Development Goals in an Era of Demographic Change

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Overview
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Overview

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The data presented in text, charts, and tables is current as of mid-September, 2015.
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This is a pivotal year for global development. The Millennium Development Goals (MDGs) have guided countries and partners over the last 15 years in improving the living conditions of the poor. We are now transitioning to the Sustainable Development Goals (SDGs), a new set of global targets that embrace economic, social, and environmental priorities through 2030.

As we reflect on the hard-fought progress since the launch of the MDGs, we have an opportunity to make important changes in how we approach development. We can celebrate that the MDGs mobilized the world behind an ambitious agenda, that many countries have reduced poverty and illness, and that more children today are in school than ever before.

Our mission, however, is far from complete. During the last quarter-century, more than 1 billion people have lifted themselves out of extreme poverty. Yet, about one tenth of the global population still lives on less than $1.90 a day—the updated international poverty line.

Looking ahead, three critical challenges remain:

- A large percentage of the remaining poor are deeply poor, with income levels far below the poverty line. Policy action and programs need to focus more directly on the men, women, and children that live in deep poverty. This year’s Global Monitoring Report presents new and more intuitive measures of poverty that allow us to measure depth and help contribute to the policy dialogue and action agenda in this urgent area.
- We have seen progress in achieving shared prosperity, with a majority of countries registering solid income growth in the poorest 40 percent of their income distributions. But in many countries, the incomes of the bottom 40 percent declined, including in half of the high-income countries. Ensuring that income is shared more equitably should be a priority for all countries.
- Poverty reduction and shared prosperity are held back by unequal progress on the non-income dimensions of development, like access to essential services. We must urgently address the widespread inequalities of opportunity in education, health, and other sectors.

The thematic section of this report shows that advancing these critical challenges will take place against the background of major demographic changes. The global population is growing much slower in 2015 than at the beginning of the MDG period in 2000. It is also aging at record speed.

There is significant cross-country heterogeneity because while some countries still
maintain young and growing populations, particularly those where global poverty is concentrated, others are aging, especially the high- and middle-income countries. Projections for global growth over the SDG period trend down in line with the decrease in population growth, but demographic change can also be a contributor to growth and development if the right policies are adopted.

To advance development amid demographic change, we must place our policies and financing behind three strategic priorities: grow economies in ways that are sustainable and create jobs; invest in people’s social and economic potential; and insure against ever-changing risks, which tend to disproportionately impact the poor. These policies will be tailored to each country’s demographic profile.

Moreover, the recent European refugee crisis only further highlights the importance of making the best out of demographic change. Whether people migrate for more opportunities in life or just a safer life, migration—together with fertility and mortality—is a critical driver of demographic change. Along with capital flows and trade, it is also a key channel through which mutual benefits can be realized in response to diverse demographic trends across countries. Challenges must be managed, but international cooperation is key.

With the right policies in place, demographic change can contribute to the movement to end extreme poverty, boost shared prosperity, and achieve the SDGs. This year’s Global Monitoring Report will help all countries—rich and poor alike—to navigate the challenges and to take advantage of demographic change and advance on global development goals that will improve living standards around the world.

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World Bank Group

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Executive Summary

With 2015 marking the transition from the Millennium to the Sustainable Development Goals, the international community can celebrate many development successes since 2000. Despite the global financial crisis, economic growth was generally strong and robust. About 1 billion people rose out of extreme poverty. Most developing countries saw solid income growth for the bottom 40 percent of their income distribution. Millions of children who were unlikely to survive their fifth birthday passed beyond these critical years and went on to school in ever greater numbers. The incidence of preventable diseases such as AIDS, malaria, and tuberculosis is falling. The share of those with access to clean water and better sanitation has risen. Overall, the Millennium Development Goals played an important role in galvanizing the global development community, and that experience will help drive progress toward achievement of the Sustainable Development Goals by 2030.

Despite solid development gains, progress has been uneven, and significant work remains. With an estimated 900 million people in 2012 living on less than $1.90 a day—the updated international poverty line—and a projected 700 million in 2015, extreme poverty remains unacceptably high. It has also become more concentrated in Sub-Saharan Africa and South Asia. Addressing moderate poverty and mitigating the vulnerability of falling back into poverty have become more pressing issues in many countries, including in those where the bottom 40 percent saw their incomes decline. Even in a world of single-digit extreme poverty, non-income disparities, such as limited access to quality education and health services, pose a bottleneck to sustained poverty reduction and shared prosperity. Wider environmental sustainability concerns are a major challenge throughout the world, in regard to climate change and its impact on the natural resources upon which many of the poorest depend, such as water. In sum, while development progress was impressive, it has been uneven and a large unfinished agenda remains.

Three key challenges stand out: the depth of remaining poverty, the unevenness in shared prosperity, and the persistent disparities in non-income dimensions of development. First, the policy discourse needs to focus more directly on the poorest among the poor. While pockets of ultra-poverty exist around the world, Sub-Saharan Africa is home to most of the deeply poor. To make depth a more central element in policy formulation, easy-to-communicate measures are needed—and this report attempts a step in this direction with person-equivalent measures of poverty. Second, the eradication of poverty in all of its forms requires steady growth of the incomes of the bottom 40 percent. Yet, economic growth—a key driver of shared prosperity—
may not be as buoyant as it was before the
global financial crisis. Third, unequal progress
in non-income dimensions of development
requires addressing widespread inequality of
opportunity, which transmits poverty across
generations and erodes the pace and sustain-
ability of progress for the bottom 40 percent.
To meet these challenges, three ingredients are
core to the policy agenda: sustaining broad-
based growth, investing in human develop-
ment, and insuring the poor and vulnerable
against emerging risks.

In view of these challenges, the Sustainable
Development Goals aim to scale up impact in
a changing world through a more integrated
approach to development. Recognizing the
interconnections between development objec-
tives, the SDGs embrace an ambitious and
holistic vision to foster inclusive and sustain-
able development with scaled-up impact.
Shared by all countries, they recognize that
collective action is required. Global chal-
lenges—resilient financial systems, common
resources, climate change—require interna-
tionally coordinated solutions. Meeting SDG
investment needs will depend on shifting from
“billions” in official development assistance to
“trillions” in investments of all kinds, unlock-
ing, leveraging, and catalyzing public and pri-
vate resources. The SDGs will need to be
pursued in a changing world, with new oppor-
tunities and challenges brought by evolving
megatrends, including climate change, contin-
ued globalization, rapid urbanization, and, as
discussed in the special theme of this report,
demographic change.

Profound changes in global demography
have the potential to alter the trajectory of
global development over the SDG period.
Global demography is at a turning point: the
world’s population is growing more slowly
and is aging at an unprecedented rate. These
trends reflect past development successes—
women’s empowerment, improved education,
better child, maternal and reproductive health,
and increased longevity. The working-age
share of the population peaked in 2012 and is
now on the decline. Aging means that popula-
tion increases are reflected in larger numbers
of older people. The global count of children
is stabilizing at a plateau of 2 billion. Yet,
underneath these global trends lies consider-
able diversity in the direction and pace of
demographic change. Regional and subre-
gional patterns vary across and within coun-
tries. To frame the impact of diverse
demographic trends on development across
countries, this report lays out a new typology
of demographic change, applied to the latest
2015 UN population statistics.

The diversity of demographic change at the
country level presents unique opportunities
and challenges to the world’s centers of global
poverty and engines of global growth. More
than 90 percent of poverty is concentrated in
pre- and early-dividend countries with swell-
ing working-age populations that lag in key
human development indicators and continue
to register rapid population growth. In these
countries, the demographic transition to lower
fertility creates a golden opportunity to raise
living standards. Over 85 percent of global
economic activity and 78 percent of global
growth over the last 15 years can be attributed
to late- and post-dividend countries, which
have much-lower fertility rates and some of the
highest shares of the elderly in the world. In
these countries, population aging may weaken
growth prospects. To be sure, demographic
change is not inherently good or bad and pres-
ents opportunities and challenges everywhere.
In each case, policies can make a critical differ-
ence in how demographic change affects prog-
ress toward the development goals.

Navigating the dynamic implications of
demographic change will require sound poli-
cies informed by a long-run perspective and
tailored to a nation’s demographic context. To
eradicate persistent poverty, the centers of
global poverty need to accelerate their demo-
graphic transition, invest in their young and
still-growing populations, and lay the founda-
tions for sustained growth. Among other pol-
icy initiatives, these goals require better
education and health services, as well as greater
empowerment of women. Facing weakening
economic dynamism, the lower-fertility, richer
countries that make up the current engines of
global growth need to address headwinds aris-
ing from shrinking labor forces. They also
need to adapt their policies and institutions to foster healthy and productive aging. Selected policy priorities include mobilizing savings for productive investment in human and physical capital, as well as strengthening welfare systems—pensions, health care, and long-term care—while ensuring fiscal sustainability and protection for the elderly and vulnerable.

Policy opportunities also exist to arbitrage demographic diversity across countries. The extent of demographic diversity across countries is starker than ever, with large and inevitable impacts on the global economy. Returns on capital and labor are affected. Comparative advantages in trade are altered. Given these implications, flows of capital, labor and goods and services will be affected and, together, they can help respond to growing demographic imbalances globally. Mutual benefits can be realized: capital can flow to rising consumer markets; older countries can benefit from legal immigration; younger countries can produce labor-intensive products. But challenges need to be managed and international cooperation is key.

With effective policies, this era of intense demographic change may herald a period of sustained development progress. Global demography is changing and has the potential to alter the trajectory of global development profoundly. To speed up progress, countries need to step up efforts to sustain broad-based growth, invest in people, and insure the poor and vulnerable against ever-changing risks. However, they must undertake these measures by taking into account demographic change. Where possible, this requires capturing and harnessing demographic dividends. Elsewhere, it requires adaptation. Everywhere, it calls for turning demographic change into one of the most consequential development opportunities of our times.
Projections show that the global poverty rate may have fallen to single digits in 2015. Yet, the number of poor remains high.

With extreme poverty concentrating in Sub-Saharan Africa, more focus is needed on the poorest among the poor.

With less buoyant growth expected at the start of the SDG period, increased effort is needed to sustain broad-based growth.

While income poverty fell rapidly during the MDG-era, a large unfinished agenda remains for the SDGs with respect to non-income goals.

Prosperity needs to be better shared with the bottom 40 percent of the income distribution, especially in high-income countries.

We need to invest in people and protect them from risk with adequate human development policies and social protection.

Sources: PovcalNet 2015, World Bank’s Global Database for Shared Prosperity, IMF’s World Economic Outlook.
Global demographic change is intense: the working-age share peaked, the population grows much slower and ages at record speed. Underneath global trends lies stark diversity, with countries facing different opportunities to capture demographic dividends.

Pre- and early-dividend countries need to spark demographic transition, invest in human development and create jobs for the youth bulge. Late- and post-dividend countries need to sustain productivity growth amidst demographic headwinds, and adapt institutions and policies to rapid population aging.

Demographic fault lines separate centers of global poverty needing further development and engines of global growth facing rapid aging. Freer flows of capital, trade and, especially, people present an increasingly compelling global opportunity to arbitrage demographic diversity across countries.

Sources: UN 2015, PovcalNet 2015, World Bank’s World Development Indicators 2015.
The world is at a global development crossroads, as 2015 marks the end of the 15-year window for achieving the Millennium Development Goals (MDGs) and the beginning of the Sustainable Development Goals (SDGs). The world met the MDG target of halving the global poverty rate in 2010, five years ahead of schedule. The latest data suggest that extreme poverty has continued its decades-long descent. Still, poverty remains unacceptably high, with an estimated 900 million people in 2012 living on less than $1.90 a day—the new international poverty line; the projected number for 2015 under the new line is 700 million people. Poverty also is becoming increasingly concentrated in Sub-Saharan Africa, where its depth and breadth remain an overriding challenge. The MDGs were successful in reducing income poverty, but they were less successful in ameliorating non-income deprivations, such as access to quality education or to basic health services. Few countries have combined growth with reducing the level of environmental externalities and carbon emissions. Yet, increasing land degradation, overfishing, deforestation, extreme weather events, and urban air pollution endanger recent progress. Looking forward, three challenges stand out: the depth of remaining poverty, the unevenness in shared prosperity, and the persistent disparities in non-income dimensions of development. The MDGs were helpful in galvanizing global development progress—an experience that will help drive the achievement of the SDGs by 2030.

The world is also at a crossroads for global demographic trends. Global population growth is slowing: the share of the working-age population (15–64 years) peaked in 2012 at 66 percent and is now falling, while the total number of children (ages below 15 years) will remain at a plateau of around 2 billion into the next decades. These trends reflect past successes in development—women’s empowerment, improved education, better reproductive health services, and increased longevity. But the direction and pace of demographic change vary starkly across countries, with sizable disparities between the centers of global poverty (marked by high fertility) and the engines of global growth (marked by rapid aging). The latter comprise almost all high-income and most middle-income economies. In many cases, they have completely eliminated extreme income poverty, but they continue to face challenges in sharing the benefits of increased prosperity, particularly if aging weakens their economic dynamism. The former include lower-income
countries in earlier stages of demographic transition to lower fertility levels and longer life expectancy, making them the focus of the continuing battle against global poverty.

Demographic change brings unique opportunities and challenges to further the post-2015 development goals. But countries have very different starting lines and face stark differences in demographic characteristics and projected trends. The way forward, as underpinned by the SDGs, is a more synergistic approach between the various dimensions of development. Three ingredients will frame the policy agenda: sustainable broad-based growth, investment in human development, and measures that insure the poor and vulnerable against evolving risks. These strategies must be sensitive to demographics. The centers of global poverty need to accelerate their demographic transition, invest in their young and growing populations, and lay the foundations for sustained growth to capture demographic dividends. The engines of global growth need to address headwinds arising from shrinking labor forces and adapt their policies and institutions to foster healthy and productive aging. In addition, to eradicate poverty and invigorate economic dynamism, all countries must also grasp the opportunities and manage the challenges that arise from demographic imbalances at the global level—through capital flows, migration, and trade. With the right set of policies, this era of intense demographic change can be turned into one of sustained development progress.

Global Monitoring Report 2015/2016 investigates these issues in two parts:

Part I—the global monitoring part—examines global development progress, the unfinished agenda, and the policy opportunities looking ahead. Chapter 1 examines the progress made on sustainable poverty reduction and shared prosperity, as well as the policies that are needed to make further progress. With 2015 being a watershed year for global development goals, Chapter 2 reviews the development successes during the MDG period and examines the unfinished agenda left for the SDGs. Chapter 3 assesses the macroeconomic performance over the MDG period, provides the near- and medium-term outlook, and examines what the world might be like in 2030.

Part II—the thematic part—examines how demographic change can be tilted in favor of the development goals. Chapter 4 characterizes demographic change at the global, regional, and country levels. It also examines the drivers of demographic change that have shaped the diversity of demographic patterns and trends. Chapter 5 examines how demography affects development. It develops a new global typology that ties demographic change to development potential and analyzes the various pathways through which demographic change affects the prosperity of nations. Chapter 6 analyzes how policies can leverage demographic change in support of the development goals. It examines policy opportunities at both the country and the global levels.

Part I: Monitoring global development progress

Development progress over the MDG period has been impressive

In many ways, development has advanced more rapidly over the 15-year MDG era than at any other time in human history. Since the launch of the MDGs, economic growth has been rapid, aided by strong commodity prices and generally improved macroeconomic policies. Poverty reduction also has been rapid, particularly in East Asia and Pacific. Millions of children who were unlikely to survive to their fifth birthday have passed beyond these critical years and gone on to school in ever greater numbers, including many more girls than was the case 15 years ago. The incidence of preventable diseases such as acquired immunodeficiency syndrome (AIDS), malaria, and tuberculosis is falling, and the share of people with access to clean water and better sanitation has risen markedly. The MDGs helped frame the broader goals of development and build a coalition of partners to work toward common goals.
One of the most remarkable achievements during the MDG era was the significant decline in the share of the extremely poor in the global population. The first MDG target—cutting the extreme poverty rate to half its 1990 level by 2015—was met five years ahead of schedule. Poverty was on the decline before the MDG period, but progress was fastest in the 2000s (figures O.1a, O.1b). Particularly notable are the substantial reductions in poverty in East Asia and Pacific and South Asia, where the rapid growth and development of China and India helped lift millions of people out of poverty (figures O.1c and O.1d). As the number of poor declined, the average shortfall of income below the poverty line improved as well from 13.2 percent in 1990 to 3.7 by 2012.

Based on the updated poverty line of $1.90 a day, the estimate for 2012 puts the number of extremely poor people at 900 million, or 12.8 percent of global population (table O.1). Global poverty estimates have been updated to reflect a re-estimated international poverty line of $1.90 a day, new 2011-based purchasing power parity (PPP) prices, and revisions

![Global poverty declined, but Sub-Saharan Africa lagged](image)
to complementary data (box O.1). The 2012 estimate represents continued progress in poverty reduction as the revised headcount in 2011 was 987 million people (14.2 percent of global population). Comparison between 2011 and 2012 reveals a modest decline in the number of poor in Sub-Saharan Africa, potentially heralding an era of poverty reduction not just in the share of the poor but also in their absolute number.

Although the estimate for 2012 remains the most reliable recent estimate, World Bank projections suggest that global poverty may have reached 700 million, or 9.6 percent of global population, in 2015. For the first time, the global extreme poverty rate may have reached single digits. The projected decline between 2012 and 2015 is 200 million people (some 80 million in South Asia, about 65 million in East Asia and Pacific, and close to 40 million in Sub-Saharan Africa). This projection is extrapolated from 2012 based on growth scenarios and distributional assumptions. Given that the collection and processing of nationally representative household surveys—on which actual poverty estimates are based—usually takes two to three years, the 2012 number remains the most reliable recent estimate.

Turning to broader segments of the population, the bottom 40 percent (B40) of the income distribution in many countries has seen rising incomes over the past decade, yet progress was unequal. Considering five-year periods starting around 2007 and ending around 2012, B40 incomes grew in 65 of the 94 countries with adequate and comparable household data. Among them, 47 countries registered a “shared prosperity premium,” meaning that B40 incomes grew faster than the incomes of the average population (figure O.2). This premium ranged from less than 1 percentage point to well above 3 points, suggesting that growth in many countries has been considerably pro-poor. Progress on shared prosperity

### TABLE O.1  Global poverty is assessed with the re-estimated poverty line

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<td>1990</td>
<td>1999</td>
<td>2011</td>
</tr>
<tr>
<td>Share of population below $1.90 a day (2011 PPP) (%)</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>8.5</td>
</tr>
<tr>
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<td>1.9</td>
<td>7.8</td>
<td>2.7</td>
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<tr>
<td>Latin America and the Caribbean</td>
<td>17.7</td>
<td>14.1</td>
<td>6.5</td>
</tr>
<tr>
<td>Middle East and North Africa(^b)</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>South Asia</td>
<td>50.6</td>
<td>41.2</td>
<td>22.3</td>
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<tr>
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<tr>
<td>World</td>
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<td>29.0</td>
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Source: PovcalNet 2015.

Note: Poverty estimates based on the $1.90 poverty line and 2011 purchasing power parity (PPP) prices. Box O.1 explains how the global poverty estimates were calculated. Regional aggregates for the Middle East and North Africa are omitted because of lack of sufficient observations.

a. Given the production lags for household surveys, 2012 is the latest year for which the World Bank is able to produce regional and global poverty estimates. All numbers for 2015 and beyond are statistical projections based on growth scenarios and distributional assumptions, and should be treated with considerable circumspection.

b. Even though five countries in the Middle East and North Africa region are omitted from the database of country-level poverty estimates, poverty estimates for these countries are calculated for the purposes of global poverty estimation (see box O.1). The 2011 and 2012 poverty estimates for this region implied by these global estimates are 2.4 and 2.3 percent, respectively.
BOX O.1 Drawing global poverty lines

Global Monitoring Report 2015/2016 unveils poverty data based on a new $1.90 international poverty line, using 2011 purchasing power parity (PPP). To be comparable, the global poverty estimates are based on a common poverty line across all countries. As with the previous line of $1.25 a day, in 2005 prices, the new line is calculated by averaging the national poverty lines of the 15 poorest developing countries. It represents a very low threshold standard of living which is believed to correspond to the minimum costs of basic needs. Changes in this value over time thus reflect the increasing cost of obtaining these basic needs.

A key driver behind the raising of the international poverty line to $1.90 is the release of the 2011 PPP index. Cross-country comparisons of poverty rates require PPP indexes, produced by the International Comparison Program. New rounds of PPP indexes estimate the cost of living across countries and provide price data for countries not covered by previous rounds. Introducing new PPPs typically require the re-estimation of the international poverty line and can involve, in some cases, significant changes in our understanding of poverty levels in some countries or the relative ranking of poverty across countries.

Including this year’s revision, there have been four major changes to the World Bank Group’s estimate of the international poverty line, reflecting different methodologies and PPP indexes. The revisions to PPP indexes in 1985, 1993, and 2005 corresponded to poverty lines of $1.01, $1.08, and $1.25, respectively. Different methods have been followed to estimate these lines. Beginning with the $1.25 line, the poverty line was calculated by taking the average of the 15 poorest countries (Chad, Ethiopia, The Gambia, Ghana, Guinea-Bissau, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Tajikistan, Tanzania, and Uganda). This same practice was followed for the $1.90 revision.

Despite solid development gains, significant work remains

A first key challenge is the depth of poverty, especially in Sub-Saharan Africa. The decline in poverty rates has been impressive. Yet, poverty still remains unacceptably high—around 900 million extremely poor people in 2012 and a projected 700 million people in 2015. It is also becoming increasingly concentrated in Sub-Saharan Africa. Over the last decades, the vast majority (about 95 percent) of global poverty has been concentrated in three regions: East Asia and Pacific, South Asia, and Sub-Saharan Africa (figure O.1c). Over time, the composition of global poverty across these three regions has shifted dramatically. East Asia and Pacific registered a spectacular decline. South Asia saw an initial increase and a later decline, with rates remaining high. Sub-Saharan Africa saw a steady increase in its share and is now home to 43.0 percent of the global poor. The growing global share of Sub-Saharan Africa reflects slower poverty reduction there amid rapid population growth: in
2012 the region’s poverty rate stood at 42.6 percent, which is only 13 points lower than in 1990 (figure O.1d).

The policy discourse needs to focus more fully on the poorest among the poor. Poverty headcount statistics present distorted views of the spatial distribution of poverty and the pace of progress over time. Two countries could record the same poverty headcount rate, where in one country poverty is shallow
and in the other it is very deep. Similarly, a country may be successful in lifting its poorest citizens—the poorest of the poor—from abject poverty to a level just below the poverty line. Such improvement would not show up in a poverty headcount measure. Measures that account for depth, such as the “poverty gap” (shortfall from the poverty line), are not as simple to grasp as headcount measures. To make “depth” a more central element of policy formulation, easy-to-communicate measures are needed—and this report attempts a step in this direction with the new “person-equivalent” approach. It finds that, in person-equivalent terms (a benchmark poor person with a typical income shortfall), the poverty headcount ratio in Sub-Saharan Africa for 2012 rises from 42.6 to 46.3 percent, whereas that for South Asia falls from 18.8 to 10.5 percent.

With extreme poverty on the decline globally, a second key challenge is the unevenness in shared prosperity for the B40. The B40 may include many possible populations. Among developing regions, the income of the richest person among the B40 makes that person either extremely or moderately poor, particularly in Sub-Saharan Africa and parts of East Asia, or vulnerable, primarily in Latin America and the Caribbean and parts of Europe and Central Asia (Map O.1). In countries where reducing poverty and vulnerability is key, the shared prosperity focus on the B40 thus enhances that focus. Among richer countries, the B40 may encompass the relatively poor. Promoting healthy B40 income growth represents an ongoing challenge, as well as an opportunity to make the development process more inclusive and socially sustainable.

In many countries, stepped-up effort is needed to sustainably build shared prosperity. The latest comparable household data points to a decline in the growth of B40 incomes over the period circa 2007–12. Half
of the high-income countries and more than a third of low-income countries saw an actual outright decline in B40 incomes. The United States saw a decline in B40 incomes during the 2000s, perpetuating a trend of rising inequality between B40 and the rest of the population—a trend observed in several other high-income countries and exacerbated by the global financial crisis. Indeed, compared with the earlier period circa 2006–11—as reported in *Global Monitoring Report 2014/2015*—the latest shared prosperity data suggest a significant deterioration. For countries with consistent time series, average B40 income growth slowed from 4.6 to 2.9 percent, whereas average income growth for the entire population declined from 3.0 to 1.7 percent.

A third key challenge relates to the persistent disparities in the non-income dimensions of development. Compared with the MDG goal on income poverty, non-income goals saw more mixed success. Progress fell particularly short for targets related to health (maternal and infant mortality), nutrition (undernourishment and hunger), and sanitation (Kenny and Dykstra 2013). Close to one-fifth of all children under five remain undernourished, and some 860 million people continue to live in slums. Access to primary school education and literacy rates have improved, yet the quality of education remains a concern. Moreover, while the tide has turned on the incidence of major deadly diseases, a high number of preventable deaths persist. With the development of new medicines, human immunodeficiency virus (HIV) patients receiving treatment have nearly the same life expectancy as those without HIV. However, three-fifths of those people living with HIV, mostly in developing countries, lack access to antiretroviral drugs. Tuberculosis killed 1.5 million people in 2013, many in the prime of their productive lives. An estimated 198 million cases of malaria were registered in 2013, claiming the lives of about 453,000 children.

In addition, little progress has been made in improving the long-term environmental sustainability of development. Although some countries have successfully “delinked” trends in environmental degradation from growth, most have not. The cost of environmental degradation—externalities associated with outdoor and indoor air pollution, water pollution, deforestation, carbon emissions, and other environmental hazards—rose 50 percent during 1990–2010. Furthermore, in 2013, over 5 billion people in developing countries were breathing polluted air with concentrations of particulate matter (PM) 2.5 in excess of the guideline levels recommended by the World Health Organization, up 42 percent since 1990 (Brauer et al. 2015).

In 2010, between 11 and 21 percent of all deaths in developing countries were the result of pollution and other environmental risk factors. Only about 25 percent of the countries in the world, primarily high-income countries, have managed to grow economically while simultaneously decreasing their environmental externalities. Even fewer have managed to delink carbon emissions from growth, challenging the world’s ability to contain the impacts of future climate change to agreed-upon levels of acceptability.

To sustainably end extreme poverty and promote shared prosperity, more attention is needed to the non-income dimensions of development. First, to “end poverty in all of its forms everywhere,” it must be recognized that poverty is multidimensional. Income poverty is typically accompanied by inadequate access to education, health, housing, employment, and personal security—areas where improvements would increase the chances for escaping poverty. Second, the B40 consistently underperform in non-income dimensions. Children from B40 households are more likely to die before age five than children in the top 60 percent (T60) households and are also more likely to be underweight. Access to improved water sources (piped water) and technology (the Internet) is uneven, too. Despite rising enrollment rates in poorer countries, access to primary education remains inequitably low. Third, greater efforts are needed to monitor the sustainability of development progress in its economic, environmental, and social aspects. Environmental sustainability concerns, particularly regarding natural
resources, environmental health, and ecosystem sustainability, need to enter more fully into economic decision making.

Amid an uncertain outlook, stronger effort is needed to grow, invest, and insure

Sustained economic growth has been the key building block of poverty reduction and shared prosperity during the MDG era. After the launch of the MDGs in 2000 until the global financial crisis in 2009, developing economies grew on average by 6.6 percent a year, compared with just over 2 percent a year in advanced economies. Even during the depth of the financial crisis and its immediate aftermath, developing economies grew by 5.5 percent, while advanced economies stalled. Moreover, this strong economic expansion was accompanied by greater income convergence. The global Gini coefficient—a measure of inequality in income distribution—declined. The global per capita distribution of income exhibited greater global income convergence during 2000–15, in part thanks to rapid income growth in major economies like China and India.

Economic growth is expected to be less buoyant in the period ahead. Global growth is expected to trend down somewhat in 2016–30 relative to the MDG period. This slowing may reflect weaker levels of investment and the gradually diminishing growth dividends from information and communication technology. Moreover, demographic trends in major advanced and emerging markets could be a drag on economy-wide growth—even if they also present significant opportunities to raise living standards. Lower growth prospects threaten the income convergence of developing and high-income economies. Developing economies require strong growth to support the hard-won gains of the MDG era. Looking ahead, a number of risks remain as geopolitical tensions, the tightening of financial conditions, and lower commodity prices present sources of uncertainty.

Economic growth may not transmit into poverty reduction as easily as in the past. First, with global poverty at 37.1 percent in 1990, many poor people were just below the poverty line, leading to a large percentage point reduction in poverty for a given (distribution-neutral) increase in household income growth. Now that the headline rate is 12.8 percent (latest most reliable estimate for 2012), the same distribution-neutral increase in GDP is unlikely to produce as much poverty reduction since comparatively more people will be situated in the lower end of the income distribution. Second, the deepest pockets of poverty may be less readily reached through growth as many of the remaining poor live in narrowly diversified natural-resource-based economies and fragile and conflict-affected states. Poverty is less responsive to growth in such economies because the availability of jobs—the main channel through which growth uplifts the poor—is more limited. Capital-intensive, natural-resource sectors may generate growth but are likely to have weaker linkages to job creation.

Given the unfinished agenda and the uncertain outlook, additional efforts are needed to promote broad-based growth, investment in people, and insurance against risks. These three priorities require a strategy that promotes competitive economies and stable business environments, thus ensuring broad-based growth and income-earning opportunities to benefit the poor and the B40. Investment in human development is needed to tackle non-income deprivations and inequalities of opportunity so that these same groups can gain the capacity to benefit from and contribute to economic growth and prosperity (Fryer and Levitt 2004; Paxson and Schady 2007). And robust insurance mechanisms are required so that people—although not necessarily jobs, firms, or industries—are protected against evolving risks for individuals, nations, and the world, all in the spirit of nurturing a competitive economy and fostering an inclusive society.

An environment that fosters sustainable growth—the first big priority—is complex. Among economies that have sustained growth for extended periods, five characteristics are key (figure O.3): effective leadership
Five characteristics have been key among countries that sustained rapid growth

- Effective leadership and governance
- Macroeconomic stability so markets work
- Market orientation to guide structural change
- Outward orientation to leverage and discipline
- Future orientation to meet investment needs

Source: GMR team adaptation from Commission on Growth and Development 2008.

sustained growth can bite deep into poverty and contribute to shared prosperity, but for that to happen it must create jobs (Gill and Revenga forthcoming). Growth is most effective in reaching low-income people when it leads to productive employment. Policy makers must be mindful of the impacts of job creation and income growth on the extreme poor and the B40. That will require attention not only to the pace of economic growth but also to its pattern.

To leverage human resources to their fullest potential—the second priority—focused investment is needed in human development. The capacity of households to promote their well-being depends on the assets they control, the returns on these assets, and how intensively the assets can be used. Human capital assets have both intrinsic value (contributing to a person’s well-being) and instrumental value (raising a person’s capability to earn income). The unequal distribution of assets may prevent poorer households from borrowing to accumulate human capital, thus perpetuating poverty and inequality. Policies that reduce inequalities of opportunity are crucial for enabling poorer households to invest in their human potential. As technological change increasingly affects the structure of economies, worker skills must evolve.

Robust insurance mechanisms—the third priority—are needed to protect the extremely poor from destitution and the vulnerable against evolving risks, including climate change. These mechanisms can help families avoid irreversible losses and prevent them from having to make decisions with costly long-run implications. Noncontributory social assistance programs for the chronic or extremely poor protect them from destitution and promote investments in their children’s human capital. Social insurance programs prevent people from falling back into poverty, whether from individual illness, temporary unemployment, or localized droughts. Generally, the poor in developing countries are disproportionately affected by shocks. One reason is that the poor have lower access to resources and savings to absorb the impact of shocks, whether they come from climate change or political, economic, or financial instability. Climate change may have a greater impact on the poor relative to other types of shocks because the poor tend to be more dependent on agriculture and have more perilous access to water. Insurance mechanisms are needed to help countries cope with systemic shocks.

Evolving circumstances demand a new approach—enter the SDGs

Several “megatrends” are playing a critical role in framing what will be feasible through 2030. These include the unprecedented increase in global connectedness, including the cross-border movements of trade, services, capital, and people; the shift of the global economic center of gravity toward the East; the pace of technological change and adoption; the move toward urbanization; the evolution of demographic trends; the general failure of countries to secure long-term environmental sustainability; and the impact of human activity on climate change. Trade, finance, communications, and migration are all expanding rapidly, bringing the world
closer together and increasing economic integration (figure O.4).

These megatrends may help or hinder efforts to reach the development goals. On the positive side, the shift in the global economic center of gravity to developing countries creates opportunities. The deepening of global trade and investment connections could help reverse slipping potential growth in some countries, and technological change is also proving to be a driver of productivity growth. On the other hand, increased connectedness permits the rapid spreading of economic crises in one country to the rest of the world. Urbanization is associated with economic growth, but it can also give rise to urban slums and environmental damage. Lower fertility rates reflect improved health and labor market opportunities for women, yet falling shares of the working-age population can produce headwinds to growth and put the fiscal sustainability of many public services at risk.

Cognizant of these trends, the SDGs represent a greater level of ambition and a more holistic vision of sustainable development. By shifting focus to quality, the SDGs seek to address the unfinished agenda and scale up impact. The SDGs recognize that collective action is needed to address global challenges such as the need for more resilient international financial systems, the sharing of transboundary resources, and, most urgently, slowing and coping with climate change. Meeting the SDG investment needs requires a shift from “billions” in official development assistance to “trillions” in investments to unlock, leverage, and catalyze domestic public resources and private capital flows. The SDGs need to be pursued in a changing world, with new opportunities and challenges brought by evolving global megatrends that shape development prospects. A central challenge in this respect is demographic change.

The SDGs recognize the interconnections between development objectives. There are important interactions between development goals, and they cannot be effectively pursued separately from each other. For example, progress on health goals depends on investments in infrastructure that provides access to safe water and improved sanitation. Similarly, limiting carbon monoxide (CO₂) emissions to slow global warming requires the modernization of energy supplies. Hence, the SDGs explicitly articulate goals that are
“integrated and indivisible and balance the three dimensions of sustainable development: the economic, social, and environmental.” (UN 2015f, 3.) The breadth of the SDGs has raised questions about whether the scale of the agenda will dilute focus, especially when some development exigencies are likely to be more pressing than others at the country level. Still, the SDGs are not simply a menu of development objectives, and policy makers and other stakeholders are called upon to pursue the goals as an integrated whole.

The World Bank Group (WBG) supports the 2030 agenda for sustainable development. In 2013, the WBG established clear goals to guide its own work: to end extreme poverty globally by 2030, promote shared prosperity in every country, and to do so in ways that sustainably secure the future of the planet and its resources, promote social inclusion, and limit the economic burdens that future generations inherit. These goals, conceptually and in practice, are fully aligned with the SDGs: end poverty, promote prosperity, and improve people’s well-being while protecting the environment. The WBG is committed to partnering closely with its client governments and its development partners to further the 2030 agenda. Building on and learning from the experience of the MDGs, the WBG will help to secure financing; help to deliver development solutions at the country, regional, and global levels; and work with partners to help convene, connect, and coordinate.

The International Monetary Fund (IMF) actively participated in the debate on the new global development agenda and it is strongly committed, within the scope of its mandate, to support the SDGs. The IMF will help member countries achieve the SDGs by providing advice on strengthening macroeconomic policies, technical assistance on building capacity, and resources to boost economic resilience against adverse shocks. New IMF initiatives in support of member countries’ development efforts include enhancing support for countries building domestic capacity in tax policy and administration; expanding assistance, through a package of tools, for countries seeking to address large infrastructure gaps without imperiling public debt sustainability; increasing access to IMF concessional resources to provide countries with a wider safety net should they encounter balance of payments pressures; and strengthening the effectiveness of the Fund’s engagement with countries in post-conflict and fragile situations. The IMF is also deepening its focus on aspects of economic, social, and gender inclusion and environmental protection, which are core SDG objectives.

Part II: Development in an era of demographic change

Global demography is at a turning point

The world population is growing more slowly and aging at unprecedented speed. While the global population has tripled since the post-war “baby boom” era (figure O.5a), population growth is now slowing markedly (figure O.5b). After increasing for five decades, the proportion of people ages 15 to 64—the typical working-age population—reached a peak in 2012 and is now starting to fall (figure O.5c). The rise in the share of dependents is driven mainly by an increase in the share of elderly (figure O.5d). These global trends—slower population growth and population aging—have been shaped by a steady decline in fertility rates and a rapid improvement in life expectancy. In the 1950s total fertility rates were more than 5 births per woman, but since then they have steadily declined to 2.45 births per woman in 2015. A further decline is projected through 2050. In parallel, average life expectancy at birth has risen from 47 years in 1950 to 72 years in 2015, while infant mortality has declined. The coming decades are expected to see further improvements in life expectancy, although at a slower pace than in the past.

Global population dynamics are driven mainly by the demographic transition in developing countries. Falling mortality rates and still-high fertility led to a “child bulge” in developing countries in the 1960s and 1970s, while population growth slowed in high-income countries. In most developing
FIGURE O.5 Global demography is at a turning point: Slower growth, unprecedented aging

a. The global population has tripled since the 1950s and is expected to reach over 9 billion by 2050

b. An unprecedented period of global population growth has ended

c. The working-age share of the global population is estimated to have peaked in 2012

d. The aged share of the global population is rising, while the child share is falling

e. Total fertility rates have declined, though less so in Sub-Saharan Africa

f. Half of global population growth between 2015 and 2050 will be in Sub-Saharan Africa

Source: World Bank calculations, based on data from UN 2015.
countries (outside lower-fertility Europe and Central Asia), population growth picked up and age structures shifted, with the share of children rising. Population growth later slowed as fertility fell (figure O.5e). The working-age share rose and populations started to age rapidly, partly thanks to improved life expectancy, especially in East Asia and Pacific. By then, fertility rates had fallen dramatically in many developing regions, in some cases to levels below replacement fertility. Slower global population growth ensued, with populations in several countries now expected to contract. Sub-Saharan Africa is the exception among developing regions, with still high fertility and mortality rates, low life expectancies, and HIV/AIDS slowing progress.

Demographic change has a profound impact on the share of the global population that lives in developing countries. In 1950, 32 percent of the global population lived in high-income countries. Developing East Asia and Pacific—the region with some of the most rapid fertility declines and life expectancy improvements in recent years—accounted for 29 percent of the population, while Sub-Saharan Africa—the region with the most modest improvements—accounted for only 7 percent. By 2015, this distribution had shifted substantially: high-income countries accounted for just 17 percent of the global population and Sub-Saharan Africa for 14 percent; the share of developing East Asia and Pacific remained about the same. Looking further ahead, Sub-Saharan Africa is expected to account for almost a quarter of the global population and half of the world’s population growth during 2015–50 (figure O.5f).

Demographic change may alter the trajectory of global development

As fertility rates decline, countries are presented with the opportunity for two types of “demographic dividend” (Lee and Mason 2006). Child dependency ratios fall both within households and within a population, while the share of the working-age population rises and remains high for a few generations. A first demographic dividend is possible as the growing labor force supports fewer children. As changes in the age structure expand production and resources, a second demographic dividend may arise as savings build up and greater investment is possible in human and physical capital. The bonus provided by the first dividend is transitory, while the second dividend produces lasting benefits in the form of greater productivity growth and enhanced sustainable development. Yet, these outcomes are not automatic—they depend on effective policies. The two demographic dividends thus represent an opportunity—and not a guarantee—of greater prosperity and improved living standards.

A new typology is presented that distinguishes between countries in their ability to capture and harness demographic dividends. Underneath the global and regional averages lies considerable diversity in the direction and pace of demographic change across and even within countries. As a result, a country’s demographic characteristics and trends may in principle have more in common with countries in another continent than with its regional neighbor. Despite the diversity, there is considerable commonality across countries in their ability to capture the first and second demographic dividends. These common factors are captured in a new global typology that ties demographic change to development potential and is based on the latest revision of the United Nations (UN) population statistics of July 2015.

Based on this typology, the world can be divided into four types of countries (figure O.6 and map O.2).

- **Pre-dividend countries** are mostly low-income countries, lagging in key human development indicators and with current fertility levels above four births per woman. They face very rapid population growth. Their high dependency ratios, however, are expected to decline as more and more children reach working age. These countries need to lay the foundations for realizing the first demographic dividend.
• **Early-dividend countries** are mostly lower-middle-income countries further along the fertility transition. Fertility rates have fallen below four births per woman and the working-age share of the population is likely rising considerably. These countries need to focus on capturing the first demographic dividend and laying the foundations for realizing the second demographic dividend.

• **Late-dividend countries** are mostly upper-middle-income countries where fertility rates are typically above replacement levels of 2.1 births per woman, but fertility continues to decline. Even though they have shrinking working-age shares, their overall age structures are still favorable for the first demographic dividend. However, they are experiencing very rapid aging, so reaping the second demographic dividend is crucial.

• **Post-dividend countries** are mostly high-income countries where fertility has
transitioned below replacement levels. These countries continue to see shrinking working-age shares and have some of the highest shares of elderly in the world. While they are past the point of additional benefits from the first demographic dividend, they can still reap the second dividend from rising savings and investments.

The development characteristics among these demographic types vary considerably, particularly among the pre- and early-dividend countries. Development successes are found mostly in countries with falling population growth, rising life expectancy, and declining infant mortality and fertility rates (figure O.7). Unfortunately, fewer than one-fifth of pre-dividend countries and only a quarter of early-dividend countries were able to reduce under-five child mortality rates by three-fourths in 1990–2011. Urbanization, which can play a role in reducing poverty, has been slow in pre-dividend countries and has not necessarily provided improved access to services. In these countries, less than one-fourth of the population lives in urban areas, more than two-thirds of which live in slums. In contrast, early-dividend countries urbanized rapidly, almost doubling the urban share to half over the period, with roughly one-third living in urban slums. Education is another factor. Whereas lower secondary education completion rates are 72 percent for early-dividend countries, they are just half of that in pre-dividend countries. This disparity poses a challenge in the face of continued rapid population growth.

Pre- and early-dividend countries currently account for about 90 percent of global poverty (figure O.8). In pre-dividend countries, almost half the population lives below the poverty line. Although early-dividend countries have a much lower poverty rate, they still account for half of the global poor, largely because this group includes Bangladesh and India. Many pre-dividend countries have managed to reduce poverty headcount rates, but rapid population growth has limited the reduction in the number of the poor. While poverty is dominated by pre- and early-dividend countries, it should not be ignored in late-dividend countries like China, which accounts for a tenth of global poverty.

Late-dividend countries are experiencing demographic change at a much faster pace
than many post-dividend countries, potentially resulting in headwinds to economic growth. In the 1950s, late-dividend countries had double the fertility rates of post-dividend countries, and life expectancies were shorter by nine years. Since then, late-dividend countries have made substantial improvements in these metrics, with extremely rapid improvements in life expectancy. As a result, late-dividend countries will have the same age structure as post-dividend countries by 2050. These trends are likely to present challenges to growth. The ongoing demographic changes are likely to further dampen the growth engine in these economies, particularly in the absence of policy adjustments.

Post-dividend countries’ contributions to global growth have also been slowing, with potential spillovers for other countries. These countries accounted for 42 percent of global GDP growth between 2000 and 2014, and 60 percent of global economic activity in 2014 (figure O.9). Post-dividend economies are also the major export destinations for early- and pre-dividend countries and account for two-thirds of global import demand. If growth in post-dividend countries slows, early- and pre-dividend countries will need to find alternative export markets. Also, as post-dividend economies age, their national savings rate is expected to fall, leading to a possible slowdown in capital flows to the rest of the world.

**Effective policies can leverage demographic change within countries**

Demographic dynamics can support development if governments implement demography-informed policies (table O.2). Countries moving from high to low fertility can benefit from a growing working-age population share. These countries have the potential to realize the first and second demographic dividends, which are beneficial to poverty reduction and shared prosperity as well as to overall growth and development. Half of the world’s population—and most of the world’s poor—live in countries where the working-age population share is rising. Whether a rising working-age share is beneficial depends on the extent to which governments ensure that policies and institutions take advantage of these trends. The other half of the world’s population lives in countries where populations are aging and working-age shares are dwindling. In these countries, policies will need to be adapted to demographic change. Demographically informed policies can cover a wide range of areas, including human, private sector, and financial development, as well as improved governance. To be sure, demographic change is neither universally good nor bad, and presents opportunities as well as challenges everywhere. Policies can make a critical difference in tilting the impact of demographic change in favor of the development goals.

Navigating these dynamics requires sound policies that are tailored to a country’s demographic context. In pre-dividend countries, policies need to spark demographic transition by addressing human development challenges and speeding up the decline in fertility needed to raise the working-age population share and boost economic growth. In early-dividend countries, the priority is to accelerate job creation by investing in human capital and ensuring an enabling environment for private sector development to help realize
the first demographic dividend and lay the groundwork for the second dividend. In late-dividend countries, where fertility rates are low and the working-age population share is high (but shrinking), the key challenge is to sustain productivity growth by mobilizing savings for productive investment, while also preparing for aging. Finally, in post-dividend countries the overriding policy priority is to adapt to aging through efforts to maintain welfare and accommodate changing demands for services while at the same time encouraging a rise in fertility rates toward the replacement level.

Policy action focused on human development may help pre-dividend countries progress to the next stage in the demographic transition. These policies include improving maternal and child health; expanding education, particularly for girls; and empowering women in the household, in the labor force, and in the economy more generally (Bloom and others 2009; Soares and Falcão 2008; World Bank 2015a). Given their potential to reduce total fertility rates and reduce child mortality, these three policy areas can be considered “interactive accelerators” that spark demographic transition, in addition to being important development goals in their own right. Concluding the unfinished MDG agenda related to these policies should be considered one of the priorities for pre-dividend countries.

To maximize demographic dividends, early-dividend countries need to focus on interventions that help absorb new workers into productive jobs. The first demographic dividend arises only to the extent an economy

<table>
<thead>
<tr>
<th>TABLE O.2</th>
<th>Policy priorities that leverage demographic change at the country level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country type</td>
<td>Policy priorities</td>
</tr>
<tr>
<td>Pre-dividend</td>
<td>Sparking demographic transition</td>
</tr>
<tr>
<td>Early-dividend</td>
<td>Accelerating job creation</td>
</tr>
<tr>
<td>Late-dividend</td>
<td>Sustaining productivity growth</td>
</tr>
<tr>
<td>Post-dividend</td>
<td>Adapting to aging</td>
</tr>
</tbody>
</table>

Source: GMR team elaboration.
is able to create productive jobs for the growing working-age population. In addition, early-dividend countries need to lay the foundation for the second demographic dividend. There is a need to accelerate job creation, by ensuring that both the supply side (particularly human capital development) and the demand side (job-intensive economic growth) of job creation are sufficient to absorb the labor force across income levels (Fox and Sohnesen 2012; Lee and Mason 2006; Troiano 2015; World Bank 2013b). These policies would also include the removal of barriers to female labor force participation, given persistent gender gaps in the labor market.

Late-dividend countries face the challenge of sustaining the first demographic dividend into the more durable second demographic dividend. How much of the second dividend these countries can realize will depend on the accumulation of physical and human capital. Capital accumulation is, in turn, affected by policies. For example, late-dividend countries need to implement sound financial sector policies to help mobilize private savings in support of investments. Given projected declines in the share of the population that is of working age, a more capital-intensive development path is often needed to support growth. Policies that encourage the geographic expansion of the financial sector and broaden access to banks and other intermediating institutions may help channel savings to investments in small and medium enterprises, as well as underserved regions.

In post-dividend countries, the challenge is to maintain and improve living standards in the face of shrinking labor supply and rising proportions of the elderly. The decline in the working-age population share could be partly offset by family-friendly measures that facilitate a rebound in fertility rates to near replacement levels. Raising the labor force participation and employment prospects of older people will become increasingly pressing as population aging progresses. A more inclusive labor market requires adequate incentives to sustain human capital investment through the life cycle, more flexible work arrangements, lifelong learning programs, and improved incentives in the social protection systems to continue working in old age (Bussolo, Koettl, and Sinnott 2015).

In addition, adjustments to fiscal and social protection systems will generally be necessary to address the challenges posed by demographic changes in aging countries (particularly those in the late- and post-dividend stages). Given the growing need for spending on the aged, tax increases may not be a viable option, in view of likely price distortions and disincentives. Governments should strive to enhance the efficiency and cost-effectiveness of overall and aging-related spending. Pension reforms need to ensure a minimum level of protection for the vulnerable elderly. Lowering coverage and adequacy of pension systems may raise vulnerability among current and future elderly generations, whose private savings are limited. Pension systems, health care, and long-term care will have to be put on fiscally sustainable paths without neglecting the social safety nets that all those services represent (Bussolo, Koettl, and Sinnott 2015; World Bank 2015b). In particular, population aging will naturally bring about an increase in pension and health expenditure.

Opportunities exist to arbitrage demographic diversity across countries

In pursuing their domestic agendas, countries can also arbitrage and in the process leverage demographic change at the global level through cross-border capital flows, international migration, and global trade. Differences in the demographic dynamics at the country level are producing important spillovers across countries, contributing to changes in comparative advantages underpinning trade, and in the returns earned by labor and capital. These changes require the implementation of policies to support enhanced trade in goods and services as well as greater factor mobility. This would encourage labor-intensive production to shift from aging countries to younger societies or migration from countries with growing working-age populations to countries where the number of workers is falling,
thereby delivering non-tradable services such as elderly care (table O.3). International cooperation—in addition to domestic measures—is needed on trade facilitation, legal migration, and capital flows to ensure smooth adjustment to demographic change.

In coming decades, global trade flows are projected to continue shifting toward countries earlier in their demographic transition, possibly yielding substantial benefits for poorer countries. Differences in demographic change may lead to comparative advantages that influence trade patterns. Countries with slower population growth tend to become more capital-abundant over time, while countries with faster population growth become more labor-abundant (figure O.10). Trade can reduce poverty through faster growth, more economic diversification, and greater macroeconomic stability. It can also facilitate the technology transfers through knowledge embodied in goods and services production, boosting productivity and growth. Knowledge transfers from trade in health and education products and services, for instance, have contributed significantly to development, while medical imports are associated with lower mortality rates.

### TABLE O.3 Policy priorities that leverage the differences in demographic change across countries

<table>
<thead>
<tr>
<th>Area of focus</th>
<th>Policy priorities</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>International trade</td>
<td>Promoting foreign provision of education services to boost educational opportunities in countries with a high share of youths, or to facilitate lifelong learning for aging countries</td>
<td>Ease visa requirements for the free flow of international students and academics; address qualification recognition issues; reduce limits on foreign ownership; and increase transparency of government education regulations</td>
</tr>
<tr>
<td></td>
<td>Using foreign providers to meet demand for health services in aging countries</td>
<td>Address restrictions affecting the physical presence of foreign suppliers, foreign equity ceilings, or barriers on the movement of health care professionals across borders</td>
</tr>
<tr>
<td></td>
<td>Supporting comparative advantage in producing labor-intensive products in labor-abundant countries</td>
<td>Streamline customs, border and transit procedures; improve logistics and transport services and extend physical infrastructure; tackle remaining tariff and nontariff barriers on goods trade</td>
</tr>
<tr>
<td>Migration</td>
<td>Promoting legal migration flows to counteract the decline in working-age populations in aging countries and to mitigate labor market pressures in labor-abundant countries</td>
<td>Formulate clear migration policies; enforce minimum wage laws; provide adequate information to migrants about their rights and obligations; facilitate their contribution to and benefits from social protection schemes and public services; sanction potential abuses by firms.</td>
</tr>
<tr>
<td></td>
<td>Reducing the burden of brain drain in sending countries</td>
<td>Develop comprehensive and targeted policies to retain, attract talent; encourage return migration.</td>
</tr>
<tr>
<td>International finance</td>
<td>Attracting international capital flows to young, labor-abundant countries</td>
<td>Create favorable investment climate; strengthen macroeconomic stability, the financial sector, and governance.</td>
</tr>
<tr>
<td></td>
<td>Addressing challenges posed by large and volatile capital flows to developing countries</td>
<td>Undertake measures to relax investment barriers at the domestic, regional, and global level.</td>
</tr>
<tr>
<td></td>
<td>Supporting opportunities for capital-abundant countries to increase returns and diversify investment portfolios</td>
<td>Introduce macroeconomic policies to address risks from volatile capital inflows, supervision, regulation, strong institutions. Provide investment guarantees or technical assistance.</td>
</tr>
</tbody>
</table>

Source: GMR team elaboration.

### FIGURE O.10 Early-dividend countries are more specialized in labor-intensive exports

![Early-dividend countries are more specialized in labor-intensive exports](image)

Trade policy measures can be powerful tools in enabling countries to adapt to the opportunities and challenges in demographic change. Agricultural trade is still distorted by high tariffs, export subsidies, and domestic support. Although average tariffs on manufactured goods have been declining over the years, substantial tariff and nontariff barriers still affect the free flow of goods between countries (UNCTAD 2013; WTO 2012). Reductions in those barriers, coupled with improving trade facilitation, could encourage firms to relocate production to relatively more labor-abundant countries and allow developing countries to take full advantage of their growing labor forces. In pre- and early-dividend countries, additional trade facilitation measures may add to their comparative advantage in labor-intensive products and help create jobs. Trade can also help meet the demand for health services in aging countries and the demand for education services in young countries. Both health care and education are traded only lightly across borders due to high barriers, so liberalizing trade in those areas could potentially yield substantial benefits.

Migration can help countries’ adjustment to uneven demographic change. Given the generally high level of restrictions on the movement of people across borders, the potential gains from expanding legal and safe migration are large (Borgy and others 2010; Tyers and Shi 2007; Walmsley, Winters, and Ahmed 2011; World Bank 2006). Demographic disparities can amplify those gains. While South–South migration flows have grown rapidly, substantial migration also takes place from younger developing countries to aging high-income countries (figure O.11). International migration flows can mitigate the decline in working-age population shares in aging countries. Younger immigrants can help ease the pressures of aging populations in late- and post-dividend countries, improve the growth prospects, and ensure the sustainability of public finances in destination countries. But the impact of migration on both origin and destination countries depends on the skills of migrants, and socio-political challenges must be managed.

A wide range of policies could potentially foster legal migration, with benefits to both sending and receiving countries. In the past 10 years, many countries revised their migration laws in response to changes in demography, labor market conditions, and political contexts (OECD 2013). Pre-departure orientation and training, protecting the rights and preventing the abuse of migrants, lowering remittance costs, and removing regulatory and bureaucratic barriers to return migration are all actions that can enhance the net development benefits. Migration not only benefits sending countries through remittances but also presents challenges (such as brain drains or “Dutch disease” effects), but these can be actively managed. Tackling the underlying push and pull factors of migration and targeting interventions to retain, attract, or re-attract talent are essential.

Different trajectories of demographic change have important implications for capital flows. Countries early in their demographic transition need to boost investment, and those later in their transition must seek higher returns than may be available domestically. So demography can augment
the impetus for international capital flows. Facilitation of such flows would allow young, labor-abundant countries to attract much-needed capital. In the initial stages of the demographic transition, investment demand exceeds savings, stimulating current account deficits. The opposite tends to be true for countries in later stages of demographic transition. Capital flows could generate an increase in labor productivity and wages, contributing to faster growth in young, labor-abundant countries. For sending countries, increasing investment in young economies can provide opportunities to raise capital returns and diversify investment portfolios, especially if labor-abundant countries create favorable investment climates, ensure macroeconomic stability, deepen their financial sectors, and strengthen governance (World Bank 2013a).

Improving institutional quality and developing the financial sector will attract capital flows to pre- and early-dividend countries. Countries early in their demographic transition can promote foreign direct investment by reducing the economic, political, and legal risks facing investors. Host countries can relax investment barriers, such as caps on foreign ownership and requirements for joint ventures. Home countries can facilitate outflows through investment guarantees and technical assistance. At the global level, reforms are needed to allow countries to take full advantage of international investment agreements, including by reforming investment dispute settlements. Macroeconomic policies need to address risks from volatile capital inflows in tandem with sound financial supervision and regulation. Minimum levels of financial and institutional development are needed to reduce the riskiness of financial liberalization (Sahay and others 2015). International regulatory coordination can bring bilateral and multilateral benefits, including by strengthening and institutionalizing swap lines that provide liquidity for non-key currencies.

*  *  *

Strategies to sustainably end poverty and build shared prosperity need to keep demography in mind as countries pursue broad-based growth, invest in human development, and insure against evolving risks. Each country’s demographic context matters greatly in setting priorities in these three areas, defining the opportunities and challenges for ending poverty and sharing prosperity. The centers of global poverty need to spark the transition to lower fertility and accelerate development by taking advantage of demographic shifts and absorbing youth bulges in the labor market. The engines of global growth need to address headwinds to growth and adapt institutions and policies to aging populations. Because the centers of global poverty continue to face significant poverty reduction challenges and the engines of global growth are weakening, all countries must grasp the opportunities stemming from cross-border capital flows, international migration, and global trade. With such strategies in place, the world stands a better chance of successfully ending extreme poverty by 2030 and lifting the well-being of lower-income people throughout the world.

References


The Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change details the progress toward the global development goals and examines the impact of demographic change on achieving these goals.

Part I examines global development progress, the unfinished development agenda, and the policy opportunities ahead. The report assesses progress toward ending extreme poverty by 2030 and in promoting shared prosperity, and it outlines the measures necessary to scale up impact over the horizon of the Sustainable Development Goals.

The report unveils the new poverty line of $1.90 a day and provides updated estimates for the number of people living in extreme poverty, which shows further declines. In 2015 the global poverty rate is forecast to decline to 9.6 percent of the world’s population, the first time it has reached single digits. At the same time, the report makes the case that the depth of remaining poverty, the unevenness in shared prosperity, and the persistent disparities in non-income dimensions of development call for urgent action.

Part II analyzes how profound demographic shifts could alter the course of global development. Global demography is at a turning point: the world’s population is growing more slowly, while it is aging at an unprecedented rate. Within these broader global trends considerable diversity can be found across regions and countries. While the higher-income countries that drive global growth are rapidly aging, the lower-income countries comprising the centers of global poverty are much earlier in their demographic transition and continue to grapple with high fertility rates and rapid population growth.

Demographic changes bring both opportunity and risk; the report argues for demography-informed policy approaches to tilt demographic change in favor of achieving the development goals. With the right policies, demographic change can become one of the most consequential development opportunities of our time.

The Global Monitoring Report 2015/2016 is written jointly by the World Bank Group and the International Monetary Fund, with substantive inputs from the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank, and the Organisation for Economic Co-operation and Development.