015, the World Bank increased the poverty threshold – a global benchmark used to measure extreme poverty – to $1.90 (using the 2011 purchasing power parity; Cruz et al., 2015). Using that updated threshold, the headcount incidence of poverty fell from 37% in 1990 to 12% – or some 897 million people – in 2012 (Ferreira et al., 2015).

Inevitably, the global picture obscures regional and sub-regional variations. The 2000s have seen rapid reductions in both the share and number of people affected by poverty in East Asia and South Asia (Table 1). Progress in sub-Saharan Africa has been far more limited. While the region has been part of the global success story, the share of people living in poverty has fallen slowly and the absolute number of poor has only recently started to decline. The poverty incidence stood at 42% in 2012, and the number of poor people – 388 million – still exceeded the level in 1999. The corollary of this background is that, in the midst of global progress, Africa's share of world poverty has effectively doubled since the end of the 1990s to 43% in 2012. In the global 'lottery of birth', being born in sub-Saharan Africa comes with a highly elevated risk of drawing the losing ticket that consigns children to poverty.

Any assessment of consumption poverty in Africa has to include two caveats. The first concerns data quality and availability. Far too little is known about either the current state of poverty in Africa or the moving picture with

Table 1. Global poverty trends: changes in poverty headcount, the number of poor, poverty gaps and share of extreme poor, selected regions

	1999					2012				
	Headcount (%)	Number of poor (million)	Poverty gap (%)	Share of world population	Share of world poverty	Headcount (%)	Number of poor (million)	Poverty gap (%)	Share of world population	Share of world poverty
Sub-Saharan Africa	58.0	374.6	26.4	10.7	21.4	42.7	388.8	16.5	12.9	43.4
South Asia	NA	NA	NA	NA	NA	18.8	309.2	3.7	23.4	34.5
East Asia and the Pacific	37.5	689.4	11.6	30.6	39.4	7.2	147.2	1.5	29.0	16.4
Latin America and the Caribbean	13.9	71.1	6.0	8.5	4.1	5.6	33.7	2.6	8.6	3.8

Data source: World Bank PovcalNet data (collected on 15 June, 2016).

respect to trends. No region suffers more from data gaps and survey quality (Box 1). Secondly, monetary poverty is just one aspect of deprivation. Other dimensions of well-being – the ability to read and write, access to health, shelter and nutritional status, to mention only some of the most prominent – also matter.

While strongly associated with monetary deprivation, the overlaps with wider capability deprivation are not exact. The Multi-Dimensional Poverty Index (MPI) provides a more rounded picture by constructing a composite headcount based on 10 indicators of well-being and categorising people as multi-dimensionally poor if they are deprived in at least one-third of the indicators (Alkire, Coconi and Seth, 2014). Application of the MPI metric to sub-Saharan Africa identifies 58% of the population as deprived (Alkire and Housseini, 2014). Another measure of multi-dimensional deprivation estimates that over 65% of Africa's children – 247 million in total – experience two or more aspects of multi-dimensional poverty (Milliano and Plavgo, 2014). It is clear that the majority of people in the region are deprived in multiple dimensions.

1.1 Post-2000: strong growth but limited poverty reduction

At first sight, there is an apparent paradox in Africa's poverty reduction record. Since the end of the 1990s, much of the region has moved into the fast lane of global growth (Africa Progress Panel, 2012). With the sustained boom in world prices for minerals acting as a magnet for foreign investment and driving export-led growth, regional GDP rose at around 5% annually until 2012. Even with the downturn in commodity prices, output expanded by 3.5% in 2015 (IMF, 2016a). Yet in the midst of this surging and then respectable growth, poverty has declined slowly. So why the disappointing performance?[1] Five factors stand out:

1.1.1 The depth of poverty

Much of the global poverty reduction registered since 2000 has involved a movement of populations that already started close to the $1.90 poverty threshold line.[2] One of the defining features of Africa's poverty is that the poor were starting out further back from the poverty threshold – and that remains the case (Chandy et al., 2013). The region's poverty gap is 16%, roughly five times as wide as in South Asia (Table 1).[3] The median daily consumption level below the extreme poverty threshold in sub-Saharan Africa is $1.18, compared to around $1.56 in South Asia (Figure 1). Moreover, while 21% of Africa's population lives below this median, the comparable shares for East

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Box 1. Data deficits obscure poverty and inequality trends

Several caveats have to be attached to Africa's poverty data. Regional poverty estimates post-1990 are based on consumption surveys covering between one-half and one-third of the region's population. Poverty rates for other countries are imputed, with researchers interpolating data between survey periods and extrapolating to cover years before and after surveys using GDP growth rates. In the absence of robust underlying data on the distribution of consumption, the relationship between changes in GDP and household consumption, and changes in prices for the basket of goods consumed by the poor, interpolation is an inexact science.

Even when surveys are available and countries appear data rich, problems of comparability can arise. Serious questions have been raised over the accuracy of national income data. The rebasing of GDP estimates has pushed countries from low-income to low-middle-income classification overnight. It has also led to Nigeria overtaking South Africa as the region's largest economy. According to one researcher, adjustments for higher GDP per capita and price factors have the effect of reducing the reported poverty rate for Nigeria in a 2009/10 survey from 62% to 35%. Given the size of Nigeria's population, which accounts for almost one-in-five Africans, this is a discrepancy with regional and global consequences for poverty estimates.

Data uncertainties point to a case for extreme caution in interpreting evidence on Africa's poverty. Current estimates and trend analysis should be viewed as indicative of orders of magnitude, rather than a precise picture. There is, as one recent report puts it, an urgent need 'for more reliable and comparable consumption data to help benchmark and track progress towards eradicating poverty by 2030'.
*Sources: Beegle et al., 2016; Morten, 2013; World Bank, 2014.*

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1   See the excellent blog by Chandy on this question, 'Why is the number of poor people in Africa increasing when Africa's economies are growing?', May 4, 2015.

2   Ibid.

3   The poverty gap measures the mean distance below the poverty line as a proportion of the poverty line.

Figure 1. Africa's poor are farthest from the poverty threshold: distribution of mean daily consumption, selected regions (2012)
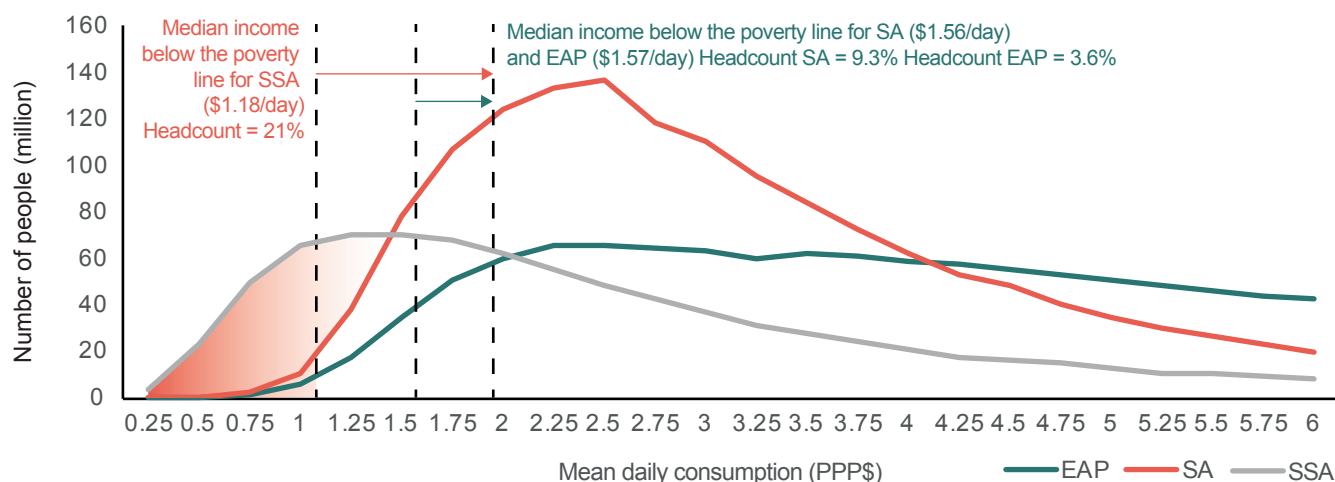
Data source: Regional aggregation using 2011 purchasing power parity, WB PovcalNet data.

Asia and South Asia are 3.6% and 9.3%. Simple arithmetic demonstrates why the depth of poverty matters: at a hypothetical growth rate, with per capita income growth of 3% a year, it would take the median poor person in sub-Saharan Africa 16 years to cross the threshold – twice as long as for a counterpart in South Asia.

1.1.2 High levels of inequality

High levels of inequality can slow the pace of poverty reduction by weakening the trickle-down of wealth. Other things being equal, the larger the share of any increment to growth captured by people living below the poverty threshold, the faster the rate of poverty reduction. There is no hard data evidence to support the proposition that within-country inequality in Africa is rising across Africa. Within-country inequality is declining in as many countries as it is increasing (Beegle et al., 2016). However, very high levels of initial inequality weaken the link between economic growth and poverty reduction. For sub-Saharan Africa as a whole, the Gini index is 0.56 – higher than in Latin America (ibid.). Disparities in consumption may increase on a regional basis, driven principally by inequalities across countries (rather than within them; Jirasavetakul et al., 2016). Analysis of consumption data for the period 1993 to 2008 suggests that the richest 5% of Africans accounted for 40% of gains, while the poorest 40% captured only 9% (ibid.). The critical importance of distribution patterns is illustrated by the case of Tanzania, where the relationship between GDP growth and poverty reduction – the poverty elasticity of growth – has fluctuated markedly over time. While the poor benefited disproportionately from economic growth between 2007 and 2011, the benefits of growth

between the period 2001 and 2007 were captured mainly by richer groups (World Bank, 2015).

1.1.3 Commodity-intensive economic growth

The composition of growth has an important bearing on distribution and poverty effects.[4] Much of Africa's post-2000 growth was driven by a 'commodity super-cycle' fuelled by high world prices for energy exports and minerals. The sectors driving economic growth have, for the most part, been capital intensive rather than employment intensive. In contrast to other regions with a strong track record in poverty reduction, sub-Saharan Africa has yet to embark on a transformative economic growth pattern marked by rising productivity, entry into higher value-added areas of production and labour-intensive growth in manufacturing (Rodrik, 2014; Rodrik, 2015; te Velde, 2015; African Center for Economic Transformation, 2014).

1.1.4 Rapid population growth

Population growth for sub-Saharan Africa as a region has averaged 2.6% since 2000, rising to over 3% in 12 countries. Plugging these population growth figures into overall economic growth puts the 'Africa rising' narrative on economic growth in a less favourable light. On a regional basis, per capita incomes have been rising at 1-2% a year since 2000. However, in 15 countries, per capita income growth has been either less than 1% or negative; and in another 10 countries, it has averaged less than 2% (Figure 2). These countries have a combined population of 402 million – approximately 40% of the regional total (World Bank, 2016a).

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4   See the excellent blog by Chandy on this question, 'Why is the number of poor people in Africa increasing when Africa's economies are growing?', May 4, 2015.

Figure 2. Mixed fortunes: average annual per capita income growth, sub-Saharan Africa (2000-2015)
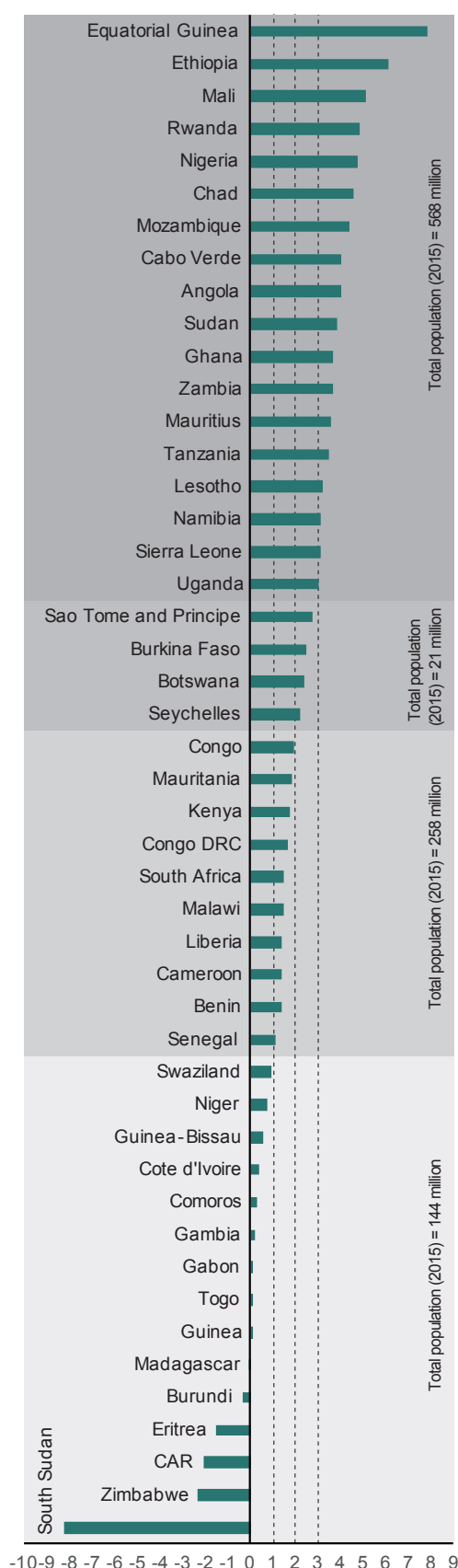
2000-2015 average GDP per capita growth rate

Data source: World Bank World Development Indicators, 2016 and World Population Prospects: The 2015 Revision (UNDESA).

1.1.5 Wider human development deficits

While there have been substantial gains on many indicators, Africa's low level of human development is itself a brake on the reduction of monetary poverty – and a factor weakening the relationship between growth and poverty reduction. Malnutrition is endemic: 40% of children are stunted (IFPRI, 2016 and UNDESA, 2015). Even with the increase in school enrolment, around one-in-five of African children of primary school age are out of school, and only around half of those in school get through to the last grade of primary education (UNESCO, 2015a). Moreover, while literacy levels have improved, learning outcomes in school are abysmal. Gender disparities systematically limit market opportunities for women, acting as a further constraint on poverty reduction. In all these areas, human development deficits weaken growth and restrict the conversion of growth into poverty reduction.

1.1.6 Conflict and state fragility

Although the data has to be treated with caution (and there are many definitions of fragility), there is evidence that poverty is falling far more slowly in fragile states (Beegle et al., 2016). Armed conflict undermines poverty reduction prospects at many levels: it weakens growth, disrupts livelihoods, depletes assets and undermines service provision (World Bank, 2011). It also leads to large-scale displacement, which in itself constitutes a barrier to accelerated poverty reduction. In 2015, there were a reported 18 million refugees (UNHCR Africa) and 12.5 million people internally displaced people (iDMC Sub-Saharan Africa) in sub-Saharan Africa.

Recent economic growth projections raise compound concerns over poverty reduction prospects. In July 2016, the International Monetary Fund (IMF) effectively cut its growth forecasts for sub-Saharan Africa to 1.6% for the year. This is well below population growth, pointing to a marked decline in per capita income. If these revised numbers are correct, prospects for accelerated progress towards the SDGs – including the 'elimination of extreme poverty' target – will be severely compromised (IMF, 2016).

2 The power and consequence of Africa's delayed demographic transition

Like the rest of the world, sub-Saharan Africa is undergoing a demographic transition – a shift from a regime of high birth and death rates to a regime of low birth and death rates (Bloom, 2016). During the typical transition cycle, first mortality and then fertility declines, with the population initially becoming younger and then older as a result of smaller birth cohorts and increased longevity. While demographic transitions take diverse forms, they are both a cause and effect of wider social and economic changes. Transition processes are associated with changing family structures and cultural attitudes, increased investments in education and human capital, and accelerated human development (Lam, 2011). Sub-Saharan Africa is at an early stage of the demographic transition, with far-reaching implications for global child poverty profiles.

2.1 Africa's youth and population growth

In a rapidly ageing world, Africa is increasingly set apart by its youth. Children under the age of 15 account for 41% of the population, and young people aged 15-24 for another 9% (UNDESA, 2015). The median age in countries such as Niger, Uganda, Chad, Nigeria and Senegal ranges from 15-18, compared to 40 in the United Kingdom and 46 in Germany and Japan (Figure 3). One consequence of sub-Saharan Africa's demographic trajectory is that the region will account for the 1.3 billion of the projected 2.4 billion people that will be added to the world's population by 2050 (Ibid.).

Figure 3. Africa's population is young in an ageing world: median ages, selected countries (2015)
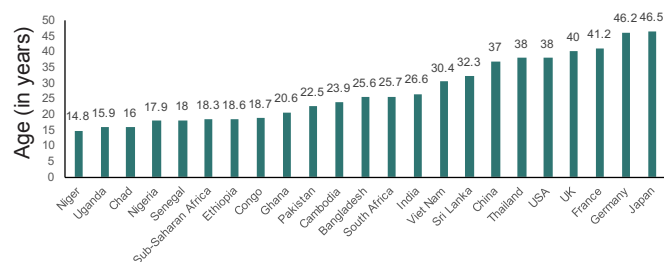
Data source: World Population Prospects: The 2015 Revision (UNDESA).

What is driving Africa's population growth? Projected changes in population over time can be decomposed into fertility, mortality, migration and momentum effects.[5] In the case of sub-Saharan Africa, the fertility component accounts for around three-quarters of the projected population increase to 2050 (UNDESA, 2013).

While fertility rates are falling, fertility rate gaps between sub-Saharan Africa and the rest of the world are large – and they are projected to remain wide (Figure 4). Of the 21 'high fertility' countries in the world with total fertility rates in excess of five children per woman, 19 are in sub-Saharan Africa – and these countries account for around two-thirds of the region's population. Projections suggest that the region will account for 14 of the 15 countries with the highest fertility rates (Table 2) in the world in 2025-2030.

The country-level demographic trajectories behind these projections are striking. As illustrated in Figure 5, high fertility countries in the region like Nigeria and Mali have yet to embark on the type of demographic shift that has transformed current or until relatively recently low-income

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5 Momentum effects are conditioned by population age structure at the starting point of a projection. In countries undergoing a demographic transition with a young age profile, population will continue to grow because births by a large group of women in the reproductive age cohort will exceed mortality.

Figure 4. Demographic convergence is happening, but slowly: projected fertility rate by selected region, 2015-2020 and 2025-2030

Data source: World Population Prospects: The 2015 Revision (UNDESA).

Figure 5. Sub-Saharan Africa's delayed demographic transition: comparative fertility trends (selected countries), 1980-85 to 2025-30
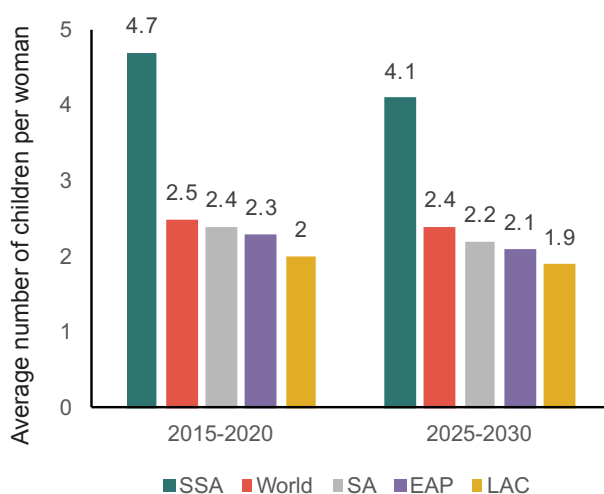
Data source: World Population Prospects: The 2015 Revision (UNDESA).

countries like Bangladesh, Cambodia, India and Indonesia. For example, Bangladesh halved fertility rates in around two decades. Improved access to reproductive health provision, falling infant mortality rates, rising education levels, and increased female employment all contributed along with changes in social attitudes and expectations (Hayes and Jones, 2015). The lasting benefits of the demographic transition to Bangladesh are evident from the decomposition of factors driving the countries poverty reduction between 2000 and 2010, from 49% to 32%. The rising share of the adult population as Bangladesh's past youth bulge was absorbed into the work force during a period of declining fertility was the second biggest driver of poverty reduction, after changes in adult income (World Bank, 2013). To the extent that any lessons can be drawn about the relationship between economic growth and demographic transitions, it is that caution should be exercised in drawing lessons. Countries such as China, India and Iran all registered marked declines in fertility ahead of rapid economic growth (Behrman and Kohler, 2013). However, the international evidence strongly suggests that demographic change, interacting with other factors, has the potential to put countries on a higher growth trajectory.

Africa's share of the world's child and youth populations is rising

In other developing regions at a more advanced stage of the demographic transition, child populations are either growing more slowly or starting to shrink (Lam and Leibbrandt, 2013). With increasing life expectancy, the share of young people in sub-Saharan Africa's population is not rising – but the region's share of the world's population of children and young people is on a steep increase.
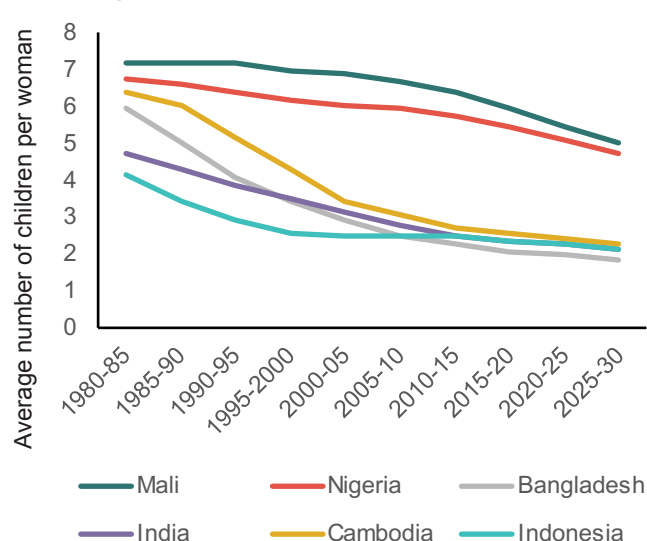
The underlying driver of this global demographic shift is illustrated in Figure 6. This maps the location of countries in sub-Saharan Africa against selected other countries on two indicators: fertility rates (horizontal axis) and the annual projected rate of change in the size of the 0-4 population age group to 2030 (vertical axis). The increase

Table 2. Total projected births per woman in fifteen highest fertility countries, 2025-2030 *(2010-2015)*

Country	2025-2030 *(2010-2015)*
Niger	6.68 *(7.63)*
Somalia	5.22 *(6.61)*
Mali	5.03 *(6.35)*
Angola	4.98 *(6.20)*
Burundi	4.89 *(6.08)*
Gambia	4.87 *(5.78)*
Chad	4.85 *(6.31)*
Congo DRC	4.77 *(6.15)*
Nigeria	4.74 *(5.74)*
Uganda	4.62 *(5.91)*
Zambia	4.59 *(5.45)*
Burkina Faso	4.48 *(5.65)*
Mozambique	4.47 *(5.45)*
Tanzania	4.33 *(5.24)*
Timor-Leste	4.30 *(5.91)*

Data source: World Population Prospects: The 2015 Revision (UNDESA).

Figure 6. Africa's rising generation: projected fertility rate and annual change in the 0-4 population, sub-Saharan Africa and selected countries in other regions
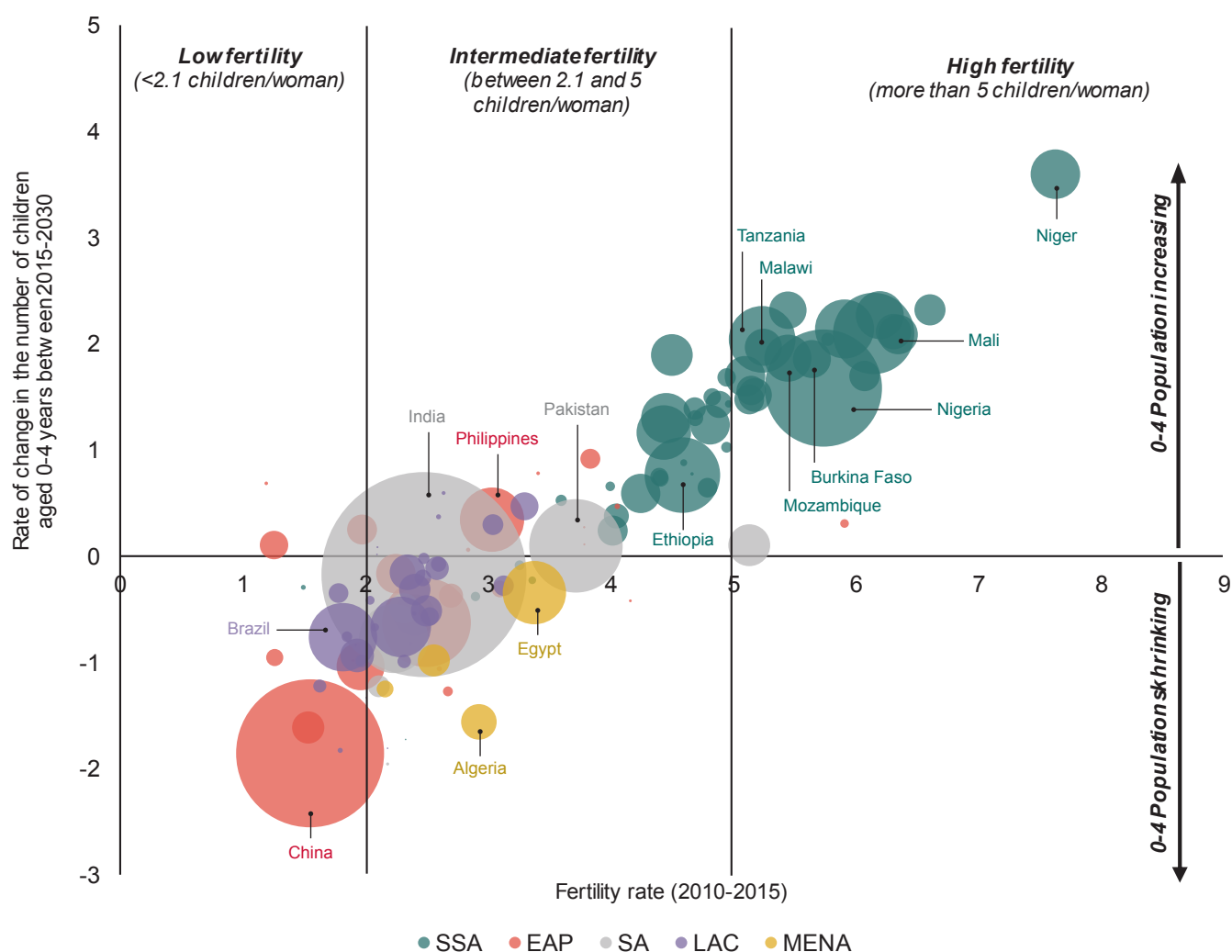
Data source: World Population Prospects: The 2015 Revision (UNDESA).

in the size of the under-five age group is a function of the difference between the projected decline in fertility and the (more rapid) decline in child mortality. Sub-Saharan Africa accounts for almost all of the countries with a projected rate of increase in excess of 1%.

These demographic shifts carry several wider consequences for the 2030 time horizon for achieving the SDGs. To cite some of the headline trends:

- **Global births:** Sub-Saharan Africa's share of world births is projected to increase from 29% in 2015 to 35% by 2030. Nigeria alone will account for 6% of all global births between 2015 and 2030 (UNICEF, 2014).

- **Under-five population:** While the under-five population is shrinking in absolute and relative terms across other developing regions, in sub-Saharan Africa it will increase by a projected 43.4 million or 26.6%. (UNDESA 2015 data adjusted by World Bank PovcalNet regional country classification).

- **Under-18 population:** Sub-Saharan Africa's under-18 population is projected to rise by 165.3 million between 2015 and 2030, accounting for the entire global increase (Figure 7) in this population group. The region's share of the global age group is projected to increase from 16% in 2000 to 28% in 2030.

Figure 7. Africa's under-eighteen population is rising rapidly: actual and projected change in 0-17 year-old population by region, absolute number and share of world total (2000 to 2030)
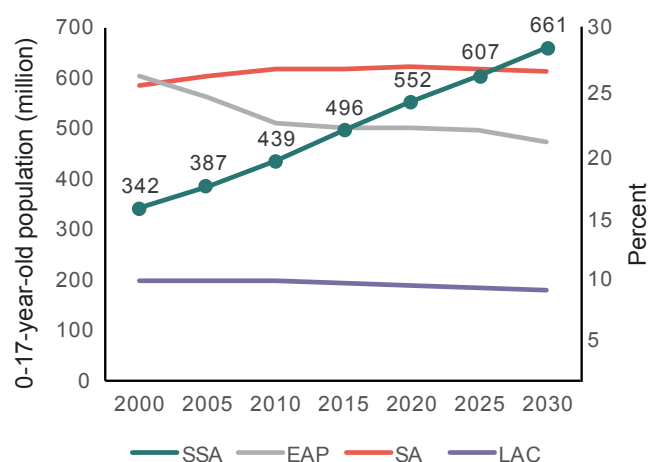
Data source: World Population Prospects: 2015 Revision (UNDESA) adjusted according to PovcalNet regional country classification

Figure 8. Africa will account for a growing share of the world's youth and new entrants to the work force: changes in population aged 15-24, absolute number and share of world total (2000 to 2030)

Data source: World Population Prospects: 2015 Revision (UNDESA) adjusted according to PovcalNet regional country classification

While beyond the scope of this paper, Africa's emerging demography will have consequences for regional and global labour markets. The 'youth bulge' phenomenon explains why. Briefly summarised, the bulge occurs as a result of childhood mortality falling followed, with a lag, by fertility. The interval between the two changes results in children and youth accounting for a rising share of the population. The growth of the youth population (15-24 years old) has peaked, or will peak soon, across most of the developing world, and has gone into reverse in developed countries.

Sub-Saharan Africa provides the exception to the global rule (Figure 8). Africa's youth population is projected to grow for several decades. By 2030, there will be 94 million more 15-24 year olds in the region (UNDESA, 2015) – and the region's share of the global age group will exceed 4%, or double the level in 2000. Nigeria's youth labour force will increase from 35 million in 2015 to 51 million in 2030 (Lam and Liebbrandt, 2013). Creating decent jobs for this rising generation of youth is one of the defining challenges of the SDG era. Meeting that challenge will require not just economic growth, but a pattern of labour-intensive growth at increasing levels of productivity. One model developed by the IMF estimates that sub-Saharan Africa will need to create 18 million high productivity jobs annually through to 2035 to absorb the influx of new entrants to the labour market (IMF, 2015a). These new entrants are projected to increase the region's working-age population by around 4% a year (offset by an exit of 1% through ageing and
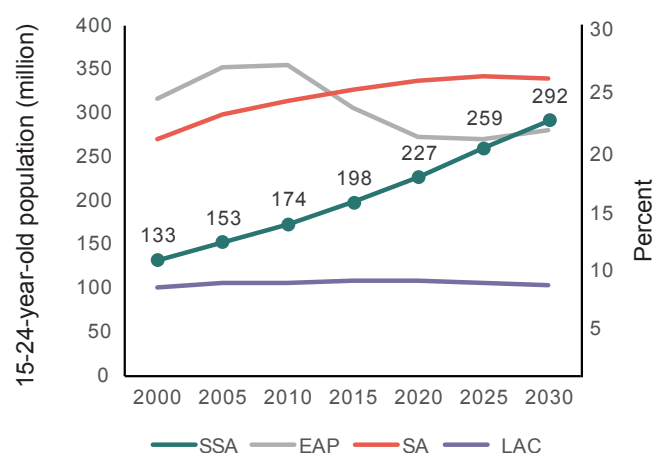
death); and by 2025-2030, the youth bulge will be driving an increase in sub-Saharan Africa's working age population of around 1.6 million per month (Lam and Liebbrandt, 2013). Viewed through the prism of the global labour market, sub-Saharan Africa's youth will account for the bulk of new entrants between now and 2030 at a time when the working age population in Europe is shrinking rapidly – a prospective outcome that may well prompt a review of current approaches to migration.

Some caution has to be exercised in considering population scenarios. The figures used in this section are based on the medium-fertility projections of the United Nations (UN). These projections have large margins of uncertainty in both directions. In the specific case of sub-Saharan Africa, the medium-variant may prove too overly optimistic with respect to fertility rates. The broad assumption is that the region will follow the fertility trajectories of other regions, which has not been the case to date. As a result, UN projections have been regularly adjusted in an upwards direction. However, a combination of improved child survival and expanded access to reproductive health care, coupled with progress in other areas of human development could create the potential for an accelerated transition. Other elements of the scenario have smaller margins of uncertainty. For example, youth populations in 2030 are highly predictable for the obvious reason that most of the people who will be 15-25 in 2030 have already been born.

3 The 2030 scenario – poverty with a child's face

In this section, we draw on a World Bank poverty scenario for 2030 (Cruz et al., 2015), merged with UN population data and household survey data on fertility, to highlight plausible changes in child poverty. The methodology is explained in the Annex. While any scenario for poverty should be read as indicative of plausible outcomes, rather than as predictions, our scenario points unmistakably towards African children accounting for a fast-rising share of world poverty.

3.1 Sub-Saharan Africa is not on track to eliminate poverty

Results from any poverty projections are highly sensitive to underlying assumptions and methodologies. Estimates for household income vary considerably depending on whether household consumption surveys or national accounts are used. National accounts typically generate higher levels of income and consumption (and hence lower levels of poverty). This partly explains why simulations based on the same core data have produced very different pictures for the projected incidence, depth and distribution of poverty in 2030.[6] There are also differences over what is being measured, the exchange rate adjustments used to estimate $1.90 poverty, the setting of the threshold itself, and the composition of consumption baskets used to measure poverty (Haughton and Khandker, 2009). Debates in this area are long-standing and beyond the scope of this paper. It is not our intention to assess the validity of the different exercises, or the wider question as to whether the World Bank's $1.90 poverty threshold is an appropriate metric for measuring progress (Reddy and Lahoti, 2015). However, if there is one common theme to emerge from a range of projection exercises, it is that sub-Saharan Africa is a region apart. Under any plausible growth scenario to 2030, the goal of eradicating poverty will not be achieved – and sub-Saharan Africa will account for a fast-rising share of global poverty (Zorobabel, Brixiová and Mthuli, 2015; World Bank, 2014).

The World Bank scenario that we draw upon for this paper is illustrative of the prospective 2030 deficit (Cruz et al., 2015). The scenario explores prospects for eliminating poverty (defined as a poverty rate of less than 3%) under a range of economic growth and distribution pathways (Ibid.). Depending on whether per capita incomes grow at the (higher) pace observed since 2000 or the (lower) rates observed over the period 2004-13, global poverty levels could range from 4-6% (Figure 9). Introducing a 'shared prosperity' premium in the form of a scenario in which the consumption of the poorest 40% grows 2 percentage points faster than the mean, could lower the global poverty incidence to 2%.[7] The redistributive scenario is within the bounds of recent country experience, though redistribution is moving in an anti-poor direction in many developing countries (Milanovic, 2016).

What the global scenario does not fully capture is the extent of the challenge facing sub-Saharan Africa. Under none of the World Bank's growth projections does the region come close to 'ending poverty', defined as a headcount incidence of less than 3%. Even under the most benign growth and distribution scenarios, sub-Saharan Africa falls short of the 2030 ambition. As illustrated in Figure 9, the poverty incidence in sub-Saharan Africa is likely to range from 14-26%. The mid-range scenario, based on country-specific growth rates from 2004 to 2013, would leave one-in-five sub-Saharan Africans – some 257 million people – living on less than $1.90. Factoring in a 'shared prosperity' premium for the bottom 40% improves the picture. We do this using updated data that adjusts an earlier study looking at redistributive growth scenarios for $1.25 poverty. The shared prosperity pathways almost halves the headcount incidence of poverty (from 20% to 11%), lifting 131 million people in sub-Saharan Africa above the poverty threshold in 2030 (Lakner et al., 2014).

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6   See for example Peter and Sumner, 2013; Ravallion, 2013; Kharas and Rogerson, 2012.

7   See Hoy and Samman, 2015; Lakner et al., 2014.

Table 3. Children living below the $1.90 poverty threshold: number and share of global poverty, 2002 and 2012 with projections to 2030

	Children in extreme poverty (million)			Share of total extreme poor (% of total)			Share of world population (% of total)	
	2002	2012	2030	2002	2012	2030	2015	2030
Children 0-4	213.7	126.4	51.6	13.0	14.1	14.6	9.1	7.9
Children 5-14	406.1	222.5	91.1	24.7	24.8	25.9	16.9	15.7
Children 15-17	116.7	60.5	24.5	7.1	6.7	6.9	4.8	4.7
All children (0-17)	736.5	409.4	167.2	44.8	45.6	47.4	30.9	28.3

Source: ODI Child poverty estimates based on World Bank PovcalNet Data and UNDESA.
Notes: Middle East and North Africa and Europe and Central Asia (other) have not been included in child poverty figures, which underestimate the number of children in extreme poverty. The total number of extreme poor (all ages, used to compute the share of extreme poor that are children by age group) is estimated as the product of the poverty rates reported in PovcalNet for 2002 and 2012, and Global Monitoring Report 2015/16 for 2030 (scenario 2), and the regional total population estimates from UNDESA (for the regions considered) but using PovcalNet country classification by region. Data on the 'Share of world population' are from the 'World Population Prospects: The 2015 Revision' (UNDESA).

Figure 9. World Bank regional scenarios for $1.90 poverty in 2030
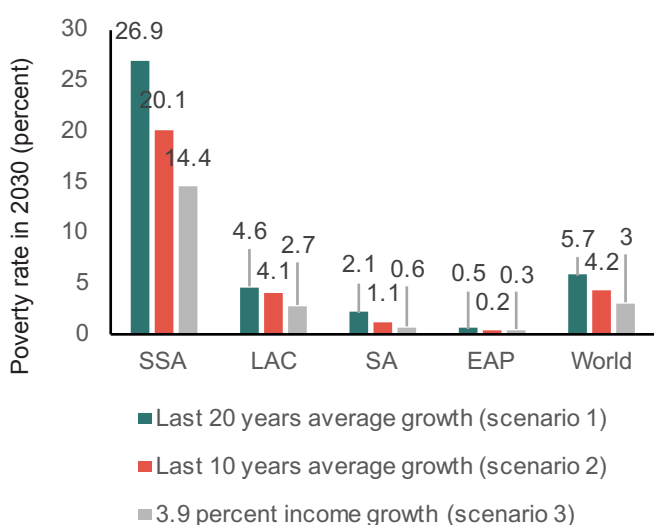
Data source: Cruz et al., 2015.

3.2 The changing face of child poverty

Given the 2030 poverty scenarios outlined in the last section, what are the implications for child poverty? What emerges is a picture of both continuity but also radical change. The continuity reflects a consistency in the overall share of children in world poverty. The radical change is the product of Africa's fast-rising share of child poverty and world poverty.

Basic demographic arithmetic helps to explain why children account for a share of poverty greater than their population share. Poor households in all regions typically have more children than non-poor households, creating

a strong association between poverty and household size (Olinto et al., 2013). In 2012, children aged 0-17 accounted for around 30% of the world's population but around 46% of $1.90 poverty (Table 3). While overall levels of child poverty are projected to decline sharply to 2030, the share of extreme poor globally aged under 18 remains virtually unchanged. In this scenario, around 167 million children will be living on less than $1.90 a day in 2030.

The radical change within the continuity can also be traced to simple demographics. The number of children is rising most rapidly in the parts of the world where poverty is falling the least. Table 4 provides a detailed breakdown of our estimates for child poverty in 2012 and the 2030 scenario. Consistent with wider regional trends, trajectories for East Asia and South Asia point towards the potential for achieving the 'elimination of poverty' goal for children, with the caveat that achieving such an outcome will require a concerted drive to reach the most marginalised. By contrast, around 22% of Africa's children – 147.7 million in total – aged under 17 would be living on less than $1.90 a day in 2030 (Figure 10.1). Around 46 million of these children will be aged 0-4.

What this scenario points to is a dramatic change over the next 15 years in the regional age profile of world poverty. By 2030, sub-Saharan Africa's children will account for around 8% of the world's population. However, these children will account for 43% of global $1.90 poverty (Figure 10.2) and almost 90% of global child poverty at that threshold (Figure 10.3). There is, in short, an overwhelming case for young Africans to be central to the challenge of delivering on the 2030 commitment to eliminate poverty.

Introducing a pro-poor growth element into the equation produces significant benefits for child poverty reduction. In a scenario where the income of the poorest

Table 4. The shifting regional profile of child poverty: estimates for 2002 and 2012, with projections to 2030

	Children in extreme poverty (million)			Poverty incidence by age group		
	2002	2012	2030	2002	2012	2030
Sub-Saharan Africa						
Children 0-4	75.7	72.2	46.3	65.3	49.0	22.4
Children 5-14	117.7	115.7	80.2	65.0	49.4	22.3
Children 15-17	29.4	28.5	21.2	65.2	49.6	22.3
All children (0-17 years old)	222.8	216.4	147.7	65.1	49.3	22.3
South Asia						
Children 0-4	80.7	37.0	2.1	46.4	20.9	1.2
Children 5-14	151.5	73.9	4.2	47.0	21.6	1.2
Children 15-17	43.7	21.6	1.3	49.2	22.1	1.3
All children (0-17 years old)	275.9	132.5	7.6	47.2	21.5	1.2
East Asia and the Pacific						
Children 0-4	46.5	12.9	0.3	33.1	9.3	0.2
Children 5-14	116.2	24.0	0.7	32.0	8.7	0.2
Children 15-17	37.5	7.8	0.2	37.4	8.0	0.2
All children (0-17 years old)	200.2	44.7	1.2	33.2	8.7	0.2
Latin America and the Caribbean						
Children 0-4	10.8	4.3	2.9	18.9	7.9	6.0
Children 5-14	20.7	8.9	6.0	18.8	8.0	5.9
Children 15-17	6.1	2.6	1.8	19.1	8.1	5.9
All children (0-17 years old)	37.6	15.8	10.7	18.9	8.0	5.9
Total developing countries (only regions included)						
Children 0-4	213.7	126.4	51.6	43.9	24.5	9.5
Children 5-14	406.1	222.5	91.1	41.7	23.1	8.5
Children 15-17	116.7	60.5	24.5	43.4	21.2	7.8
All children (0-17 years old)	736.5	409.4	167.2	42.6	23.2	8.7

Source: ODI, 2016.

40% increases at 2 percentage points above the mean, there would be 68 million fewer children in poverty in sub-Saharan Africa – almost halving projected poverty. As these figures suggest, redistributive economic growth has the potential to act as a powerful vehicle for poverty reduction. Translating the redistributive scenario into real outcomes would require some significant changes, including more employment-intensive growth at higher levels of productivity, more equitable social spending and recourse to targeted cash-transfers.

There is a broader case to be made for redistributive growth. The overwhelming bulk of poverty reduction achieved during the MDG period was the product of economic growth, rather than pro-poor growth. One cross-country exercise uses decomposition analysis to estimate that around three-quarters of the income gain registered by the poorest 40% was the product of changes in average income rather than in its distribution (Dollar et al., 2013). However, past patterns of growth, distribution and poverty reduction may be a weak guide to future imperatives.

Redistributive growth through which people in poverty capture a larger share of increments to income than their current share and average growth, can accelerate the pace of poverty reduction – and it may become more important as countries get closer to zero poverty (World Bank, 2015). Moreover, more equitable patterns of income distribution may act as an accelerant for growth and other human development indicators in health and education, with further benefits for the pace of poverty reduction (Cruz et al., 2015). Targeting Africa's children may prove to be one of the most effective routes towards redistributive growth, with attendant benefits for equity and the pace of progress towards poverty eradication.

It is important to stress that scenarios such as those outlined above have some very obvious limitations. An underlying assumption in the modelling is that progress towards the eradication of poverty is, in some sense, linear. In fact, there are a number of factors – such as caste and ethnic discrimination, geographic isolation, conflict and gender inequality – that may produce non-linear effects, slowing the pace of poverty reduction as countries move closer to zero. Such considerations advise against complacency over prospects for child poverty reduction in regions that appear, in our scenarios, to have reasonable prospects of achieving the 2030 goal.

Methodological considerations also warn against overstating the conclusions to emerge from our scenario. As highlighted earlier, there are marked data gaps in the household survey data on African poverty and inequality. Regional estimates such as those provided by the World Bank's PovcalNet are the product of extensive interpolation and extrapolation. Even where data is available, comparability across countries is problematic. Nonetheless, the assumptions used in our scenario are well within the bounds of plausibility – and the results serve to highlight a distinctly possible set of outcomes.

For all of these caveats, sub-Saharan Africa's current trajectory is a source of concern. While monetary poverty is just one dimension of deprivation it is associated with disadvantages that matter profoundly for child well-being, including nutrition, health and education. These are all areas in which sub-Saharan Africa faces acute deficits. Moreover, monetary poverty is both a cause and a consequence of the wider inequalities that are holding back progress in sub-Saharan Africa. As documented in recent research, the region faces some of the widest inequalities in 'human opportunity' for children (Dabalen et al., 2015; Narayan et al., 2013).

Figure 10.1 Child poverty in sub-Saharan Africa is declining more slowly than in other regions: number of children living on less than $1.90 per day, estimates for 2002 and 2012 with projections to 2030
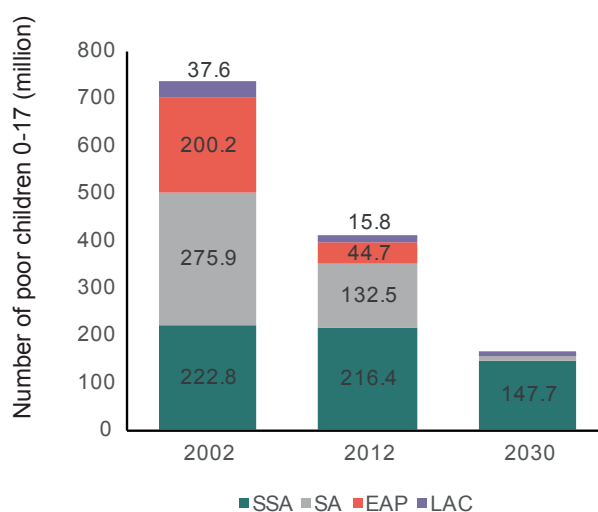
Figure 10.2. Africa's share of world poverty is rising sharply: estimated and projected share of children in world poverty by region ($1.90 threshold)
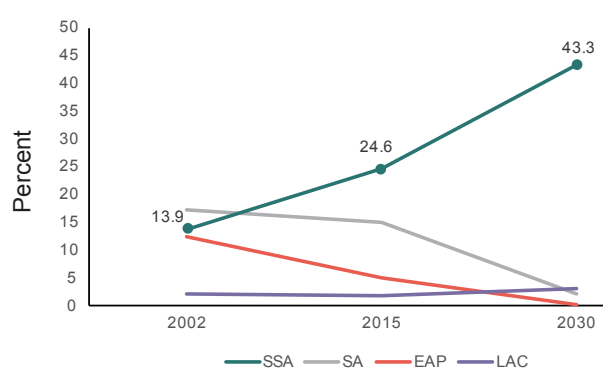
Figure 10.3 Africa's share of child poverty is on the increase: estimated and projected regional shares of children living on less than $1.90
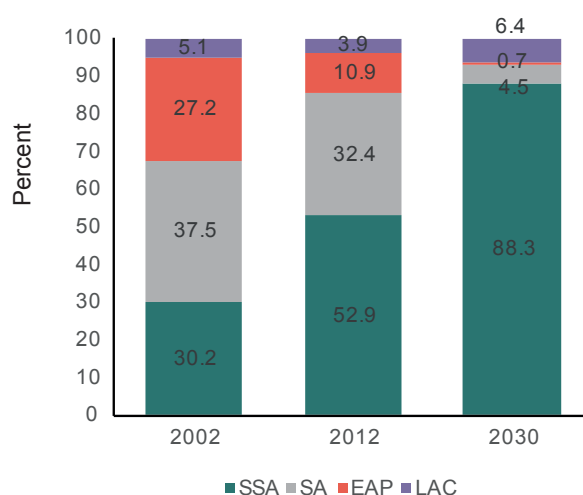
Source for figures 10.1, 10.2 and 10.3: ODI 2016.

4 Accelerating the demographic transition

The tectonic shifts in demography that are reconfiguring the profile of the world's children have far-reaching consequences for governments across sub-Saharan Africa – and, indeed, for every government that signed the SDG pledge for 2030.

As we have highlighted in this report, extreme poverty in 2030 will be an overwhelmingly African phenomenon. The intersection of demography, inequality and high levels of initial poverty dictate that Africa's children will account for a large and growing share of the unfinished business on poverty eradication. This will have wide implications. Children born into and raised in poverty face greatly elevated risks of mortality, malnutrition, failure in education and early entry into child labour markets. For girls raised in poverty, deprivation comes with additional risks of early marriage and pregnancy. These mutually-reinforcing patterns of disadvantage undermine the well-being of individual children, transmitting poverty and inequality across generations in the process. The lost opportunities for health, education and productivity associated with child poverty also inflict large social and economic costs on the rest of society, not least in terms of lost opportunities for economic growth and jobs creation.

Demographic transitions can play an important role in fuelling virtuous circles of economic growth and human development. Lower levels of child mortality, reduced fertility, increased education and rising living standards have intersected to dramatic effect in many countries. On one estimate, around one-third of the growth in per capita income registered in East Asia between 1965 and 2000 was attributable to falling fertility and a corresponding rise in the working-age share of the population (Bloom, 2016). Yet the demographic dividend is not automatic. Unlocking that dividend depends on a wide array of factors, ranging from improved access to reproductive health care, shifting social and cultural practices on early marriage, improved education, and an alignment between a rising supply of skilled workers and demand for labour generated through the macro-economy. East Asia was able to benefit from the rise in the regions working age population and reduced dependency ratios because of the specific social and economic conditions, and the associated political institutions, that were in place (Bloom and Williamson, 1997).

Sub-Saharan Africa's stands to secure significant benefits from an accelerated demographic transition. Quantifying these benefits is not straightforward. Outcomes depend not just on the pace of transition from higher to lower fertility, but also on the creation of jobs to absorb new entrants to labour market, improved health and education standards and other variables. Indicative modelling work by the IMF suggests a combination of lower fertility, improved skills development and job creation could raise sub-Saharan Africa's income per capita by 25% by 2050. This would also come with a faster transition to lower fertility, bringing forward the date at which the benefits materialise (IMF, 2015b).

There are no blueprints for an accelerated demographic transition. There are, however, some guides for public policy. Human capital investments in education appear to have played a critical role in the early phases of the demographic transition, including raising the quality of the work force. Expanding access to good quality child and maternal health care, including reproductive care, can create multiple benefits that include reducing fertility by expanding choice while cutting child death rates (an important determinant of fertility). While economic growth and job creation is not a necessary condition for an accelerated transition, their role in creating expectations of a more prosperous and secure future can reduce the pressures to have more children (Soares, 2005).[8] Changing social attitudes and norms are also an important driver of change, particularly with respect to issues such as family size, early marriage and the timing of pregnancy.

What are sub-Saharan Africa's prospects for following these pathways? That question has to be addressed with a high degree of caution on two counts. First, the regional aggregates mask a large amount of variance in terms of where individual countries are located on the demographic transition curve. Second, historic patterns associated with countries in other regions are shaped by wider processes connected with social, cultural and economic change that may – or may not – be relevant to sub-Saharan Africa. There is, however, some evidence to support the argument

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8   See also Bloom et al., 2006.

that policy interventions may have the potential to accelerate the demographic transition.[9]

Part of that evidence comes from comparative demography. One of the distinctive features of Africa's demography highlighted initially in research at the end of the 1990s is the persistence of high fertility rates in the face of rapidly declining child mortality.[10] In other regions, improved child survival has been more strongly associated with declines in fertility. Comparisons with South Asia are instructive. Both regions have taken around 25 years to halve child mortality from levels in the range 170-180/1000 to deaths for every 1000 lives births, to levels of 85-90/1000 (Figure 11). In this transition, the decline in fertility associated with each percentage point decline in mortality was 0.66% in South Asia and 0.29% for sub-Saharan Africa. In other words, the semi-elasticity of fertility with respect to under-five mortality was more than twice as high in South Asia.

Associations of this type do not imply causation. Child survival is just one of the factors influencing fertility rates. Moreover, it could be the case that the steep decline in child mortality in sub-Saharan Africa since 2000 will lead to a marked fertility rate effect. If, however, there is a marked regional lag in fertility rates, then it could be linked to a range of factors. These include poverty-related concerns over security in old age, household demand for child labour, and social and cultural practices such as child marriage. Unmet demand for contraception may also be important, though evidence from some countries points to a continued preference for high fertility even in the face of improved child survival rates.[11]

More detailed country-level research is needed to identify the drivers of high fertility. One study orders countries into two categories based on their reported rates of fertility reduction, differentiating between 'stalled transition' and declining fertility countries. Characteristics of countries in the former group include earlier ages of first birth, which is associated with early marriage, lower contraceptive use and preferences for higher family size (Madsen, 2013). One country undergoing what appears to be an accelerated transition is Rwanda (Samman, 2016; Rutayisire et al., 2014). Survey data points to a fall in fertility rates from 6.1 to 4.6 births per woman between 2005 and 2010. Contributory factors include a dramatic increase in contraceptive use and a decline in unmet need for contraceptives, steep declines in infant mortality as well as rapid economic growth. High-level political leadership has played what appears to be a central role, with family planning given a high priority in national health strategy and government public awareness campaigns on the benefits of smaller families, delayed marriage and contraceptive use.

It is not evident that governments in Africa have as yet faced up to the difficulties presented by demography. Planning frameworks that might catalyse a demographic dividend while tackling child poverty are, for the most part, under-developed. Policy design too is proceeding on a highly fragmented basis. While there is no shortage of initiatives in specific areas such as reproductive health and nutrition and skills training, what is lacking is the high level leadership and the development of coherent, integrated strategies for change. In this context, five priorities suggest themselves.

Figure 11. Diverging pathways: fertility rates and under-five mortality reduction: South Asia (left) and sub-Saharan Africa (1980-2015)
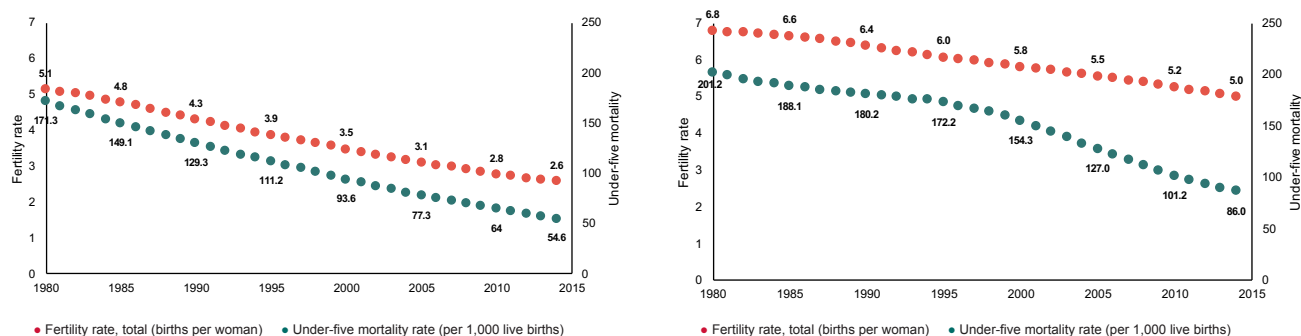
Data source: Fertility rates are from UNDESA, 2015; under-five mortality rates are from UNICEF 'Child mortality estimates' 2015.

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9 This sections draws on a paper by Emma Samman (forthcoming, 2016) on Africa's demography.

10 This was identified by Bloom and Sachs, 1998. Also see Samman, 2016.

11 Samman (2016) points to evidence that the gap between actual and wanted pregnancy may be relatively small and that there may be a 'preference' for high fertility. In 2000, the wanted and total fertility rates in sub-Saharan Africa diverged by just 1.5 births; and in 2011, the 'wanted' fertility rate had risen and the gap had shrunk to 0.5 births.

4.1 Investing in human capital – start early

Over the next 15 years, 622 million children will be born in sub-Saharan Africa. Ensuring that these children get a fair start in life is an overwhelming priority. The challenge is daunting. Sub-Saharan Africa has made limited progress towards universal antenatal care, skilled birth attendance and postnatal care – only around half of births have skilled attendants present (Kantorová et al., 2014).

Changing this picture will require a major increase in the quantity and quality of health personnel and facilities, along with a greatly strengthened focus on equity. With around 58 million of Africa's children stunted by malnutrition (IFPRI, 2016), a condition associated with impaired cognitive development, there is an urgent need to strengthen investment in nutrition during the first 1,000 days – by far the most crucial period of a child's health and nutritional development. And in a region where out of school numbers are rising at the primary level, education systems have to prepare for an increase of 90.2 million in the primary school population. There are no shortcuts in any of these areas. However, failure to make the human capital investment up-front in the early years will severely impair prospects for achieving the demographic dividend.

4.2 Changing the demographic trajectory – empower women and girls

Demographic trajectories do not dictate outcomes. Accelerating the reduction in child mortality could have the knock-on effect of reducing fertility. Extending access to reproductive health care could shift trajectories by empowering women to make, and act upon, informed choice.

One indicator of the scope for action is provided by the high levels of unmet demand for family planning. Around one-quarter of women of reproductive age in sub-Saharan Africa report an unmet need for family planning – a figure that is far higher (and coming down more slowly) than in other regions (You et al., 2015). For example, in Nigeria, the fertility rate is some 15% higher than it would be if women had the number of children they say they want, which is equivalent to one child per women (NPC Nigeria and ICF International, 2014).

There is an important equity dimension to reproductive health provision. In sub-Saharan Africa, as in other regions, there is a social gradient in fertility. Women in the poorest quintiles of many countries have on average 2-4 more children than those in the richest quintiles (Figure 12). Fertility levels are also higher in rural than urban areas. In Ethiopia, for example, rural women average three more children than their urban counterparts. These outcomes are not merely the results of unequal access to facilities and information. Social norms, cultural practices and the intersection of poverty with gender inequality also play a role.

Figure 12. Fertility rate (women aged 15-49) by wealth quintile
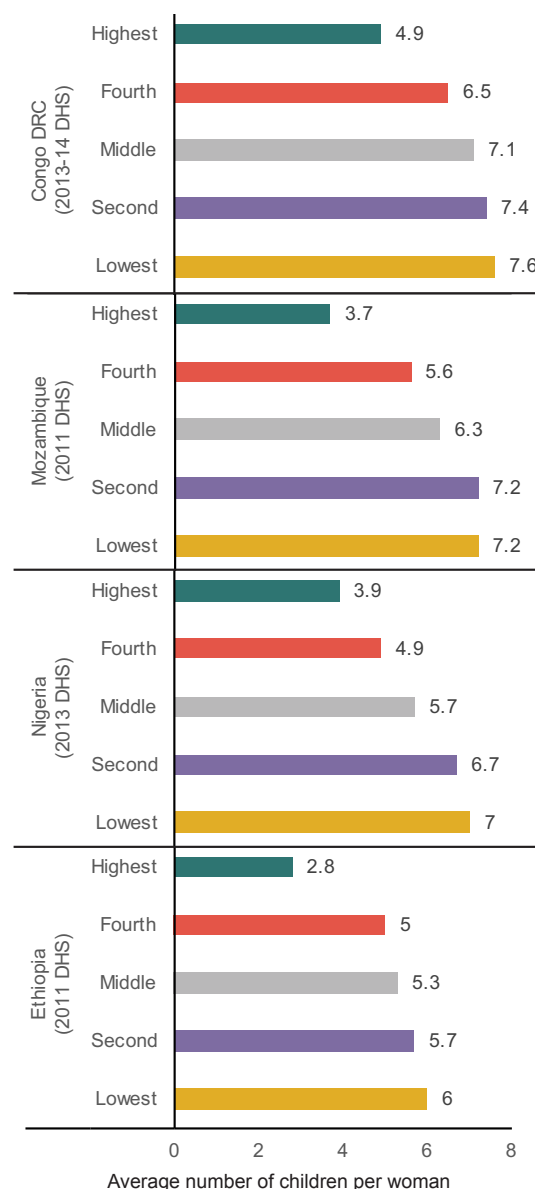
Data source: World Population Prospects: The 2015 Revision (UNDESA).

High levels of adolescent pregnancy contribute to high fertility, simultaneously creating health risks for mother and child. Early marriage is typically a precursor to adolescent pregnancy: around 12% of girls in sub-Saharan Africa marry before the age of 15 and 40% before 18. There are high levels of unmet adolescent demand for family planning (You et al., 2015). Here, too, there are vicious circles in operation. Early marriage and teenage is strongly associated with school drop-out, which in turn weakens the role of education in reducing fertility. While the underlying issues are complex and rooted in social practices and cultural attitudes that reinforce unequal gender relationships, policies that create incentives for keeping adolescent girls in school, and practices that engage with parents, community leaders and teachers, can reduce the risk of teenage pregnancy.

Such interventions can break and even reverse the vicious circle. Several countries – Ethiopia, Malawi and Rwanda among them – have rapidly expanded access to reproductive health care. Several countries have launched ambitious strategies to combat child marriage and teenage pregnancy.

One striking example comes from Uganda. Under a 2015 plan developed with UNICEF, the government has identified regions and districts with high levels of reported early marriage and teenage pregnancy. An integrated framework has been drawn up to expand access to reproductive health care, incentivise girls to stay in school and – critically – challenge and change social attitudes through engagement with children, parents and communities (UNICEF, 2015a). Education provides governments with a powerful vehicle for combating early marriage: staying in school is a powerful bulwark against marriage and pregnancy. There is broader evidence that cash transfers made conditional on girls remaining in school can reduce the social and economic pressures leading to early marriage (Population Council, 2014).[12]

4.3 Expanding social protection – target children more effectively

The $1.90 threshold is an indicator of monetary poverty linked to other indicators of social deprivation. While monetary poverty is not a stand-alone indicator of child well-being, it is an important indicator. Monetary deprivation can be mitigated, in part, through conditional and unconditional cash transfers delivered through social protection programmes. With African children accounting for a large and growing share of the global extreme poverty burden, there are compelling grounds for governments in the region and the wider aid community to expand social protection programmes and to strengthen the focus on children.

Sub-Saharan Africa is expanding safety-net programmes, one element of social protection. Relative to the situation in middle-income countries, where poverty is typically low relative to government revenues, the safety-net challenge in sub-Saharan Africa is addressing high levels of poverty with a limited revenue base. However, there is compelling evidence that well-targeted safety-net interventions are affordable, provided they can be targeted to poor and vulnerable groups (Monchuk, 2014; Holmes and Jones, 2010b).

Ensuring that vulnerable children are at the heart of the targeting criteria helps achieve that goal. Several countries in sub-Saharan Africa have already introduced child-based targeting (ILO, 2014). Lesotho's Child Grants Programme targets orphans and other vulnerable children, delivering an average of $9 per month (in 2011; ILO, 2014). Other countries – Ghana, Kenya, Malawi, South Africa, Tanzania, and Zambia among them – have introduced an element of child-based targeting into safety-net transfers. Evaluation evidence points to encouraging results for nutrition, health, school attendance and other indicators (UNICEF-ESARO, 2015). While most of the programmes targeting children operate on a project basis, some are of significant scale. For example, the LEAPS programme in Ghana reaches around 250,000 beneficiaries: around half of them children aged under 17 (Handa et al., 2013).

Evidence from other regions is also instructive (Hagen-Zanker et al., 2015). In Nepal, the government has introduced a Child Grant as one element of the wider national social protection strategy. Transfers are modest ($1.95 monthly per child), with targeting geared towards Dalit, or low caste, households in specified zones characterised by high levels of deprivation. The programme now covers around 20% of the under-five population. Evaluations have found the targeting to be very effective, though the benefits are constrained by the small size of the transfer.

Cash transfers through social protection programmes are not a panacea for child poverty in Africa – but they can make a difference. Recent years have seen some encouraging signs of increased ambition. Several countries are seeking to bring a patchwork quilt of fragmented national programmes under a unified social protection system. One example comes from Tanzania, where a Social Action Fund is targeting social assistance transfers to around 1 million households (World Bank, 2016b). Mozambique doubled the share of the country's (fast-rising) GDP allocated to social assistance between 2008 and 2013 (ILO, 2014). From a public-financing perspective, a combination of rising incomes and declining

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12 Evidence from an asset transfer programme in Ethiopia – Berhane Hewan – designed to create incentives to keep girls in school and delay marriage also delivered significant results. For a detailed review, see Erulkar and Muthengi, 2009. Evidence on unconditional transfer programmes is more sparse. However, evidence from Malawi suggests that these programmes may, under some conditions, be as effective as unconditional transfers. See Baird, Chirwa, McIntosh and Ozler, 2009.

poverty will increase the potential reach and impact for social assistance programmes.

Unlocking that potential will depend on governments reforming national tax systems to increase revenue-to-GDP ratios, which remain very low in Africa. At the same time, these governments will need to develop efficient and equitable social assistance programmes. Again, there may be lessons to be drawn from the experience of other regions. For example, Argentina closed a major loophole in its national social protection system, which previously focussed on contributory benefits for children of people in formal employment, by introducing a universal child allowance under a social assistance programme. At a cost of 0.5% of GDP, the scheme is estimated to reach a staggering 70% of children in poverty (Ibid.).

Viewed from a demographic dividend perspective, there are wider reasons to scale-up social protection programmes targeting the poorest and most vulnerable children. There is now a vast body of evidence pointing towards the scope for using cash transfers to weaken the link between monetary poverty and other forms of deprivation. Conditional cash transfers, which make payments contingent on recipients meeting wider eligibility criteria, have a proven track record in improving school participation, reducing drop-out rates, pulling children out of labour markets, and improving child nutrition, health and cognitive development.[13] These are all areas with a direct bearing on prospects for accelerating the demographic transition.

4.4 Delivering education – tackle inequality and improve learning

The accumulation of human capital is one of the defining characteristics of countries that have reaped a high demographic dividend – and education is a critical part of that capital. Research on East Asia consistently points to the pivotal role of education as a driver of economic growth and employment, and as both a source and outcome of reduced fertility and improved health. In the case of sub-Saharan Africa, a combination of restricted access to education, poor learning outcomes and high levels of inequality in both access and learning, is acting as a powerful brake on the important development of human capital.

The record of the past 15 years provides cause for optimism and pessimism. Despite the rapid growth of sub-Saharan Africa's school age population, enrolment rates have continued to rise. In the case of Niger, which has one of the world's fastest growing school-age populations,

only one-quarter of primary school age children were in school at the end of the 1990s. That figure has now risen to two-thirds. However, around one-in-five primary school-age children in Africa are out of school, and just 56% progress in school to grade 4. Only 40% of children enrol in secondary school – and only a small fraction of this total completes a secondary cycle. Around 50 million primary and adolescent children are out of school. With population increases, these numbers are not coming down. One of the most worrying aspects of Africa's out-of-school profile is that around one-half of the primary school children now out of school are predicted never to enter school (UNESCO, 2015b).

Behind these figures are some of the world's starkest disparities in education. In Nigeria, a country that now has the unfortunate distinction of topping the global league for out-of-school children, there is a four-year gap between predicted years of schooling for children the richest and poorest 20%. Comparing wealthy rural males (12.6 years) with the poorest females in the north-west of the country (0.6 years), widens the gap to 12 years.

Enrolment and participation in education is just one part of the equation. Evidence for sub-Saharan Africa suggests that around one-quarter of the children who make it through to grade 4 of primary school have yet to master basic literacy and numeracy (UNESCO, 2014). As learning assessment surveys in Kenya, Tanzania and other countries have documented, many children end a full primary cycle either unable to construct a simple sentence or correctly answer a two-digit addition sum (Jones et al., 2014; Rose and Alcott, 2015). For millions of children in sub-Saharan Africa, the marginal return on an additional year of schooling as measured by learning outcomes, is distressingly close to zero. Here, too, there are marked social disparities in learning outcome linked to wealth, rural-urban differences, ethnicity and gender (Ibid.).[14]

This backdrop has profound implications for any strategy aimed at unlocking the demographic dividend. Progress in education is closely associated with reductions in fertility and improvements in child survival – two of the key drivers of the demographic transition. Moreover, there is a large and growing evidence-base pointing to learning outcomes as the key driver of accelerated economic growth, another critical condition for unlocking the demographic dividend (Wößmann, 2007 and 2010). Equipping Africa's current and future school-age populations with the education opportunities they need to develop the competencies, skills and knowledge they require to escape

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13 For an overview of the evidence see ILO (2013); Glewwe and Muralidharan, 2015; UNICEF Eastern and Southern Africa 'Social protection' (http://www.unicef.org/esaro/5483_social_protection.html); and Bastagli et al., 2016. 15

14 See also UNICEF, 2016.

poverty and drive more dynamic and inclusive economic growth is crucial to the region's prospects.

While there are no blueprints for success there are some broad policy guidelines. Far more could be done across the region to target public finance on the least advantaged students, schools and regions. Cash transfer programmes could play a valuable role in this respect. Looking beyond access, the evidence on learning outcomes points unequivocally towards system-failure. Sub-Saharan Africa faces a chronic shortage of trained teachers (around 225,000 a year, according to one estimate; UNESCO, 2015b). More than that, it faces a deficit of teachers trained, equipped and supported to deliver credible learning opportunities to children, many of them first generation learners, entering school carrying the burdens that come with poverty, early experience of malnutrition and low expectations. Investment in nutrition, early childhood development and early grade learning are obvious areas for priority investment.

4.5 Building youth skills – provide a second chance

Fixing Africa's failing education systems will benefit current and future generations, but it will do little to address the vast backlog of lost potential. For millions of 15-24 year olds in the region, past failures to provide quality education has led to livelihoods characterised by poverty level incomes, low productivity and insecurity. Redressing the legacy of disadvantage has the potential to generate a large demographic dividend by raising the lifetime employment and earning potential of young workers. Securing that dividend demands policy interventions on several fronts.

The education system itself has a role to play. Several countries have introduced 'second chance' accelerated learning programmes. These programmes are tailored towards children who have dropped out of school. They typically cover two or three grades of primary education in a single year, often with the aim of securing re-entry to the formal education system. Several such programmes have operated on a significant scale with some success in sub-Saharan Africa. For example, Ghana's School for Life programme, which operates in the disadvantaged northern region, covered some 641,000 children in 2011. Once re-enrolled in primary school, these children out-performed their peers. Malawi's Complementary Basic Education Programme has similarly produced a graduate cohort that out-performs formal school peers. Critical to the success of these programmes is the development of an appropriate curriculum, teacher training and a flexible school timetable.

Beyond good quality basic education, it is also important to provide opportunities for technical and vocational training relevant to the labour market. There is a large and burgeoning discourse around active labour market programmes – broadly defined as strategies to improve employment and earnings prospects (Betcherman et al., 2004).[15] These programmes can facilitate information flows on employment, create incentives for skills training, and create jobs and skills development opportunities through public works. The hard evidence available is limited and points to mixed and mostly modest results but entrepreneurship development is another important strand.

A broad lesson that can be drawn is that engagement with the private sector is critical, both in terms of identifying employment opportunities and developing skills. Evidence from Africa is not yet conclusive but instructive. In Kenya, a government partnership with the Kenya Private Sector Alliance appears to have produced positive results by helping young people acquire work experience and skills through internships and training. Another successful example comes from Uganda, where the Youth Opportunity Programme (initially introduced as part of the country's Social Action Fund), provided cash grants to young men and women to invest in skills training, tools and other materials. An impact evaluation found significant increases in hours of employment, income and skill levels, though women benefited far less than men from income returns (Blattman et al., 2013).

15 See also Assaad and Levison (2013).

Conclusion

The 2030 SDGs have established some exacting targets. Yet even on the most benign assumptions, one of these targets – eradicating extreme poverty – will not be achieved without a dramatic acceleration of progress in sub-Saharan Africa. This paper has shown that the region's distinctive mix of demography, inequality and initial poverty points towards a large gap between SDG ambition and prospective outcomes. And Africa's children are at the heart of that gap.

While scenarios have to be treated with caution, the next 15 years will see global poverty taking on an increasingly African face. This matters at many levels. High levels of monetary poverty represent a source of deprivation in their own right, while also constraining human development and reinforcing inequalities in other areas. Economic growth is unlikely to close the SDG gap entirely. Yet with better equitable distribution, investments in human capital, reproductive health care and social protection, it could generate a twin benefit in the form of an accelerated demographic transition with a more rapid reduction in child poverty.

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Annex: Estimating age profiles for extreme poverty

In estimating the number, share and distribution of children in poverty, we followed four methodological steps:

Step 1. Overall $1.90 poverty estimates

These are based on historic PovCal regional estimates for 2002 and 2012 and a World Bank scenario for 2030 described in the text. As we highlight in the text, there are wide margins of error and uncertainty in these exercise linked to the uneven availability of high quality data across regions.

Step 2. Deriving fertility rates by quintile

Poverty incidence refers to the entire population. However, poorer households tend to have more children than non-poor households. We derive approximate fertility rates for different wealth quintiles from fertility data presented in demographic and health surveys, using the mean number of children ever born to women aged 40-49. We then develop a *regional multiplier*. This expresses the regional fertility rate by quintile as a multiple of the regional (unweighted) average. For example, SSA fertility multiplier for the poorest (equal to 1.14) is the ratio between the fertility rate for the poorest in the region (6.6) and the unweighted regional average (5.8). Similarly, SSA fertility multiplier for the poorer (equal to 1.10) is the ratio between the fertility rate for the poorer in SSA (6.4) and the unweighted regional average (5.8).

Step 3. Percentage of the total poor population in each region that belongs to a particular age group [(0-4), (5-14), (15-17)]

UNDESA data suggest that 16.6% of the total SSA population was less than four years of age in 2012. For the poorest, this 16.6% is equivalent to 18.92% (that is, the product between 16.6 and the fertility multiplier for the poorest; see step 2). For the poorer, this 16.6% is equivalent to 18.62% (i.e. the product between 16.6 and the fertility multiplier for the poorer).

PovcalNet data suggest that around 40% of people were living below the poverty line in sub-Saharan Africa in 2012. We then compute the percentage of the total population that is 0-4 *and* poor in sub-Saharan Africa in 2012 as the simple average between 18.92 and 18.62%. We apply the same logic to all other regions (SSA, SA, EAP, LAC), years (2002, 2012 and 2030) and age groups [(0-4), (5-14), (15-17)].

Our population data are based on UNDESA population estimates (2012) adjusted for PovCal regional classifications. Note that the Demographic Health Surveys' wealth quintiles are not consumption quintiles that correspond to $1.90 monetary poverty, which introduces a further margin of error.

Step 4. Child poverty numbers

We estimate child poverty numbers for each region as the product between child poverty shares (from step 3) and total number of poor (from step 1). As per child poverty shares (Step 3), child poverty numbers in step 4 are also computed for all relevant regions, years and age groups.

The Middle East, North Africa, Europe and Central Asia regions are not included in our analysis owing to the absence of poverty estimates for the Middle East and North Africa in PovcalNet using the updated $1.90 poverty line. Europe and Central Asia were not included since they account for a negligible share of the world's extreme poor.

Cover photo: 27 year old Devota Nyampinga, sells avocadoes at the local market. She carries her baby, 9 month old, Terreza Mukanikundo on her back. © A'Melody Lee / World Bank