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Department of
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The background of the cover is a solid magenta color. It features several abstract white and light magenta geometric shapes. On the left, there are stylized white outlines of leaves and a circuit-like pattern with dots. In the center and right, there are large, stepped white and light magenta shapes that resemble modern architecture or a staircase. The title text is located in the bottom right corner, within a white stepped shape.

WORLD SOCIAL REPORT 2020
INEQUALITY
IN A RAPIDLY
CHANGING
WORLD

DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS

WORLD SOCIAL REPORT 2020
INEQUALITY IN A RAPIDLY CHANGING WORLD



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS

The Department of Economic and Social Affairs of the United Nations Secretariat is a vital interface between global policies in the economic, social and environmental spheres and national action. The Department works in three main interlinked areas: (i) it compiles, generates and analyses a wide range of economic, social and environmental data and information on which States Members of the United Nations draw to review common problems and to take stock of policy options; (ii) it facilitates the negotiations of Member States in many intergovernmental bodies on joint courses of action to address ongoing or emerging global challenges; and (iii) it advises interested Governments on the ways and means of translating policy frameworks developed in United Nations conferences and summits into programmes at the country level and, through technical assistance, helps build national capacities.

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FOREWORD

The *World Social Report 2020: Inequality in a rapidly changing world* comes as we confront the harsh realities of a deeply unequal global landscape. In North and South alike, mass protests have flared up, fueled by a combination of economic woes, growing inequalities and job insecurity. Income disparities and a lack of opportunities are creating a vicious cycle of inequality, frustration and discontent across generations.

The *World Social Report 2020* documents deep divides within and across countries despite an era of extraordinary economic growth and widespread improvements in living standards. The report also underscores how gender, along with ethnicity, race, place of residence and socioeconomic status, continue to shape the chances people have in life.

In some parts of the world, divides based on identity are becoming more pronounced. Meanwhile, gaps in newer areas, such as access to online and mobile technologies, are emerging. Unless progress accelerates, the core promise of the 2030 Agenda for Sustainable Development – to leave no one behind – will remain a still distant goal by 2030.

The inequality challenge is global, and intimately connected to other pressing issues of our times: not only rapid technological change, but also the climate crisis, urbanization and migration. In many places, the growing tide of inequality could further swell under the force of these megatrends.

The *World Social Report 2020* sends a clear message: the future course of these complex challenges is not irreversible. Technological change, migration, urbanization and even the climate crisis can be harnessed for a more equitable and sustainable world, or they can be left to further divide us.

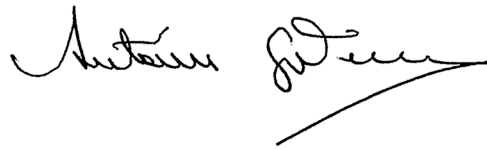
Governments are key players in creating more equitable societies, protecting the most vulnerable from the negative effects of these trends and ensuring that their benefits as well as adaption costs are broadly and equitably shared. But, in our increasingly interconnected world, the decisions of other countries can constrain national policy-making.

International cooperation is more important than ever.

As we enter a Decade of Action to achieve the Sustainable Development Goals, the United Nations system will be at the forefront of the fight against inequality, linking global principles and policy know-how to local action.

The start of the Decade of Action coincides with the seventy-fifth anniversary of the United Nations. To mark this important occasion, we are opening a global conversation on building the future we want. In a world of dramatic global changes, I encourage people to express their views on how enhanced international cooperation can help build a fair globalization.

The *World Social Report 2020* frames the debate on how to curb inequality in these turbulent times. Together, we must challenge the status quo and take action to tackle deep-seated as well as emerging inequalities once and for all.

A handwritten signature in black ink, appearing to read 'António Guterres', with a long, sweeping horizontal line extending from the end of the signature.

António Guterres
Secretary-General
of the United Nations

ACKNOWLEDGEMENTS

The *World Social Report* is the flagship publication on major social development issues of the Department of Economic and Social Affairs (DESA) of the United Nations Secretariat.

The 2020 report was prepared by a team managed by Wenyan Yang in the Division for Inclusive Social Development, under the guidance of Elliott Harris and Daniela Bas.

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The following symbols have been used in tables throughout the Report:

A hyphen (-) between years, for example, 1990-1991, signifies the full period involved, including the beginning and end years.

A full stop (.) is used to indicate decimals.

A dollars sign (\$) indicates United States dollars, unless otherwise stated.

Details and percentages in tables do not necessarily add to totals, because of rounding.

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The following abbreviations have been used:

BEPS	Base erosion and profit shifting
CRED	Centre for Research on the Epidemiology of Disasters
DHS	Demographic and Health Surveys
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
GNI	Gross national income
ICT	Information and communication technologies
IEA	International Energy Agency
ILO	International Labour Organization
IMF	International Monetary Fund
IOM	International Organization for Migration
MICS	Multiple Indicator Cluster Surveys
MPI	Multidimensional Poverty Index
ND-GAIN	Notre Dame Global Adaptation Initiative
OECD	Organization for Economic Cooperation and Development

OPHI	Oxford Poverty & Human Development Initiative
PISA	Programme for International Student Assessment
PPP	Purchasing power parity
SDGs	Sustainable Development Goals
UBI	Universal basic income
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlements Programme
UN-ECLAC	United Nations Economic Commission for Latin America and the Caribbean
UN-ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational Scientific and Cultural Organization
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
UNISDR	United Nations Office for Disaster Risk Reduction
UNU-WIDER	United Nations University World Institute for Development Economics Research
WID	World Inequality Database
WIID	World Income Inequality Database
WHO	World Health Organization
WMO	World Meteorological Organization

For analytical purposes, countries are classified as belonging to either of two categories: more developed or less developed. The *less developed regions* (also referred to as *developing countries* in the Report) include all countries in Africa, Asia (excluding Japan), and Latin America and the Caribbean, as well as Oceania, excluding Australia and New Zealand. The more developed regions (also referred to as *developed countries* in the Report) comprise Europe and Northern America, plus Australia, Japan and New Zealand.

The group of *least developed countries* comprises 47 countries: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen and Zambia. These countries are also included in the less developed regions.

This report uses the following country groupings or sub groupings:

Sub-Saharan Africa, which comprises the following countries: Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mayotte, Mozambique, Namibia, Niger, Nigeria, Réunion, Rwanda, Saint Helena, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Togo, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

Northern Africa, which comprises the following countries and areas: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia, Western Sahara.

Central Asia, which comprises the following countries: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

Eastern Asia, which comprises the following countries and areas: China, Hong Kong Special Administrative Region, China, Macao Special Administrative Region, China, Democratic People's Republic of Korea, Japan, Mongolia, Republic of Korea.

South-Eastern Asia, which comprises the following countries: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Viet Nam.

Southern Asia, which comprises the following countries: Afghanistan, Bangladesh, Bhutan, India, Islamic Republic of Iran, Maldives, Nepal, Pakistan, Sri Lanka.

Western Asia, which comprises the following countries and areas: Armenia, Azerbaijan, Bahrain, Cyprus, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, State of Palestine, Syrian Arab Republic, Turkey, United Arab Emirates, Yemen.

Eastern Europe, which comprises the following countries and areas: Belarus, Bulgaria, Czechia, Hungary, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Ukraine.

Northern Europe, which comprises the following countries and areas: Åland Islands, Channel Islands, Denmark, Estonia, Faeroe Islands, Finland, Guernsey, Iceland, Ireland, Isle of Man, Jersey, Latvia, Lithuania, Norway, Sark, Svalbard and Jan Mayen Islands, Sweden, United Kingdom of Great Britain and Northern Ireland.

Southern Europe, which comprises the following countries and areas: Albania, Andorra, Bosnia and Herzegovina, Croatia, Gibraltar, Greece, Holy See, Italy, Malta, Montenegro, North Macedonia, Portugal, San Marino, Serbia, Slovenia, Spain.

Western Europe, which comprises the following countries and areas: Austria, Belgium, France, Germany, Liechtenstein, Luxembourg, Monaco, Netherlands, Switzerland.

Northern America, which comprises the following countries and areas: Bermuda, Canada, Greenland, Saint Pierre and Miquelon, United States.

Latin America and the Caribbean, which comprises the following countries and areas: Anguilla, Antigua and Barbuda, Argentina, Aruba, Bahamas, Barbados, Belize, Bolivia (Plurinational State of), Bonaire, Sint Eustatius and Saba, Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curaçao, Dominica, Dominican Republic, Ecuador, El Salvador, Falkland Islands (Malvinas), French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Saint Barthélemy, Saint Kitts and Nevis, Saint Lucia, Saint Martin (French part), Saint Vincent and the Grenadines, Sint Maarten (Dutch part), Suriname, Trinidad and Tobago, Turks and Caicos Islands, United States Virgin Islands, Uruguay, Venezuela (Bolivarian Republic of).

Oceania, which comprises the following countries and areas: Australia, American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Micronesia (Federated States of), Nauru, New Caledonia, New Zealand, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna Islands.

The group of *small island developing States* includes 58 countries or territories located in the Caribbean (29), the Pacific (20), and the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS) (9). Further information is available at <http://unohrrls.org/about-sids/>.

For the current 2020 fiscal year, low-income economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of \$1,025 or less in 2018; lower middle-income economies are those with a GNI per capita between \$1,026 and \$3,995; upper middle-income economies are those with a GNI per capita between \$3,996 and \$12,375; high-income economies are those with a GNI per capita of \$12,376 or more:

Low-income economies: Afghanistan, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Liberia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Rwanda, Sierra Leone, Somalia, South Sudan, Syrian Arab Republic, Tajikistan, Togo, Uganda, United Republic of Tanzania, Yemen.

Lower-middle-income economies: Angola, Bangladesh, Bhutan, Bolivia (Plurinational State of), Cabo Verde, Cambodia, Cameroon, Comoros, Congo, Côte d'Ivoire, Djibouti, Egypt, El Salvador, Eswatini, Ghana, Honduras, India, Indonesia, Kenya, Kiribati, Kyrgyzstan, Lao People's Democratic Republic, Lesotho, Mauritania, Micronesia (Federated States of), Mongolia, Morocco, Myanmar, Nicaragua, Nigeria, Pakistan, Papua New Guinea, Philippines, Republic of Moldova, São Tomé and Príncipe, Senegal, Solomon Islands, State of Palestine, Sudan, Timor-Leste, Tunisia, Ukraine, Uzbekistan, Vanuatu, Viet Nam, Zambia, Zimbabwe.

Upper-middle-income economies: Albania, Algeria, American Samoa, Argentina, Armenia, Azerbaijan, Belarus, Belize, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, China, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, Equatorial Guinea, Fiji, Gabon, Georgia, Grenada, Guatemala, Guyana, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kazakhstan, Lebanon, Libya, Malaysia, Maldives, Marshall Islands, Mauritius, Mexico, Montenegro, Namibia, Nauru, North Macedonia, Paraguay, Peru, Romania, Russian Federation, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Serbia, Sri Lanka, South Africa, Suriname, Thailand, Tonga, Turkey, Turkmenistan, Tuvalu, Venezuela (Bolivarian Republic of).

High-income economies: Andorra, Antigua and Barbuda, Aruba, Australia, Austria, Bahamas, Bahrain, Barbados, Belgium, Bermuda, British Virgin Islands, Brunei Darussalam, Canada, Cayman Islands, Channel Islands, Chile, Croatia, Curaçao, Cyprus, Czechia, Denmark, Estonia, Faroe Islands, Finland, France, French Polynesia, Germany, Gibraltar, Greece, Greenland, Guam, Hong Kong, SAR of China, Hungary, Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Kuwait, Latvia, Liechtenstein, Lithuania, Luxembourg, Macao, SAR of China, Malta, Monaco, Netherlands, New Caledonia, New Zealand, Northern Mariana Islands, Norway, Oman, Palau, Panama, Poland, Portugal, Puerto Rico, Qatar, Republic of Korea, San Marino, Saudi Arabia, Seychelles, Singapore, Sint Maarten (Dutch part), Slovakia, Slovenia, Spain, Saint Kitts and Nevis, Sweden, Switzerland, Taiwan, Province of China, Trinidad and Tobago, Turks and Caicos Islands, United Arab Emirates, United Kingdom of Great Britain and Northern Ireland, United States of America, United States Virgin Islands, Uruguay.

Disclaimers for map in Figure 3.1:

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined.

A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).



EXECUTIVE SUMMARY

Fifteen years ago, the *Report on the World Social Situation 2005* warned that growing inequality could jeopardize the achievement of internationally agreed development goals. The report noted that the world was at a crossroads. If the vision of a shared future was to be carried forward, world leaders had to seize every opportunity to take bold and decisive action to reduce inequality (United Nations, 2005).

Inequality has since moved to the forefront of the policy debate. “Leave no one behind” is the rallying cry of the 2030 Agenda for Sustainable Development. Reducing inequality within and among countries is Goal 10 of the Sustainable Development Goals (SDGs) – with good reason. The extraordinary economic growth and widespread improvements in well-being observed over the last several decades have failed to close the deep divides within and across countries.

Powerful economic, social and environmental forces are affecting inequality. The implications of these global forces – or megatrends – are broad and varied. Some can help equalize opportunities, while others are exerting mounting pressure on income inequality, mainly through their effect on labour markets.

This report examines the impact of four such megatrends on inequality: technological innovation, climate change, urbanization and international migration. Technological change can be an engine of economic growth, offering new possibilities in health care, education, communication and productivity. But it can also exacerbate wage inequality and displace workers. The accelerating impacts of climate change are being felt around the world, but the poorest countries and groups are suffering most, especially those trying to eke out a living in rural areas. Urbanization offers unmatched opportunities, yet cities find poverty and wealth in close proximity, making high and growing levels of inequality all the more glaring. International migration allows millions of people to seek new opportunities and can help reduce global disparities, but only if it occurs

under orderly and safe conditions. While these megatrends and the policies aimed at managing them interact with each other in multiple ways, the focus of this report is exclusively on the direct effect of each megatrend on inequality.

Whether these megatrends are harnessed to encourage a more equitable and sustainable world, or allowed to exacerbate disparities and divisions, will largely determine the shape of our common future.

INEQUALITY: WHERE WE STAND TODAY

For the first time within the context of internationally agreed development goals, the 2030 Agenda includes targets to reduce inequality based on income.

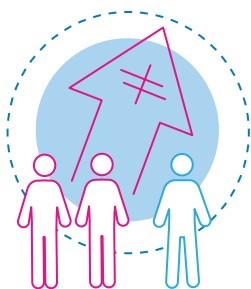
Income inequality has increased in most developed countries and in some middle-income countries, including China and India, since 1990. Countries where inequality has grown are home to more than two thirds (71 per cent) of the world population. Yet growing inequality is not a universal trend. The Gini coefficient of income inequality has declined in most countries of Latin America and the Caribbean and in several African and Asian countries over the last two decades.

Despite progress in some countries, income and wealth are increasingly concentrated at the top. The share of income going to the richest 1 per cent of the global population increased in 46 out of 57 countries and areas with data from 1990 to 2015.¹ Meanwhile, the bottom 40 per cent earned less than 25 per cent of income in all 92 countries with data (United Nations, 2019a).

While economic inequality has grown within many countries, inequality among countries is declining in relative terms. Strong economic growth in China and other emerging economies in Asia has been the main driver of this decline. However, this convergence is not evenly distributed, and the differences among some countries and regions are still considerable. The average income of people living in Northern America is 16 times higher than that of people in sub-Saharan Africa, for example. Meeting the targets and Goals of the 2030 Agenda “for all nations and peoples” requires reducing these stark disparities.

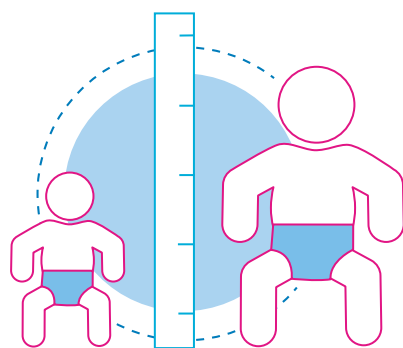
The 2030 Agenda also calls for ensuring equal opportunity and draws attention to attributes and circumstances that affect access to opportunity, namely age, sex,

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Two thirds of the world's population live
in countries where inequality has grown

¹ World Inequality Database. Available at <https://wid.world/data> (accessed on 6 November 2019).



At the rate of progress observed from the 1990s to the 2010s, it will take more than four decades to close the stunting gap between ethnic groups

disability, race, ethnicity, origin, religion and economic or other status. While high and growing income inequality is fuelling polarized political debates around the globe, a consensus has indeed emerged that all should enjoy equal access to opportunity – that one's chances to succeed in life should not be determined by circumstances beyond an individual's control.

Major progress in fulfilling basic needs – through improved child health and increased completion of primary education, for example – has moderated inequalities among some population groups. However, unless progress accelerates, children from those groups that are furthest behind will remain behind by 2030. At the rate of progress observed from the 1990s to the 2010s, it will take more than four decades to close the stunting gap related to ethnicity, for instance.

Evidence suggests that gaps in more advanced accomplishments persist or are widening. For example, disparities in secondary school attendance by ethnic group, wealth quintile and educational level of the household head have increased since the 1990s in developing countries with data.² Gaps in learning outcomes are large and persistent as well.

Such inequalities have historical roots, but often continue even after the conditions that generated them change. Ethnic minorities, for instance, often remain disadvantaged even in countries where special efforts are made to promote their inclusion. Members of groups that suffered from discrimination in the past start off with fewer assets and lower levels of social and human capital than other groups. While prejudice and discrimination are decried around the globe, they remain pervasive obstacles to equal opportunity – and to the achievement of the SDGs.

Highly unequal societies are less effective at reducing poverty than those with low levels of inequality. They also grow more slowly and are less successful at sustaining economic growth. Disparities in health and education make it challenging for people to break out of the cycle of poverty, leading to the transmission of disadvantage from one generation to the next.

² Calculations based on Demographic and Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS) data. For more information, see chapter 1 of this report.

Without appropriate policies and institutions in place, inequalities concentrate political influence among those who are already better off, which tends to preserve or even widen opportunity gaps. Growing political influence among the more fortunate erodes trust in the ability of Governments to address the needs of the majority. This lack of trust, in turn, can destabilize political systems and hinder the functioning of democracy. Today, popular discontent is high even in countries that have fully recovered from the 2008 financial and economic crisis and have benefited from steady growth in recent years.

Yet rising inequality is not inevitable. Inequality levels and trends differ among countries that are at similar levels of development and equally exposed to trade, technological innovation and even the effects of climate change. National policies and institutions do matter.

THE TECHNOLOGICAL REVOLUTION: WINNERS AND LOSERS

The world is in the midst of rapid, revolutionary and often disruptive technological breakthroughs. Advances in biology and genetics, robotics and artificial intelligence, 3D printing and other digital technologies are transforming economies and societies, with unfolding and often unforeseen consequences.

For all its promise, technological change tends to create winners and losers. And its current pace brings new and urgent policy challenges for navigating uncharted territories. Much depends on how these policies play out, especially on the degree to which Governments and international institutions address distributional effects and maximize the benefits and opportunities that new technologies can bring.

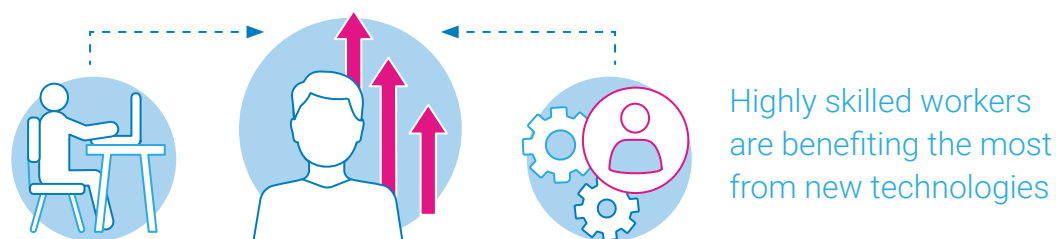
In the world of work, emphasis has focused largely on the potential implications of technological change for job destruction. Yet technologies usually replace specific tasks, rather than entire jobs. Often ignored is the fact that new technologies also generate new jobs and tasks, including those necessary to use, test, supervise and market new products and services.

At present, important differences are found across countries in how jobs are being redesigned and tasks regrouped into new or existing jobs. Whether the automation of tasks inevitably leads to the disappearance of jobs is as much a technological question as it is an institutional one. Regulations and institutions influence the profitability of regrouping tasks into new jobs and the ability of workers to upgrade their skills to take on new responsibilities.

So far, highly skilled workers are benefiting the most from new technologies. Job disruption – and, at times, destruction – is affecting mainly low-skilled and middle-skilled workers in routine manual and cognitive tasks. Moreover, in many countries, the extraordinary gains brought about by new technologies are being

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captured by a small number of dominant companies. If these trends continue, they will lead to even greater polarization of the labour force, with less demand for middle-skilled workers. They will also intensify wage inequality.

Automation has led to a reduction in jobs in routine-intensive occupations and is likely to continue affecting them. However, there is no solid evidence to suggest that recent technological advances have led to massive increases in joblessness or that they will make work obsolete. Where new technologies are pushing wage and income inequality higher, they are doing so mainly through increasing workforce polarization and non-standard working arrangements that often lack the benefits and stability of regular jobs.

Digital innovation and artificial intelligence are opening up opportunities in sectors such as education, health and banking, with far-reaching implications for equality. The use of the Internet and mobile phones, for instance, is enabling more people in developing countries to access financial services. Open online courses can help democratize access to education. Mobile health applications make health-care delivery and monitoring systems available to underserved areas and populations. Improvements in data availability brought about by new technologies can enhance governance and facilitate participation, helping individuals and groups to voice their opinions and organize on behalf of common causes.

The potential of new technologies to foster sustainable development can only be realized, however, if everyone has access to them. Regrettably, new technologies are reinforcing various forms of inequality and creating new “digital divides”. Close to 87 per cent of the population of developed countries have Internet access, compared to 19 per cent in the least developed countries.³ Access to basic technologies such as mobile phones has improved rapidly, but gaps in access to the Internet and computers persist. The potential of new technologies is particularly strong for youth, but it can also widen the divide between younger and older people.

The speed of diffusion is important. Given the comparative advantage that “first movers” enjoy in many sectors linked to new technologies, gaps in access can push poorer countries and disadvantaged groups further behind. Many of the benefits

³ ITU Statistics (International Telecommunication Union). Available at www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx.

from new technologies that developing countries could realize may not materialize if Governments and leading firms, which are often located in developed countries, fail to reduce barriers to the entry and diffusion of such technologies.

The deployment of new technologies can exacerbate inequalities instead of reducing them, even in contexts of broad accessibility. Gaps in education can widen, for instance, if new technologies primarily benefit those pursuing tertiary education, or if they disproportionately improve the learning outcomes of children in wealthier households.

In sum, as in any process of rapid structural change, technological innovation can be disruptive. But its effects are not set in stone. Proactive policies and supportive institutions can help ensure that technological dividends are broadly shared.

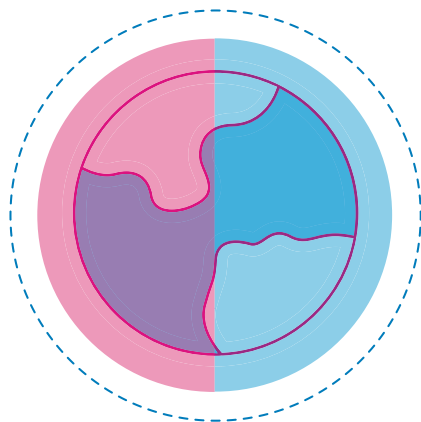
Three key policy interventions are called for. First, invest in skills that enable workers to perform new tasks over a lifetime of changing work environments. Once-and-for-all education at a young age is no longer sufficient. Second, support people through work and life transitions, including through universal access to social protection. Third, strengthen efforts to bridge technological divides within and among countries.

CLIMATE CHANGE: EXACERBATING POVERTY AND INEQUALITY

Climate change is accelerating environmental degradation and increasing the frequency and intensity of extreme weather events, among other impacts. The effects of both gradual environmental degradation and sudden shocks, such as hurricanes and floods, disproportionately affect vulnerable populations. Whether they impinge on infrastructure, livelihoods, resources, health or even the loss of lives and homes, these impacts are by no means uniform across countries or population groups.

Rising temperatures have adversely affected economic growth in countries located in the tropics, which tend to be poorer than countries located in more temperate climate zones. They have made the world's poorest countries poorer. The ratio between the income of the richest and poorest 10 per cent of the global population is 25 per cent

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The ratio between the income of the richest and poorest 10 per cent of the global population is 25 per cent larger than it would be in a world without global warming

larger than it would be in a world without global warming (Diffenbaugh and Burke, 2019). Unaddressed, climate change may even reverse current progress in reducing inequality among countries.

Within countries, people living in poverty and other disadvantaged groups – including indigenous peoples and small landholders – are disproportionately exposed to climate change. A majority of people in these groups live in rural areas and are highly dependent on agricultural, fishing and other ecosystem-related income. Their lives and livelihoods are finely attuned to environmental conditions that are now changing rapidly. People living in poverty are also more affected by infectious and respiratory diseases that climate change will aggravate. Similarly, they are more susceptible to damage from climate change than their richer counterparts living in the same regions. Finally, they have fewer resources to help them cope with and recover from both sudden- and slow-onset effects of climate change.

Climate change is affecting both the prevalence and depth of poverty, thereby contributing to inequality. It is making it harder for people to escape poverty and is increasing their vulnerability to falling into poverty, due to price shocks caused by sudden changes in agricultural production, natural disasters and environmentally triggered health problems. Estimates suggest that even under a low-impact scenario where powerful mitigation and adaption strategies are successful, between 3 million and 16 million people will fall into poverty by 2030 because of climate change. Under a high-impact scenario, those figures could rise to between 35 million and 122 million (Hallegatte and others, 2016).

Climate change is also having an impact on intergenerational inequality. The disruptions caused by climate change are likely to reduce the livelihood opportunities of future generations, especially in countries hardest hit, and exacerbate downward intergenerational mobility.

Climate action and the transition to green economies bring opportunities to reduce poverty and inequality. Economic restructuring brought about by the greening of economies will result in the loss of lower-skilled jobs in carbon-intensive sectors. However, with carefully designed adaptation strategies, it can result in the creation of many new jobs worldwide and overall net gains.

A just, equality-enhancing transition towards green economies calls for the integration of climate action with macroeconomic, labour and social policies aimed at job creation, skills development and adequate support for those who will be harmed. Policies aimed at reducing poverty and inequality, in turn, can help reduce the negative effects of climate change and provide the means for low-income households to engage in environmentally sustainable livelihoods.

URBANIZATION: EXPANDING OPPORTUNITIES BUT DEEPER DIVIDES

Geography matters. Where people are born and live has a lasting influence on their opportunities in life. Access to safe drinking water, electricity, health care, good schools, decent work and other goals envisioned in the 2030 Agenda have a clear spatial dimension. Regional inequalities within countries are often larger than inequalities among countries.

Disparities between rural and urban areas stand out. The rural-urban divide is closing in some countries but widening in others. The gap in levels of stunting among children, for instance, has declined in 35 out of 53 developing countries with data – and has increased in the remaining 18 – since the 1990s. The difference between the percentage of urban and rural residents that have access to electricity has increased in 23 out of 55 countries with data.⁴

For the first time in history, more people now live in urban than in rural areas. Over the next three decades, all population growth is expected to occur in cities which will also draw in rural populations through migration. This transformation has implications for every aspect of sustainable development, including inequalities. Cities are catalysts for economic growth, innovation and employment. However, urban areas are more unequal than rural areas. In most cities and towns, areas characterized by high levels of wealth and modern infrastructure coexist with pockets of severe deprivation, often side by side.

The urban divide has economic, social and spatial dimensions. Economically, the Gini coefficient of income is larger in cities than in rural areas in most developed and developing countries. Socially, rapid urbanization has led to growing concerns about deteriorating health conditions. Even if maternal and child health are generally better in urban than in rural areas, they are at times worse in urban slums and other poor neighbourhoods of cities than in rural areas. Unregulated land and housing markets as well as poor urban planning can concentrate disadvantages in specific locations and lead to a vicious cycle of exclusion and marginalization. Slums are the most visible symptom of exclusion in divided cities. In 2016, one in four urban residents, or over one billion people, lived in slums.

THE CURRENT SPEED OF URBANIZATION IN DEVELOPING COUNTRIES AND ITS EFFECTS ON INEQUALITY MAKES URBAN GOVERNANCE AND ADEQUATE PLANNING INCREASINGLY URGENT



Income inequality is usually larger in cities than in rural areas

⁴ Calculations based on DHS and MICS data. For more information, see chapter 4 of this report.

Yet levels of inequality and poverty vary greatly by city, even within a single country. Although spatial segregation and exclusion, based on income, race, migratory status or other factors, are common to many urban areas, cities are unique, with different histories and patterns. Inequalities have increased in some as they have grown and developed but have declined in others.

In an increasingly urban world, innovative planning and city management are essential to reduce inequality and achieve all other development goals. Too often, Governments merely react to urbanization once imbalances in the process have become blatant. The current speed of urbanization, especially in poor countries, makes urban governance and appropriate urban design and planning increasingly urgent.

Four components are found in successful policy approaches to reduce inequality and promote inclusive cities. First, secure housing and land rights, with a focus on meeting the needs of people living in poverty, and provide equitable public services. Second, improve spatial connectivity and promote public transportation to facilitate equal access to the opportunities and amenities that cities offer. Third, promote access to decent work and formal employment. Fourth, strengthen the political and administrative capacities of local governments to respond quickly to increasingly complex challenges, including those related to climate change.

INTERNATIONAL MIGRATION: A FORCE FOR EQUALITY UNDER THE RIGHT CONDITIONS

International migration is a powerful symbol of global inequality, whether in terms of wages, opportunities or lifestyles. Millions of people move each year across countries and continents to seek better job opportunities, study, marry, reunite with family members or flee conflict or natural disasters.

Migration does not arise only from inequality or failed development: middle-income countries send more migrants abroad than low-income countries. In general, migration takes off once countries have started to grow economically and develop. Industrialization and urbanization have long been associated with massive displacements of people, mostly from rural to urban areas, but also across countries. As countries develop, more people have the economic means to migrate. Improvements in education and access to ideas, information and affordable transportation often increase the desire and opportunities to migrate.

International migration generally benefits most migrants and their countries of origin and destination. Yet its costs and benefits are not shared evenly across countries or within countries.

In countries of origin, benefits accrue through remittances and other transfers by migrant communities abroad. Remittances help to reduce the scale and severity of

poverty in these countries and even contribute to the reduction of inequality among countries. Indeed, more than 75 per cent of officially recorded remittances were received by low- and middle-income countries in 2018 (World Bank, 2019a).

Findings on the impact of remittances within countries are less conclusive. Wealthier and more skilled migrants send remittances less often than less skilled migrants, but the amounts wealthier migrants send are larger. Households at the lower end of the income distribution are disproportionately affected by the high transaction costs of sending money. Countries that restrict the immigration of less-skilled workers reduce the flow of remittances and their potential levelling effect.

The impact of migration on the labour markets of destination countries are at the core of current public debate. Concerns have been voiced over the negative effects of immigration on wages, based on the belief that migrants compete directly with native-born workers. However, less-skilled migrant workers often accept jobs that non-migrants are not willing to perform, including in agriculture, mining, construction and domestic work. Where migrants compete with less-skilled natives, immigration may indeed exert downward pressure on already low wages and push inequality higher. On the other hand, where they offer skills that are in short supply and services that non-migrants are not willing to provide, migrants may contribute to the smooth functioning of the labour market and even have a positive effect on employment.

In developing regions, the emigration of skilled workers is a cause for concern. It can lead to shortages of professionals with key skills, such as teachers, doctors and nurses. It can hamper economic growth and essentially subsidize richer countries with highly trained workers. But positive feedback effects are possible as well. Migrants abroad and those who return can generate flows of knowledge, foreign direct investment and trade. In China, India and the Republic of Korea, for instance, migrants abroad and returnees have been a driving force in the growth of the software industry and other high-tech manufacturing industries. Whether the emigration of skilled workers constitutes a net loss or a net gain – including through the flows of knowledge and investment it generates – depends on the country of origin. However, it is safe to assume that countries of destination may gain, even more than sending countries, from the inflow of skills. Skilled migration may contribute to rising international inequality if high-income countries, typically countries of destination, gain more than low-income countries.

The 2030 Agenda highlights the role that migration can play in reducing inequality. Yet the equalizing effects of migration are far from guaranteed. To a large extent, the degree to which developing countries – and migrants themselves – benefit from migration, and whether migration reduces or exacerbates inequalities, depends on the conditions under which migration takes place.

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Most destination countries in developed regions encourage the admission of highly skilled migrants while offering few avenues for the legal entry of less-skilled or educated migrants. Offering legal pathways for migration to less-educated workers can benefit both developed and developing countries. Moreover, actively promoting their integration and that of their families, through access to health care, education and other services, can benefit society at large. Establishing mechanisms for the formal recognition of educational credentials earned abroad would also help increase migrants' contributions. In order to fill specific job gaps, Governments in destination countries may also consider funding training in countries of origin. Doing so would equip migrants for success in destination countries and prevent shortages of skills in their countries of origin.

The high cost of transferring money prevents people in poverty from fully reaping the benefits of migration. Meeting the SDG target of reducing the transaction costs of migrant remittances to less than 3 per cent of the amount sent and eliminating remittance corridors with costs higher than 5 per cent by 2030 can help workers and their families keep more of their earnings.

PROMOTING EQUALITY AND SOCIAL JUSTICE IN A CHANGING WORLD

The 2030 Agenda recognizes that major challenges are interrelated and require integrated solutions. Without decisive action to manage megatrends in a strategic and coordinated way, the world will see inequalities widen. Conversely, addressing inequalities now will allow us to seize opportunities presented by these transformative changes for the world as a whole and protect disadvantaged groups from falling further behind.

Policymaking through an equality lens

The megatrends examined in this report are having an impact on the reduction of inequalities and on the achievement of all other SDGs. However, their course is not set. It is neither possible nor desirable to hold back technological change, urbanization or migration, but their effects can be managed to encourage more equitable and sustainable societies. Climate change cannot be turned around in the short term and has already exacted significant and possibly irreversible changes. Still, social considerations can be part of adaptation and mitigation policies as countries transition to green economies.

The evidence summarized in this report shows that these megatrends can be managed in ways that ensure their benefits are broadly shared and their negative effects do not fall disproportionately on those who lack the resources to cope and recover. Applying an equality lens to policymaking calls for policies and regulations

that leverage the potential of new technologies to reduce poverty and create jobs while addressing existing technological divides. It requires policies that build the resilience of people living in poverty to climate change. It means addressing the spatial, economic and social divides within cities, making urbanization more inclusive and ensuring that rural areas are not left behind. And it calls for facilitating safe, orderly and regular migration and promoting its positive impacts.

Applying an equality lens also means that Governments should reconsider policies that aggravate the harmful effects of these trends. While technological change may have contributed to workforce polarization and increased wage inequality, for instance, financial and labour market deregulation, declines in income tax progressivity and weakened social protection have also exacerbated these trends in some countries.

Finally, applying an equality lens means redoubling efforts to address the root causes of inequality now.

Reducing inequality within countries: what experience can teach us

Mixed success in reducing inequalities within countries calls for a rethinking of strategies. Clearly, no single set of policies is applicable to all countries and contexts. Instead, this report highlights three building blocks of a coherent and integrated policy strategy to reduce inequality in many of its dimensions.

① Promote equal access to opportunities

Universal access to quality education, in particular, expands opportunities and encourages a more equal distribution of capabilities. However, the educational system has often served to reinforce inequalities rather than help to level the playing field.

Supporting people in realizing their potential also requires the promotion of full employment and decent work. Yet the contrast between looming and transformative changes in the world of work and the preparedness of Governments and the international community to manage them is stark. Governments can address these disconnects by increasing investments in labour market institutions and policies and supporting new forms of collective representation, ensuring that those who work under non-standard employment contracts or outside the formal sector have a voice.

② Institute a macroeconomic policy environment conducive to reducing inequality

Fiscal and monetary policies can encourage greater equity. In addition to their direct impact on income distribution, they can also mobilize resources for social policies, including social protection. The way in which taxes and expenditures are allocated is at the heart of the social contract.

Universal access to effective social protection goes a long way towards reducing poverty and inequality, as substantiated by the evidence presented in this report. Social protection systems that provide unemployment and disability benefits, child benefits, old-age pensions and access to health care offer income security at all stages of the life cycle and minimize the risk of falling into poverty. Despite the value of social protection systems in building a more equitable society, comprehensive coverage was enjoyed by only 29 per cent of the world population in 2017 (ILO, 2017a).

③ Tackle prejudice and discrimination and promote the participation of disadvantaged groups in economic, social and political life

Social and economic policies will have limited impact on inequality if societies continue to discriminate on the basis of ethnicity, race, gender or other characteristics that should have no bearing on achievement or well-being.

Ending prejudice and discrimination is a long-term process. It requires reforming institutions and influencing social norms and behaviours. Constitutional changes, revision of discriminatory laws and policies, and the passage of new laws to prevent discrimination and promote the well-being of excluded groups can lay the groundwork for greater fairness.

However, all of these measures tend to challenge the status quo, and thus are likely to encounter resistance. In most cases, inaction is due not to the lack of sound technical advice or even adequate capacity. Rather, mobilizing support for policy responses that affect the balance of power can be most difficult. Understanding the political constraints to reducing inequality and devising ways to overcome them is key to breaking the current stalemate.

In general, policy frameworks grounded in universalism have enjoyed broader support than those focused narrowly on addressing the symptoms of poverty or disadvantage. While reducing inequalities may require measures targeted at specific groups to meet their special needs, a universal policy framework is necessary to address the root causes of inequality and ensure that policies enjoy sustained popular support.

Reducing inequality in an interconnected world

Governments and other national stakeholders are key players in creating more equitable societies. But large gaps in well-being and opportunities within and among countries are a national as well as a global problem, demanding integrated, multilateral solutions. One country's action on climate change or international migration – or lack thereof – has costs and benefits for other countries. The imbalance between top greenhouse gas-emitting countries and those suffering the most from the impacts of climate change is a well-documented injustice. None of these issues can be addressed unilaterally. Concerted, coordinated and multilateral action is also needed

MOBILIZING
SUPPORT FOR
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to address other challenges that affect inequality within and among countries, namely tax evasion, cross-border financial flows, transnational crime, international trade and intellectual property rights.

At this critical juncture, however, multilateralism is under attack and trust in public institutions is flagging. Although the multilateral system may need adjusting, current global challenges call for strengthening it, rather than dismissing it altogether. Among other things, restoring trust in international problem-solving requires multilateral institutions that give adequate voice to regions and countries with growing influence in the global economy as well as to those groups and communities that are being left behind.

It is increasingly clear that reducing inequalities strengthens not only the social fabric but also the economic and environmental dimensions of sustainable development. However, this awareness has not yet been translated into the necessary normative changes. Instead, growing inequalities and overreliance on the capacity of markets to bring about social justice threaten the social contract in many countries. Beyond the urgent need to accelerate action, realizing the vision of the 2030 Agenda requires a reconsideration of the policy priorities that have perpetuated inequality as well as insecurity.

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INTRODUCTION

The year 2020 marks the twenty-fifth anniversary of the World Summit for Social Development and the fifth anniversary of the adoption of the 2030 Agenda for Sustainable Development. The commitments made by world leaders, and the ideals they represent, are milestones in the international pursuit of greater equity and non-discrimination. They are also a reaffirmation of the vision chartered with the founding of the United Nations 75 years ago. It was a vision based on “faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small”.⁵

Heads of State and Government gathered once again in September 2019 to take stock of how far countries have come in realizing their commitments. The voluntary national reviews presented in advance of the United Nations Summit on the Sustainable Development Goals (SDGs) attest to the wide-ranging actions taken by Governments and other stakeholders in responding to global challenges.⁶ Yet, as the United Nations General Assembly recognized in its declaration of the Summit, inequalities in wealth, income and opportunities are increasing. Governments will need to do more and faster in order to leave no one behind.⁷

While the challenge is clear, there is far less consensus on what is fuelling these trends and on what can be done to address them. Many of the factors driving growing inequalities are specific to countries or regions based on their history, geography, policies and institutions. At the same time, powerful economic, social and environmental forces are also at play. The implications of these global forces – or megatrends – are far-reaching and varied. While some are helping to equalize

⁵ Preamble to the Charter of the United Nations (1945).

⁶ See: Note by the Secretariat: Compilation of main messages for the 2019 voluntary national reviews (E/HLPF/2019/5).

⁷ A/RES/74/4.

opportunities, others are exacerbating income inequality. Some are taking a toll on the poorest countries and groups while others are solidifying the advantages of those already better off.

This report examines the impact of four megatrends on inequality: technological innovation, climate change, urbanization and international migration. Technological change is an engine of economic growth offering new possibilities in health care, education, communications and productivity. Yet it can also raise wage inequality and displace workers. Climate change is affecting all countries, but it is hitting the poorest countries and population groups the hardest, affecting most directly people seeking to eke out a living in rural areas. Urbanization offers unparalleled opportunities for poverty reduction, while rural areas remain disadvantaged in terms of services, jobs and income in both developing and developed countries. Yet urban areas are more unequal than rural areas and inequalities are rising in cities and megacities around the world. International migration allows millions of people to seek new opportunities and can help reduce global disparities, but only if it occurs under safe and orderly conditions.

The 2030 Agenda recognizes that critical challenges facing the world today require integrated solutions. It explicitly states that eradicating poverty in all its forms, combating inequality within and among countries, preserving the planet, creating sustained, inclusive and sustainable economic growth, and fostering social inclusion are interlinked and interdependent. Indeed, without decisive action to manage each of these megatrends in a strategic and coordinated way, the world will see inequalities widen. Conversely, addressing inequality now will help countries seize the opportunities presented by these transformative changes, and protect people living in poverty and other disadvantaged groups against their most negative effects.

The report traces recent inequality trends. It discusses why inequality matters and provides an overview of the impacts of each megatrend. In considering the effects of technological innovation and of urbanization, the focus is on inequality within countries. The report assesses the effects of climate change and of international migration on inequality both among and within countries. These megatrends and the policies aimed at managing them interact with each other in multiple ways. Technological change, for instance, can help combat climate change. Unaddressed, climate change will affect international migration trends. Even though these multiple interactions require policy attention and analysis, the focus of this report is exclusively on the direct effect of each megatrend on the distribution of resources and opportunities.

While these trends are global, how each of them affects specific countries, communities and population groups, immediately and over time, depends on the institutions and policies in place. A key message of the report is that the effects of new technologies, urbanization, international migration and even climate change on the distribution of resources and opportunities are not predetermined. Some countries have managed to protect the most vulnerable from the negative impacts of these trends while ensuring that their benefits are broadly shared. Despite constraints, there is still ample scope for independent national policymaking to help harness these global forces for the good. Policies can and should rectify trends that are neither socially, environmentally or politically sound nor morally acceptable.

At the same time, global challenges call for global solutions. Actions taken by one country affect other countries. Coordination and collective decision-making are needed to manage the global commons and the international movement of people. The evidence presented in this report affirms the critical role of multilateral action to address the driving forces of inequality under the global social contract embodied in the 2030 Agenda.

CHAPTER 1

INEQUALITY: WHERE WE STAND TODAY



CHAPTER 1

INEQUALITY:

WHERE WE STAND

TODAY

KEY MESSAGES

- Inequality within countries is very high but it is not rising everywhere. Since 1990, income inequality has increased in most developed countries. Inequality declined in most Latin American countries from 1990 to the early 2010s but is increasing again in some of them.
- Inequality trends differ across countries at even similar levels of development.
- Income inequality among countries has declined in relative terms but is still higher than inequality within most countries. Absolute income differences between countries continue to grow.
- The world is far from the goal of equal opportunity for all: circumstances beyond an individual's control, such as gender, race, ethnicity, migrant status and, for children, the socioeconomic status of their parents, continue to affect one's chances of succeeding in life.
- Group-based inequalities are declining in some cases but still growing in many others. Unless progress accelerates, leaving no one behind will remain a still distant goal by 2030.
- High or growing inequality not only harms people living in poverty and other disadvantaged groups. It affects the well-being of society at large.
- Highly unequal societies grow more slowly than those with low inequality and are less successful at reducing poverty.
- Without appropriate policies and institutions, inequalities in outcomes create or preserve unequal opportunities and perpetuate social divisions.
- Rising inequality has created discontent, deepened political divides and can lead to violent conflict.

INTRODUCTION

As part of the 2030 Agenda's aim to promote inclusion and leave no one behind, heads of State and Government pledged to reduce inequality within and among countries. The decision to tackle inequality within countries broke new ground. For the first time in the context of internationally agreed development goals, SDG 10 and its targets call for action to reduce income-based inequality within countries.⁸ They also highlight concrete means to progressively achieve greater equality – namely fiscal, wage and social protection policies (target 10.4).

In aspiring to promote the social, economic and political inclusion of all members of society, Goal 10 also draws attention to attributes and circumstances that affect the risk of exclusion and disadvantage, specifically age, sex, disability, race, ethnicity, origin, religion and economic status (target 10.2). Additionally, target 10.3 calls for “ensuring equal opportunity and reducing inequalities in outcome” and points to the role of discriminatory laws, policies and practices in preventing progress.

This chapter provides an overview of inequality trends in various dimensions of well-being and discusses the impact of high and growing inequality. Following the 2030 Agenda's framework, section A describes levels and recent trends in income and wealth inequality. The availability of data and tools to analyse economic inequality has improved rapidly over the last decade. This growing evidence base has helped ensure consideration of income inequality as part of the international development agenda. This section summarizes what is now a broad and burgeoning technical literature on the topic. Considering that each indicator of economic inequality has strengths and limitations, the analysis uses several indicators to assess progress – or lack thereof.

Section B illustrates how access to opportunities and resources continues to depend on group attributes such as ethnicity and race, migrant origin, and socioeconomic and disability status. The focus is on the dynamics of group-based inequality – that is, on whether development is equalizing opportunities among groups or, rather, is leaving some groups behind. Section C discusses why inequality matters, focusing on the effect of high and growing inequality on economic growth, poverty, social mobility and political stability.

A. Economic inequality

People's opportunities in life and the future of their children are largely shaped by their income and wealth. Now five years into implementation, the 2030 Agenda has focused the attention of the international community on the predicament of growing economic inequality. Real and sustained progress in addressing it, however, has eluded most countries.

The evidence presented in this section shows that economic inequality has been on the rise in most high-income countries over the past 30 years but has declined in several low- and middle-income countries. Where inequality has risen, increases have

⁸ Target 10.1 is to progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average by 2030.

been largely due to the rapid rise in top incomes. Even though economic inequality among countries has declined, it is still more pronounced than that observed within countries. Chances in life continue to depend on the country in which a person is born.

Beyond these broad findings, inequality levels and trends vary greatly by country. They are also sensitive to the indicator used to assess progress.

1. Income inequality across countries

In relative terms, income inequality among countries is declining. After a prolonged period of rising international inequality, the relative gap in mean national incomes is shrinking. The Gini coefficient of international inequality, calculated using population-weighted national incomes per capita, fell from close to 63 in 1980 to 53 in 2010 (Milanovic, 2012; United Nations, 2013).⁹ Strong economic growth in Asia has been the main driver of this decline.

INTERNATIONAL
INCOME INEQUALITY
IS DECLINING,
BUT ABSOLUTE
DISPARITIES AMONG
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STILL VERY LARGE

Despite this positive trend, absolute disparities among countries are still very large. The average income of people living in the European Union is 11 times higher than that of people in sub-Saharan Africa; the income of people in Northern America is 16 times higher than that of sub-Saharan Africans.¹⁰ While low-income countries are growing faster than high-income countries, the absolute gap between the mean per capita incomes of high- and low-income countries increased from about \$27,600 in 1990 to over \$42,800 in 2018.¹¹ The distinction between relative and absolute inequality is not merely of academic interest: perceptions that inequality is rising globally often refer to absolute differences. People perceive and experience absolute inequalities in their daily lives, in terms of living conditions and well-being. The aim to see the Goals and targets of the 2030 Agenda met “for all nations and peoples” calls for a reduction of these absolute gaps.

While inequalities between average national incomes are large, considerable disparities are also found among people at the bottom and at the top of the income distribution across and within countries.

Figure 1.1 shows the mean income of selected countries as well as the income levels that separate the richest and poorest 10 per cent of the population from the rest of the population of these countries, around 2015. The mean income of Bulgaria was below the cut-off income of the poorest decile of all other developed countries shown. Denmark’s poorest decile was five times richer than Bulgaria’s and 20 times richer

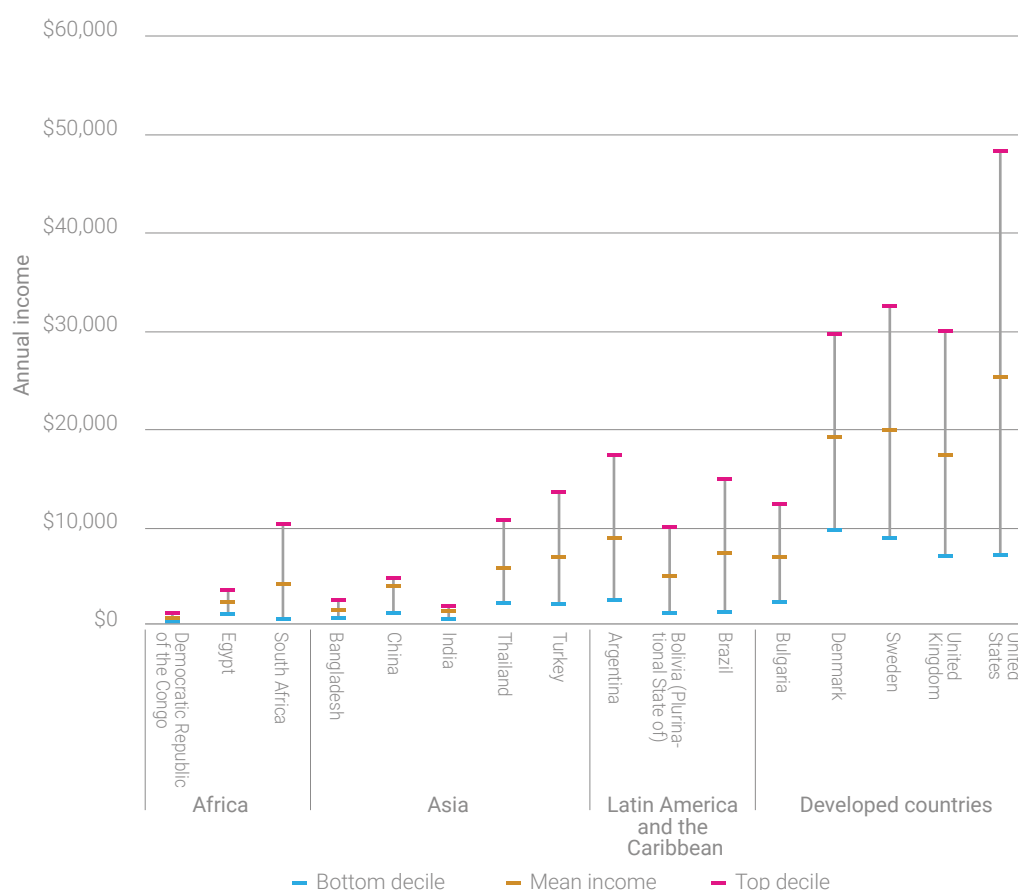
⁹ Trends in income inequality among countries (or international inequality) differ depending on the indicator used, as do trends in inequality within countries. See Annex 1 and box 1.1 for an overview of data and indicators on economic inequality. For a more detailed description of the methods used to estimate international and global income inequality, see United Nations (2013).

¹⁰ Calculations are based on gross national income (GNI) per capita, calculated using purchasing power parity (PPP) exchange rates at constant 2011 international dollars from the World Bank World Development Indicators database, available at: <http://databank.worldbank.org/data/source/world-development-indicators>. Accessed on 19 September 2019. Using non-PPP GNI at constant 2010 US\$, incomes in the European Union are 25 times higher and incomes in the United States are 33 times higher than those in sub-Saharan Africa.

¹¹ High-income countries are those with a GNI per capita of \$12,376 or more in 2018 while low-income countries are those with a GNI per capita of \$1,025 or less, according to World Bank country classifications.

than South Africa's. People at the bottom of the income distribution may be poorer in countries with higher income per capita. For instance, the bottom decile (the poorest 10 per cent) was poorer in the United States than in Sweden, despite higher income per capita in the former. While differences among top earners across countries are also very large, growing evidence shows that household surveys underreport top incomes. That is, inequality within countries as well as differences across countries may be even greater than what is shown in figure 1.1. Box 1.1 discusses the pros and cons of different data sources used to measure income inequality.

FIGURE 1.1
Mean incomes, top and bottom income deciles of selected countries in 2015



Source: World Bank PovcalNet database, unpublished tabulations (based on data from household surveys).

Note: The top and bottom of each bar represent the (annual) income level that separates the richest 10 per cent and the poorest 10 per cent from the rest of the population of each country, respectively; the marker in between represents each country's annual mean income, estimated on the basis of household survey data. All estimates are adjusted for purchasing power parity (PPP). The estimates should be interpreted with caution for two reasons. First, household surveys underreport top incomes. Second, for the African and Asian countries shown, the estimates are based on consumption rather than income data. See Annex 1 for an overview of inequality data and indicators. The countries chosen are only meant to provide an illustrative example of disparities within and across countries. All estimates are for 2015 or later except those of the Democratic Republic of the Congo (2012) and India (2011).

BOX 1.1**Improved data sources to measure income inequality¹²**

The last decade has seen major advances in the availability, quality and comparability of data on income and wealth inequality. As a result, several cross-national databases containing summary inequality statistics are now available.

These databases differ considerably in purpose, data sources and coverage. In terms of sources, assessments of income inequality have traditionally relied on data from household surveys. While surveys are the most comprehensive source of information on income dynamics, they do not capture very high or very low incomes accurately. The wealthy, in particular, are routinely under-sampled and are often reluctant to report all their income. Recently, sources of information other than surveys have been used to help improve the quality of data on income, wealth and consumption at the top of the distribution.

Among available databases, the World Bank's PovcalNet contains the most non-imputed statistics for the largest number of countries (164). Its estimates, based on microdata from household surveys, are used for the international monitoring of SDG target 10.1. Another source – the World Inequality Lab's Database (WID) initiative – relies on data from national accounts, surveys, tax records and wealth rankings in order to track changes at the top of the income and wealth distributions more precisely. In some cases, WID combines data from some or all of these sources based on a series of assumptions.¹³ In other cases, the estimates are based on tax data only. However, the availability of such data remains limited in developing countries. WID estimates are available for 70 countries, of which only three countries are in Africa.

Different indicators shed light on different aspects of income inequality. Considering that each has strengths and limitations, as do the sources used to compute them, the analysis in this report relies on more than one indicator. Estimates of the Gini coefficient are based primarily on PovcalNet as provided through a secondary source – the World Income Inequality Database (WIID), maintained by the United Nations University World Institute for Development Economics Research (UNU-WIDER). These data are complemented by estimates of income shares, where available, from the WID. It is important to bear in mind that these sources and the indicators they provide are obtained using different methodologies.

Estimates of global income inequality go beyond the mean incomes of each country – used in the previous paragraphs to measure international inequality – and account for the distribution of income within countries as well. That is, they consider inequality among all the world's people, across and within borders. Combining data from national household surveys, the World Bank (2016a) found that global inequality as measured by the Gini coefficient changed little between 1988 and 2008 (from 69.7 to 66.9) and then declined faster, reaching 62.5 in 2013.¹⁴ Such levels of inequality are larger than those found within almost any country, as discussed in the next section.

Despite stagnation of the global Gini, important changes have been observed in the income growth and regional composition of bottom, middle and top shares of the income distribution. Namely, income growth has been rapid in the middle and top of the global income distribution, but slow at the bottom and among those in the 80th and 90th percentiles (the global “upper middle class”) (see box 1.2).

¹² See Annex 1 for a more comprehensive overview of data and indicators of economic inequality.

¹³ See the World Inequality Database website (<https://wid.world>) for additional information on the methodology and assumptions used.

¹⁴ These estimates are based on data from household surveys. Growing evidence suggests that very high incomes are underreported in household surveys (World Inequality Lab, 2017; Atkinson and Piketty, eds., 2010). Using national accounts consumption data to correct for such underreporting, Lakner and Milanovic (2016) estimate that the Gini coefficients of global inequality are higher and only declined from 76.3 in 1988 to 75.9 in 2008. Using a different survey dataset and different methods to make datasets comparable across countries, Bourguignon (2015) estimates that the global Gini declined from 70 in 1990 to 64 in 2008 and 62 in 2010.

BOX 1.2**Trends in global income distribution**

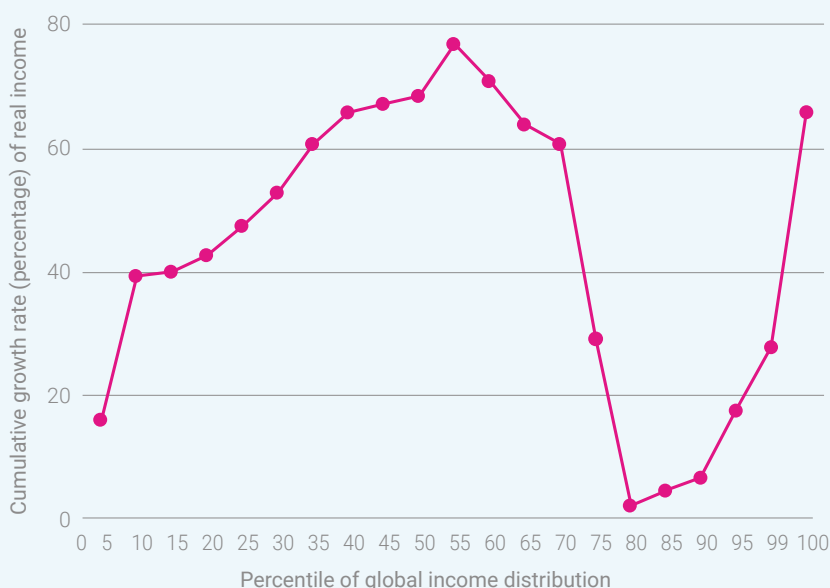
During the last two decades, growth in per capita income has been slow globally among people at the bottom 10 per cent of the income distribution. The number of people living in poverty has declined rapidly, but the average income of the poorest has not increased significantly (Ravallion, 2014). The regional composition of the bottom 10 per cent has shifted dramatically, however. In 1988, about 40 per cent of all people in the bottom 10 per cent lived in China (Lakner and Milanovic, 2016). By 2008, practically all individuals in this group lived in sub-Saharan Africa and India.

Per capita income growth has been very high among the population in the world's 40th to 60th income percentiles. China's growth, which has helped lift a large portion of its population from poverty into the global middle class, explains most of the observed improvements at the centre of the global income distribution. The global top 1 per cent of the income distribution has also fared well. Based on the data available, the top 1 per cent captured 27 per cent of all income growth from 1980 to 2016 (World Inequality Lab, 2017). The share of income earned by the top 1 per cent rose from about 16 per cent in 1980 to more than 22 per cent on the eve of the economic and financial crisis in 2007, before declining slightly (to 20 per cent) in 2016. At the same time, the income share of the bottom 50 per cent remained close to 9 per cent throughout this period. Based on these income-share measures, where available, global inequality has increased in recent decades, mainly because top income earners have gained more than the rest.¹⁵

The situation of the global upper middle class (those in the 80th to 90th percentile of the global distribution) barely improved from 1988 to 2008. Most of the population in developed countries – except high income earners – belong to these percentiles. On the one hand, income growth has stagnated among the non-rich in many of these countries. On the other hand, the country composition of the population in these percentiles has changed. Some people in middle-income countries such as China and the Russian Federation reached the 80th and 90th percentiles of the global income distribution during this period. While China has grown rapidly, the income of the better-off segments of the Chinese population in 2008 was lower than that of most of the population in richer countries in 1988.

Overall, relative changes in the global income distribution by decile from 1988 to 2008 yield what has been termed the “elephant chart” by academia and the press (see figure B.1.1). The “elephant” shape is explained by rapid income growth in the middle and top of the distribution.

FIGURE B.1.1
Global growth incidence curve, 1988 to 2008



Source: Lakner and Milanovic (2016). Data available at: <https://sites.google.com/site/christophlakner/publications>.

Note: The vertical axis displays the growth rate of the fractile average income (in 2005 PPP dollars) weighted by population. Growth incidence evaluated at ventile groups (the bottom 5 per cent); top ventile split into top 1 per cent and 4 per cent between P95 and P99.

¹⁵ Findings from the World Inequality Lab are based on income inequality data for 70 countries. Included among these are only three countries in Africa and three in Latin America.

The World Inequality Lab (2017) presents basic projections of global inequality based on different scenarios.¹⁶ Under a scenario where inequality trends within countries observed since 1980 continue, the income share of the top 1 per cent would rise from 20 per cent in 2016 to 24 per cent in 2050, while the share of the bottom 50 per cent would remain unchanged (ibid., p. 252). That is, global inequality would increase further. The income share of the global top 1 per cent would decline only if growth in within-country inequality slowed down considerably.

In sum, inequality among per capita national incomes has declined in relative terms in recent decades, although it is still very high. Global inequality, which accounts for inequality within and among countries, has remained stable and high, according to some measures, and has increased based on others. Since inequality among countries has declined, inequality within countries makes up a growing share of global inequality. Estimates by Bourguignon (2015) indicate that the contribution of inequality within countries to total global inequality increased from 30 per cent in 1990 to about 40 per cent in 2010. However, there are substantial differences in inequality trends within countries and regions, as the next section shows.

2. Trends in economic inequality within countries

a. Regional trends

Inequality in income distribution has grown in most developed countries and in several middle-income countries over the last three decades, but trends differ markedly among countries, by period and depending on the indicator used.

Between 1990 and 2016, income inequality as measured by the Gini coefficient increased in 49 out of 119 countries for which data are available and declined in 58 of them, as shown in table 1.1. Inequality has grown in the world's most populous countries – China and India – in particular. Overall, countries where inequality has grown are home to more than two thirds (71 per cent) of the world population.

In general, countries and regions that enjoyed relatively low levels of inequality in 1990 have experienced rises in the Gini coefficient, and many countries that still suffer from high inequality have seen the Gini decline. The Nordic countries, Germany and many Eastern European countries, for instance, have experienced an upsurge in income inequality. Some large middle-income countries have also seen the Gini increase since 1990. Most notable among them is China, where the Gini increased in urban areas (from about 23 in 1990 to 37 in 2013) as well as in rural areas (from 30 to 40).¹⁷

COUNTRIES
WHERE INCOME
INEQUALITY HAS
GROWN SINCE
1990 ARE HOME TO
OVER 70 PER CENT
OF THE WORLD
POPULATION

¹⁶ As with any projections, the aim is not to predict the future but simply to extrapolate trends in order to observe the role played by key determinants.

¹⁷ While inequality increased in China over the full period (from 1990 to 2016), the data available show declines starting in the late 2010s, as described in the following paragraphs.

Even though Latin America remains the region with the highest levels of income inequality, together with Africa, the coefficient has declined in 17 out of the 19 Latin American countries with sufficient available data. Included among them is Brazil, which has traditionally endured extremely high levels of inequality (see box 1.3).

Disparities in income declined in several African countries as well, according to the information available, including very unequal countries such as Eswatini and Lesotho. They continued to increase in South Africa during the post-apartheid period until at least the mid-2000s, despite sustained economic growth and the expansion of social

TABLE 1.1

Trends in income distribution by region, 1990 to 2016^a

Number of countries by type of trend in the Gini coefficient

	Africa	Asia	Latin America and the Caribbean	Europe, Northern America, Oceania and Japan	Total	Percentage of countries	Percentage of total population ^c
Rising inequality 1990-2016	13	9	1	26	49	41.2	71.0
1990-1999 ^b	n.a.	7	12	4	23		
2000-2007	n.a.	7	2	13	22		
2008-2016	n.a.	4	1	14	19		
Falling inequality 1990-2016	16	12	17	13	58	48.7	20.8
1990-1999	n.a.	2	4	4	10		
2000-2007	n.a.	8	13	13	34		
2008-2016	n.a.	13	13	14	40		
No trend^d 1990-2016	2	3	1	6	12	10.1	8.2
1990-1999	n.a.	3	2	4	9		
2000-2007	n.a.	0	3	9	12		
2008-2016	n.a.	0	4	14	18		
Total	31	24	19	45	119		

Sources: Calculations based on data from UNU-WIDER's World Income Inequality Database, version 4, released in December 2018. Available online at: www.wider.unu.edu/database/world-income-inequality-database-wiid4. Accessed between January and March 2019.

Notes:

a. Or latest year available, if 2008 or later.

b. Includes countries where inequality has remained relatively constant as well as countries where inequality has fluctuated, but where there is no clear upward or downward trend during the period.

c. Percentage of the total population of the 119 countries with data. These 119 countries accounted for 91 per cent of the world's population in 2016.

d. The number of countries with detailed information for each of the subperiods (1990-1999, 2000-2007, 2008-2016) is below the total number of countries with enough information to assess trends over the full period (1990-2016).

BOX 1.3**Brazil: the decline of income inequality and the uncertain road ahead**

Starting in the mid-1990s, Brazil experienced two decades of unprecedented reductions in income inequality: its Gini coefficient fell from 60 in 1995 to 53 in 2015.¹⁸ This reduction is explained mainly by declining disparities in labour earnings. Rising levels of education, increases in minimum salaries, a drive towards transitioning workers from informal to formal employment, together with solid economic growth and falling dependency ratios due to declining fertility, pushed down wage disparities (Neri, 2018; Paiva, 2016). Beyond these factors, social policies played an important role during this period, with fiscal redistribution estimated to account for up to half of the decline in net income inequality (Ferreira, Firpo and Messina, 2014). Included among the social protection programmes implemented in Brazil are:

- Previdência Social Rural, introduced in 1992, provides older rural residents who have worked in mining, agriculture and fishing with a monthly pension equivalent to the minimum wage. As a scheme designed to cover those with a low capacity or inability to participate in contributory pensions, these transfers contributed considerably to a reduction in poverty. In 2008, the number of rural Brazilians living in extreme poverty was estimated at 4 million people lower than it would have been without such transfers (Barrientos, Debowicz and Woolard, 2014). Children living in the same household as those receiving pensions also benefited from the scheme.
- Rolled out in 1996, Benefício de Prestação Continuada targets older persons and persons with disabilities living in households earning a per capita income of not more than a quarter of the minimum wage. Beneficiaries, who numbered 3.7 million in 2010, receive monthly payments equivalent to the minimum wage. As with Previdência Social Rural, some share them with household members, and co-residence was also found to be linked to a reduction of child labour (ibid.).¹⁹
- Through the conditional cash transfer programme Bolsa Familia, launched in 2003, recipient households are required to ensure children's school attendance, complete a full immunization schedule, and participate in prenatal monitoring for pregnant mothers and development monitoring for children. The scheme reached 14 million households in 2013 (ibid.).

Collectively, these programmes have managed to bolster the incomes of millions of Brazilians while costing less than 3 per cent of gross domestic product (GDP) per year (ibid.). Despite this impact, inequality remains high, and there is scope to expand social protection. Changing economic and political circumstances in recent years, however, put future prospects for inequality reduction in Brazil into question.

After robust growth over the previous two decades, Brazil suffered a strong recession from mid-2014 until the end of 2016. The Government subsequently put in place austerity measures, including a freezing of federal government spending. The information available indicates that the Gini coefficient stopped declining in 2013.²⁰ Poverty has also been on the rise.

Following general elections in 2018, the future of social protection and other social policies in Brazil is uncertain. Of the three programmes described above, entitlement to Benefício de Prestação Continuada is established in the Constitution, and President Jair Bolsonaro announced plans to enhance Bolsa Familia during his election campaign. Given sustained pressure to cut public spending and reduce the fiscal deficit, however, the new administration has proposed a reform of the welfare system, which will decrease overall spending on social programmes (Loyens, 2019). It remains to be seen what the impact of such policy changes will be for the population and for inequality in that country.

¹⁸ World Bank World Development Indicators database, available at: <http://databank.worldbank.org/data/source/world-development-indicators>. Last accessed on 31 October 2019.

¹⁹ The two social pensions have been further augmented by minimum wage raises throughout the two decades, which have consistently kept the minimum age ahead of inflation (Paiva, 2016).

²⁰ The Gini coefficient increased from 51.3 in 2013 to 53.0 in 2015, according to estimates from the Socio-economic Database for Latin America and the Caribbean (SED-LAC), as reported in UNU-WIDER's World Income Inequality Database (WIID) version 4. SED-LAC, prepared by the Centre for Distributive, Labour and Social Studies (CEDLAS) in collaboration with the World Bank, is available from www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/sedlac/estadisticas/.

protection, particularly social assistance programmes. In 2015, South Africa had the world's highest Gini coefficient, at 63.²¹ Persistently high unemployment, strong polarization of the labour force and high wage gaps are the main reasons for the country's very high income inequality (World Bank, 2018a; Hundenborn, Liebbrandt and Woolard, 2018).

Rather than moving continuously in one direction, inequality in all regions has gone through periods of expansion and decline, when measured by the Gini coefficient. In most countries of Latin America and the Caribbean, income inequality rose during the 1990s – a decade of strong economic instability and widening wage disparities – but has declined since 2000. Starting in 2010, inequality stopped declining or has even increased in Argentina (since 2014), in Brazil (since 2013) and in Mexico (since 2010). Inequality rose in China in the 1990s and early 2000s but has fallen since 2008, as policies aimed at addressing poverty and inequality have started to take effect and regional inequalities have subsided (Jain-Chandra and others, 2018). On average, the Gini coefficient has also levelled off in developed countries since 2008, after rising in the decades prior. These declines have been small – of less than one point in most of the countries that have benefited from them.

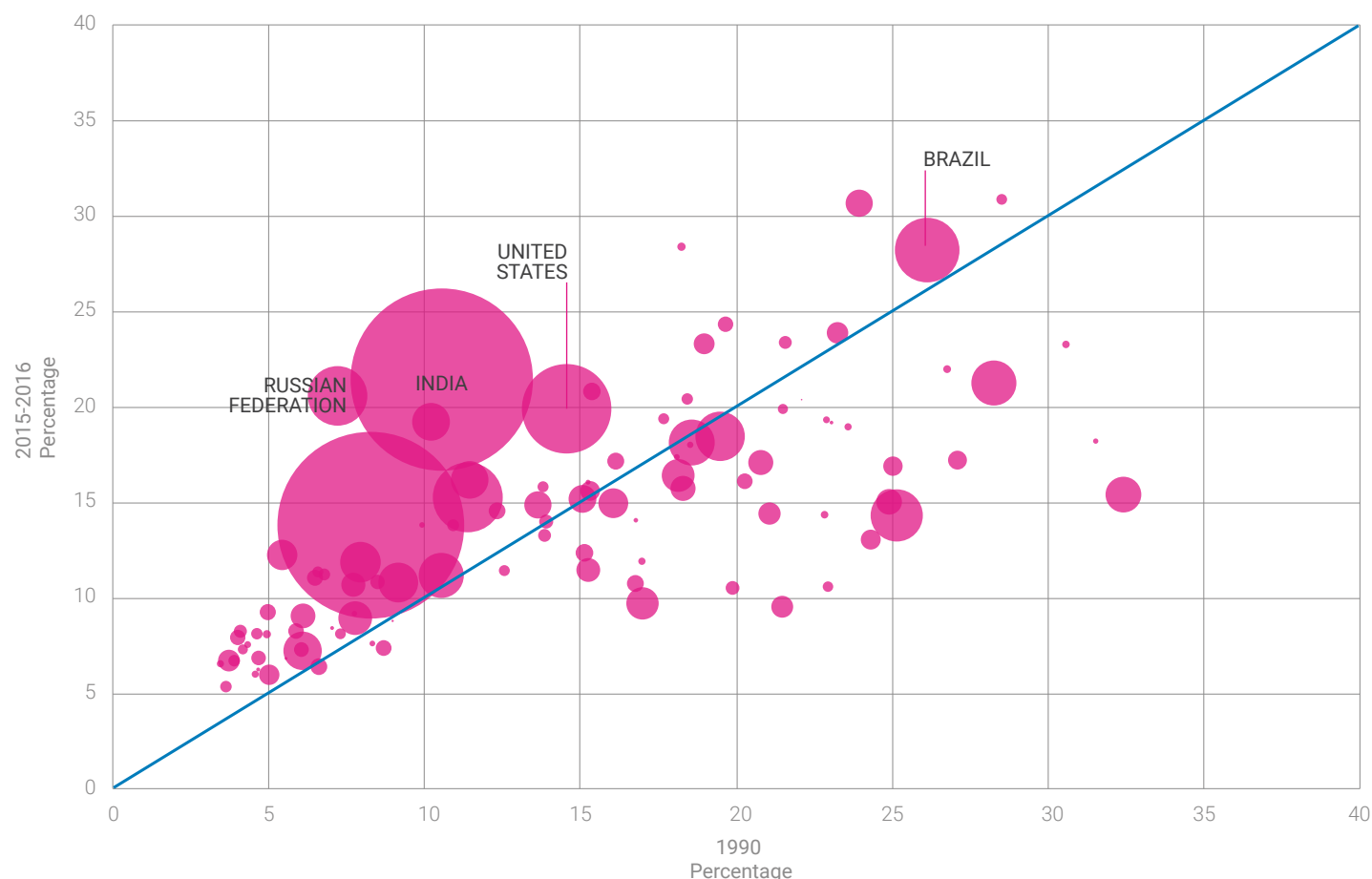
The Gini coefficient does not provide information on whether rising or falling inequality is caused by changes at the bottom, middle or top of the income distribution. Additional indicators show that income is increasingly concentrated at the top of the income ladder, including in some countries that have seen the Gini coefficient decline. The share of income earned by the richest 1 per cent of the population increased in 59 out of 100 countries or areas with data from 1990 to 2015 (see figure 1.2). In 2015, the top 1 per cent earned more than 20 per cent of all income in 18 countries with data, including Brazil, Chile, India, the Russian Federation, Thailand, Turkey, the United Arab Emirates and the United States. While Brazil has seen the Gini coefficient decline rapidly, the income share of the top 1 per cent before taxes and transfers increased – from 26.2 per cent in 2001 to 28.3 per cent in 2015.²²

At the other end of the income distribution, the relative situation of those at the bottom has improved in many, but not all, countries. Between 2011 and 2016 alone, the incomes of the poorest 40 per cent of the population grew faster than those of the total population in 50 out of 92 countries with data. In other words, 50 countries made progress towards target 10.1 of the SDGs (United Nations, 2019a). The remaining 42 countries saw the bottom 40 per cent fall further behind the average. For example, average incomes grew faster in the United States than in France in 2011-2016. However, the incomes of the bottom 40 per cent grew more slowly than average in

INEQUALITY
HAS STOPPED
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IN MAJOR LATIN
AMERICAN
COUNTRIES IN
RECENT YEARS

²¹ Gini coefficient of consumption expenditure from PovcalNet (<https://databank.worldbank.org/data/source/world-development-indicators>) based on data from the Living Conditions Survey 2014/2015. Hundenborn, Liebbrandt and Woolard (2018) estimate the Gini coefficient of disposable income – income after taxes and transfers – at 66 in 2014. In contrast, the Gini ranged from 25 to 30 in most Northern and Western European countries. For an overview of data and indicators on income inequality, see Annex 1. Section 1.B discusses the role that inter-racial and intra-racial inequalities have played in explaining these trends.

²² It is important to note that fiscal policy became increasingly redistributive in Brazil starting in the 1990s, as described in box 1.3. It is possible that estimates based on disposable income do not show the same increase.

FIGURE 1.2Share of income earned by the top 1 per cent, 1990 and 2015^a

Source: World Inequality Database. Available from: <https://wid.world/data/>.

Notes: Estimates based on pre-tax national income, which is the sum of personal income flows from labour and capital before taxes and all transfers except pensions.

a. Or earliest/latest year available. The estimates cover only part of the full period in Argentina (1997-2004), Brazil (2001-2015), Colombia (1993-2010), Japan (1990-2010), Republic of Korea (1995-2015), Malaysia (1993-2012) and Thailand (2001-2015).

the United States but faster than average in France.²³ Based on this indicator, France made progress towards reducing inequality and leaving no one behind while the United States did not.²⁴

After the onset of the 2008 economic and financial crisis, the income shares of the top 1 per cent and the top 10 per cent fell in most high-income countries (World Inequality Lab, 2017). Wealth-income ratios fell in all of them. At the same time, the

²³ Income growth rates (national averages and those of the bottom 40 per cent) from the World Bank World Development Indicators database, available at: <http://databank.worldbank.org/data/source/world-development-indicators>. Accessed on 18 January 2019.

²⁴ Fukuda-Parr and Smaavik Hegstad (2018) question the adequacy of target 10.1 to measure the distribution of income. In its report, *Poverty and Shared Prosperity 2016: Taking on Inequality*, the World Bank notes that the indicator “possesses an inequality dimension even though it is not an inequality indicator” (World Bank, 2016a, p. 26). Specifically, the indicator does not track changes at the apex of the income distribution. The indicator will show progress if the incomes of both bottom and top earners grow while incomes of the middle of the income distribution shrink, for instance. Complementary metrics are necessary to assess inequality trends.

income share earned by the bottom 10 per cent of the distribution has experienced a sustained decline in over one third of developed countries with data since 2009.²⁵ Included among them are countries that suffered the greatest labour-income losses during the crisis – Greece, Ireland and Spain.

It is too soon to assert whether the levelling of inequality observed in some countries is a temporary change or the start of a long-term trend. It is possible that some countries have reached their “inequality possibility frontier” – the maximum levels of inequality that are socially possible or acceptable (Milanovic, Lindert and Williamson, 2007). However, recent trends in labour income and wealth inequality suggest that economic inequality may continue growing in the years to come.

b. Labour and capital

The distribution of household wealth – which comprises ownership of capital, including physical assets (housing, land) and financial assets, excluding debts – is typically more unequal than the distribution of income. The following findings have been widely publicized: while the bottom half of the global population owned less than 1 per cent of all wealth in 2018, the richest decile (top 10 per cent) owned 85 per cent of all wealth and the top 1 per cent alone held almost half of it (Shorrocks, Davies and Lluberas, 2018). The existing evidence also suggests that, where income inequality has grown, wealth inequality has grown even faster since at least 2008 (Davies and Shorrocks, 2018). While these estimates suggest extreme wealth inequality, they should be interpreted with caution, as measuring levels of wealth is particularly challenging.²⁶

In addition, the distribution of income between capital and labour has undergone major changes. The share of wages in total GDP declined in a majority of countries (91 out of 133 with data) from 1995 to 2014 (ILO, 2016). Improvements in labour productivity have not translated into better labour compensation. Wage stagnation is likely to disproportionately harm workers in the middle and at the bottom of the income distribution, since they rely mostly on labour income.

The forces pushing the labour-income share downwards are unlikely to disappear, as the discussion in chapter 2 suggests. Piketty (2013) argues that the growing capital share of income is likely to endure – mainly because economic growth will slow down and the rate of return to capital will exceed overall growth – unless Governments make a concerted effort to increase wages and tax wealth effectively.

²⁵ The income share held by the lowest 10 per cent of the income distribution has declined in 10 of 26 countries with sufficient data, based on the World Bank World Development Indicators database, available at: <http://databank.worldbank.org/data/source/world-development-indicators>. Accessed on 23 January 2019.

²⁶ Although estimates by Shorrocks, Davies and Llubera (2018) are the most recent and comprehensive to date, estimates of wealth inequality are less often available and less comparable than estimates of income inequality. The data sources available make it impossible to properly estimate the level and evolution of the global distribution of wealth (World Inequality Lab, 2017). The diverse sources of data needed to estimate all the components of household wealth, along with underreporting, affect data quality and their comparability. Wealth is particularly challenging to estimate in poor countries and for people that have negative wealth (debt and mortgages, for example). Therefore, assertions such as Oxfam's – that, in 2018, the 26 wealthiest people worldwide had the same wealth as the bottom half of the world's population, which is about 3.8 billion people (Oxfam, 2019) – should be interpreted with caution.

THE SHARE OF
WAGES IN TOTAL
INCOME HAS
DECLINED AND
THE WAGE GAP
BETWEEN TOP AND
BOTTOM EARNERS
HAS GROWN
IN A MAJORITY
OF COUNTRIES

In addition to general declines in worker compensation, the wage gap between top and bottom earners has increased considerably in most developed countries and in several developing countries with data (ILO, 2016; OECD, 2015a). On the one hand, the incidence of non-standard forms of employment – temporary and part-time jobs, own-account work and informal employment – has increased. Workers under non-standard contracts earn less than workers under standard contracts; they also bear the brunt of employment losses during recessions and are not afforded the same protection as other employees. Workers have also become more vulnerable due to a decline in the share of waged workers in the traditional “middle” of the workforce – that is, workers with middle-level skills that usually perform routine jobs, ranging from administrative jobs to sales-related occupations, as discussed in chapter 2.

On the other hand, top salaries have risen dramatically. A sizable proportion of the observed gains in top income shares are due to increases in top wages (Atkinson, Piketty and Saez, 2011).²⁷ The rise in pay of top executives has attracted considerable attention in the past decade in developed countries, particularly in the United States. In 2016, compensation of chief executive officers – including salary and bonuses – of the top 350 companies in the United States was 224 times higher than the average employee’s pay (Economic Policy Institute, 2018).

The recent experience of many developing countries shows that rising wage disparities are not inevitable. Declining income inequality in Latin America, for instance, is due mainly to the reduction of wage gaps that were made possible by the spread of secondary education, a drive towards reducing informal employment, higher minimum salaries, a decline in returns to labour market experience and increases in social spending. These and other policy options are discussed in chapter 4.

c. The impact of policy

Growing inequality is often assumed to be an inevitable cost of the development process. Decades ago, Kuznets (1955) posited that inequality is low at the initial stages of development, when societies are mostly agricultural, and as industry develops, countries urbanize and economies grow faster, and inequalities increase. As countries develop further, increased wealth should enable the introduction of broad-based education and social protection. The growing political power of the urban lower-income groups would lead to protective and supporting legislation, much of it aimed at counteracting the worst effects of rapid industrialization and urbanization. As a result, inequality would follow the shape of an inverted “U” curve as societies develop.

²⁷ In the United States, about 60 per cent of the income of the top 1 per cent came from labour in 2010 (Solow, 2017).

Regional and time trends in economic inequality suggest no clear relationship between inequality and development. Levels of inequality vary considerably even among countries with similar levels of per capita income (United Nations, 2013). Trends within individual countries have also been different from those that Kuznets predicted. Income inequality has increased in many countries and has declined in some others as countries have developed and grown over the last 30 years. In addition, many developed countries have seen inequalities rise.

Global economic, social and environmental forces are certainly affecting the evolution of inequality within countries, as the next chapters will show. But national income dynamics are also shaped by national policies and institutions. Education, health care and labour market policies, for instance, affect the distribution of human capital, skills and wages, and thereby the distribution of market (gross) income. Disparities in disposable (net) income depend on the distribution of market income but are also explained by the redistributive impact of social transfers and taxes.

The magnitude of the impact of taxes and transfers depends on how progressive the tax system is (direct income and property taxes are usually progressive while indirect taxes, such as sales taxes, are regressive), and on the degree to which people living in poverty benefit from social protection transfers and public services. The negative effects of indirect taxes on the incomes of people living in poverty can be stronger than the positive effects of public transfers and services (Lustig, 2017).

Taxes and transfers are much larger in developed than in developing countries, even though the magnitude of their impact differs considerably by country. In Belgium, Denmark, Finland, Ireland and Slovenia, taxes and transfers reduce inequality – as measured by the Gini coefficient – by more than 35 per cent (Causa and Hermansen, 2017).²⁸ In contrast, fiscal policy reduces inequality by less than 20 per cent in Japan and Switzerland (ibid.). Reductions in inequality are even smaller in developing countries with data (United Nations, 2018a). The level of redistribution varies even among countries at similar levels of inequality: while the Gini coefficient of market income stood at 38 in both Japan and Norway in 2014, the Gini of disposable income was around 26 in Norway compared to 32 in Japan (Causa and Hermansen, 2017).

Over the last two decades, however, the redistributive effect of transfers and taxes has failed to correct the trend towards rising income and wealth inequality in developed countries. On average, the effect of fiscal policy on inequality declined from 32 per cent in 1995 to 27 per cent in 2007 in member countries of the Organisation for Economic Co-operation and Development (OECD) with data (Causa and Hermansen, 2017). Declines in progressive taxation are apparent beyond developed countries.

REGIONAL AND TIME TRENDS IN ECONOMIC INEQUALITY SUGGEST NO CLEAR RELATIONSHIP BETWEEN INEQUALITY AND DEVELOPMENT

²⁸ The studies cited use the difference between the Gini values of market and disposable incomes (proxies of income before and after taxes and transfers, respectively) as a measure of the overall redistributive impact of taxes and transfers.

OVER THE LAST
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COUNTRIES

Using a complete set of national income tax data for 189 countries, Sabirianova, Buttrick and Duncan (2009) found that top income tax rates declined, on average, from 1981 to 2005, making tax systems less progressive. While the 2008 economic and financial crisis temporarily led to increased redistribution in developed countries, reflecting fiscal discretionary measures, the effect of taxes and transfers declined again after 2009 (Causa and Hermansen, 2017).

To be clear, inequality in disposable incomes has increased mainly because inequality in market incomes – before taxes and transfers – rose in the first place. But, with important exceptions, policies have not become increasingly redistributive (Immervoll and Richardson, 2011; Causa and Hermansen, 2017).

These trends have prompted debate about the role that global economic integration and other transformations – from technological innovation (discussed in chapter 2) to changes in policy (discussed in chapter 4) – may have played in driving inequality trends. Bourguignon (2015) highlights the role played by the expansion of trade in developing countries and by capital mobility, together with technological innovation, to explain the decline in inequality among countries – and its increase within countries. Other authors question the pre-eminence of globalization as the main driver of global inequality, noting that inequality trends differ across countries at similar levels of development and that are equally exposed to trade (Ravallion, 2018; Corlett, 2016). Ravallion (2018) stresses the vital role that national policies and institutions continue to play in defining inequality levels and trends.

In sum, the assumption that economic inequality should decline as societies develop and should remain low in developed countries has not held up in practice. Evidence shows that the reduction of inequality is not a systematic outcome of economic growth and development.

B. Inequality of opportunity

While high and growing inequality are fuelling polarizing political debates around the globe, a consensus has emerged that all should enjoy equal access to opportunity – that one's chances to succeed in life should not be determined by circumstances beyond an individual's control. However, the world is far from giving all people and groups the same opportunity to live a healthy and prosperous life. This is critical in the case of young children, who bear little responsibility for the opportunities afforded to them, but whose early life experiences have a major influence on their health, well-being and even productivity throughout their lifetimes. The 2030 Agenda draws attention to the fact that inequalities based on age, sex, disability, race, ethnicity, origin, religion, and economic and other status are common in developed and developing countries alike.

BOX 1.4**Group-based disadvantages: measuring inequality of opportunity**

In the 2030 Agenda, Governments envisage “a world of equal opportunity permitting the full realization of human potential and contributing to shared prosperity” (A/RES/70/1, para. 8). A growing literature has attempted to quantify the broad concept of equality of opportunity for policy purposes. The basic proposition of this literature is that inequality results from two sets of factors: those that are in some way assumed to be under an individual's control, such as effort or personal responsibility, and those that are not. A person's circumstances, such as place of birth, parental socioeconomic status and other attributes highlighted in the 2030 Agenda, including gender, ethnicity and race, and disability status, are beyond one's control. These and other circumstances affect access to education, health, income and other resources as well as participation in social and political life. Inequalities based on circumstances – also referred to as group-based inequality or horizontal inequality – are therefore used to measure inequality of opportunity.

Most attempts at measuring inequality of opportunity use a decomposable measure of inequality (often the dissimilarity index or Theil-L index) to quantify the extent of inequality that can be explained by measurable circumstances and the extent that cannot (see, for instance, Ferreira and Gignoux, 2011; UN-ESCAP, 2018). Inequality that is not explained by measurable circumstances is attributed to differences in effort and/or skill.

The literature on inequality of opportunity is not without its shortcomings. Conceptually, the distinction between circumstances and effort or skill is not clear-cut. Kanbur and Wagstaff (2014) note that, in early childhood, it is the effort of the parent, not the child, that shapes outcomes. A young child's effort does not determine whether she is enrolled in school or not, for instance.

In terms of measurement, the extent of inequality of opportunity reported depends on the data available to assess the effect of a person's circumstances. Analytical studies often take into consideration a person's gender, age, race or ethnicity, place of birth and parental education, occupation and income. Arguably, there are other factors beyond an individual's control that affect the outcomes of her or his efforts. As data improve, country-specific studies are taking into account additional characteristics (see, for instance, Hufe and others, 2017). Estimates from cross-country studies, however, are particularly limited by lack of data comparability and availability.

While a comprehensive assessment of all relevant circumstances is not yet feasible, most of the empirical literature on inequality of opportunity qualifies inequality that is not explained by measurable traits as “fair” or legitimate.²⁹ Thus, the measurement shortcomings of this approach have policy implications. Specifically, the extent of inequality assumed to be fair, legitimate or due to personal choices depends on the amount and quality of data available. The more information is used, the stronger the estimated contribution of a person's circumstances to total inequality. Because of this, estimates of inequality of opportunity are usually considered the lower-bound of actual levels (Ferreira and Gignoux, 2011).

The economic inequalities described in section A are in part the result of inequalities among different population groups – also referred to as horizontal inequality. The persistence of disadvantages based on characteristics such as those described above are hard to justify in our modern and interconnected world.

This section examines group-based disparities in several markers of well-being, including poverty, health, education and employment. Since data limitations preclude a comprehensive analysis of all the circumstances affecting a person's access to services and resources, the section does not attempt to quantify inequality of opportunity in one single indicator (see box 1.4). Rather, it examines the impact of concrete characteristics

²⁹ Recent studies, including Ferreira and Gignoux's (2011), are careful to note that estimates of inequality of opportunity are a lower bound of actual inequality of opportunity (because some circumstances are not adequately measured).

BOX 1.5**South Africa: promoting inclusion amidst record high inequality**

South Africa is one of the most unequal countries in the world. While the end of apartheid in 1994 brought forth dramatic social and economic changes, inequality has remained at record highs. However, inequality between racial groups has decreased, as important strides were made in social development and poverty reduction over the last two decades.

The decline in interracial inequality has been driven largely by faster income growth in non-white lower-income households and by a growing percentage of non-white, middle- and upper-income households (Hino and others, 2018). Opportunities have gradually opened up in the civil service, business and education to black South Africans, who made up 6 per cent of top management and company executives in 2001 and 14 per cent in 2017 (Republic of South Africa, 2018).

Efforts to reverse the effects of decades of segregation have been underpinned by anti-discriminatory legislation and by a Constitution establishing citizens' rights to food, water, social security and social assistance. Through a system of progressive taxation and social programmes, the Government has expanded provision of basic public services, achieved near-universal access to primary education, and implemented cash transfer programmes for older persons, families with children, and persons with disabilities (World Bank, 2018a). Primary health care is free, while public hospital services are relatively low-cost or free for disadvantaged/vulnerable persons.

These measures have contributed to reducing both absolute and multidimensional poverty. Workers are becoming more educated, female labour market participation has risen, and the share of the population with access to electricity, improved sanitation and improved water sources has increased (Finn and Leibbrandt, 2018; Leibbrandt, Finn and Woolard, 2012). On the whole, households in the bottom half of the income distribution receive much more in public transfers and services than they pay in taxes (Inchauste and others, 2017).

Social protection transfers form a significant portion of the income of poorer households. It is estimated that the Gini index in 2014-2015 would have been 10.5 per cent higher in the absence of public transfers (World Bank, 2018a).

Despite this progress, substantial challenges remain. South Africans continue to experience high levels of poverty and unemployment, while inequality within racial groups has worsened. With social spending constituting more than half the Government's budget allocations in 2019, solutions will have to go beyond the mere fiscal expansion of current programmes to focus on the quality and sustainability of outcomes.

separately, both to illustrate inequality of opportunity and to highlight the disadvantages faced by some social groups. In line with target 10.2 of the 2030 Agenda, the focus is on inequalities based on gender, race, ethnicity, disability status, migrant origin and parental socioeconomic status. Considering the 2030 Agenda's pledge to leave no one behind, the section places a strong focus on trends in group-based inequality over time.

1. Group-based disadvantage, poverty and income inequality

A sizeable part of observed income inequality can be attributed to inequality among social groups, although large differences are found across countries. For instance, inequality among racial groups accounted for an estimated 50 to 70 per cent of total inequality in South Africa in the mid-2000s, 30 to 50 per cent of the total in Guatemala, Panama and Paraguay, but less than 15 per cent of the total in developed countries (Liebbrandt, Finn and Woolard, 2012; Elbers and others, 2005 and 2008).

Trends in these two key components of inequality – across groups and within groups – do not always go hand in hand. South Africa, for instance, has seen the Gini coefficient of income inequality increase rapidly since the end of apartheid while racial inequality has declined (see box 1.5). In contrast, research from Mexico suggests that, despite declining income inequality at the national level from the mid-1990s to 2010, income growth has been slower for indigenous than for non-indigenous populations, and differences in the incidence of poverty have increased (Servan-Mori and others, 2014).

These examples illustrate that, even where Governments have made conscious efforts to promote social inclusion, overall income inequality can remain unaffected or even grow. Conversely, declining income inequality does not automatically translate into improved welfare outcomes for all disadvantaged individuals or groups.

The uneven progress observed in reducing poverty across different groups further substantiates this point. Extreme poverty has dropped rapidly since 1990. The number of people living on less than \$1.90 a day declined from 36 per cent in 1990 (1.9 billion people) to 12 per cent in 2015 (727 million).³⁰ Yet pockets of extreme poverty persist.

Not only are some groups more likely to live in poverty, but they experience deeper poverty than the rest of the population. The examples shown in figure 1.3 indicate that the multidimensional poverty index is higher than average among the ethnic minorities selected (figure 1.3 A), and that these minorities experience a deeper intensity of deprivation than the national average (figure 1.3 B). That is, they are more likely to experience deprivations across more of the 10 indicators related to health, education and basic services that comprise the index.

Additional research shows that members of ethnic minorities and other disadvantaged groups are also more likely to remain in poverty over the long term. Caste, ethnicity, religious affiliation and class heighten the risk of chronic poverty and of transmitting poverty to the next generation (Dang and Lanjouw, 2015 and 2018; Sumner, 2013; Reddy, 2015). In India, according to Dang and Lanjouw (2018), members of Scheduled Castes and Scheduled Tribes are both less likely to escape poverty than other groups and more likely to experience downward mobility and fall into poverty.

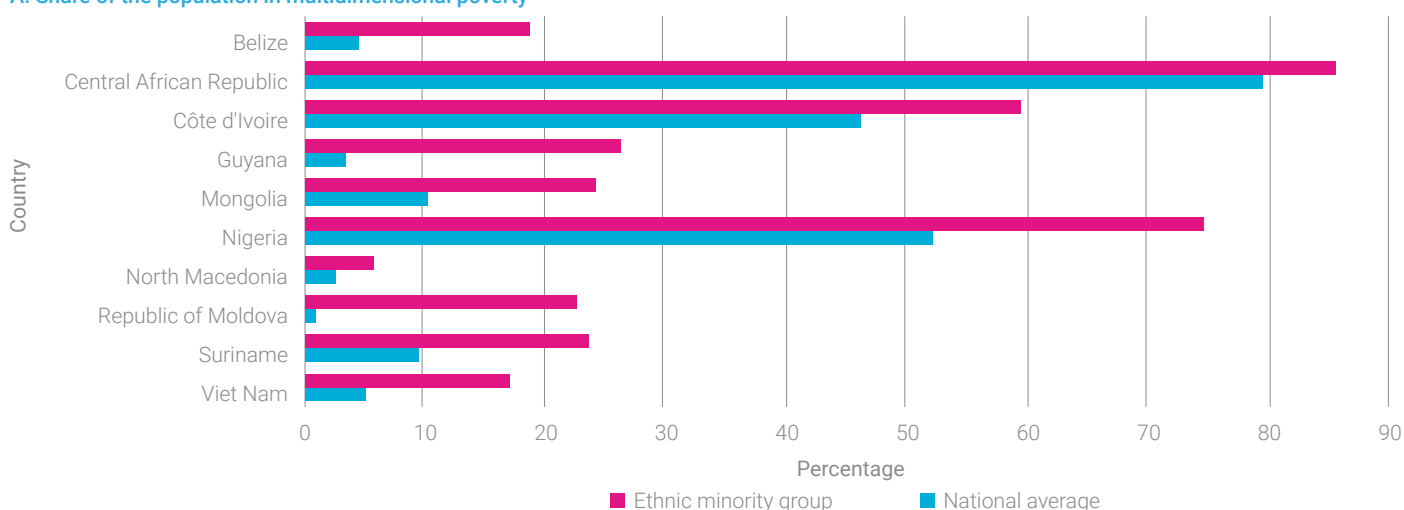
DECLINING INCOME
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ALWAYS RESULT
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OPPORTUNITIES OR
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INDIVIDUALS
AND GROUPS

³⁰ World Bank, PovcalNet database. Available at <http://iresearch.worldbank.org/PovcalNet/home.aspx> (accessed on 31 October 2019).

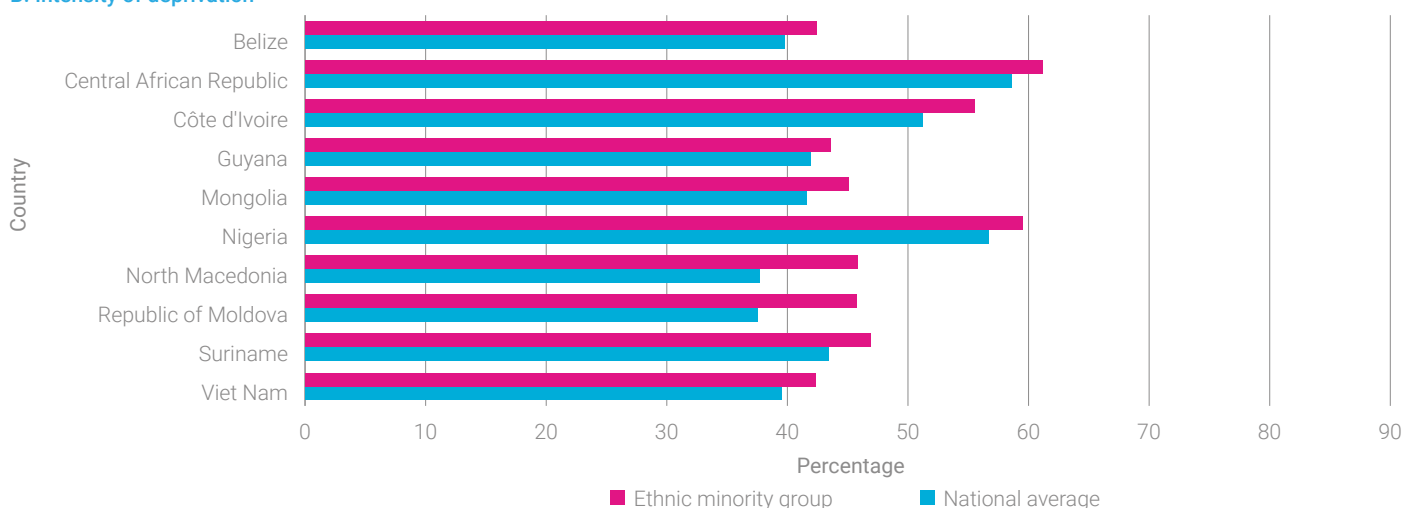
Members of these groups often suffer from multiple disadvantages that deepen their exclusion. In many developing countries, for instance, ethnic minorities live predominantly in rural areas with low access to quality schooling or health centres. Not only do children in rural areas fare worse than those in urban areas in terms of health and education, but the ethnic minority “penalty” in terms of educational attainment is often larger in rural than in urban areas. For instance, in Belize, the percentage of Mestizo youth who completed lower secondary school was two thirds that of Creole children in rural areas, and nearly 90 per cent that of Creole children in urban areas (United Nations, 2016a). Research has also shown that gender and ethnicity interact to the detriment of women, including in the labour market (United Nations, 2016a;

FIGURE 1.3
Multidimensional poverty by ethnicity in selected countries around 2010

A. Share of the population in multidimensional poverty



B. Intensity of deprivation



Source: Calculations by the Oxford Poverty & Human Development Initiative (OPHI), based on data from Multiple Indicator Cluster Surveys (MICS).

Note: The figure represents data for 10 countries where the last two rounds of MICS collected and published information on ethnic identification. Ethnic groups represented are: Maya (Belize), Hausa (Central African Republic), Gur (Côte d'Ivoire), Amerindian (Guyana), non-Macedonian or Albanian (North Macedonia), Roma (Republic of Moldova), Kazakh (Mongolia), Hausa (Nigeria), Indigenous/Amerindian (Suriname) and non-Kinh (Viet Nam).

Kabeer, 2010; World Bank, 2013a). In Bolivia, Brazil, Guatemala and Peru, for example, indigenous women and those of African descent are more likely to earn \$1 an hour or less than men from their ethnic group or men and women in the rest of the population (Kabeer, 2010).

Clearly, conclusions about inequalities within and among social groups are limited by data availability (see box 1.6). The fact that income and consumption data are gathered mostly at the household level, for instance, challenges proper assessments of the gender and age dimensions of inequality. The existing evidence, while incomplete, indicates that resources are not distributed evenly within households. Boys benefit more than girls from investments in health care, private education and childcare, for instance (United Nations, 2015). A study of 30 countries in sub-Saharan Africa shows that women in this region are more likely to be undernourished than men, and that half of undernourished women and children are found in non-poor households (Brown, Ravallion and van de Walle, 2017). Globally, women do three times as much unpaid care and domestic work as men (UN Women, 2019).

BOX 1.6

The challenge of measuring who is being left behind

Adequately measuring who is being left behind requires data from a variety of sources that are different in scope and purpose. National population censuses and some internationally standardized surveys are available for a large number of countries and are fairly comparable across countries. However, none of them alone allows for a comprehensive international assessment of disadvantage or social exclusion. Assessing changes over time presents additional challenges, since some data sources are available for only one point in time and comparability issues arise even between censuses or surveys of the same type.

Ideally, empirical analyses should determine which individual characteristics or combinations of characteristics increase the risk of disadvantage. However, most studies, including this one, pre-select some criteria that have been proven, empirically, to affect inequality – typically age, sex, ethnic background, income, nationality and place of birth. Analyses based on these traditional criteria run the risk of overlooking new forms of inequality.

An additional challenge to measuring who is being left behind is that groups at high risk of poverty and exclusion are often statistically “invisible”. Household surveys inevitably omit homeless persons, people in institutions, including prisons and refugee camps, and mobile and nomadic populations. In practice, they also tend to underrepresent populations in urban slums, those in insecure and isolated areas and atypical households. While population censuses do not omit any of these groups by design, they often under-enumerate them. In addition, the definitions used to classify a population by nationality or by migrant, ethnic or disability status, vary across countries.

While statistical groups are useful analytical categories, it is important to note that they are not necessarily entities with common agency or even common purposes. Some groups of people have shared beliefs and values and act in collective ways (such as religious and many ethnic groups). Other groups are defined on the basis of some shared characteristics (such as migrant status), but in reality have little in common, aside from the discrimination they often face.

THE EFFECTS OF
SOCIAL EXCLUSION
ON DIGNITY AND
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PEOPLE'S SENSE OF
WELL-BEING

People are left behind in many domains of life – social, economic, political. Translating the disadvantages they experience in each of these domains into a limited set of indicators and finding data to measure them presents considerable obstacles. The effects of social exclusion on a person's dignity and their agency, for example, are difficult to measure, but can undermine one's sense of well-being (United Nations, 2016a).³¹

2. Trends in group-based inequality

Leaving no one behind calls for reductions in group-based inequalities. The empirical literature shows positive trends: from a reduction of inequalities in access to primary education to the broader representation of disadvantaged groups in political processes (United Nations, 2016a). Yet the examples shown in this section indicate that countries are off track in terms of ensuring equal opportunity for all by 2030.

Major progress in fulfilling basic needs, such as improved child health and completion of primary education, has helped reduce gaps. Figure 1.4 shows that disparities in child stunting based on household wealth and the educational level and ethnicity of the household head have also declined, somewhat, based on a large sample of developing countries. However, differences in the average annual change among the different groups are small. At the rate of progress observed from the 1990s to the 2010s, it will take more than four decades to close the stunting gap related to ethnicity, for instance. Under a business-as-usual scenario, those children that are furthest behind in terms of stunting will remain behind by 2030.

Access to good-quality education can help level the playing field or reinforce existing inequalities, depending on how it is distributed. With the notable success achieved at the global level in the provision of primary education, gaps in secondary education have received increasing attention, including in the 2030 Agenda. The percentage of adolescents attending secondary school is growing across developing regions (figure 1.5), but this increase is not enough to close existing gaps. On average, progress in secondary school attendance is slower among children from households in the lowest wealth quintile and among those that belong to the most disadvantaged ethnic group in the countries shown.

UNDER A BUSINESS-
AS-USUAL SCENARIO,
THOSE CHILDREN
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BEHIND WILL
REMAIN BEHIND
BY 2030

Clearly, disadvantages in different domains reinforce one another. Children must be healthy in order to attend school and benefit from the education they receive. Improvements in both health and education come about, in large part, due to improvements in basic infrastructure. Investments in improved water supply, sanitation, electricity and broadband help prevent malnutrition and disease and ultimately promote productivity. Unfortunately, across the board, gaps in access to infrastructure (specifically, electricity and improved sanitation) remain wide (see Annex 2, figures A.1 and A.2).³²

³¹ Chapter 4 of the *Report on the World Social Situation 2016* (United Nations, 2016a) contains a discussion of challenges in measuring discrimination, agency and stigma.

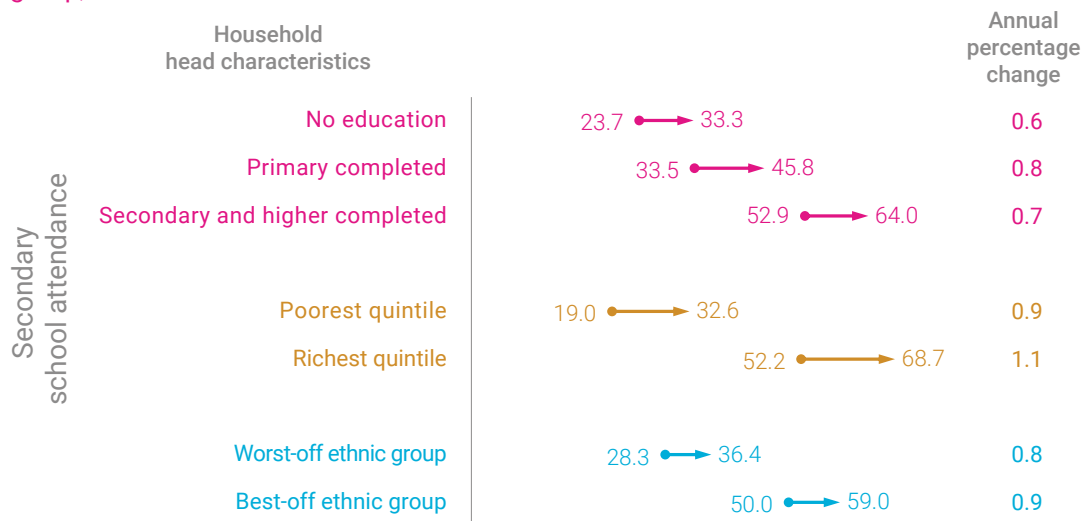
³² Disparities in access to broadband are examined in chapter 2.

FIGURE 1.4

Recent trends in the proportion of stunted children by socioeconomic status and ethnic group,^a 1990s to 2010s^b

**FIGURE 1.5**

Recent trends in secondary school attendance by socioeconomic status and ethnic group,^a 2000s to 2010s^c



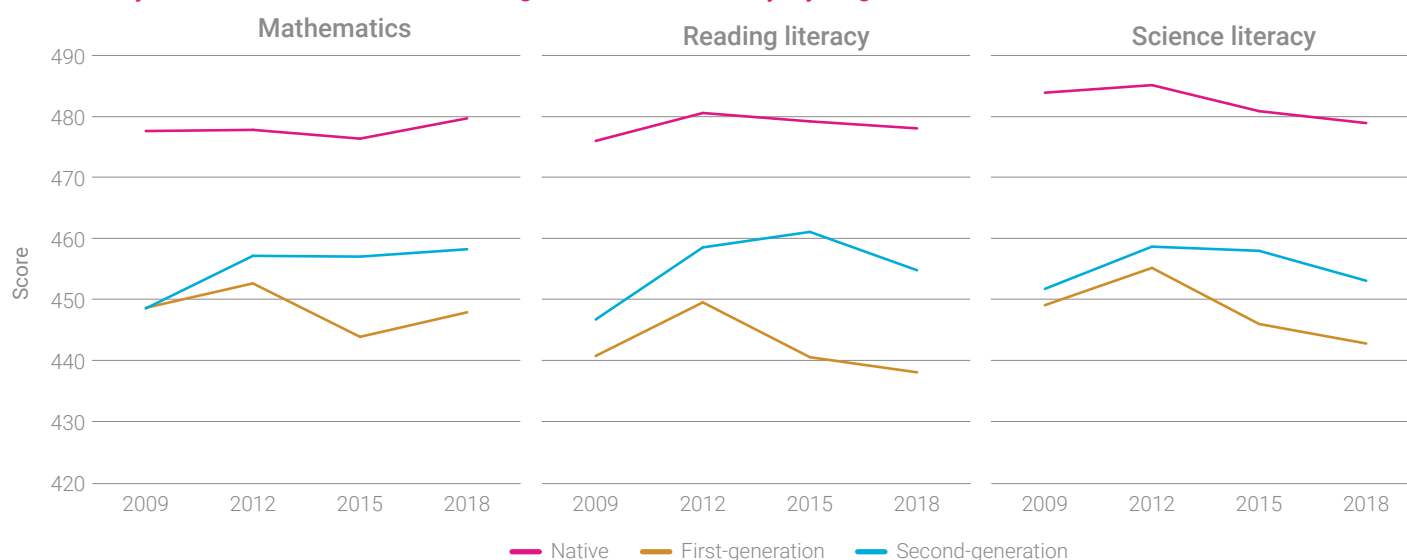
Source: Calculations based on data obtained from MICS and Demographic and Health Surveys (DHS).

Notes:

- Ethnic groups are selected and classified as "worst-off" and "best-off" based exclusively on the prevalence of stunting and secondary school enrolment in the starting year.
- A child is considered stunted if she or he is below minus two standard deviations from the median height-for-age of the World Health Organization Child Growth Standards. Stunting estimates by household wealth are based on data for 54 countries and stunting estimates by education of the household head are based on data for 51 countries. Estimates by ethnic group are based on data for 23 countries, including 17 in Africa, 3 in Latin America and the Caribbean, 2 in Asia and 1 in Europe. Data collection ranges from 1993 to 1999 for the earliest survey, and from 2010 to 2017 for the most recent survey. Household wealth as measured by DHS is based on a household's ownership of selected assets, materials used for housing construction and access to water and sanitation facilities.
- Secondary school attendance estimates by household wealth are based on data for 51 countries and by education of the household head for 50 countries. Estimates by ethnic group are based on data for 26 countries, including 16 in Africa, 5 in Latin American and the Caribbean, 4 in Asia and 1 in Europe. Data collection ranges from 2000 to 2017.

FIGURE 1.6

Proficiency scores in mathematics, reading and science literacy, by origin of student, 2009 to 2018



Source: Calculations based on PISA data. Available at <http://pisadataexplorer.oecd.org/ide/idepisa/>. (accessed December 2019).

Note: Data shown for 49 PISA-participating countries or areas with scores reported for all three categories across all four waves. First-generation immigrant children are those born abroad. Second-generation children are born in the country of residence of foreign parents.

Beyond school attendance and completion, the effective acquisition of relevant knowledge and skills – that is, learning outcomes – is a key determinant of future opportunities. Information from the Programme for International Student Assessment (PISA), indicates that students from an immigrant background – both those born abroad, that is, first-generation immigrants, and those born in the country to foreign-born parents, or second generation – score, on average, lower on mathematics, reading and science tests than students without immigrant parents (see figure 1.6).³³

Differences in socioeconomic status affect learning outcomes as well. Better-off families have more resources – both time and money – to invest in their children's schooling. Across PISA-participating countries and areas in 2018, students from socioeconomically disadvantaged backgrounds were nearly three times less likely than socioeconomically advantaged students to attain the minimum level of proficiency in reading (OECD, 2019a). Using PISA data from 2006, Ferreira and Gignoux (2013) found that differences in gender and family background account for up to 35 per cent of differences in scores. The educational achievement gap between immigrant and non-immigrant students is still significant when controlling for their families' socioeconomic status and the socioeconomic composition of their schools, although it declined from an observed average of 41 score points, in the case of reading in 2018, to 24 points (OECD, 2019a).³⁴

³³ PISA is an ongoing OECD programme that helps assess 15-year-old students' acquisition of knowledge and skills in mathematics, science and reading across high- and middle-income countries. In the 2018 round of PISA, 79 countries and areas participated in the assessments, including OECD member countries and partner countries and areas in Asia, Eastern Europe and Latin America. Scores are reported on a range from 0 to 1,000. About two thirds of students from OECD countries score between 400 and 600.

³⁴ In the context of PISA assessments, OECD measures socioeconomic status (social, economic and cultural status) on the basis of indicators of parental education and occupation, the number and type of home possessions that are considered proxies for wealth and of possessions related to "classical" culture in the family home.

The evidence in figure 1.6 suggests little progress in ensuring equity in learning outcomes. For instance, the gap between native and second-generation students in math scores slightly increased from 30 points in 2009 to 32 points in 2018 in the countries and areas covered by PISA. The difference in student performance in reading by socioeconomic status remained largely unchanged in most participating countries and areas during the same period (OECD, 2019a).

Improvements in health or education do not always translate into reductions in other dimensions of inequality, such as employment, income or wages. Educational attainment is often higher among women than men, for instance, particularly in developed countries. Yet women have not seen this improvement translate into reduced inequality in employment and wages.

Similarly, the proportion of persons with disabilities with secondary education or higher has increased since the 1990s in a sample of 17 countries from developing and developed regions, yet their labour force participation has remained constant over the last decade (figures 1.7 and 1.8). The educational and labour force participation gaps between persons with disabilities and those without disabilities have not changed.

FIGURE 1.7
Percentage of adults who completed secondary or higher education by disability status, 1990s to 2010s

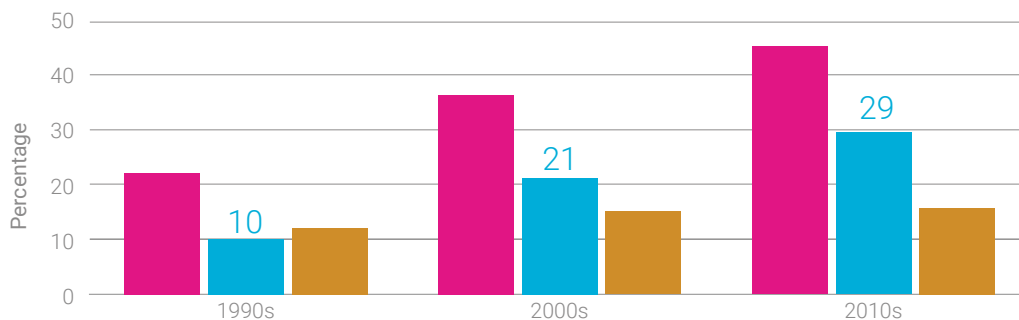
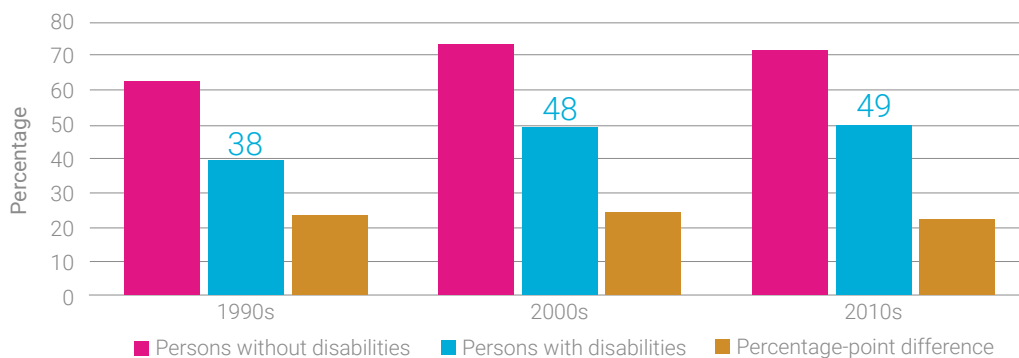


FIGURE 1.8
Labour force participation rates by disability status, 1990s to 2010s



Source: Calculations based on census data from the Integrated Public Use Microdata Series (IPUMS) International: Version 7.1 (Minnesota Population Center, 2018).

Notes: Calculations based on data for the following 17 countries: Benin, Botswana, Brazil, Costa Rica, Dominican Republic, Ecuador, Ireland, Panama, Philippines, Poland, Rwanda, South Africa, United Republic of Tanzania, Trinidad and Tobago, United States, Uruguay and Zambia, as collected by national statistical offices and available from the IPUMS repository at the Minnesota Population Center.

BOX 1.7**Socioeconomic status and the intergenerational transmission of disadvantage**

Socioeconomic status remains a major determinant of lifelong opportunities across countries and cultures. Several recent large-scale studies provide a global picture of how socioeconomic status – as measured by levels of education, income and occupation – is transmitted from parents to children (Narayan and others, 2018; OECD, 2018a).

Intergenerational mobility in social status has historically been lower in developing than developed regions, but it is increasing in middle-income countries such as Brazil, Egypt, India and Indonesia. In some countries, such as China and Nigeria, children can expect to complete more years of education than their parents. However, their rank in educational distribution is increasingly tied to that of their parents (Narayan and others, 2018).

Mobility from the bottom half of the educational or income distribution to the top quartile is low in both developed and developing countries. That is, a person whose parents have low levels of education is unlikely to complete higher education regardless of the country's development level (a phenomenon known as “sticky floors”). On average, it would take five generations for the descendants of a low-income family in OECD countries to reach their country's average income level (OECD, 2018a). At the same time, downward mobility in education, income or occupation is rare among those at the top of the socioeconomic ladder (referred to as “sticky ceilings”).

Infant and early childhood contexts are crucial to understanding the persistence of advantage or disadvantage across the life course and across generations. Language development, for instance – a key precursor to literacy proficiency at older ages – is significantly lower among children from households of low socioeconomic status (Pace and others, 2016). Parents with more economic and social resources are better positioned to access better schools. The positive sorting between families and schools explains a significant share of inequality in learning outcomes above and beyond a student's family background (Anand and others, 2019). The socioeconomic composition of schools has a significant effect on differences in learning outcomes among foreign-born and native-born children, for instance. Parents can also transmit cultural knowledge, or “the rules of the game” in terms of how institutions work.

Across countries, there is a strong link between rising inequality and declining social mobility, as section 1.C illustrates. The experience of some countries, such as those in Northern Europe, that benefit from high intergenerational mobility and low inequality, signal the role that policy and institutions can have in mediating the influence of parents' characteristics on their children's future success, particularly through public funding for education, as discussed in chapter 4.

Evidence suggests that the ability of persons with disabilities to fulfil their potential has been largely stymied. Persons with disabilities face physical barriers in accessing the workplace as well as education, especially in their daily travel. Moreover, misconceptions persist about their ability to study or work and about their potential productivity, in addition to open discrimination. Unaddressed, the lower labour force participation of persons with disabilities perpetuates the myth that they are unable to contribute to society or in the workplace, and results in higher poverty levels among persons with disabilities and their families.

In sum, gaps in opportunity are widespread and not closing fast enough. Children's chances in life continue to depend on who their parents are, where they live and what they own (see box 1.7). Disparities are declining in some basic achievements such as reductions in the prevalence of stunting, but they are growing in more advanced determinants of well-being – such as access to secondary education. Unless progress accelerates, leaving no one behind will remain an unmet challenge.

C. The price of inequality

High inequality is an ethical and moral concern across cultures around the world. Promoting equality is a common ideal, a principle that should be upheld and actively pursued. However, there are instrumental reasons for tackling the issue as well, since high and growing inequality has a range of negative impacts on well-being. This section examines some of those economic, social and political impacts.

1. Slower economic growth and poverty reduction

While the relationship between inequality and economic growth is not clear-cut, recent research shows that countries with high and rising inequalities generally experience slower growth than those with lower inequality (Ostry, Berg and Tsangarides, 2014).

Inequality hurts the economy in different ways. First, greater inequality in income and wealth can result in greater disparities in access to credit or productive assets, such as land, since poorer households are unable to offer collateral or other guarantees against default. This makes it harder for lower-income households to invest in businesses or education. Forgone demand, productivity and innovation affect economic growth negatively. When those at the bottom of the income distribution are at high risk of not living up to their potential, the economy pays a price – not only through weaker demand today, but also through lower growth in the future.³⁵

In contexts of high inequality, the rich may opt out of publicly funded education and health and choose private equivalents of better quality (Ferreira, 2001; van der Weide and Milanovic, 2018). The choice of private services by the wealthy can affect political support and therefore the funding of public services, making it even harder for lower-income households – who depend more on these public services – to access good-quality education and health care, further squandering potential for growth. Unequal access to education and health services has also been recognized as a barrier to productivity growth and a key contributor to economic inequality, namely in Latin America (UN-ECLAC, 2018). Low human-capital accumulation among poorer households has similarly been identified as a key factor in explaining the negative impact of inequality on economic growth (OECD, 2015a).

In addition to inhibiting economic growth, inequality can generate economic instability and market volatility. Growth spells tend to be shorter when income inequality is high (Berg and Ostry, 2011). This result holds also when other factors that affect economic

³⁵ Additionally, high income earners typically spend a lower share of their income than do other income groups (see for example Pigou, 1920; Auclert and Rognlie, 2018).

HIGH AND GROWING
INEQUALITIES
INHIBIT ECONOMIC
GROWTH, CREATE
ECONOMIC
INSTABILITY AND
HINDER PROGRESS
TOWARDS POVERTY
ERADICATION

stability, such as external shocks and macroeconomic conditions, are taken into account. The global economic and financial crisis of 2008 provided some evidence of this effect. Its onset has been linked to a combination of rising inequality, wage stagnation and financial deregulation.³⁶

Most empirical evidence on the relationship between inequality and economic growth, including the studies cited, focuses on growth in average incomes. Disaggregating the impact of inequality among different percentiles of the income distribution, van der Weide and Milanovic (2018) find that, in the United States, rising inequality in net incomes has been particularly detrimental to income growth rates among the lower income percentiles, while proving beneficial to those in higher percentiles. Thus, even if inequality were found to affect overall growth positively, it is probable that such positive effects would accrue mainly to the wealthy. Indeed, across countries, high and growing levels of inequality have been associated with slower poverty reduction at given levels of economic growth (Besley and Burgess 2003; Ravallion, 2007a; Fosu, 2011).

2. Limited upward mobility

The ability to move up the socioeconomic ladder defines people's aspirations and their sense of well-being. Perceived or actual barriers to upward mobility create social tensions and put the social contract under threat.

Recent research has shown that more unequal societies tend to be less socially mobile across generations. For instance, Narayan and others (2018) find that higher inequality is associated with lower relative intergenerational mobility across a range of 75 countries in all regions.³⁷ Their results echo earlier research by Corak (2013), who named the strong association between the lack of intergenerational income mobility and inequality the "Great Gatsby Curve". That is, people's ability to do well depends more strongly on their parents' fortunes and resources in contexts of higher inequality. The relationship goes both ways: higher inequality is associated with lower relative mobility and lower mobility results in inequality of outcomes and opportunities across generations.

While Narayan and others (2018) find that the negative association between inequality and mobility is stronger in developing than in developed countries, recent findings from OECD countries indicate that social mobility across generations has declined in developed countries in recent decades (OECD, 2018a). However, mobility patterns vary considerably across countries. In countries that have experienced periods of rapid growth in recent decades – including Brazil, China, Indonesia and South Africa – high relative mobility and high inequality coexist. In these middle-income countries, there is greater mobility at the top and, especially, at the bottom of the income distribution

³⁶ See Bourguignon (2015) for a more detailed discussion of the link between inequality and the 2008 economic and financial crisis.

³⁷ Relative intergenerational mobility reflects the extent to which one does better – or worse – than one's peers, in terms of income, education, occupation or other, across generations. A person whose income is at the 75th percentile of the distribution while her or his parents' income was at the 50th percentile at a comparable point in their lives has experienced upward relative mobility. Absolute intergenerational mobility measures the absolute overall progress across generations. Most countries have seen positive upward mobility in absolute terms in recent decades.

than in other countries (OECD, 2018a). Periods of rapid economic growth, particularly in urban areas, offer greater opportunities for mobility to all, even in contexts of high inequality. These opportunities may, however, dry up if growth slows but inequality remains high. The case of China is discussed in depth in box 1.8.

BOX 1.8

China: rising inequality alongside greater social mobility

Over the past several decades, China has made rapid advances in economic development. At the same time, its Gini coefficient increased from 35 in 1990 to a peak of 49 in 2008.³⁸ Despite this dramatic rise in inequality, social mobility has also risen, particularly in rural areas where both relative income mobility and income inequality are higher than in urban areas (Chen and Cowell, 2015).

Strong social mobility has to do with the nature of the country's inequality – the result of the much faster income growth of higher-income households and urban areas, rather than a deterioration of incomes for rural or lower-income households. More than 800 million people have pulled themselves out of extreme poverty in China since 1990 (World Bank, 2018b). The expenditure growth of the bottom 40 per cent of the population is above the national average.³⁹

Government policies, especially those targeted at aiding people living in poverty and expanding public access to services and opportunities, have played a role in facilitating social mobility in China (while having limited impact on overall inequality). Strategic efforts have also been undertaken to improve the infrastructure and development of the rural and inner regions of China, to reduce the gap with richer, coastal provinces. Some of these regions have also benefited from rapid urbanization, which has opened employment opportunities for previously rural and/or lower-income households.

A series of pro-farmer policies have been rolled out since 2000, providing farmer subsidies, abolishing the agricultural tax, and enhancing social protection (Jain-Chandra and others, 2018). Reforms increased public health insurance coverage of rural households from less than 15 per cent before 2000 to over 90 per cent in 2009 (OECD, 2018a). Other measures include expanding social assistance, increasing the minimum wage, and loosening the household registration system that allows for increased migration of rural residents to small and medium-sized cities.

The Government has also instituted policies to abolish tuition fees at the primary and lower-secondary levels and provide schooling subsidies and expand access to education across all levels (Chen and others, 2015). As a result, secondary and tertiary enrolment have increased drastically since the 1980s, and today almost 50 per cent of children in China attain higher levels of education than their parents (Jain-Chandra and others, 2018; OECD, 2018a). This high educational mobility can be considered an aspect of, and lead to increased, social mobility. In general, highly unequal societies provide fewer opportunities for children at the bottom of the income distribution to do better than their parents. If poorer households cannot afford to invest in more schooling for their children, despite high returns to education, opportunities for upward mobility will be limited. High inequality can also create the perception that returns to education are low if people see that, no matter how hard they try, they cannot get the same opportunities as children from wealthier backgrounds – that is, if they perceive the system as being fundamentally unfair. Perceptions of unfairness may offset the potential “aspirational” effect of the higher wage premiums available in highly unequal societies (Kerney and Levine, 2016).

³⁸ UNU-WIDER, World Income Inequality Database. Last accessed 2 October 2019.

³⁹ UN Global SDG Indicators Database. Available from <https://unstats.un.org/sdgs/indicators/database/>. Accessed on 19 September 2019.

SOCIAL
MOBILITY ACROSS
GENERATIONS
HAS DECLINED
IN DEVELOPED
COUNTRIES

Rising inequality in income is also associated with growing spatial disparities and can lead to the concentration of poverty in certain areas, which is associated with lower relative mobility. At state or provincial levels, Narayan and others (2018) find that countries with higher educational mobility enjoy greater spatial equity in education outcomes. At the neighbourhood level, the availability and quality of public services, including schools, is lower in poorer neighbourhoods that also suffer from higher crime rates, limiting prospects for mobility (Chetty and others, 2014; Durlauf and Seshadri, 2017).

Inequality can also hurt social mobility if those at the top of the income distribution ensure that advantages are passed from parents to children. In highly unequal societies, elite groups are more effective at influencing policymakers, creating an environment that favours their interests and shielding their children from downward mobility. Political parties become more dependent on the support of the wealthy as well (Bartels, 2008). The capturing of opportunities for upward mobility by those already advantaged may result in a vicious cycle of lack of mobility and growing inequality (see box 1.9).

IN HIGHLY UNEQUAL
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THEIR CHILDREN
FROM DOWNWARD
MOBILITY

Even though there is a strong association between inequality and a lack of intergenerational mobility, cross-country studies have not successfully established direct causal links. It is likely that the causal mechanisms and their relative importance vary significantly by country. Moreover, mobility itself can be measured in different ways – from income mobility to educational mobility or occupational mobility – yielding different results in cross-country analyses. For example, measured by income mobility, Denmark is a more mobile society than the United States, but not when measured by educational mobility (Landersø and Heckman, 2017). Even when the focus is solely on income mobility, findings can differ depending on the measure of income used (ibid.). The quality and comparability of the underlying data used to measure intergenerational mobility also put findings into question, particularly for developing countries (Krishna and Nolan, 2019).

3. Captured political processes, mistrust of institutions and growing unrest

In principle, rising inequality should become a rallying cry for greater redistribution through progressive taxation and more comprehensive public service provision. However, this is often not the case. People in positions of power tend to capture political processes, particularly in contexts of high and growing inequality. Without strict checks and balances to prevent it, big corporations and the wealthy may use their position and resources to lobby in support of their interests, raise legal challenges to progressive tax legislation, or promote communications and media campaigns to influence, for example, public perceptions of redistribution.

A strong middle class can act as a counterbalance to the interests of wealthier groups by demanding better and more accessible public services, infrastructure and social protection. Where the middle class is small or shrinking, it exerts insufficient political pressure. Additionally, if high-income households opt out of public services,

BOX 1.9**The United States: opportunity “hoarding” among high-income households**

Social mobility is lower in the United States than in many other countries. Relative mobility has been stagnant for decades and absolute mobility has decreased substantially for those born in 1980 or after. Close to four in 10 children born to parents in the top quintile of the income distribution remain in the top quintile. This is roughly twice the probability that a child of middle-quintile parents will rise to the top quintile (Chetty and others, 2017). A contributing factor to the decline in mobility is opportunity hoarding by people in the top quintile. Through their economic and political influence, the wealthy can preserve access to important opportunities for their children, while effectively preventing less-advantaged groups from competing for them.

One channel through which high-income households hoard opportunities is zoning practices. Exclusionary zoning is particularly prevalent in urban areas. It restricts population density in affluent neighbourhoods and increases property values. Research has shown that social mobility is lower in urban areas with high levels of economic segregation (Sharkey and Graham, 2013; Orentlicher, 2016). In making some areas unaffordable for most of the population, zoning laws can effectively block access by lower-income families to high-quality public schools and other services. Moreover, since public schools are often funded locally, through property taxes, wealthy areas generate better-funded schools. Even where schools are predominantly state-funded, affluent families can lobby for additional funding for their school districts more effectively than less affluent groups and contribute a significant amount of their own resources to their children's schools.

Opportunity hoarding also factors into university admissions processes. While tertiary education is critical for upward mobility, its cost is higher in the United States than anywhere else in the world. Students from high-income households are far more likely to have a family member pay than students from low-income households, who require loans (Douglas-Gabriel, 2017). In recent years, the number of for-profit universities has increased rapidly. Most of these universities target low-income communities, even though tuition is higher in for-profit schools than in public universities. Yet students in these establishments have worse labour market outcomes and are more likely to default on their loans (Armona, Chakrabarti and Lovenheim, 2018). Many of the top universities in the United States also continue the tradition of legacy admissions – that is, they give preference to certain applicants based on their familial ties to alumni from that university – in what has been termed “affirmative action for the rich” (Kahlenberg, 2010).

In the labour market, social networks help people with more resources to access better jobs, including through the granting of internships. Approximately half of the students selected for internships are offered employment straight out of college. Unpaid internships, in particular, favour those who have the financial means to work for free.

THE CONCENTRATION
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AND PUBLIC
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AND HINDERS THE
FUNCTIONING OF
DEMOCRACY

they can become more resistant to taxation for services they do not use, leading to a growing sense of “social separatism” (Milanović, 2016). On the one hand, middle- and lower-income groups who feel the system is unfairly benefiting the rich can become politically discouraged, making redistributive policies even less likely. Evidence from Europe and the United States also suggests that people who live in highly unequal societies can become less sensitive to the unequal distribution of incomes and exert less pressure for redistribution (Roth and Wohlfart, 2018). Alternatively, unfairness can lead to political turmoil. The social movements against austerity measures in the European Union in the aftermath of the 2008 crisis and the “Occupy Wall Street” protests in the United States were all, in some way, a reaction against the combination of rising inequality and the “elite capture” of politics.

Overall, the increasing concentration of wealth and income affects trust in the role of politics and public institutions to address the needs of the majority (Kuziemko and others, 2015; Larsen, 2013). Lack of trust destabilizes political systems and hinders the functioning of democracy. It threatens prosperity through its effect on the climate for investment and economic growth. It also threatens the underlying fabric that holds societies together. While trust in institutions is necessary to address social issues, and to provide and distribute public goods collectively, it can be undermined if policy decisions are perceived to be grossly unfair.

Evidence demonstrates that rising inequality substantially lowers an individual’s trust in others as well, likely through its impact on people’s perception of their position in society relative to others. In the United States, the increase in inequality between 1980 and 2000 explains almost half of the observed decline in trust in others, with a similar impact on trust in Government (Gould and Hijzen, 2016). Even faith in institutions such as property rights may be affected by perceptions of unfairness. Levels of commitment to property rights and contract enforcement, for instance, are lower in countries with higher shares of billionaires whose wealth comes from sectors prone to rent-seeking (World Bank, 2017a).⁴⁰

Rising inequality creates discontent, political dysfunction and can lead to violent conflict. In particular, a positive relationship is found between group-based inequality and violent conflict. Real or perceived inequality among social groups in access to economic resources, public services, political processes and power, along with other aspects of civic and cultural life, has been closely associated with intense grievances that, in turn, have often been mobilized to fuel violent conflict. Research suggests that when the distribution of income and wealth clearly falls along distinct ethnic or religious lines, it can be particularly harmful to social cohesion, inspiring hatred, envy and a sense of unfairness (Alesina, Michalopoulos and Papaioannou, 2016). The recent resurgence of populism in some countries has also been presented as a direct consequence of rising inequality (see box 1.10).

⁴⁰ Including those sectors that are heavily dependent on government concessions, such as finance, real estate and natural resources.

BOX 1.10**Inequality and the rise of populism**

Populism inspires a wide range of definitions. Common to most is the notion of populism as combining anti-establishment sentiments with authoritarianism and nativism. The central message of populist movements has historically been that the common people are being exploited by a privileged elite, and that radical institutional change is required to avoid such exploitation. In recent years, populist movements across the political spectrum have seen electoral success, including in the United States, several European countries and Brazil.

Scholars have provided two main explanations for the electoral success of populist movements. The first explanation highlights the role of increased economic insecurity. Increases in unemployment during the 2008 economic and financial crisis, for instance, have been identified as a driver of the rise of populism in Europe (Algan and others, 2017). In the United Kingdom, regions characterized by increasing income inequality, but also declining shares of manufacturing employment and lower real wage growth, voted systematically to leave the European Union (Becker, Fetzer and Novy, 2017).

The second explanation prioritizes cultural factors. Inglehart and Norris (2016), for example, find that the recent rise in populism in the United States and Europe has been driven more by cultural backlash – a reaction by once-dominant social groups to social and demographic changes – than by economic insecurity. Indeed, support for populist parties has grown in countries that have not seen a rise in inequality (France and Austria), as well as in countries where income growth has been relatively robust (Poland).

A backlash against globalization has been a key component of recent populist rhetoric in developed countries. It is likely that inequality, together with labour market insecurity and other economic considerations, along with cultural and demographic factors, have all played a role in the rising of populism. Milanović (2016) sees a declining middle class in a range of developed countries contributing to a sense of “social separatism”, eroding broad-based support for public services and infrastructure and giving ammunition to populist parties and individuals. Similarly, it is possible that the pursuit of a free-trade agenda in the 2000s – supported by high-income groups – left low- and middle-income groups feeling unrepresented by traditional political parties (Piketty, 2018). In the United States, for instance, counties with greater global trade exposure shifted towards the conservative Republican Party – and its populist candidate, Donald Trump – in the 2016 presidential election (Autor and others, 2016). In the United Kingdom, greater exposure to trade with China resulted in regions voting more strongly in favour of leaving the European Union (Colantone and Stanig, 2018). In both countries, however, the most consistent single predictor of how people voted were educational levels (Becker, Fetzer and Novy, 2017; Picketty, 2018). In this context, tackling inequality is only one of several social and economic policy imperatives to ensure fairer, more sustainable globalization.

D. Conclusions

High and rising inequality hinders progress towards the Sustainable Development Goals. Highly unequal societies grow more slowly than those with low income inequalities and are less successful in sustaining economic growth. They also are less effective at reducing poverty. Without appropriate policies and institutions, inequalities lead to a concentration of political influence among those who are already better off, and therefore tend to create or preserve unequal opportunities.

Yet growing inequality is not inevitable. Although economic inequalities have generally increased in most developed countries since 1990, they have declined in many countries of Latin America and in several countries of Africa and Asia, albeit from very high levels. Differences are found in the timing, direction and intensity of distributional changes across countries, even within regions. Inequality among countries has declined in relative terms but remains very high.

Similarly, some countries have seen increases in group-based inequality but, once again, trends vary by country and depending on the indicator used to assess progress. The data presented in this chapter indicate, for instance, that average gaps in children's stunting are declining, yet disparities in secondary education are not. The educational attainment of persons with disabilities is increasing rapidly, yet their employment opportunities are not.

Major global trends, including those examined in the next chapters, are undoubtedly affecting the distribution of opportunities and resources. Some megatrends may help equalize opportunities while others may exacerbate income inequality, mainly through their effect on labour markets. Yet their impact is not predetermined. Inequality levels and trends differ even among countries at similar levels of development and that are equally exposed to trade, technological innovation and even the effects of climate change. Success stories in reducing inequality illustrate the importance of national policies and local institutions.

ANNEX 1: MEASURING ECONOMIC INEQUALITY

There are different ways to measure and summarize the distribution of income, consumption or wealth, and the levels of economic inequality among individuals and households. Each of the available indicators has strengths and limitations.

The most widely used indicator of inequality is the Gini coefficient, which ranges from 0 (perfect equality) to 100 or 1 (complete inequality, in the sense that one person has all the income – or consumption – while others have none). The closer the coefficient is to 100 (or 1, depending on the scale used), the more unequal the distribution. The Gini coefficient of within-country inequality measures the distribution of income (or consumption) among individuals or households in each country. In contrast, the Gini coefficient of international inequality is obtained by taking each country's income per capita as one observation or data point. That is, it calculates income inequality among average persons in each of the world's countries. A variant of this coefficient weighs each national income per capita by each country's population to account for the fact that China's income and its economic growth, for instance, affect more people than the income and growth of smaller countries. The international income inequality trends described in section A.1. are based on the weighted Gini coefficient. The Gini of global inequality – also presented in section A.1. and discussed in box 1.2 – goes beyond the mean incomes of each country to account for inequality both among and within countries.

The Gini has important advantages over other indicators as well as several limitations. Namely, it has a clear graphic representation. As any summary measure, it allows for general conclusions regarding inequality trends. At the same time, it does not identify whether rises or falls in inequality are triggered by changes at the bottom, middle or top of the distribution. The Gini itself is more responsive to changes in the middle of the distribution than other indices and less responsive to changes at the very bottom and at the very top.

A detailed analysis of distributional changes calls for additional indicators. The shares of income, consumption or wealth at the top or the bottom of the distribution – that is, the share of the bottom or top 10 per cent or 1 per cent of the population – are better indicators of income concentration at these extremes. Each measure focuses on one part of the full distribution and therefore does not provide full information. Combining different shares (for example, relating the share of the top 10 per cent to that of the bottom 40 per cent, as the “Palma ratio” does, or that of the top 1 per cent to the bottom 50 per cent) allows for broader conclusions, but the results may be ambivalent. For instance, the share of income going to both the top 1 per cent and the bottom 50 per cent has increased in many countries in recent decades.

Income and wealth shares have not been used as broadly as the Gini coefficient until recently because their quality is often questionable, as described in box 1.1. Recently, the use of sources of information other than surveys has helped to improve the quality of data on income, wealth and consumption at the top of the distribution. The World Income Lab's Database initiative, in particular, combines data from national accounts, surveys, tax records and wealth rankings in order to track changes at the top more precisely. WID estimates are available for 70 countries, but only three in Africa. In developing countries where tax data are available, data quality may be questionable given the absence of broad income taxes in many of them and the incomplete taxation of capital incomes.

It is, however, important to note that household surveys contain abundant information that is not available in any other of the sources listed. With the necessary corrections from administrative or other data, they are likely to remain the primary source of information on various dimensions of inequality.

Considering that each indicator of economic inequality has strengths and limitations, the analysis in this report relies on more than one indicator. The authors note that cross-country analyses are still affected by data consistency and comparability. In general, there are trade-offs between coverage and comparability.

One of the main reasons for the lack of comparability among data sources is that some surveys collect information on income as the main indicator of economic well-being, while others use consumption expenditure. Developed countries and those in Latin America tend to use income surveys, while surveys in Africa and many Asian countries record consumption. Non-harmonized cross-country series of the Gini coefficient often rely on a mix of consumption and income data.

Given the fact that richer households tend to consume a smaller share of their incomes than poorer households (and save more), estimates of inequality based on consumption are generally lower than estimates based on income. That is, consumption data tend to understate the level of inequality if they are compared to estimates based on income data. For example, in Egypt, the Gini of consumption inequality was estimated at 31.5 in 2011 by the World Bank while the Gini of (net) income inequality was estimated at 53.9 in 2012 by the Luxembourg Income Study.⁴¹ Given the different welfare aggregates used, comparisons across countries and especially among regions – namely Africa and Latin America – must be done carefully. It is reassuring that time trends are similar irrespective of the indicator used (World Bank, 2016a).

⁴¹ Data from UNU-WIDER's World Income Inequality Database (WIID), version 4. Available online at: www.wider.unu.edu/project/wiid-world-income-inequality-database. For a broader comparison of income and consumption-based Ginis, see World Bank (2016).

Among countries that use household income, some datasets report income before taxes and transfers (market or gross income), others report disposable or net income (after taxes and transfers), and still others report income after taxes but before transfers.

In order to increase coverage and comparability, some income inequality databases make assumptions to impute values where data are missing. The authors of this report have tried to minimize the use of imputed values. Among the databases examined, the World Bank's PovcalNet has the most non-imputed estimates for the largest number of countries. It is also the data source used for the international monitoring of SDG target 10.1. Section 1.1 of this report relies mostly on PovcalNet's estimates of the Gini coefficient provided through UNU-WIDER's World Income Inequality Database. When possible, estimates from various sources are compared to ensure consistency. In addition, estimates of the Gini coefficient of income inequality are complemented with estimates of income shares, where available, as well as estimates of wealth inequality.

ANNEX 2: GROUP-BASED^a DISPARITIES IN ACCESS TO ELECTRICITY AND SANITATION

FIGURE A.1

Recent trends in the proportion of households with access to electricity, by household head characteristics, 1990s to 2010s^b

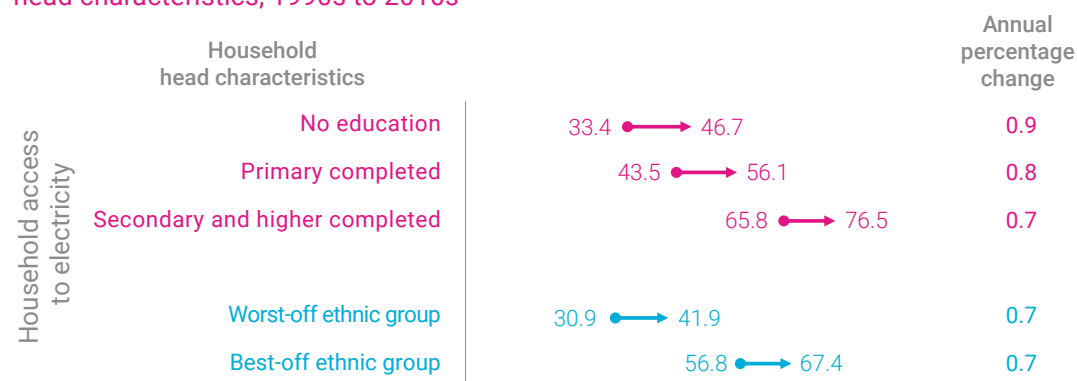
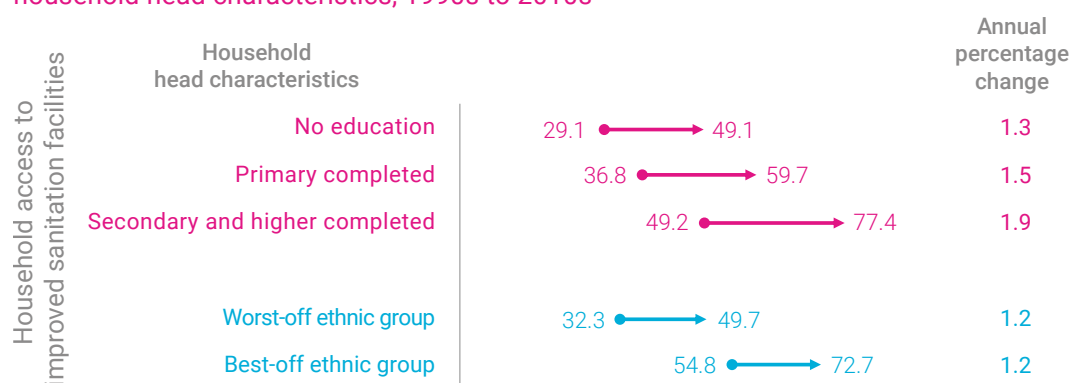


FIGURE A.2

Recent trends in the proportion of households with access to improved sanitation,^c by household head characteristics, 1990s to 2010s



Source: Calculations based on data obtained from DHS and MICS.

Notes:

- Ethnic groups are selected and classified as "worst-off" or "best-off" based exclusively on their access to electricity and improved sanitation in the starting year.
- Access to electricity estimates by education of the household head are based on data for 55 countries. Estimates by ethnic group are based on data for 27 countries.
- Improved sanitation is measured by the type of toilet facilities used by a household, and where the contents of the facility eventually end up (if this information is available). An improved sanitation facility is one that hygienically separates human excreta from human contact. Access to improved sanitation estimates by education of the household head are based on data for 54 countries. Estimates by ethnic group are based on data for 26 countries.

CHAPTER 2

THE TECHNOLOGICAL REVOLUTION: WINNERS AND LOSERS



CHAPTER 2

THE TECHNOLOGICAL REVOLUTION: WINNERS AND LOSERS

KEY MESSAGES

- Highly skilled workers are benefiting the most from new technologies. Moreover, in many countries, productivity gains brought about by such technologies are largely being captured by a small number of dominant companies.
- Technological progress displaces workers, mainly through automation, but it also creates demand for new jobs. Job disruption – and, at times, destruction – is affecting mainly low-skilled and middle-skilled workers, contributing to job polarization and wage inequality.
- Technological innovations in sectors such as health and banking have far-reaching implications for equality. The potential of new technologies to foster sustainable development can only be realized, however, if everyone has access to and uses them.
- Proactive policies and supportive institutions can help ensure that technological dividends are broadly shared.

INTRODUCTION

The world is in the midst of rapid, revolutionary and often disruptive technological breakthroughs. Advances in biology and genetics, robotics and artificial intelligence, 3D printing and other digital technologies, including information and communication technologies (ICTs), are transforming economies and societies. These new technologies bring new opportunities, greater efficiency and can contribute to the achievement of the SDGs. They can help improve health and longevity, end hunger and enhance the quality of life.

However, the rapid speed of current technological change brings new and urgent policy challenges for managing its impacts. While technology brings productivity gains, for instance, it can also erect hurdles for individuals and societies transitioning to new types of employment. For all its promise, technological innovation is already creating winners and losers. Highly skilled workers are benefiting more from new technologies than other workers, resulting in greater income and wage inequality.

Digital and communication technologies have also changed the nature of work: they allow workers more flexibility – not only in terms of the locations they can work from but in achieving better work-family balance. This agility extends to a wider choice of employers. More people now work part-time, as contractors or freelancers. Such non-standard work arrangements offer greater flexibility. However, they also leave workers in insecure employment and income situations, with weaker bargaining power compared to traditional workers belonging to labour unions. New technologies have also weakened unions and other labour market institutions. Skill-biased technologies have reduced the share of middle-skilled workers – once the backbone of labour unions – in the overall workforce. All of these factors affect wage inequality.

At the same time, digital innovation is opening opportunities in sectors such as health and finance. Advances in mobile technologies have eliminated the need for costly landlines and provided remote areas with access to communication networks and the Internet through mobile phones. This has made it possible for applications of digital technologies in health care and mobile banking to extend their reach to remote underserved areas as well as other poor communities.

These technologies can help drive development and create more inclusive societies. However, in order to harness their potential, Governments need to introduce policies and strategies to make new technologies accessible to all, particularly disadvantaged segments of society. If everyone had access and the capacity to use them, new technologies could help reduce inequality.

This chapter analyses the impact of new technologies on income and wage inequality. It argues that proactive policies and supportive institutions can help ensure that the dividends of technological change are broadly shared. Section A examines the impact of technological innovation on labour markets and income and

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WINNERS AND
LOSERS

wage inequality. Section B describes the extent of the technological divide and the opportunities that new technologies bring to sectors such as health and banking, with far-reaching implications for inclusion. The chapter concludes by considering the role of Governments in managing technological change and harnessing its potential for greater equality.

Technological change brings additional concerns for inequality, namely those associated with potential biases brought about by the use of algorithms in artificial intelligence. The increasing use of decision-making systems based on artificial intelligence in job recruitment and justice, for instance, can discriminate against certain population groups, including ethnic minorities, when based on biased historical data. These issues are explored in a recent United Nations report (United Nations, 2018b) and will not be examined in this chapter.

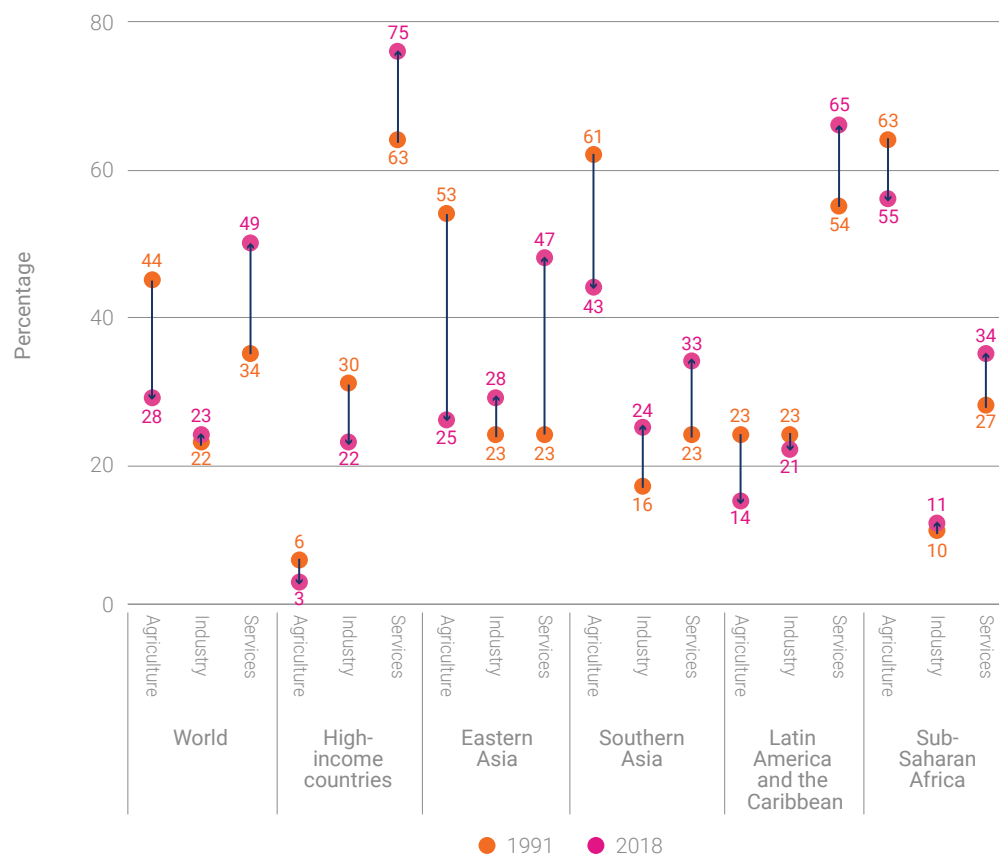
A. Technology, employment and inequality

Technological progress has been a primary driver of economic growth over the last two centuries. The past three industrial revolutions increased productivity per worker and per capita income, even though their full impact became visible only decades later (Bruckner and others, 2017). Industrial revolutions not only made the production of existing products more efficient, but they also created new products and services. This broadened the range of choices for consumers and producers. Higher incomes and more consumer choices have contributed to a higher quality of life in many parts of the world.

At the same time, technological progress prompted changes in sectoral employment. Specifically, the first industrial revolution encouraged shifts from the agricultural sector to manufacturing and, later, to the service sector. Developed countries completed the structural transformation away from agriculture early on, and many developing countries underwent a similar process later – often at a faster pace. Many least developed countries have not yet experienced this type of structural transformation, particularly those in sub-Saharan Africa, where most of the labour force is still employed in the agricultural sector. Ongoing technological innovation, however, will undoubtedly change the development paradigm, with implications for trade and global value chains in these countries. The traditional transition from agriculture to manufacturing may not be realized, and labour may move directly from agriculture to services.

The widespread use of machines and automatic devices has contributed to a decline in the share of workers employed in the agricultural sector at the global level. From 1991 to 2018, the share of agriculture in total employment declined by 16 percentage points at the global level, while remaining relatively unchanged in sub-Saharan Africa (see figure 2.1). On the other hand, the service sector gained importance in employment over the same period, now accounting for about 50 per cent of global employment. Rapid advances in digital technologies, particularly ICTs, have contributed to increases in the share of the service sector.

FIGURE 2.1
Total employment shares by sector and by region, 1991 and 2018 (percentage)



Source: Calculations based on data from ILOSTAT (November 2018).

Note: Regional averages are based on all countries in the region, including low-, middle- and high-income economies.

In the second half of the twentieth century, technological progress also changed the kinds of jobs demanded in developed countries. This progress intensified skill bias, and repetitive tasks previously carried out by low-skilled workers were replaced by machines and a smaller number of low- or high-skilled workers. This shift also contributed to increases in the college wage premium – that is, the wages of college graduates relative to the wages of high school graduates.

1. Labour-saving and skill-biased technologies

The emergence of new technologies is changing the nature of work. High-speed Internet (“broadband”) offers workers and employers more flexibility and efficiency in the use of resources. On the other hand, the International Labour Organization argues that the same technologies could also erode workers’ bargaining power and work-related benefits (Berg and others, 2018). Technological progress could also prompt the disappearance of certain jobs through automation and increase income inequality. This section assesses whether recent technological progress has contributed to widening income inequality by examining the impact of three related

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issues: (1) the types of technological progress that are increasing income and wage disparities, (2) labour-saving technological progress and the share of labour in national income, and (3) skill-biased technology and relative demand for high- and low-skilled workers.

Many factors other than technology have contributed to income and wage inequalities. Advances in communication and transportation have made it possible for firms to establish and expand global value chains. Globalization, in turn, has influenced the choice of technologies, prioritizing those that are more profitable. The profit motive provides further incentive for firms to introduce more skill-biased or labour-saving technologies. This suggests that globalization and technological progress are reinforcing one another, widening income inequality in many countries – both developed and developing (Acemoğlu, 2003; Bruckner and others, 2017).

Changes in labour market institutions and liberal economic policies have also exacerbated inequality. Moreover, increased demand for goods and services that are produced using skill-biased or labour-saving technologies can explain a significant part of the growth of wage inequality since the second half of the twentieth century. A consensus on the specific dynamics of these factors, including technology, remains elusive.

The technologies that are most relevant to the current debate about labour-market outcomes are skill-biased and labour-saving technologies. Skill-biased technologies increase the productivity and demand of high-skilled labour more than low-skilled labour. Labour-saving technologies, on the other hand, allow employers to produce the same amount of output with less labour. Today, progress in both skill-biased and labour-saving technologies typically involve digital technologies, which include ICTs, automation (which embodies artificial intelligence and machine learning technologies) as well as new service networks, organizations and management.

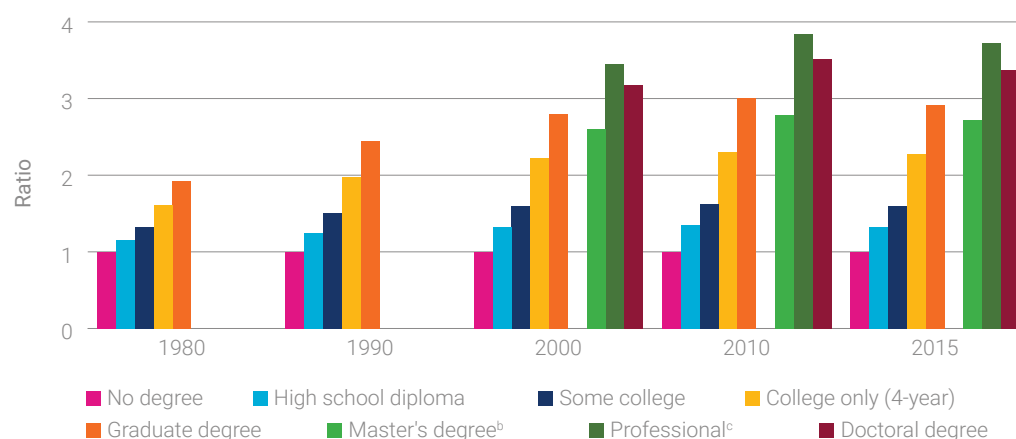
The use of labour-saving technologies affects the share of national income that goes to workers. Skill-biased technologies affect the composition of the labour force as well as the income that goes to workers with different skills. Skill bias comes into play with the technologies invented and diffused after World War II in developed countries, and their use has accelerated over the last three decades.⁴²

Technological change in developed countries has been identified as skill biased. The wages of highly skilled workers – relative to those of low-skilled workers – have indeed been rising in the last decades, even while the supply of highly skilled (educated) workers has increased. All other things being equal, overall increases in education should reduce the impact of the “skill premium”. Technological change has been recognized as an important factor in the rising skill premium (see figure 2.2).

⁴²Historically, technologies have not been always skill biased. For example, interchangeable parts, a major technological advance in the nineteenth century in the United Kingdom, were designed to replace skilled workers (artisans) with weaving, spinning and threshing machines. The technologies were considered unskill biased (see Acemoğlu, 2003).

FIGURE 2.2

Wages by workers' level of education relative to workers with no degree, United States of America, 1980-2015^a



Source: Calculations based on Valletta (2016), table 1.

Notes:

a. Wage premium is measured by the average hourly wage of workers in each educational group relative to workers with less than 12 years of education, labelled as "no degree".

b. Includes Master of Business Administration (MBA) and other master's degrees.

c. Includes Juris Doctor (JD), Doctor of Medicine (MD) and related degrees.

2. Share of labour in national income: impacts of labour-saving technology

Labour-saving technologies have been identified as one of the drivers of the declining income share of labour in both developed and developing countries (IMF, 2017a). Chapter 1 shows that the share of national income that goes to labour has declined in both developing and developed regions. Karabarbounis and Neiman (2013) estimate that the emergence of new technologies, particularly those related to ICTs, accounted for about half of the decline in the global labour share of income for 1975-2012.

Technological progress, proxied by a rapid decline in the price of investment goods relative to other goods, has contributed to and encouraged the shift away from labour and towards capital in production, particularly in developed countries.⁴³ The accelerated advance in ICTs, in general, and automation, in particular, underpins this decline. Lower prices of investment goods incentivize the employer to substitute capital – that is, the use of labour-saving technologies – for labour. If the production method, which includes not only technologies but also management and organizational arrangements, is flexible enough,⁴⁴ more capital is used to produce a unit of product, at the expense of labour. This reasoning is consistent with the experience of many developed countries.

Technological progress has also contributed to the emergence of one or two dominant firms in several industries. Autor and others (2017a) point out the role of firms such as Google, Apple, Facebook and Amazon in their respective industries in

⁴³ According to Karabarbounis and Neiman (2013), the relative price of investment goods declined by about 25 per cent from 1950 and 2010 in developed countries.

⁴⁴ In this case, the elasticity of substitution between labour and capital is said to be greater than one. Lawrence (2015) refutes the claim that elasticity is greater than one in the economy of the United States. He instead claims that elasticity is less than one and that technological progress is augmenting labour.

the declining labour share. The presence of these so-called superstar firms leads to a “winner-take-most” market concentration and increases the price markup over marginal cost, lowering the labour share of value-added in the industry. In fact, in the United States, market concentration has increased in some industries, and the industries with higher concentration have decreased their labour share (see also Autor and others, 2017b). Other possible factors that could explain the decline in labour share include increases in markups by monopolistic or oligopolistic firms and the share of economic profits (Karabarbounis and Neiman, 2013).

In developing countries, the share of labour in total income has declined for different reasons than in developed countries, even though new technologies still play a role. In conventional economic theory, developing countries are considered to have a comparative advantage in producing more labour-intensive products, while globalization would provide them with the opportunity to expand the production of such products, which would lead to a higher labour share in national income. Empirical evidence, however, suggests otherwise. Such evidence shows that it is difficult for developing countries to substitute capital with labour because of low elasticity, even when there is higher demand for labour. Moreover, advances in information technology and innovation in the transportation industry have geographically expanded global value (or supply) chains and deepened the supply and communication relations between headquarters offices and their suppliers and among suppliers in the value chains. Global value chains, in turn, have facilitated the off-shoring of capital-intensive production to developing from developed countries.⁴⁵ In general, off-shore tasks using new technologies are more capital-intensive than the average intensity in these host countries, contributing to a decline in the labour share.^{46,47}

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It should be noted that the declines in labour share are largely due to intrasectoral (or within-industry) changes rather than to changes in the sectoral composition of the economy (or structural changes) (Karabarbounis and Neiman, 2013). If the changes were structural, the declining labour share would be attributed to shifts of workers from industries with higher labour-income shares (for example, finance and services) to those with lower shares (such as mining, transportation and manufacturing). This within-industry decline of the labour share, on the other hand, supports the role of labour-saving technology in the shrinking share of labour income at the national level. Karabarbounis and Neiman (2013) find that, with a few exceptions – namely, the economies of Puerto Rico and the Republic of Korea – by and large, changes in the within-industry labour share accounted for a significant portion of changes in the total labour share.

⁴⁵ According to the International Labour Organization, about 19 per cent of total employment in seven large developing countries (Brazil, China, India, Indonesia, Mexico, the Russian Federation and Turkey) involved jobs in global supply chains in 2013. See Kizu and others (2016).

⁴⁶ It should be noted that advances in ICT and transportation have also made it possible to expand global value chains in many parts of the world.

⁴⁷ More recently, increasing automation is argued to have led to reshoring (or *on-shoring*) of production – that is, the process of returning the production of goods back to the enterprise's home country. In theory, reshoring will force the host country to exploit its comparative advantage in labour-intensive production, thus leading to a higher labour share in national income. Yet it will take several years before any impacts of reshoring on labour share can be discerned.

3. Wage divergence: impacts of skill-biased technology

Widening wage inequality is a key contributor to the rise of income inequality. There are two possible channels through which recent technological progress has affected wage inequality, though they are not mutually exclusive. The first is the emergence of superstar managers, who innovate and capture a large share of the market, earning astronomical wages. The second channel is the so-called race between skills and technology: if the rate of technological progress is faster than increases in education, then the growing demand for highly skilled workers may result in higher wages for them (see Rotman, 2014). In fact, compensation paid to superstar managers and highly skilled workers has increased while that of middle- and low-skilled workers has stagnated or even declined, resulting in widening wage inequality, as explained in chapter 1.⁴⁸

The term “superstars” originated in the television and motion picture industries; superstars significantly expanded the audiences for those in show business and sports, and their wages rose commensurately (Rosen, 1981). At present, chief executives of large corporations receive hefty compensation in the form of salaries, bonuses and, most importantly, stock options. According to the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), the chief executive officers of S&P 500 companies received an average of \$14.5 million in 2018, while the average production and non-supervisory worker earned about \$40,000 that year.⁴⁹ The current era of new technologies is characterized by a small group of successful individuals and the enterprises they manage (see Brynjolfsson and McAfee (2014) and Autor and others (2017a)). The nature of the technology itself draws attention to their accomplishments and dramatically increases their rewards. The biggest economic winners are “those with the ideas behind new products and successful business models”, not the conventional capital owners (Rotman, 2014, p. 10). In 2017, five technology and two financial companies were ranked among the 10 largest publicly traded companies in the United States. In 1967, only one technology company was among the top 10; the rest comprised oil and gas, film, automobile and telephone companies, all of which are capital intensive and tend to employ heavy machinery.

As described in the previous section, labour-saving technologies – particularly the automation of routine tasks – reduced the need for many production, sales, administrative and clerical jobs. The automation process began with advances in digital technologies in the 1980s. Now, artificial intelligence, machine-learning and robotics are the main drivers of technological progress that is expanding to a new domain of tasks and offers opportunities for automation in both manual and cognitive work.

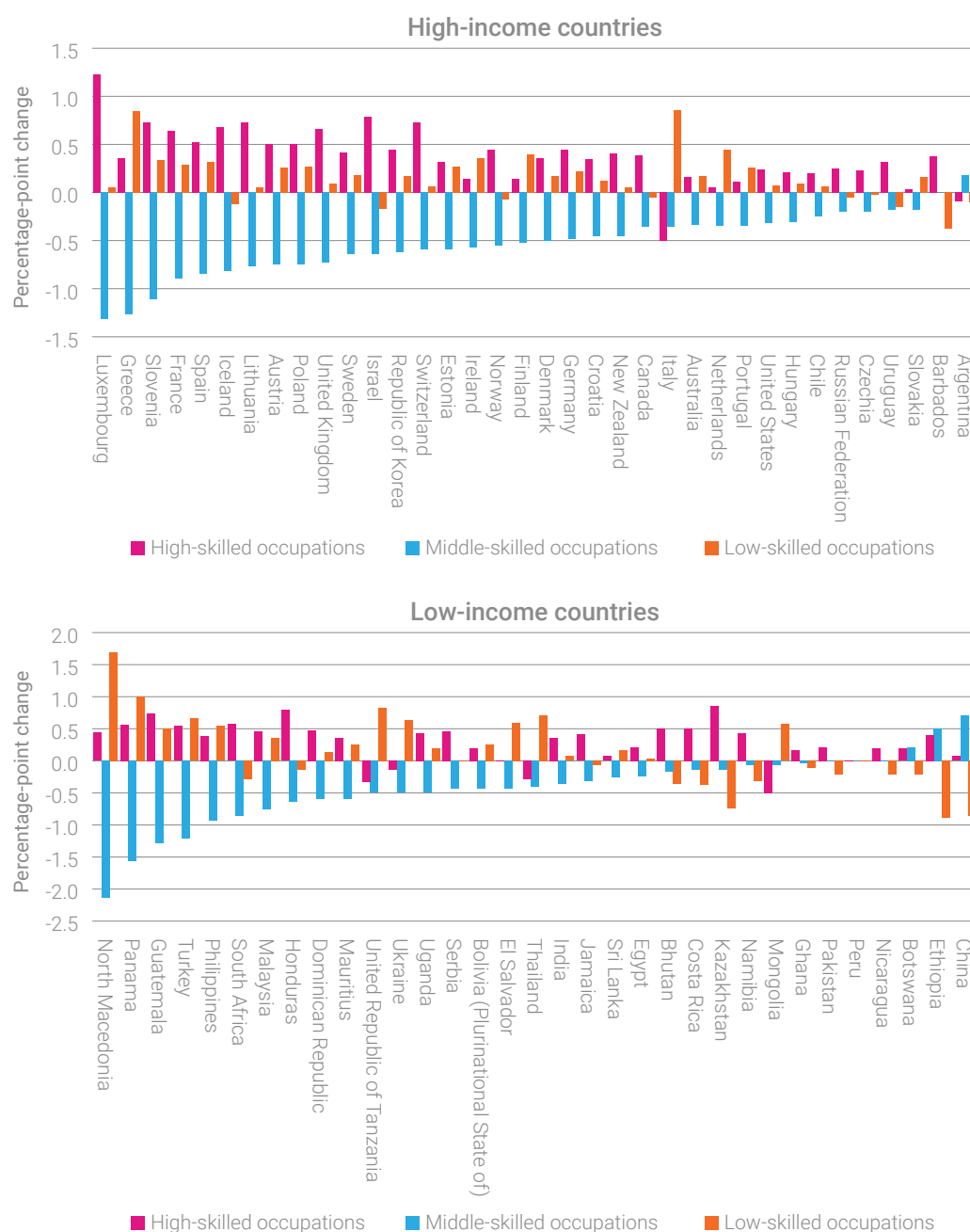
There has indeed been a long-term reduction in jobs that are routine intensive. As shown in figure 2.3, the share of middle-skilled occupations – often administrative and sales-related – declined since the 1990s in almost all high-income countries and even in many low-income countries.

⁴⁸ Chapters 1 and 6 also point out that policy changes have contributed to the growing wage gap.

⁴⁹ AFL-CIO, “Highest-Paid CEOs”, available from <https://aflcio.org/paywatch/highest-paid-ceos>.

FIGURE 2.3

Polarization of labour markets: changes in employment shares by skill level in high- and low-income countries, around 1995 and around 2015



Source: Calculations based on World Bank (2016b).

Note: High-skilled occupations include legislators, senior officials and managers, professionals, technicians and associate professionals. Middle-skilled occupations comprise clerks, craft and related trades workers, plant and machine operators and assemblers. Low-skilled occupations refer to service and sales workers and elementary occupations.

As a result of these trends, labour markets are becoming increasingly polarized. Skill-biased technologies that favour high-skilled workers and reduce the demand for middle-skilled workers are a key determinant of this polarization. Thus, on the one hand, automation has led to a direct substitution of jobs and tasks currently performed by workers (in what is often called the displacement effect). On the other hand, increases in productivity (and thus income) for some (mostly high-skilled) workers generate larger demand for goods and services (known as the productivity effect). High-skill-biased technology has increased the demand for low-skilled workers as a second-round effect of its increased demand for high-skill workers. So, while skill-biased technologies have affected the skill composition of the labour market, there is little evidence to suggest that they have reduced the total number of job opportunities significantly (OECD, 2019c).

SO FAR, HIGHLY
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The hollowing out of middle-skilled occupations has been well documented in the United States and European countries, but the same phenomenon is now spreading to developing countries, except China and Ethiopia. In China, mechanization in the agricultural sector increased the share of routine employment between 2000 and 2010, while in Ethiopia the share of employment in manual occupations increased from around 1995 to around 2012. Some commodity-exporting countries did not experience this polarization since the commodity price boom benefited low-skilled workers (World Bank, 2016b).

One type of skill-biased technology that has contributed to the hollowing out of middle-skilled jobs is routine-biased technology. Together with the off-shoring of tasks from developed to developing countries (which is also partially affected by technological change), new technology has polarized the labour market. Both factors decreased the demand for middle-skilled workers relative to high- and low-skilled workers (Goos and others, 2014).⁵⁰ As a result of the emergence of routine-biased technology, middle-skilled workers earned about three quarters of the wages of their college-educated counterparts in 1980; in the United States, middle-skilled workers earned only about half as much as their more educated counterparts. It may not be surprising that the wages of middle-skilled workers declined relative to those of high-skilled workers, since demand for the former group decreased. But the wages of low-skilled workers also declined relative to those of the highly skilled, despite the increased demand for low-skilled workers. In the majority of developed countries, wage disparity as measured by the ratio between wages at the ninth and the first deciles of the wage distribution – called the 90:10 ratio – is higher today than 40 years ago. In the United States, where wage disparity is higher than in other developed countries, the 90:10 ratio rose from 3.66 in 1973 to 5.07 in 2017 (OECD, 2019b).

Earnings inequality and job polarization have also increased in Europe. Bussolo, Torre and Winkler (2018) examine three factors that have affected the distribution of earnings among workers in Germany, Poland and Spain: changes in occupational

⁵⁰ It should be noted that a general consensus has not yet formed. Some economists argue that skill-biased technological change does not adequately account for rising wage inequality over the last three decades. See, for example, Schmitt, Shierholz and Mishel (2013).

structure (that is, polarization), returns to education, and labour market characteristics, such as age and gender composition. The study concludes that job polarization can account for a significant share of the observed increases in inequality, while the two other factors played only minor roles in explaining wage inequality. Of particular interest in this analysis is the strong power of occupational structure to explain the increasing 90:10 and 50:10 ratios, more than the increasing returns to education.⁵¹ Most of the displaced middle-skilled workers are likely to move down to jobs categorized as low-skilled, exercising downward pressure on wages for low-skilled workers, explaining the widening wage gaps.

Autor (2019) points out that urban workers who are not college educated have been most adversely affected by routine-biased technology. He also says that job polarization and wage inequalities among different skill or educational groups have been most noticeable in urban areas of the United States since 1980. Urban workers that are not college educated and that enjoy (relatively) high-paying middle-skill jobs in large, high-wage cities have been steadily losing these jobs and shunted into low-wage occupations. These workers now perform substantially less skilled work than decades earlier (Autor, 2019, p. 31). He concludes that technological progress in recent decades has been less beneficial and more disruptive to workers without a college education.

More recently, a debate has emerged on whether wage gaps among workers with a college or higher degree and those with a high-school diploma are decreasing in the United States and some European countries (Valletta, 2016) (see box 2.1). At this moment, it is too soon to tell how this would affect wage distribution at the national level and thus income distribution.

Many attempts have been made to estimate the extent to which jobs could be automated and replaced by machines. As Figure 2.4 shows, all estimates suggest that many jobs are at risk of disappearing due to automation. The share of jobs at risk is especially high in developing countries (the upper part of the figure), where the proportion of manufacturing jobs, including tasks that are intensive in routine skills, is high. Estimates on the impact of automation on developed countries (the lower part of the figure) are wide-ranging, depending on the methodologies applied – for example, occupational versus task-based approaches. Task-based approaches recognize that automation may replace specific tasks instead of entire jobs. Acemoğlu and Restrepo (2018) suggest that what matters for the future labour market is the task content of production methods and the skills acquired by the future labour force. Therefore, estimates using the occupation-based approach to gauge the impact of automation on jobs are likely to be higher. Despite disagreements, most studies and estimates suggest that, in developed countries, middle-skilled jobs that are intensive in routine tasks face a higher risk of disappearing.

⁵¹ The 50:10 ratio refers to the ratio between wages at the fifth and first deciles of the wage distribution.

BOX 2.1**United States of America: higher-education wage premiums flatten**

Figure 2.2 shows widening higher-education wage premiums in the United States since 1980. The graph, however, also indicates that the wage premium for college-educated workers rose only marginally between 2000 and 2010. Moreover, from 2010 to 2015, the wage premium for college-educated workers as well as those with post-graduate degrees declined slightly relative to those with a high school diploma or no educational degree.

Valletta (2016) argues that the slow growth of the wage premium – followed by a decline – represents a departure from the long-term trend in widening higher-education wage premiums due to technological changes, as argued in the text.

He suggests two reasons for the recent flattening of the wage premium: job polarization and skill downgrading. Job polarization, which contributed to a widening higher-education wage premium, can now account for the flattening of the college wage premium through a shift of college graduates towards jobs that are being displaced by automation and outsourcing. At the same time, increasing demand for non-routine cognitive skills possessed by post-graduate degree holders may contribute to expanding their relative wage advantage against those with a four-year college degree.

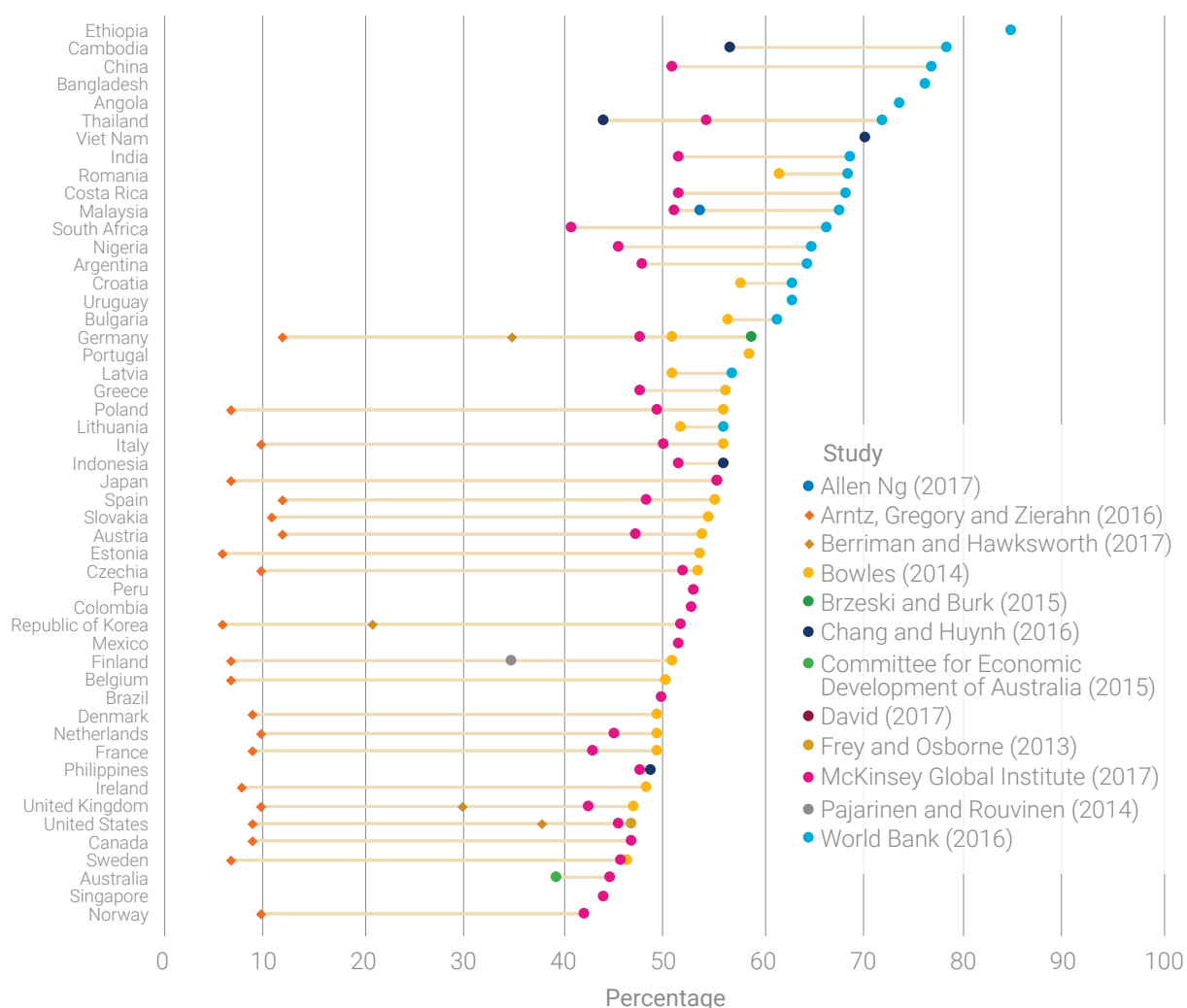
Skill downgrading is the process by which weaker demand for cognitive skills “cascades down the skill distribution as highly skilled workers...increasingly compete with and replace low-skilled workers in occupations that rely less heavily on advanced cognitive skills” (Valletta, 2016, p. 3). Weak demand for cognitive skills reflects a maturation of information technology and consequent slowdown in investment in this field (Beaudry and others, 2016).

The higher-education wage premium in 2015 was still larger than in 1980, and higher education is expected to continue to yield positive net returns for many people who complete college or higher education. But the most recent data suggest that the wage premium is likely to show significant variations among individuals with the same educational attainment. Technological progress that encouraged skill upgrading and job polarization is now considered to be a factor in the flattening of the wage premium once progress slows.

It will take some time to see the impacts of wage premium flattening on overall wage and income distributions. Policymakers need to carefully monitor how the slowdown in information technology investment affects wage gaps among workers with different education and skill levels.

FIGURE 2.4

Estimates of the share of jobs at risk of being lost to automation as a result of artificial intelligence and advanced technologies, by study



Source: Calculations based on various studies.

Note: In the key, (T) refers to studies that estimate the effect on jobs using a task methodology. All others rely on a survey that ranks entire jobs at high, middle or low risk of being automated. See Arntz, Gregory and Zierahn (2016) for further explanation.

A few studies examine the direct and more specific impact of robots – the most advanced form of automation – on wages in different education groups. The results are sometimes conflicting and, at other times, draw similar conclusions. A study by Acemoglu and Restrepo (2017) looks at the impact of robots in the United States. The negative wage effects of robots are found to be stronger on workers with less than a high-school education, with a small (though marginally significant) negative effect on workers with more than a college degree. At the national level, the introduction of robots has been estimated to have a negative effect on the wages of all groups of workers (one more robot per thousand workers reduces wages by 0.25-0.50 per cent), and robots could further widen wage inequality if the educational distribution of workers remains

unchanged. Conversely, based on a similar study of six European countries (Finland, France, Germany, Italy, Spain and Sweden), Chiacchio and others (2018) do not find any statistically significant effects of robots on wages in various educational groups.

B. Current technological divides and opportunities for inclusion

The previous section argued that digital technologies in general and automation in particular have been introduced primarily to enhance productive efficiency and, more often than not, showed adverse effects on income and wage inequalities. The evidence reviewed in this section suggests that Governments can shift the impact of technologies from enhancing inequality to enhancing equality, without affecting the speed of technological progress. The keys for success are the declining prices of goods or services that embody new technologies, and the ability of Government to make new technologies more readily accessible and usable by everyone.

The use of new technologies in the public sector is widespread among developed countries, and is increasing in developing countries. For example, Government-issued digital identification (ID) allows a holder to access various public services and government benefits. The system makes it possible to build a digital “Government” in which the provision of public services becomes more efficient, effective and inclusive. In India, advances in mobile technologies have become the foundation for reliable digital networks and sophisticated image recognition technologies that allow ID holders to be readily identified, facilitating their access to various public and financial services. China has demonstrated a significant capacity to develop technological advances in telecommunications, health and education. Healthy China 2030, for example, is an example of how technology is being used to provide health services in remote areas, illustrating how Governments can intervene to encourage a more inclusive use of new technologies.

The cases examined below show that, when the right policies are deployed in a coordinated manner, these technologies can drive development and make it possible to create more inclusive societies. Conversely, without an integrated framework of deliberate public policies, the same technologies could make societies more unequal.

1. Technological divides and unequal access to basic services

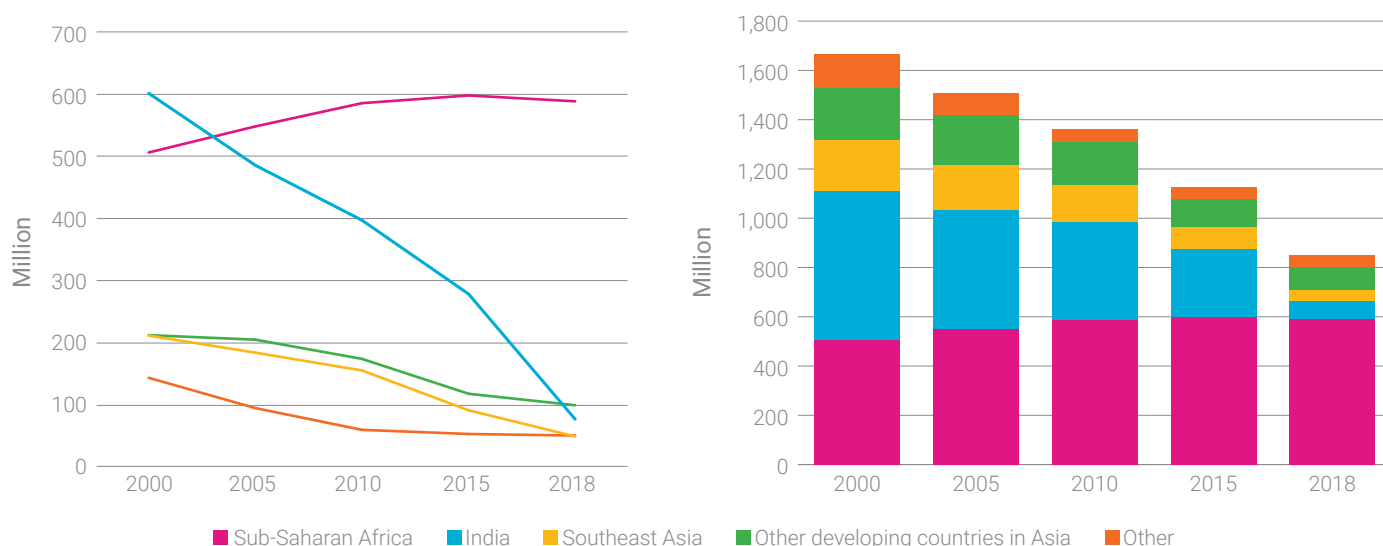
The rate of electrification has been accelerating in recent years (see figure 2.5). Still, in 2018, an estimated 850 million people were without this essential service. Within low- and lower-middle-income countries, including the least developed countries, there are typically gaps in access between people living in urban and rural areas, and within urban and rural areas, as discussed in chapter 4. In contrast, most populations living in high-income and upper-middle-income countries have universal access to electricity. A significant disparity is also found in access to the Internet among different income groups (see figure 2.6). Less than 20 per cent of the population of least developed countries have access to the Internet, compared to over 85 per cent of those in developed countries.

MANY OF THE BENEFITS FROM NEW TECHNOLOGIES FOR DEVELOPMENT MAY NOT MATERIALIZE WITHOUT DELIBERATE GOVERNMENT ACTION

LESS THAN 20 PER CENT OF THE POPULATION OF LEAST DEVELOPED COUNTRIES HAVE ACCESS TO THE INTERNET, COMPARED TO OVER 85 PER CENT OF THOSE IN DEVELOPED COUNTRIES

FIGURE 2.5

Levels and trends of people worldwide without access to electricity, by selected countries and regions, 2000-2018



Source: International Energy Agency (2019). *World Energy Outlook 2019*.

Note: The group "Other developing countries in Asia" includes Bangladesh, Democratic People's Republic of Korea, Mongolia, Nepal, Pakistan and Sri Lanka. The group "Other" includes Algeria, Argentina, Bahrain, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Egypt, El Salvador, Guatemala, Haiti, Honduras, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kuwait, Lebanon, Libya, Morocco, Nicaragua, Oman, Panama, Paraguay, Peru, Qatar, Saudi Arabia, Syrian Arab Republic, Trinidad and Tobago, Tunisia, United Arab Emirates, Uruguay, Venezuela (Bolivarian Republic of) and Yemen.

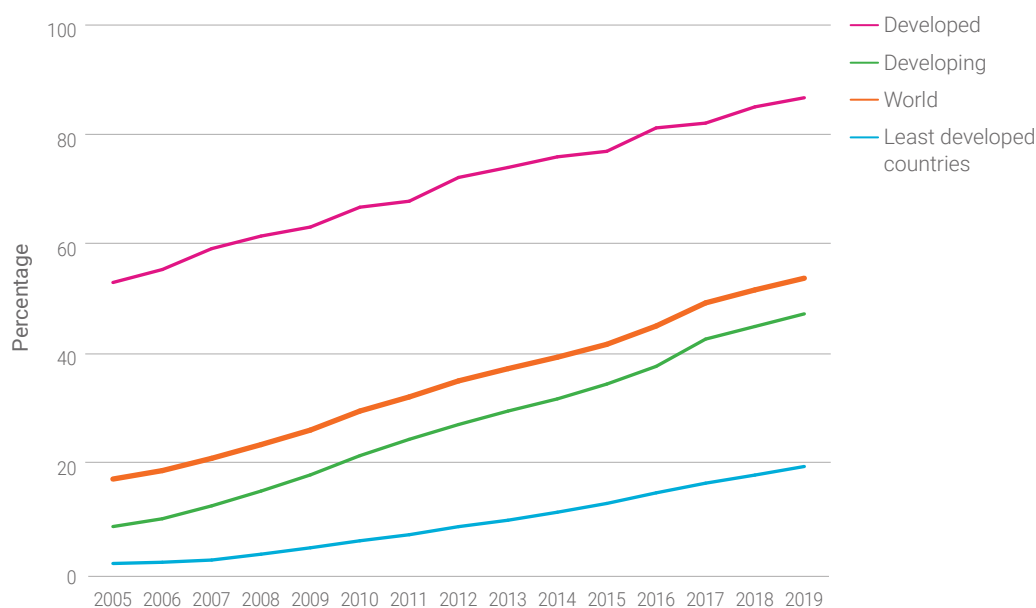
One of the reasons for low Internet coverage is the high annual cost of access. Fixed-broadband Internet in 2016 cost, on average, more than 30 per cent of GNI per capita in least developed countries, but less than 3 per cent in developed countries (ITU, 2017). Among all regions, prices are the highest in Africa. In an extreme case, the annual cost of fixed-broadband Internet access was over 1,700 per cent of GNI per capita in the Central African Republic in 2016, compared to less than 0.8 per cent in the United States.

Price is not the sole reason for the technological divide. Sometimes it reflects existing disparities not only in telecommunications infrastructure, but also educational attainment and general human capital levels among households and regions in a country. A case study in Indonesia (Sujarwoto and Tampubolon, 2016) found that inequality in Internet access was widening among different age, gender, income and education groups, due to the above-mentioned factors.

Technological divides hinder inclusion, since artificial intelligence, machine learning, biotechnology, satellite technologies and their applications in health, education, transportation, agriculture and manufacturing are directly and indirectly affected by the use of the Internet and, in particular, broadband access. Internet divides are likely to prompt schisms in other areas, partly because the Internet is a basic platform for progress in and wider dissemination of several other technologies. For example, Kudasheva and others (2015) show that inequality in access to ICTs is associated

FIGURE 2.6

Percentage of the global population with access to the Internet by country groupings, 2005-2017



Source: International Telecommunication Union (2019). Key ICT indicators for developed and developing countries and the world (totals and penetration rates). Available from www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx. Accessed on 17 December 2019.

with and may have led to higher income inequality in Kazakhstan, where wealthier households can afford higher-quality Internet services while low-income households can afford only lesser quality service with slow, blurry images and unstable streaming. Furthermore, a large gap is found between urban and rural areas in access to broadband in many developing countries. For example, while broadband use in the capital cities of India, Kyrgyzstan and the Republic of Moldova is as high as that in OECD countries, broadband access in rural areas of those three countries is among the lowest in the world (World Bank, n.d.).

2. New technologies and financial inclusion

Lack of access to electricity, mobile phones and the Internet limits the potential benefits of modern conveniences and services that people living in higher-income countries take for granted. Having an account with a financial institution is one such convenience. A bank account provides a person or family with an easy and safe means of saving and helps smooth out personal consumption over time. It can help people accumulate assets and provides financial buffers in case of economic hardship, such as job losses or crop failures. Yet in 2017, about 1.7 billion adults worldwide were without an account at a financial institution. A combination of new and existing technologies, together with appropriate government intervention, can facilitate the use of new technologies by less advantaged people, and reduce disparities in access to financial accounts.

TABLE 2.1

Disparities in financial account ownership by region, education, income and gender, 2011-2017 (percentage)

Country group/year	Account ^a	Account, primary education or less ^a	Account, secondary education or more ^a	Gap by education	Account, income, poorest 40% ^a	Account, income, richest 60% ^a	Gap by income	Account, female ^a	Account, male ^a	Gender gap
Low-income countries										
2011	13	8	23	15	7	17	10	11	16	5
2017	35	29	50	21	26	41	16	30	40	10
Lower-middle-income countries										
2011	29	23	40	17	20	35	15	23	34	11
2017	58	50	66	17	51	63	12	53	63	10
Upper-middle-income countries										
2011	57	51	65	13	42	67	25	23	4	23
2017	73	66	80	15	62	80	18	19	14	19
High-income countries										
2011	88	71	92	20	85	91	6	86	90	4
2017	94	84	95	11	90	96	6	93	95	2

Source: Based on Demirgüç-Kunt and others (2018).

Note:

a. Among persons 15 and older.

Table 2.1 shows shares of account ownership at financial institutions, such as banks, microfinance lenders and other types of regulated institutions in the global adult population and disparities based on education, income and gender. The table shows that high-income countries achieved near universal ownership of financial accounts in 2017. In these countries, the income and gender gaps were small, and educational disparities, while larger, shrank over time.

In low- and middle-income countries, the shares of financial account ownership in the total adult population are lower and disparities higher compared to high-income countries. However, the shares of account ownership have increased consistently over time in all country groupings and in all categories. Increased access to electricity and digital technologies is thought to have contributed to this positive trend (Demirgüç-Kunt and others 2018). Mobile money services, through which users can store and transfer funds through wireless transmissions, has been one contributing factor. Some 350 million adults worldwide opened their first financial account between 2014 and 2017.⁵² As of 2017, 9 per cent of adults, or 13 per cent of account owners, had opened their first financial account for the purpose of receiving private sector wages, government payments or proceeds from the sale of agricultural products (ibid.).

The widespread use of mobile phones and the Internet has been a major contributor to greater financial inclusion. At the same time, digital technologies have encouraged the

⁵² Calculation based on data from the Global Findex Database 2017 (<https://globalfindex.worldbank.org/>) and the World Population Prospects 2019 (<https://population.un.org/wpp/>).

emergence of new entrepreneurs and financial technologies. Mobile networks provide an incentive for private companies to enter the electricity market, even in rural areas, where cost recovery on investments and the illegal use of electricity have traditionally been problematic. The networks allow users of decentralized systems to remotely pay bills via smartphones. Using the same networks, the electricity producer can collect usage data, disable a device if the customer misses a payment, and turn the device back on when the payment is made. In fact, providers of mini- and off-grid electricity systems have entered the market in many parts of Africa where mobile networks are available (IEA, 2017).⁵³

Despite overall increases in financial account ownership, disparities among groups within countries are pervasive. Overall, gender gaps as well as income and educational disparities did not diminish between 2011 and 2017 despite the widespread use of mobile phones and the Internet.

The experience of India suggests that mobile digital technologies need to be complemented by other technologies to reduce inequality in access to financial services (see box 2.2).

India managed to achieve more equal access to financial accounts by complementing mobile technologies with a national system of digital IDs and an affordable electricity system that provides an uninterrupted supply of stable current. At present, many developing countries have digital ID systems (McKinsey Global Institute, 2019), and some countries are on track to achieve universal access to modern energy during the 2020s (IEA, 2018). The experience of India is likely to be replicated in other countries in the near future.⁵⁴

3. New technologies in other sectors

New technologies have been introduced in other areas as well. For example, mobile technologies can provide small-scale farmers with better access to critical information about markets for their products, help them obtain fair prices, and improve production planning and commercialization.⁵⁵ Unmanned aerial vehicles (“drones”), which rely on the global positioning system or are remotely controlled, also have potential for increasing the productivity of farmers in less technologically advanced areas by providing up-to-date information. Teaching and learning processes have improved in schools that have integrated ICTs into their curricula compared to schools that have not (Sangrà and González-Sanmamed 2010), and open online courses can also become a major equalizer in terms of universal access to education. The United Nations (2019b) has examined actual and potential applications of new technologies in the areas of the agriculture, education, health and housing.

⁵³ The most popular combination of mobile payments and decentralized systems is the pay-as-you-go system, which uses a solar-powered module with a battery and small appliances. See Runyon (2016) and Wogan (2013).

⁵⁴ China is another country that has managed to increase its share of adults with bank accounts. The share in 2017 stood at 80 per cent, compared to 64 per cent in 2011. The share of adults with an account among rural dwellers jumped from 58 per cent in 2011 to 77 per cent in 2014 (Demirgüç-Kunt and others, 2018).

⁵⁵ In fact, the World Bank (2009) found that “with 10 per cent increase in high-speed Internet connections, economic growth [in agriculture] increases by 1-3 per cent.” Chavula (2014) shows that the use of the Internet and mobile phones has played a significant role in enhancing the agricultural production of small farmers more than large farmers in 34 countries in Africa. The study warns, however, that higher education levels and skills are required for more effective adoption and utilization of new technologies.

BOX 2.2**India: Harnessing the potential of digital technologies for more inclusive development**

India has successfully managed to use digital technologies to reduce disparities among population groups. A combination of new public infrastructure and government action was behind the success of a new identification system that is increasing ownership of financial accounts and making public services more effective.

The Unique Identification Authority of India was set up in 2008 and introduced demographic and biometric identification cards (using fingerprints and iris scans) with unique ID numbers, known as the *Aadhaar* ("foundation" or "base" in the Hindi language). The numbers can be used to open financial accounts at banks or other businesses.⁵⁶ In 2014, the Government of India instructed banks to provide accounts to people without them, using their *Aadhaar* numbers or other sources of information about their identities and addresses. The number of people without bank accounts declined by more than half, from 557 million in 2011 to 233 million in 2015. By 2017, 80 per cent of adult Indians had at least one bank account, which is significantly higher than the average share in developing countries (63 per cent). The biometric ID helped reduce gender-, income- and education-based gaps in access. In fact, the system has also been used to enhance the effectiveness of social protection, health and voting programmes.

Before the introduction of *Aadhaar* numbers, those who were less advantaged were unlikely to have an official registered ID, which was necessary to open an account.⁵⁷ Improvements in electricity access have facilitated the opening of financial accounts and their use. Electrification has reached 82 per cent of the country's population, and the International Energy Agency predicts that India will achieve universal access in the early 2020s.

Despite this success, 48 per cent of bank accounts in India were reported as inactive in 2018 (Demirgüç-Kunt and others, 2018). This suggests that the government programme to promote account ownership, launched in 2014, is still in its infancy. However, more accounts are expected to become active as a greater number of people acquire mobile phones. Two thirds of inactive account holders now have mobile phones, and this share is increasing.

Among these sectors, advances in medical technologies are most notable. Recent scientific breakthroughs in biology and genetics and applications of robotics and artificial intelligence to medical treatments and diagnostics have possibilities we have yet to imagine. At the same time, these advances are likely to benefit the rich more than people in poverty, thus widening health inequalities among different socioeconomic groups.⁵⁸ That said, new technologies have the potential

⁵⁶ See <https://uidai.gov.in>, the official site of the Unique Identification Authority of India.

⁵⁷ There is a controversy surrounding the *Aadhaar* with regard to the privacy or, more generally, dual use of technologies, which is beyond the scope of this report. For details, see Bhabha and Bhatia (2016) and McKinsey Global Institute (2019).

⁵⁸ For medical innovations and their impacts on health inequality, see Weiss and others (2018), Chang and Lauderdale (2009) and Goldmann and Lakdawalla (2005).

to significantly improve the health status of humanity and to reduce socioeconomic inequalities in health. Two groups of technologies are considered here – mobile health (mHealth) technologies and the Internet.

The practice of medicine and public health supported by mobile devices is known as mHealth. Its applications improve health-care delivery and monitoring systems, which can enhance the quality of life for underserved populations and reduce inequalities in access to high-quality and affordable health care. The technologies can be used to respond promptly and effectively to both communicable and non-communicable diseases. Currently, the most common uses of mHealth are text-messaging and cell reminders to follow up on appointments and health behaviours, which have reduced the treatment time of diseases, no-show appointment rates and phone call costs (Beloev, 2016).

Reaching all population groups with the positive benefits of health technologies will take time. Policymakers can accelerate this process, thereby reducing inequalities, by facilitating access to and adoption of relevant technologies. Applications of mHealth include the direct provision of care via mobile telemedicine as well as the training of and collaboration with health workers. These applications have the potential to remove physical barriers to wider and better care and service delivery to people in poverty by increasing their access to care, strengthening health systems management, and enhancing the reliability of supply systems and communication. They can also help overcome infrastructure and hospital resource constraints by reaching people residing in remote areas and reducing the impact of an inadequate number of health-care workers – whose services are often difficult to retain in rural areas. Expansion of telemedicine's infrastructure throughout health systems is needed, particularly in rural areas, in order to overcome health staff shortages (Nouhi and others, 2012).

The Internet is fundamental to the use of ICTs in health care (known as eHealth). The Internet enables medical information to be communicated more broadly and promptly, facilitating the sharing of best practices, and helps doctors in the diagnosis of diseases and injuries. Similarly, web-based learning offers continuing education to health-care workers, tailored to their needs, skill levels and availability. The use of web-based data entry and storage means that large databases are available online, which can foster wider and more effective disease surveillance. For example, access to disease reports by health officials can help to ensure timely identification and control of outbreaks as well as efficient long-term surveillance of endemic conditions (Nouhi and others, 2012).

Access to health technologies can make health-care provision more inclusive. However, this will not necessarily lead to a reduction in digital inequalities without differentiated policies on technology adoption. Neter and Brainin (2012) show that the Internet can, in fact, increase inequalities since a clear association has been found between eHealth literacy and different social background attributes.

C. Policy considerations

Technological change is driving wage and income inequality upwards. Even well-intended policies to bring the advantages of technology to everyone have often benefited most those groups that are already better off. Those with the most resources, be they human or financial, are best positioned to take advantage of the development of innovative technologies. So, not surprisingly, technological change has greatly favoured highly skilled workers.

The fourth industrial revolution has improved productivity in large segments of the economy, but wages have not grown in tandem. In addition, job polarization triggered by technological change has contributed to the rise of wage inequality in many parts of the world.

These adverse consequences of recent technological progress are not inevitable, however. As illustrated in this chapter, proactive policies and supportive institutions can help ensure that technological dividends are widely shared. While doing so may require a broad range of strategies, three key policy interventions are fundamental:

Building forward-looking and inclusive education systems. Rapid technological progress requires a continual upgrading of workforce skills. Once-and-for-all education at a young age is no longer sufficient. It is therefore important to invest in skills and knowledge that enable workers to perform new tasks over a lifetime of changing work environments, making sure that education systems are inclusive so that opportunities are equitably shared.

Supporting people through life and work transitions. This includes expanding social protection systems and tailoring them to the fourth industrial revolution. In general, existing social protection systems have failed to properly address the consequences of rapid technological progress on workers and households. Such systems will have to cover, for instance, a growing number of people under non-standard working arrangements, as chapter 6 describes.

Strengthening efforts to bridge the technological divide within and among countries, including by investing in infrastructure. To harness technological progress for a more equal world, it is critically important that access to new technologies is universal and that all know how to use them. An enabling infrastructure requires investment in connectivity, especially in historically marginalized communities.

In the labour market, new technologies are taking over jobs and tasks currently performed by workers. However, technological change also creates the need for new jobs and tasks, including those that are necessary to use, test, supervise and

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market new products and services. Differences are found across both companies and countries in the extent to which jobs are either being cut or redesigned based on changing requirements. Strong, forward-looking education systems and adequate support can enable countries to train workers and align their workflows in response to automation.

Strengthened redistribution is needed to counterbalance widening inequality. At the same time, as more workers become more highly skilled, and as the share of medium-skilled workers consolidates and the relative size of the low-skilled workforce declines, the need for redistribution will diminish.

Not only are highly skilled workers benefiting the most from new technologies in many countries, but productivity gains brought about by such technologies are being captured by a small number of dominant companies. The presence of monopolistic or oligopolistic companies have distorted market competition and hindered the diffusion of new technologies within and among countries. Anti-trust policies may need to be adjusted to prevent first-movers from establishing dominance and to maintain fair competition in the digital economy.

Considerable policy intervention is needed at national, regional and global levels to make sure that technologies do not widen existing divides within and among countries and leave marginalized groups and many developing countries behind. Many of the less technologically advanced countries, including the least developed countries, will need international support for their national policy efforts in strengthening innovation capacities, including facilitation of technology transfer, access, adoption and development. At the global level, it is important for the international community to agree on a more flexible approach to intellectual property rights that can provide adequate patent protection, while also enabling and facilitating access to technological enhancements within and among countries.

Governments need creative solutions to ensure that the benefits of new technologies are broadly shared. The direction of technological change partly depends on policy, including tax incentives and public investment in research and development. Policies for research and development can promote innovation that prioritizes technologies that create new jobs or complement – rather than displace – existing jobs. Another solution is to deploy funds to acquire stakes in technological innovation and commercialization so that the profits they generate can be shared with the wider public rather than mainly benefiting a narrow group of stakeholders.

IN ORDER TO
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POLICIES AND
STRATEGIES
TO MAKE THEM
ACCESSIBLE TO ALL

Finally, ensuring that the equality-enhancing opportunities outpace the risks involved in technological change requires integrated, far-sighted and government-wide strategies. These must be complemented by policies that enable access to basic social services, infrastructure, employment and financial inclusion. To be effective, supportive policies that enable technology transfer, adoption and development in productive activities in the agriculture, manufacturing and service sectors have to be carried out in tandem with wider access to education, basic services (water, sanitation and electricity), employment and financial inclusion.

CHAPTER 3

CLIMATE CHANGE: EXACERBATING POVERTY AND INEQUALITY



CHAPTER 3

CLIMATE CHANGE: EXACERBATING POVERTY AND INEQUALITY

KEY MESSAGES

- The effects of climate change are experienced to varying degrees across and within countries due to differences in exposure, susceptibility and coping capacities. If left unaddressed, climate change will lead to increased inequality both within and among countries and could leave a substantial part of the world further behind.
- Developing countries, particularly small island developing States, face disproportionate risks from an altered climate, while high-income countries are generally less vulnerable and more resilient.
- Within countries, people living in poverty and other vulnerable groups – including smallholder farmers, indigenous peoples and rural coastal populations – are more exposed to climate change and incur greater losses from it, while having fewer resources with which to cope and recover.
- Climate change can generate a vicious cycle of increasing poverty and vulnerability, worsening inequality and the already precarious situation of many disadvantaged groups.
- Just as the effects of climate change are distributed unevenly, so too are the policies designed to counter them. As countries take climate action, there will be trade-offs to consider between the positive and negative effects of mitigation and adaptation measures and distributional impacts.
- An equitable transition towards green economies calls for integrating climate goals with social and economic policies aimed at reducing vulnerability, supporting those affected by climate change and creating decent jobs.
- At the international level, climate finance, technological transfer and capacity-building can support developing countries in implementing a just transition.

INTRODUCTION

Climate change is accelerating environmental degradation and increasing the frequency, duration and intensity of extreme weather and climate events.⁵⁹ Countries and societies are now increasingly facing excessive or insufficient precipitation, rising sea levels, extreme temperature changes, storms, droughts, floods and other climate hazards that are only expected to intensify in the future (Hoegh-Guldberg, and others, 2018).⁶⁰

Whether they manifest as individual shocks or gradual environmental degradation, the effects of climate change are contributing to the loss of lives and homes, poor health, and damage to infrastructure, livelihoods and environmental resources. In extreme cases of flooding and coastal erosion, the physical survival of whole communities – or even nations, in the case of small island developing States – may be at stake. In 2010, deaths resulting from climate change were estimated at 400,000 (DARA and the Climate Vulnerable Forum, 2012). By the end of the century, this number may increase to 1.5 million per year if the rate of emissions remains unchanged (Climate Impact Lab, 2018). Assessing the effect of climate change on displacement is challenging. However, one estimate puts the number of people forced to move as a result of weather events and natural disasters at an average of 24.1 million people per year from 2008 to 2018.⁶¹ In the 20 years between 1998 and 2017, losses from extreme weather events amounted to an estimated \$174 billion (PPP) annually (Eckstein, Hutfils and Winges, 2018). As climate change progresses, these losses are expected to rise and will increase in severity unless urgent climate action is taken.

Aside from the direct damage that the effects of climate change inflict on human society and the environment, emerging research indicates that they can also increase inequality within and among countries. Indeed, the effects of climate change are not uniform in their reach or magnitude – nor are the abilities of countries and communities to cope and respond. The most severe impacts of climate to date have been in tropical regions, where most developing countries are located. Such impacts are expected to become more intense. These countries often have little capacity to recover on their own, and losses from climate hazards can hamper or even reverse years of development efforts. Countries in the Caribbean, for instance, are severely affected by climate events such as hurricanes, with Dominica and Antigua and Barbuda suffering damages estimated at 46 per cent and 215 per cent of GDP (PPP), respectively, in 2017 (ibid.).

In developing and developed countries alike, persons who are disadvantaged (socioeconomically or because of where they live), or whose livelihoods are reliant on climate-sensitive resources, are disproportionately affected. People living in poverty

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⁵⁹ Article 1(2) of the United Nations Framework Convention on Climate Change defines climate change as a "change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."

⁶⁰ The Intergovernmental Panel on Climate Change benchmarks global temperature increases against a baseline from a "pre-industrial" period of 1850-1900. The Paris Agreement aims to limit this temperature increase to well below 2 degrees, although trends indicate that global warming and other effects of climate change are proceeding at a quicker pace than previously projected.

⁶¹ Author's calculations based on displacement data from the Internal Displacement Monitoring Centre: www.internal-displacement.org/database/displacement-data.

are more frequently exposed to climate hazards than their wealthier counterparts. They also tend to lose relatively more when affected, as do smallholder farmers, rural coastal populations and indigenous peoples. Having suffered setbacks – such as livelihood losses or deteriorating health – from climate hazards, those who are disadvantaged may have few resources to enable them to cope and recover.

This chapter discusses how the effects of climate change can exacerbate inequality. Section A introduces a conceptual framework outlining the linkages between the two. Section B illustrates how climate change can increase inequality across countries, through varying effects in different geographic regions and by level of income. Section C examines how climate change is linked to inequality within countries, describing the particular challenges encountered by people living in poverty and other disadvantaged groups that are especially at risk. Section D presents a brief assessment of the inequality impacts of adaptation and mitigation strategies and discusses policy implications. The section concludes that climate action policies can act in tandem with social and economic policies to reduce inequality.

A. Climate change through an inequality lens

The links between climate change and inequality are dependent on: (1) the channels through which climate impacts are felt and (2) the determinants of how these impacts are experienced by different people or groups.⁶²

1. Channels through which climate change exerts its effects

Whether they are immediate or pan out over time, climate change impacts are felt both directly and indirectly on livelihoods, health and mortality, agriculture and food prices, and labour productivity. These effects reinforce one another: the negative effects of a changing climate on health, agriculture, food prices and labour productivity may also undermine opportunities to make a living. The inability to sustain decent livelihoods, in turn, is likely to exacerbate the harmful health effects of climate change.

a. Livelihoods

Climate change has a direct impact on the assets and resources needed to earn a living. The destruction of homes and infrastructure, degradation of ecological resources and loss of biodiversity affect all, but the wealth of those in poverty is more likely to be concentrated in material forms, such as housing or livestock, and their assets are more fragile. In addition, environmental damage severely harms livelihoods that are climate-sensitive, including agriculture and fishing. The erosion of natural assets can force those reliant on them for their livelihoods to seek other sources of income, such as by shifting from crop-based to hybrid livestock-based agriculture, or wage labour employment. However, alternatives may not always be available or feasible. Such shifts may also incur high costs, or entail the acquisition of new technical

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CLIMATE CHANGE

⁶² Climate change can also exacerbate intergenerational inequality, since worsening conditions present greater challenges for succeeding generations. Impacts that occur today can have long-lasting effects, particularly if environmental damage reduces livelihood opportunities for the future. The potential effects of climate change on intergenerational inequality are not discussed in this chapter.

know-how. Outcomes can be particularly disastrous when climate hazards occur in quick succession, leaving little time for those already afflicted to recover, readjust and rebuild their assets and livelihoods.

b. Health and mortality

Changes in temperature and the occurrence of heat waves, droughts and floods, among other extreme events, also affect human health and mortality, with the greatest burdens expected to fall on lower-income countries (Smith and others, 2014). Extreme temperatures, for instance, aggravate cardiovascular and respiratory disease and increase mortality (UNFCCC, 2017). Fluctuating and increased precipitation levels compromise freshwater supplies and raise the risk of diarrhoea, waterborne illnesses and diseases transmitted through insects and animals. Changing climatic conditions will not only lengthen periods of disease transmission, but also expand their geographic range.

Children and older persons are especially at risk due to their limited mobility, vulnerability to infectious diseases, lower caloric and nutritional intake and, for older persons, greater social isolation (Field and others, 2014). Young children are more likely to suffer or die from diarrhoeal diseases and floods, while older persons are particularly susceptible to heat stress, droughts and wildfires. Climate change is also likely to affect pregnancy and maternal health outcomes, since pregnant women are especially vulnerable to climate hazards and infectious diseases, including malaria, foodborne infections and influenza (Smith and others, 2014).

Moreover, increased carbon dioxide levels have been linked to poorer nutritional quality in crops and may even compromise food safety through increasing foodborne pathogens, or by inducing chemical changes that raise the concentration of toxic compounds in agricultural produce (FAO, 2018).

The World Health Organization (2014) estimates that, in 2030, sub-Saharan Africa will have the greatest burden of mortality attributable to climate change, while in 2050 South-East Asia will be the region most affected by the health impacts of climate change.⁶³ Globally, between 2030 and 2050, climate change is projected to cause an additional 250,000 deaths per year from increased rates of malaria infection, diarrhoea, heat stress and undernutrition; direct health damages will cost an estimated \$2 billion to \$4 billion a year by 2030 (WHO, 2018a and 2018b).⁶⁴ According to one study, even after accounting for adaptation and possible reductions in mortality caused by cold weather, if the rate of emissions remains unchanged, climate change will result in an estimated 1.5 million deaths per year by the end of the century (Climate Impact Lab, 2018).^{65, 66}

CLIMATE CHANGE
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⁶³ WHO (2014) uses the following country grouping for South Asia: Afghanistan, Bangladesh, Bhutan, India, Nepal and Pakistan.

⁶⁴ Estimates of additional deaths are based on global climate-health models of mortality from these four causes, comparing projections between (i) a future world of medium-high emissions, and (ii) a future world where climate conditions remain at 1961-1990 average levels.

⁶⁵ Climate Impact Lab's estimation models utilize historical mortality data covering 399 million deaths in 41 countries, and simulate future global scenarios taking into account projected changes in emissions, income and population.

⁶⁶ Although cold-related mortality and morbidity are projected to decrease in some areas due to fewer cold extremes, globally this will be outweighed by the harm caused by temperature rise.

c. Agricultural production and food prices

Shifts in climatic conditions exert both direct and indirect effects on agricultural yields, aquaculture, livestock and fisheries production (FAO, 2018). In regions other than those with low baseline temperatures, higher temperatures will damage plant cells and reduce crop yields, and adversely affect animal growth rates and dairy production. Increased frequency and intensity of extreme weather events will diminish agricultural yields. Damages and losses from pests, diseases and livestock mortality are also expected to rise.

According to some estimates, by 2050, international producer food prices are expected to grow by an average of 20 per cent (Nelson and others, 2014). Although higher prices could benefit farmers, this gain may not be enough to offset drastically lower yields. In addition, higher food prices will put a strain on households that spend a significant proportion of their income on food.

d. Labour and economic productivity

High temperatures and heat waves result in lower economic output in countries around the world (Burke, Hsiang and Miguel, 2015). Production losses in climate-sensitive industries, increased workplace accident risks and heat-related illnesses contribute partly to this phenomenon. Studies have identified decreased labour productivity as a major factor affecting economic growth in a majority of countries (ibid.; Day and others, 2019; UNDP, 2016). Thermal conditions affect worker performance in both physical and mental tasks, a problem most severely affecting manual labourers and those who work outdoors in hot conditions.

These effects of climate change on productivity and livelihoods will also be felt at the household and community levels. For example, children pulled out of school in the aftermath of a disaster are significantly less likely to complete their schooling than other students in the same communities, with consequences for future productivity (Hallegatte and others, 2017).

Beyond the four channels described above, the negative effects of climate change are also increasingly reflected in the displacement and forced movement of people attempting to avoid climate hazards or following such disasters. Estimating the extent of migration stemming from climate change is challenging. Nevertheless, it is emerging as a key concern for the future as climate change intensifies and inflicts even greater damage to homes and habitats (see box 3.1).

2. Determinants of the uneven impacts of climate change

The effects of climate change are not experienced by everyone in the same way due to differences in exposure to climate hazards, their susceptibility to the damage caused by such hazards, and their ability to cope with the effects and recover. These determine the overall climate risk profile of a country, an individual or group.

BOX 3.1**Climate change and migration: what we know so far**

A good deal of uncertainty surrounds the scale of climate-induced migration. The decision to move is motivated by myriad factors, climate risk being only one of them. Therefore, isolating the primary driver of this process is extremely complex. Nevertheless, climate change is affecting the movement of people and is likely to continue due to four factors: (1) increased frequency and intensity of weather-related natural disasters, (2) the effects of climate change on livelihoods, health, food and water security, which will increase pre-existing vulnerabilities, (3) rising sea levels, which could make coastal areas and low-lying islands uninhabitable, and (4) competition over increasingly scarce resources, which could exacerbate tensions and potentially lead to conflict and displacement (IOM, 2014). If no appropriate action is taken to mitigate the effects of climate change, it is reasonable to expect that climate-induced migration will continue to increase.

Most of this displacement is currently internal, but some people are forced to cross borders (GMDAC, 2018). The most severe effects of climate change will not only drastically limit livelihood options; they are also likely to result in environmental conditions that are increasingly uninhabitable. This is a concern for many Pacific communities living on small, low-lying islands, such as the Tebunginako village in Kiribati. Coastal erosion and saltwater intrusion have pushed residents to relocate their village farther inland (Republic of Kiribati, 2019). However, as climate change worsens and the area of habitable physical land continues to decrease, residents may be forced to leave the island altogether.

Exposure refers to the presence of people and their livelihoods, environmental resources and infrastructure, or economic, social or cultural assets in places that could be adversely affected by climate hazards (IPCC, 2012). Location and living conditions are important determinants of exposure. Elevation and proximity to the sea, for example, determine the extent to which an area is exposed to coastal flooding. The nature of the work or activity undertaken at a location also has a role in determining exposure, by affecting how much a person is outdoors and the extent to which activities are sensitive to changes in climate.

Two communities or households that are identically exposed to a climate hazard, however, may not experience the same degree of damage. They may have different levels of *susceptibility* to the damage caused by climate events. Housing quality is a major factor determining susceptibility. Those living in solid, well-constructed homes, for example, are less likely to experience damage than neighbours living in houses built out of thin, structurally weak materials.

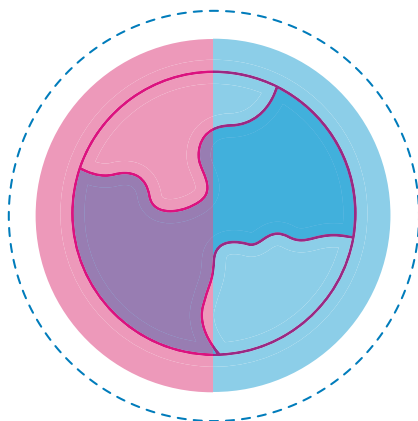
Ability to cope with and recover from losses can differ, too. Individuals and households have varying levels of resources or access to resources needed for reconstruction or to rebuild one's health or livelihood following a climate hazard. Beyond personal assets such as savings and property, this also includes access to formal social protection and informal support, including familial networks, and the ability to tap into community resources.

In some cases, individuals or households may decide to reside in an area affected by climate hazards – even though they are aware of its risks – to take advantage of certain (often livelihood-related) benefits, such as fertile soil in coastal deltas. Many others, however, face these risks due to lack of awareness and knowledge, insufficient resources to relocate or adapt, or because of circumstances beyond their control (as in the case of refugees and internally displaced persons, for example).

Countries also differ in climate change exposure, susceptibility and coping capacity. In addition to location, the level of development/income and the structure of the economy, in terms of its reliance on climate-sensitive industries and/or natural resources, are also important factors. Development status has particularly significant ramifications for both the wealth and income levels of a country's citizens, and on a society's ability to take necessary mitigation and adaptation measures (see box 3.2). At the same time, developing countries are also those whose economies tend to lean towards climate-sensitive and natural resource-focused industries, such as agriculture and fishing.

B. Unequal exposure and impacts across countries

Unaddressed, the impacts of climate change will exacerbate inequalities among countries. Diffenbaugh and Burke (2019) find that, from 1961 to 2010, higher temperatures improved economic growth in cool countries (most of which are developed), while they negatively affected growth in warm countries (most of which are developing). The researchers estimate that the ratio between the incomes of the richest and the poorest 10 per cent of the global population is 25 per cent larger than it would be in a world without global warming. Developing countries – including small island developing States – face significantly higher climate-related risk and have fewer resources for mitigation or adaptation than developed countries. Many of these



The ratio between the incomes of the richest and the poorest 10 per cent of the global population is 25 per cent larger than it would be in a world without global warming

BOX 3.2**Mitigation and adaptation: preventing and preparing for climate change**

Mitigation aims to slow the process of climate change by limiting or preventing greenhouse gas emissions, and by removing these gases from the atmosphere. Greenhouse gases are emitted from a range of sources, and mitigation can take place across all sectors and activities of different levels, including national policies curbing industrial carbon emissions, reforestation that aids the removal of carbon dioxide in the atmosphere, and changes in individual consumption aimed at reducing one's carbon footprint.

Adaptation, on the other hand, involves changes that facilitate adjustment to actual or expected future climate, by moderating the harmful effects or taking advantage of beneficial opportunities arising from it. While climate change is a global issue and mitigation efforts benefit the international community, adaptation is often felt and dealt with on a more regional or local scale. Adaptive measures can be reactive, as a response to conditions that have already changed, or proactive, in anticipation of future impacts. Examples include strengthening buildings to better withstand storms, restoring the environment, building early warning systems, and developing climate-resilient crop varieties.

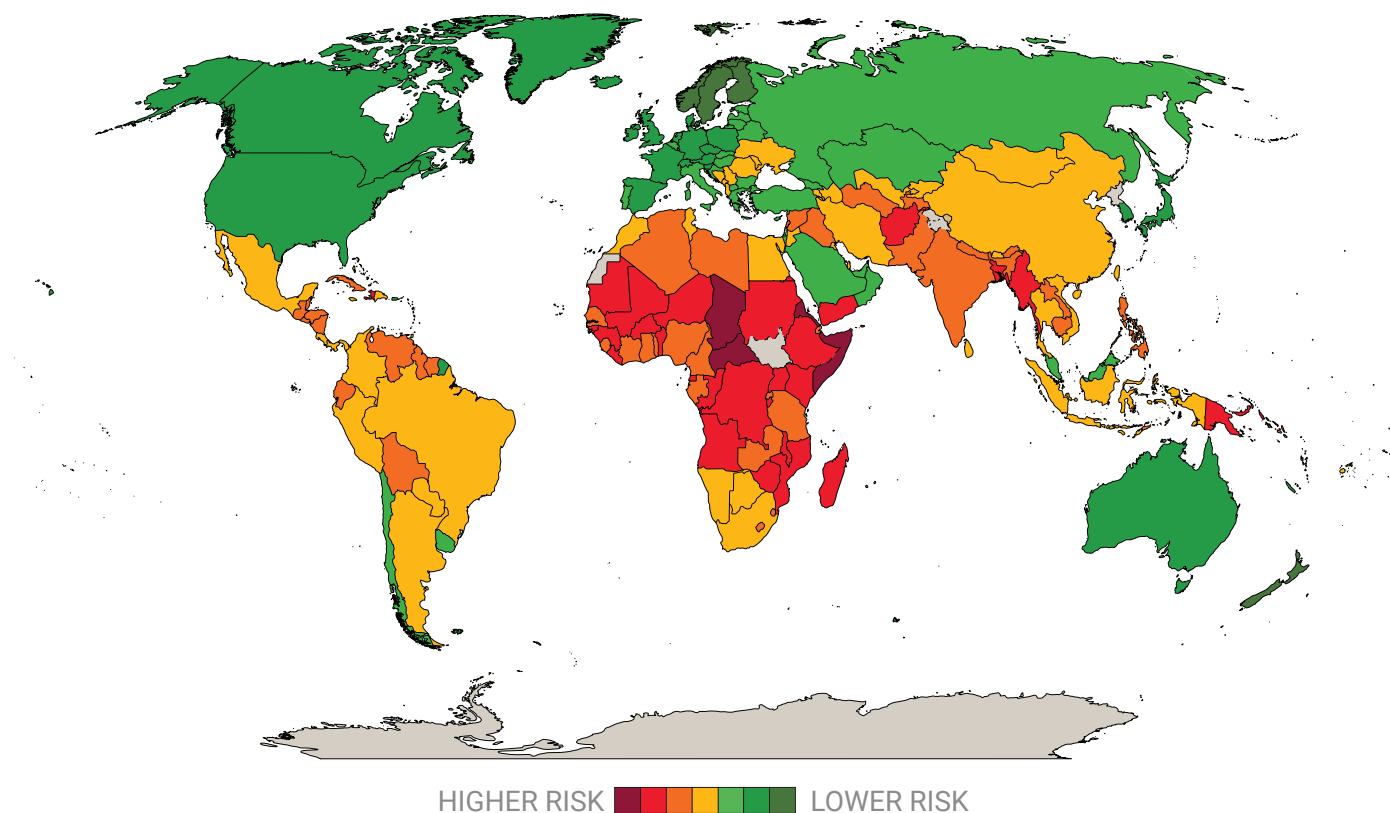
These two forms of climate action are complementary and equally vital. In the absence of mitigation, societies will have to grapple with ever-worsening climate change regardless of the adaptation measures taken. Mitigation delays the impacts of climate change and allows more time for the development and adoption of newer adaptive methods. However, mitigation alone, without adaptation, is insufficient to help communities cope with the climate impacts that are already occurring, or those that will transpire in the near future.⁶⁷

countries will find it increasingly difficult to recover from worsening climate conditions and more extreme events. In fact, unless appropriate action is taken, climate change threatens to leave a substantial part of the world further behind.

Countries in different regions suffer from different levels of exposure and susceptibility to the effects of climate change and possess varying capacities to cope with them. A country's location is an important determinant of the level of exposure. Mean temperatures are projected to increase in most land and ocean regions, with hot extremes in most inhabited regions becoming more frequent. The number of hot days is projected to increase, with tropical regions affected most. Additionally, increased heavy precipitation will affect certain regions, while some others – including semi-arid and arid areas in the Mediterranean, Southern Africa and northeastern Brazil – will

⁶⁷ Even if global emissions were drastically reduced, continued warming is expected to a certain extent from greenhouse gases already present in the atmosphere, and those that will be released from melting polar ice caps. In other words, it is likely that adaptation will continue to be necessary, even if mitigation efforts increase significantly.

FIGURE 3.1
Climate risk by country, 2017



Source: Based on University of Notre Dame Global Adaptation Initiative Index (available at <https://gain.nd.edu/>).

Note: The climate risk of each country is based on its ND-GAIN Index score for 2017. The ND-GAIN Index is a composite measure, with a range of 0-100, of a country's vulnerability to climate change and its readiness to improve resilience. Vulnerability is quantified by the level of exposure, sensitivity and adaptive capacity of six life-supporting sectors (food, water, health, ecosystem services, human habitat and infrastructure). Readiness measures a country's ability to realize adaptive actions in the economic, governance and social spheres. ND-GAIN score ranges for each of the seven colour groups used in the map, from dark brown (higher risk) to dark green (lower risk), are as follows: [20 to 28.5], (28.5 to 37], (37 to 45.5], (45.5 to 54], (54 to 62.5], (62.5 to 71] and (71 to 80].

face worsening drought and precipitation deficits (Cisneros and others, 2014). Hoegh-Guldberg and others (2018) note that projected changes in precipitation are more uncertain than changes in temperature, pointing out that there is larger variation among models projecting precipitation changes. Climate change will also cause a global rise in sea level, with significant consequences for coastal regions.

Figure 3.1 shows the risk level experienced by countries due to climate change, as measured by the Notre Dame Global Adaptation Initiative (ND-GAIN) Index. Africa and Southern Asia – currently the two poorest regions in the world – are more vulnerable to climate change and less ready to strengthen resilience than other regions.

The threat posed by climate change does not depend solely on a country's location and degree of exposure. The level of development, infrastructure, composition of the economy and coping capacity are also important factors in influencing a country's climate resilience. According to data from ND-GAIN, for instance, Singapore is highly

TABLE 3.1
AVERAGE ND-GAIN SCORES BY COUNTRY INCOME GROUP

Income group	ND-GAIN Index Range 0 to 100 (Higher is better)	Vulnerability Range 0 to 1 (Lower is better)	Readiness Range 0 to 1 (Higher is better)
High	62	0.36	0.59
Upper middle	49	0.41	0.40
Lower middle	41	0.50	0.33
Low	34	0.57	0.25

Sources: University of Notre Dame Global Adaptation Initiative Index (available at <https://gain.nd.edu/>).

Note: The ND-GAIN Index is a composite measure of a country's vulnerability to climate change and its readiness to improve resilience. Vulnerability is the average score of 36 indicators, scaled from 0 to 1, quantifying the level of exposure, sensitivity and adaptive capacity of six life-supporting sectors (food, water, health, ecosystem services, human habitat, and infrastructure). Readiness is the average score of nine indicators, scaled from 0 to 1, that measure a country's ability to realize adaptive actions in the economic, governance and social spheres. The ND-GAIN Index score is calculated using the following formula: ND-GAIN Index = (Readiness – Vulnerability + 1) * 50.

exposed to climate change as an island city-state near the equator, ranking as the 18th most exposed country out of 192 countries (ND-GAIN, 2019). However, when susceptibility and coping abilities are taken into account, Singapore's overall level of climate risk, as rated by the ND-GAIN Index score, is the 9th lowest out of 181 countries. Among other things, this is related to the country's developed infrastructure, high disaster preparedness and the structure of its economy, which has a low reliance on climate-sensitive sectors such as agriculture. On the other hand, Mauritania is the 42nd least exposed country, but its overall level of climate risk is the 28th highest. A significant proportion of its population relies on agriculture for their livelihoods and, as a least developed country, Mauritania has limited resources with which to implement adaptation strategies.

Table 3.1 shows a breakdown of the levels of climate risk, vulnerability and resilience-readiness of countries based on their level of income. According to the scores shown, high-income countries are generally less vulnerable to the risks posed by climate change and are more prepared to handle its consequences. In comparison, many developing countries are disproportionately at risk, owing to their location, lower levels of income, lack of high-quality infrastructure, and reliance on climate-sensitive industries and natural resources. For Africa and Asia, the Fifth Assessment Report (2014) of the UN Intergovernmental Panel on Climate Change identifies the following risks: compounded stress on water resources; reduced crop productivity; increased risk of heat-related mortality; and increased risk of drought-related water and food shortages, which could lead to malnutrition.

The economic consequences of heightened vulnerability and reduced readiness among low- and lower-middle-income countries are substantial and have implications for their future development. In absolute terms, economic losses due to climate-related disasters were highest in high-income countries from 1998 to 2017 (CRED and UNISDR, 2018).

FIGURE 3.2
Climate-related economic losses by country income group, 1998-2017



Source: CRED and UNISDR (2018).

Note: Economic losses are defined as the amount of damage to property, crops and livestock due to climate-related disasters (floods, landslides, storms, extreme temperatures, droughts and wildfires). For each disaster, the absolute value of loss registered corresponds to the damage value at the moment of the event, adjusted to 2017 US\$ using the consumer price index for the United States of America (with 2010 as the base index value of 100) from the World Bank (as of June 2018). Economic losses as a percentage of GDP for each income group are calculated by averaging the corresponding percentages for all countries within the group.

However, as illustrated in figure 3.2, losses relative to GDP were far more substantial in lower-income countries. For example, in a scenario of continued high emissions and the absence of climate policy, by 2050, temperature and precipitation changes alone in Eastern and Western Africa are projected to reduce annual GDP per capita growth rates by more than 10 per cent (Baarsch and others, 2019).

Climate change also has varying effects on agricultural output and food security across countries. Tropical and arid regions, where most developing countries are located, are expected to experience reduced yields and outputs in agriculture and aquaculture – sectors that make up a significant share of their GDP and employment (FAO, 2018). Agriculture in these countries is also more reliant on weather conditions due to lack of infrastructure such as irrigation or flood control systems. The overall resilience to extreme weather events is much lower in low-income developing countries compared to their more developed counterparts. In light of these changes, countries that are net exporters or self-sufficient may have to rely on imports for their food in the future. Depending on the extent of impact, global progress made in ending hunger and malnutrition, particularly in developing countries, may be reversed (WMO, 2019).⁶⁸

On the other hand, temperate zones – where most developed countries are located – could benefit from warmer weather. Some may even become more competitive in a wider range of agricultural products, and could gain from increases in fisheries catch potential due to spatial shifts of marine species from warmer waters (FAO, 2018;

⁶⁸ Following decades of decline, the percentage of the global population suffering from hunger stagnated from 2015 to 2018, while the absolute number of people going hungry rose annually over those three years (FAO, 2019). Climate change has contributed to this lack of progress and threatens to further hamper efforts in reaching SDG 2 on reducing world hunger and malnutrition.

Field and others, 2014). In certain areas, rising temperatures due to climate change may even facilitate the development of an agricultural sector where, historically, it has not been profitable, such as cereal production in marginal areas in Finland.

Some countries are facing extreme risks, possibly existential, from climate change. A group at particular risk are the small island developing States, with 3 in 10 people living in locations less than five metres above sea level (UNDP, 2017). These countries have experienced first-hand the effects of worsening storms, loss of livelihoods, and salinization of agricultural land. All the while, few have the resources required to adequately defend themselves against these changing conditions. The Government of Kiribati, for example, acknowledges that the long-term survival of the island is severely threatened by climate change.⁶⁹ As climate conditions worsen, its citizens may be forced to relocate. Similar concerns hold true for other small island developing States, and this has motivated their commitment to demonstrate global leadership in the areas of climate change, disaster risk reduction and sustainable development. Indeed, their very existence depends on it.

C. Unequal exposure and impacts within countries

Within countries, population groups differ in their degree of exposure, susceptibility to damage and their ability to cope with climate change. Income and asset levels influence these differences, as do social networks and community resources. People living in poverty as well as other population groups that are socioeconomically vulnerable or disadvantaged are particularly affected by climate change. They are also at greater risk of death from climate change causes, owing to their higher exposure and susceptibility and low access to adaptation tools (International Actuarial Association, 2017). The disproportionate effects on these groups will exacerbate economic and other forms of inequality.

1. People living in poverty

Hallegatte and others (2016) estimate that, even under a low-impact scenario where mitigation and adaptation strategies are successful, climate change could result in an additional 3 million to 16 million people living in poverty by 2030. Under a high-impact scenario, between 35 million and 122 million could fall into poverty (Hallegatte and Rozenberg, 2017). These individuals and those already in poverty face high levels of climate risk.

a. Exposure

Because disaster-prone areas tend to be more affordable, people living in poverty are disproportionately exposed to climate change, feeding a vicious cycle of poverty and exposure. Poverty is indeed higher in marginal areas and other precarious locations that are prone to climate hazards, despite general awareness of the related risks. These locations include arid areas, which are highly exposed to drought and often experience water scarcity, and the bottom of hill slopes, which are prone to mudslides that are increasing in frequency (United Nations, 2016b; Sepúlveda and Petley, 2015).

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EXPOSURE

⁶⁹ See: www.climate.gov.ki/category/action/relocation/.

Notwithstanding exceptions such as prime coastal residences for high-income households, many of those who are impoverished also live in coastal and low-lying areas, which are prone to flooding and erosion.

In Bangladesh, for example, many lower-income households live in slums that tend to be located in low-lying areas. During Cyclone Aila in 2009, 1 in 4 poor households were affected by the storm, compared to 1 in 7 non-poor households (United Nations, 2016a; UNICEF, 2009; Akter and Mallick, 2013). Similarly, in New Orleans, in the United States, a majority of residents living in low-lying districts in 2005 were lower-income households that suffered disproportionately during Hurricane Katrina (United Nations, 2016a; Logan, 2006).

Income is linked to exposure to climate hazards at work as well, since less-skilled low-earning workers are more likely to do physical or manual labour out of doors. They are at greater risk of sustaining the health impacts of high temperatures, including injuries, cardiovascular and respiratory diseases, and even death. Their labour productivity also suffers in hot weather, making it more difficult or time-consuming to complete a task, which can negatively affect wages, production of goods for sale, and subsistence farming output.

Women living in poverty may face particular circumstances that increase their exposure to climate change. In 7 out of 10 developing countries, for example, women are primarily in charge of collecting water for the household (Sellers, 2016). As climate change reduces the availability of safe water sources, they often have to walk longer distances in search of water, increasing their exposure to climate hazards.

b. Susceptibility

At similar levels of exposure, people in poverty are more susceptible to damage from climate change than those who are better off. Differences in housing quality and local infrastructure, including whether adaptation strategies are in place, is a major determinant of their susceptibility. Overall, the assets of those who are impoverished are more fragile than those of their wealthier neighbours. During Cyclone Aila, in Bangladesh, the homes of lower-income households incurred significantly more damage than those of higher-income groups (Hallegatte and others, 2016; United Nations, 2016a). In Honduras, lower-income households affected by Hurricane Mitch lost a greater percentage of their assets compared to affected higher-income households (Carter and others, 2007).

Many people in poverty make their living from agriculture and fishing, sectors highly susceptible to the effects of climate change. In 2013, 65 per cent of people living on less than \$1.90 a day worked in agriculture (Castañeda and others, 2016). Be it subsistence farming, fishing, full-time labour employment or seasonal work, livelihoods are threatened as climate change impacts cause losses in agricultural yields and fisheries production. The problem is compounded when the natural assets on which these livelihoods depend are located in hazard-prone areas. The land plots

of farmers residing in coastal zones, for instance, are exposed to saltwater intrusion from the sea, a process aggravated by climate change that decreases agricultural productivity (Dasgupta and others, 2014; Rabbani, Rahman and Mainuddin, 2013).

The lack of asset diversification and access to formal financial markets also contributes to increased susceptibility among people living in poverty. Unlike richer households that are better able to invest in a range of physical and financial assets, lower-income households tend to have their wealth concentrated in their homes, crops and livestock, all of which are more susceptible to climate change impacts. Labour is also a more important asset for lower-income households, and the capacity to work can be affected by climate-related injuries and diseases (Douglas and others, 2008).

In addition, people in poverty are more susceptible to malaria and other waterborne diseases that climate hazards help to spread (Hallegatte and others, 2016). Their areas of residence are often more conducive to the breeding of malaria vectors, and they tend to have more limited access to piped water than their wealthier counterparts. During floods, their water sources can be contaminated with pathogens, which increases the risk of waterborne diseases.

In developing countries, women living in poverty tend to be disproportionately susceptible to food insecurity, which can be aggravated by climate change. They are often the first ones to reduce food consumption in the event of lowered crop yields and crop failure, or in cases of food shortage after a drought, flood or storm (Sellers, 2016).

WOMEN LIVING IN
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CLIMATE CHANGE

c. Ability to cope and recover

Faced with the negative consequences of climate change, people living in poverty often have fewer resources with which to cope and recover. Among other challenges, they have limited capacity to relocate to safer areas, build structurally stronger homes, or pay for the costs of adaptation and coping methods. These obstacles are affected by differences in local infrastructure and resources. People living in poverty in a poor region, for instance, are likely to have less access to recovery options and public resources than people in wealthier areas or countries.

Adapting livelihoods to climate hazards and changing climatic conditions, through the use of technological solutions or shifting to other forms of employment, for example, is a major challenge. In the midst of reduced rainfall, lower-income farmers in Uganda have found it more difficult than wealthier farmers to change their crop patterns and access water-saving technology and water storage sources (Hill and Mejia-Mantilla, 2015). In the Sahel region of West Africa, where desertification is worsening, farmers living in poverty are less able to expand their land resources, intensify farming to stabilize food production, or diversify to non-agricultural production (Dietz, Ruben and Verhagen, eds., 2004).

Compared to wealthier households, those in poverty are much less likely to have insurance or access to other financial instruments, including loans for disaster recovery. Globally, half of adults without an account at a financial institution or a mobile money

provider in 2017 were from the poorest 40 per cent of households in their countries (Demirgüç-Kunt and others, 2018). They may also encounter obstacles in accessing remittances or informal, community-based resources. In order to pay for vital housing repairs and health expenses in the aftermath of a climate hazard, they often have to resort to selling their physical assets, which limits future efforts to rebuild their livelihoods and income earnings (Clarke and Dercon, 2015). Alternatively, they might reduce expenses to preserve their assets, which can be detrimental for health if food consumption and health care are compromised. This is the case in sub-Saharan Africa where, following extreme weather events, children of asset-poor households are more likely to receive lower-quality nutrition and less likely to be taken to medical facilities if they are ill (Hallegatte and others, 2016). If climate hazards occur in quick succession, households will have even less time to recover and rebuild their assets; this can push disaster-affected households into not just transient but chronic poverty and exacerbate the challenge for households that were already impoverished (Olsson and others, 2014).

DISASTER-AFFECTED
HOUSEHOLDS ARE AT
RISK OF FALLING INTO
CHRONIC POVERTY

Climate change will also lead to lower nutritional levels in crops, reduced agricultural yields and higher food prices. With food expenses constituting a larger proportion of their budgets, lower-income households will find it harder than affluent households to cope with food insecurity, undernourishment and chronic hunger. Undernourishment is made even worse when lower-income households are unable to diversify their food consumption in the face of rising prices. Often, they resort to eating mainly staple foods while cutting consumption of more expensive but nutrient-rich vegetables and protein-rich foods (FAO, 2018). In the United Republic of Tanzania, declining nutrient intake associated with increased maize prices have contributed to iron and vitamin A deficiencies among the rural poor (ibid.).

Women face particular barriers in coping with the effects of climate change. Household responsibilities can place time and labour constraints on women, hampering their ability to seek paid formal employment when primary livelihoods are threatened by climate change (Sellers, 2016). Being confined to domestic duties also limits their social networks and access to information – especially since women use communication tools such as mobile phones less often than men. Gender prejudice can aggravate the social exclusion of women already living in poverty, increasing their difficulty in accessing communal resources.

Finally, gender-biased land-tenure practices limit land ownership for women, diminishing their ability to make decisions on the adaptation or diversification of farming activities (ibid.). This inability to own land, which can serve as collateral, further restricts women's access to the loans needed to finance livelihood diversification and adaptation. In rural areas, forest resources are also often unavailable to women, given their low levels of representation in governance committees in a male-dominated sector (ibid.).

2. Other vulnerable groups

Due in part to their geographic location and way of life, some population groups are especially vulnerable to the impacts of climate change. These groups are at a disproportionately high risk of poverty and share many of the challenges faced by those who are impoverished: typically, they live in disadvantageous locations with high exposure to climate hazards, are heavily reliant on climate-sensitive natural resources for their livelihoods, and have limited options in terms of coping strategies, such as diversifying into climate-resilient income sources.

a. Smallholder farmers

Smallholder farmers tend to rely heavily on family labour to work on small agricultural lands no larger than two hectares (Rapsomanikis, 2015). Many of them live in marginal areas and depend on rain-fed agriculture. Since irrigation systems are often unaffordable for most smallholders, livelihoods are at risk as rainfall patterns become increasingly erratic, resulting in decreased and unstable crop yields (Ubisi and others, 2017).

Unlike industrial-scale farmers, smallholders are constrained by their low utilization of technology, the small size of their agricultural lands and poor soil quality. All of these factors hinder their ability to diversify their crops, especially to ones that are less sensitive to precipitation patterns. On the whole, smallholders lack the technical and financial means needed to increase agricultural productivity, and may not have access to public services and support mechanisms due to their remote locations (Donatti and others, 2018; Rapsomanikis, 2015).

For example, many of the estimated 2.3 million smallholder farmers in Central America work on steep lands with thin soils (Harvey and others, 2018). The crops they plant are sensitive to high temperatures and unstable rainfall, and extended droughts and extreme rain events mean that many of them struggle with food insecurity. Moreover, these small farms regularly suffer from hurricane damage to their crops and to infrastructure such as roads and bridges, which further impairs crop yields and transportation (Philpott and others, 2008). Like smallholders in other regions, their insecure land tenure, limited capital and lack of access to financing and technical solutions constrain their ability to cope and adapt to a worsening climate.

b. Indigenous peoples

The repercussions of climate change are severe for indigenous peoples, many of whom already face social exclusion in addition to poverty. Their reliance on natural resources for their living makes them markedly exposed and susceptible to climate change and its impacts.

For generations, their way of life has relied on traditional farming, foraging and hunting methods, some of which are no longer effective due to the changing environment (McLean, 2012; Baird, 2008). Shifting climate conditions and landscapes reduce the usefulness of traditional knowledge, and erratic weather patterns mean that

generations-old habits for planting crops are no longer reliable. With their primary livelihoods increasingly under threat, indigenous peoples will be less able to generate produce needed to trade for goods that they lack.

Increasingly unpredictable climate conditions can damage the confidence of indigenous groups that their traditional knowledge of the environment can guarantee their livelihoods. This raises the risk of a loss of culturally important practices, as members, in order to survive, forego traditional livelihoods.

The marginalization faced by many indigenous peoples affects their ability to cope with climate change, since their needs may not be taken into account in climate mitigation and adaptation policymaking (Baird, 2008). In addition, they may face institutional barriers to accessing resources and securing land tenure. Indigenous Aymara farmers from the Plurinational State of Bolivia, for example, have been struggling with water shortages and irrigation problems following the retreat of the Mururata glacier, along with an increase in flash floods and delayed rainfall (McDowell and Hess, 2012). Discrimination and, often, a lack of infrastructure in areas where many of them live make it challenging to obtain the loans and property rights that would facilitate a recovery of their way of life.

THE
MARGINALIZATION
FACED BY MANY
INDIGENOUS
PEOPLES AFFECTS
THEIR ABILITY
TO COPE WITH
CLIMATE CHANGE

Health impacts can be a concern as well. For many indigenous peoples in Latin America who live on marginal lands, climate change has resulted in the spread of diseases that previously could not thrive in those locations, causing a rise in respiratory and diarrhoeal diseases (Kronik and Verner, 2010).

Finally, it must be noted that the social and cultural identities of indigenous peoples are strongly tied to the environments in which they have lived for generations. Climate change can accelerate the disappearance of some of these elements of identity and culture as well as the destruction of natural habitats, as indigenous groups find themselves increasingly at risk of displacement.

c. Rural coastal populations

Coastal regions are highly exposed to sea-level rise, ocean acidification and temperature increases, along with storms and changes in precipitation. Rural areas of such regions are often inhabited by those living in poverty and other marginalized groups, who cannot afford to move to safer locations (Barbier, 2015).

Due to their remoteness and low levels of development, rural coastal areas may lack protection infrastructure such as storm shelters, seawalls and embankments (Barbier and Hochard, 2018). Instead, natural barriers such as mangroves are relied on for protection, but these habitats are gradually being lost to climate change, leaving residents increasingly exposed to coastal climate hazards.

In addition to the possible destruction of their houses and food gardens by rising sea levels and storms, rural coastal populations also face threats to their livelihoods. Many of them depend on marine and coastal resources for fishing or coastal agriculture,

and climate change is affecting the viability of these ecosystems. In addition to the destruction caused by extreme weather events, changes in ocean temperature and acidity reduce the yields of fisheries, while saltwater intrusion lowers the quality of coastal agricultural lands, adversely affecting farming productivity (ibid.).

Given their poverty and lack of access to resources, coping strategies are limited for many rural coastal households. Ships and equipment for fishing in deeper waters are often prohibitively expensive, as are new, climate-resilient crop varieties or the building of coastal protection infrastructure. Other forms of economic opportunities may also be unavailable in remote locations.

In such challenging circumstances, lower-income residents in rural coastal regions are prone to poverty-environment traps, which also affect other communities, including those living in drylands (see box 3.3).

D. Distributional effects of climate action: implications for policy

Policies have an important role to play in addressing climate risks and building climate resilience. However, just as climate change impacts are unevenly distributed, so too are policies built to counter them. As countries take climate action, there will be trade-offs between the positive and negative effects of mitigation and adaptation measures, and distributional impacts to consider.

1. The effect of mitigation and adaptation policies on inequality

Climate action strategies have the potential to reduce inequalities, but may not always incorporate this objective. Beyond their core intended purposes, these strategies often have other effects – both positive and negative – that can differ greatly for individuals from different income levels and social groups.

a. Mitigation policies

Whether mitigation policies curb energy consumption, encourage the use of cleaner, renewable energy or promote reforestation, the primary goal is one that benefits the global community – slowing down climate change through a reduction in carbon emissions/levels. In meeting emissions targets, mitigation policies have the potential to decrease air pollution and improve air quality, which has positive health effects. This can help to reduce inequality, since the greatest benefits are expected to accrue to lower-income households, which are more likely to live in areas heavily affected by air pollution and poor air quality (Hajat, Hsia, and O'Neill, 2015; Pratt and others, 2015).

Mitigation policies have also contributed to advances in small-scale renewable energy. The resulting proliferation and lower costs of these technologies, which include solar, wind and hydropower, are bringing electricity to remote areas unconnected to conventional power grids, addressing the energy needs of the rural poor in many countries (UNDP and ETH Zürich, 2018; REN21, 2017).

JUST AS CLIMATE
CHANGE IMPACTS
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DISTRIBUTED, SO
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BUILT TO COUNTER
SUCH IMPACTS

BOX 3.3**Climate change and poverty-environment traps**

People living in poverty in agricultural areas deemed “less-favoured” or in rural, low-elevation coastal zones are at particular risk of falling into so-called poverty-environment traps. Barbier and Hochard (2018) explore the implications of climate change on poverty in these regions. Less-favoured agricultural areas include land where agricultural production is difficult because of environmental conditions (such as poor soil quality, difficult terrain and a harsh climate) and “favoured” agricultural land that has limited market access. Low-elevation coastal zones are coastal areas below 10 metres of elevation, and are highly exposed to sea-level rise and coastal erosion, among other challenges. Lower-income households in these regions are largely dependent on natural resources for their living.

Climate-induced resource degradation and declining productivity pushes those affected to search for outside work to supplement their income (*ibid.*). Considering the regional nature of the climate impacts encountered, however, it is likely that households living in the same area will take the same action – to seek alternative employment. If too many people pursue this strategy, the spike in labour supply will inevitably result in falling wages, which may force households to forego alternative employment and refocus on increasing production at home. This, in turn, puts further stress on local resources and accelerates degradation, fuelling a vicious cycle. The following two examples illustrate the poverty-environment trap and ways in which communities are attempting to cope, with government support.

Fishing communities in southwest Bangladesh (Dasgupta and others, 2016)

In Bangladesh, the incidence of poverty is particularly severe in the low-lying coastal region in the country's southwest. The area is prone to tidal surges, salinization and cyclones, and living conditions are often challenging. In the coming years, vulnerability to flooding and salinization is expected to increase, according to climate projections. People in poverty will be heavily affected by these trends, since they rely on the local ecosystem for their livelihoods and have limited mobility due to their economic circumstances. Over the years, the region's inland fishing grounds have been degraded due to over-exploitation, destructive fishing practices and salinization, among other factors. Climate-induced sea-level rise and subsequent salinization will adversely affect many of the fish species, which are crucial food and economic resources for local residents. The Government of Bangladesh has taken action to promote sustainable fishing practices and increase community access to technological and financial resources. Whether this will be enough to enable these communities to extricate themselves from this poverty-environment trap remains to be seen.

Dryland communities in Yangguan Town, China (Cao and Zheng, 2016)

Yangguan Town lies at the edge of the Kumtag Desert in China. It faces similar challenges to many other impoverished regions in the world's drylands: limited water availability, remoteness and worsening environmental conditions due to climate change – mainly desertification and flooding. From the 1960s to the 2000s, average precipitation in the area during the rainy season increased by almost 70 per cent. Since desert soil cannot absorb large quantities of water from a single event, the risk of flooding has increased. The community has tried to adapt by building basic flood defences and attempting to develop a fruit industry, but they have found it difficult to stay out of poverty. In collaboration with a private firm that came to Yangguan in 2000 to gain access to its meltwater resources for fish production, additional flood defences were created, a series of artificial lakes were constructed and non-forest vegetation was established. These adaptive measures provided a clean water supply, security and job opportunities for the local community. The town has managed to successfully escape from the poverty-environment trap, quadrupling average per capita income in the decade from 2005 to 2015.

Given that climate change affects disadvantaged groups disproportionately, these groups stand to benefit more from global mitigation efforts in the long term. However, as with any process of structural transformation, climate action brings challenges in the short term. Green energy requirements, for instance, can be a source of financial strain for those in poverty, many of whom rely on coal and traditional fuels for cooking and heating, and are unable to afford the upfront costs of newer technology or the ongoing costs of more expensive, cleaner fuels. Rising fuel prices have spiked protests from low- and middle-income households in more than one country (see box 3.4). Large-scale land acquisition and increasing demand for biofuel production affects those in poverty and smallholder farmers through the dispossession of land and the shifting of land use from food to fuel production, which can lead to higher food prices. (Collier, Conway and Venables, 2008; Ruel and others, 2010). Displaced households are often pushed onto more marginal lands, which are often highly vulnerable to climate hazards (Rulli, Savioli and D'Odorico, 2013; Weinzettel and others, 2013).

DISADVANTAGED GROUPS STAND TO BENEFIT MORE FROM GLOBAL MITIGATION EFFORTS IN THE LONG TERM, BUT CLIMATE ACTION ALSO BRINGS CHALLENGES IN THE SHORT TERM

Renewable energy and forest management projects in rural areas can lead to the displacement of rural communities and the loss of livelihoods, especially if resource use and ownership rights are unclear or unenforced. Here, forest-dwelling indigenous peoples are especially vulnerable; their traditional lifestyles may be disrupted by the projects, and they may even lose their homes if customary indigenous land use and property rights are not well defined (Bayrak and Marafa, 2016).⁷⁰

b. Adaptation policies

With regard to adaptation, measures tend to be tied more specifically to a particular locale or target group, with varying reach. Physical housing renovations in a neighbourhood, for example, have a narrower impact, benefiting mostly local residents. Meanwhile, adaptation policies involving public services and system-level changes, such as land-zoning legislation and the enhancement of public water supplies, have a much wider reach. Whether these policies benefit disadvantaged persons or the well-off more will depend on the context and the precise measure taken.

Some adaptation initiatives entail major construction work and changes to the environment that require the resettlement of local residents. Among these residents, those in poverty and other disadvantaged groups may face more severe outcomes, since they are more likely to live in informal settlements and have fewer legal protections. They are also at higher risk of being evicted or receiving lower compensation when dispossessed of their property (Anguelovski and others, 2016).⁷¹ In Dhaka, Bangladesh, construction of flood-prevention embankments has resulted in the displacement of low-income communities living near canals (ibid.).

⁷⁰ Projects may restrict access to the resources in a given area and set regulations on how they can be used, which may be incompatible with the lifestyles and livelihoods of local inhabitants.

⁷¹ For those who are relocated, resettlement sites may continue to be affected by climate hazards, in addition to being farther away from economic centres and disconnected from social networks.

BOX 3.4**Tempering public reaction to rising fuel prices: a balancing act**

Reforming fossil fuel subsidies can play an important role in reducing emissions. Yet enacting such changes can be politically fraught.

The *gilet jaunes* movement in France exemplifies the backlash that government policies of this nature can bring when viewed as inequitable and implemented without regard to distributional consequences. Named after the yellow vests all French drivers must carry, this grass-roots movement started in 2018 when thousands of unaligned individuals from rural and suburban areas united in their opposition to a proposed fuel tax.

The tax was part of a green agenda, which the public generally approved of, but was announced without public dialogue and following a period of economic reforms that were seen to benefit upper-income groups (Council on Foreign Relations, 2019). Because people living outside of urban areas often lack access to public transportation systems, they would be forced to shoulder most of the tax burden. The tax angered a population that was already frustrated by long-stagnant wages and high levels of unemployment in rural and suburban areas. After months of social unrest, the tax was eventually rolled back. Many people in France are calling for a just transition to a low-carbon economy that is not seen to favour the urban elites over the working class.

Many countries in Western Asia and Northern Africa have traditionally subsidized energy prices. Often, the biggest beneficiaries of these subsidies are not those most in need. In addition, the high public cost of the subsidies can prevent the State from implementing equitable and efficient social protection schemes. While subsidies tend to be popular among all income groups, when reforms are linked to improvements in social protection, they tend to be more successful (Inchauste, Mansur and Serajuddin, 2017).

In Jordan, energy subsidies accounted for roughly 40 per cent of government spending in 2012 (El-Katri and Fattouh, 2017). Soaring budget deficits made reforms a fiscal necessity. Yet attempts by the Government to lift petroleum-based subsidies led to intense public protest and widespread political opposition. To counter this, the Government took steps to gain support for the reforms, including a major public communication effort outlining their rationale. To mitigate the impact on households, the Government was able to provide cash transfers to families living in poverty (*ibid.*). These efforts were key in the eventual public acceptance of the reforms and their viability.

Egypt has also had success in transitioning away from energy subsidies, which by 2013 had grown to more than 20 per cent of the Government's budget. To reduce the impact of the reforms on the most vulnerable, the Government created two new separate social protection schemes. One targeted households in poverty with added benefits for children, and the second provided a social pension to persons with disabilities and individuals aged 65 and older. By defunding a regressive public support system, the Government was able to increase social spending and invest much needed capital into renewable energy sources (Canonge, n.d.; World Bank, 2017b).

These examples illustrate the need for Governments to consider the timing of reforms and take steps to mitigate their negative impacts, ensuring that their implementation is the outcome of a participatory process.

In some instances, the groups most negatively affected by adaptation policies may even be the intended beneficiaries themselves. One area where this may occur is in the building of climate-resilient infrastructure – such as green spaces that lower urban temperatures and alleviate flooding – in low-income areas. As these neighbourhoods become more attractive, property and rental prices can rise significantly from an influx of wealthier residents, pricing out the low-income households that the policy was meant to aid in the

first place (ibid.). An example of this is the St. Kjeld district of Copenhagen, Denmark, where rents increased following the completion of climate resilience projects, leading to some displacement of low-income households (Keenan, Hill and Gumber, 2018).

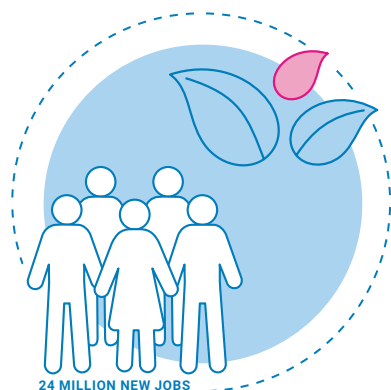
Adaptation measures can also increase inequality when they prioritize higher-income groups and economically valuable areas over low-income or marginalized neighbourhoods (Anguelovski and others, 2016). For example, flood prevention developments in Surat, India, which have focused on protecting economic assets such as oil refineries and textile mills, have contributed to the relocation of communities living in vulnerable riverine and floodplain areas (ibid.). In Manila, Philippines, new drainage infrastructure is often planned for construction in informal settlements, leading to the relocation of residents, even though other forms of urban development also contribute to the congestion of the city's waterways and drainage networks (ibid.).

In addition to the above, inequitable outcomes can emerge if the costs of climate action are passed on to the public through regressive taxation, or if climate action results in price changes that erode the purchasing power of lower-income households. This is particularly relevant where climate action involves expensive technology or fuel sources, or where policies cause an increase in the costs of energy, public transport and basic consumer goods – a financial burden that weighs more heavily on those living in poverty, since they spend a large proportion of their incomes on such goods and services.

On a broader scale, green objectives related to climate action also have repercussions for livelihoods and development. As climate-friendly policies gain traction and as livelihoods and activities adjust to meet emissions-reduction targets, inequality may increase as a result of changes in the economy and the labour market.

The urgency of cutting emissions calls for immediate action to transition to a green economy. Recent progress in the development of low-carbon technologies and the reduction of their costs facilitate this transition. Still, the process may be particularly challenging for existing, more carbon-intensive firms and economic activities. On aggregate, reduced demand for fossil fuels, coupled with an increasing focus on renewable energy and other industries associated with mitigation and adaptation, can lead to job losses and the phasing out of carbon-intensive sectors (ILO, 2019). The removal or scaling back of fossil-fuel subsidies can also disproportionately affect lower-income households. Geographically, the negative impacts could be particularly severe for regions dependent on carbon-intensive sectors. In India, for example, coal royalties constitute almost half of revenue in some states (Gambhir, Green and Pearson, 2018). Disproportionate losses in certain locations could thus contribute to spatial inequality.

INEQUALITY MAY
INCREASE IF THE
COSTS OF CLIMATE
ACTION ARE
FUNDED THROUGH
REGRESSIVE
TAXATION



With well-designed adaptation strategies, the greening of economies can result in 24 million new jobs by 2030

With carefully designed adaptation strategies, however, economic restructuring brought about by the greening of economies can result in the creation of 24 million new jobs worldwide by 2030 (ILO, 2018a). At the same time, at least 6 million jobs will be lost, including many low-skilled jobs in carbon-intensive sectors (ibid.). The net increase of approximately 18 million jobs around the world should be the result of the adoption of sustainable practices, including changes in the energy mix, the projected growth in the use of electric vehicles and increases in energy efficiency in existing and future buildings. The extent to which displaced workers, particularly those with low skills, can take advantage of new opportunities is uncertain. The mismatch of skills is a major challenge, and those who lose their livelihoods may not be sufficiently equipped to enter into new vocations.

Ultimately, the overall impact on inequality will depend on the distribution of new and destroyed jobs. Where losses fall disproportionately on those in poverty and other disadvantaged population groups, inequality will rise unless efforts are made to ensure a just transition.

2. Promoting a just transition with equitable outcomes

In 2015, world leaders took important steps to fulfil the promise of eradicating poverty, reducing inequality and reversing environmental degradation. With the signing of the 2030 Agenda for Sustainable Development, they committed to take urgent action to combat climate change and its impacts while reducing inequality.

The subsequent adoption of the Paris Agreement set forth a concrete road map to achieving climate targets globally. The Agreement includes obligations for developed countries to provide financial resources to assist developing countries with mitigation and adaptation, as well as technology transfer and capacity-building support to build clean, climate-resilient futures.⁷² Five years into the implementation of these agreements, public attention to climate change has intensified as its effects are felt by increasing numbers of people around the globe. Important scientific reports, government statements and calls to action by civil society reflect heightened and growing awareness of this alarming megatrend.

⁷² Article 9 of the Paris Agreement, adopted through Decision 1/CP.21 refers to climate finance, while Article 10 refers to technology transfer and capacity-building.

a. A systems perspective

As public awareness triggers action, ensuring a just transition is of the essence. In this regard, it is important for policymakers to take a systems perspective, integrating mitigation and adaptation measures with goals to reduce inequality. Inequality and climate change are locked in a vicious cycle, where climate change exacerbates existing vulnerabilities of disadvantaged countries, communities, groups and individuals, worsening inequality and raising their climate risk further (United Nations, 2016b). Reducing inequality not only breaks this cycle, but also facilitates the success of climate action policies, which should be formulated in an inclusive, participatory manner so that the perspectives of those most disadvantaged by climate change are taken into account.

In the course of designing solutions, it will be crucial to weigh trade-offs between policy priorities, since measures that advance one development objective, or a particular SDG, may complicate other objectives. Climate-impact assessments are a valuable tool in this process. By quantifying and incorporating multidimensional poverty and inequality into climate scenarios, integrated assessments shed light on the distributional impacts of climate hazards and policy options, yielding scientific evidence to aid decision-making (ibid.; Rao and others, 2017).

Managed well, a just transition would be able to balance sustainable economic growth and job creation at the national and global levels with climate action and inequality-reduction objectives. To this end, policies designed to reduce inequalities that exacerbate vulnerability to climate hazards are sound development policies and are essential to reducing climate risk. That is, social and economic policies that reduce vulnerabilities and support decent job creation and access to equal opportunity are also forms of climate adaptation.

b. Climate action and social protection

At the international level, dedicated climate finance, technological transfer and capacity-building – provided predominately by developed countries – can support developing country plans for adaptation and mitigation. The Green Climate Fund, under the United Nations Framework Convention on Climate Change, is a prominent example of providing resources to developing countries, especially those most vulnerable to climate change, in support of low-emission and climate-resilient development. Specifically, the Fund provides financial and technical assistance to help countries formulate and implement national adaptation plans and to integrate them into national development planning.

At the national level, environmental taxation can play a key role in promoting more sustainable production and consumption patterns, but potential regressive effects have to be mitigated. Subsidies, grants and other forms of accessible financing should be made available to lower-income households and other disadvantaged groups to help them cope with rising food, transport and clean energy prices, adaptation costs,

A JUST TRANSITION
CALLS FOR
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POLICIES WITH
INEQUALITY-
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ADAPTIVE CAPACITY
OF HOUSEHOLDS

and expenses incurred in their recovery from climate hazards. Insurance targeted at low-income earners can reduce future climate risk. However, Governments must provide a safe regulatory environment that protects the rights and investments of the insured (Akter, 2012).

Climate action projects such as renewable energy production can be strategically located in poor rural areas to provide the local workforce with employment opportunities (ILO, 2018a). In doing so, the traditional land use and rights of local indigenous peoples should be taken into account, with benefits equitably distributed. Any eventual resettlement should be mutually agreed upon and fairly compensated, with new housing arranged in a location that does not leave residents worse off.

Social protection and access to social services can bolster recipients' capacities to cope with and recover from all manner of shocks. Social protection systems are effective at building resilience by providing an income source that can help individuals and households cope with climate change and other shocks.

For workers at risk of losing their jobs in the green transition, social protection can soften the blow of income losses and strengthen the adaptive capacity of their households. The availability of safeguards against unemployment and income losses also contributes to mitigation efforts by easing public acceptance of green policies that may affect them negatively (ILO, 2018a). As economies and the world of work evolve, however, social protection systems must adapt to deliver continued support to workers coping with the shift to new forms of production and employment.

Public employment programmes can help vulnerable workers by serving as a source of temporary employment, while offering training in new skills when implemented in the form of green transition projects. Governments can consider providing fiscal incentives, such as tax exemptions or social security rebates, to employers to encourage skills training for their employees.

When disasters occur, post-disaster transfers can facilitate or accelerate recovery as well as reduce reliance on negative coping mechanisms. The result is beneficial to the environment as well. With sufficient support, recipients are better able to engage in more sustainable forms of livelihoods, such as agriculture and aquaculture practices that facilitate the care and regeneration of natural ecosystems. Addressing inequality, then, is important not only in and of itself, but also to address the impacts of climate change and strengthen people's resilience.

CHAPTER 4

URBANIZATION: EXPANDING OPPORTUNITIES BUT DEEPER DIVIDES



CHAPTER 4

URBANIZATION: EXPANDING OPPORTUNITIES BUT DEEPER DIVIDES⁷³

KEY MESSAGES

- In general, cities offer better access to jobs and services than rural areas. Rapid progress has been made in rural areas, when measured by a variety of development indicators. However, rural populations will continue to lag behind urban dwellers by 2030 if current trends continue.
- Still, cities are more unequal than rural areas, though levels of inequality vary greatly, even among cities within a single country.
- Inequality tends to be higher in large cities than in small cities and towns, but the prevalence of poverty also tends to be lower in large urban areas.
- Sustained exposure to concentrated poverty in underserved urban neighbourhoods leads to marginalization and exclusion, reinforcing the mechanisms that perpetuate poverty and disadvantage.
- Urbanization is proceeding at a fast pace in many developing countries, making urban governance and adequate planning increasingly urgent.
- Reducing inequalities within cities calls for meeting the housing and land needs of all people, including those living in poverty, ensuring the equitable provision of public services and infrastructure, improving connectivity and promoting access to decent, formal employment.

⁷³ This chapter was prepared by UN-Habitat with inputs from DESA.

INTRODUCTION

Where people live exerts a strong influence on their opportunities in life, including access to safe drinking water, electricity, health care, good schools, decent work and other goals envisioned in the 2030 Agenda. Inequalities related to location – also known as “spatial inequalities” – can be extreme between rural and urban areas,⁷⁴ especially in developing countries.

High levels of inequality are also found within cities, where virtually all of the world’s population growth will take place over the next 30 years. Cities can be incubators for innovation and boost prosperity. The concentration of people and human activity leads to increased productivity, facilitates the provision of public infrastructure and services, and stimulates the development and diffusion of new ideas. The generation of new opportunities, in turn, boosts social mobility. Yet in most cities, high levels of wealth and modern infrastructure coexist with areas characterized by deprivation and a dearth of services. Underinvestment in infrastructure and public transportation prevents some urban residents from accessing good jobs, education and services. Furthermore, the concentration of poverty in certain underserved neighbourhoods reinforces the mechanisms that perpetuate disadvantage.

In a world with high and growing levels of urbanization, the future of inequality depends largely on what happens in cities. The urban advantage in terms of innovation and opportunities for social mobility may not be sustained if development and urban planning policies neglect equity concerns. Based on a review of spatial disparities and inequalities within cities, this chapter discusses lessons learned in promoting spatial inclusion and reducing urban divisions.

A. Spatial inequalities: the rural-urban divide

Spatial inequalities within countries are often more dramatic than those between countries. The poorest regions of middle-income countries, for instance, are frequently as poor as low-income countries.⁷⁵ In Argentina and Mexico, for instance, GDP per capita in the poorest administrative regions is 16 times lower than that of the richest regions (Muñoz, Radics and Bone, 2016). Typically, spatial inequalities account for a significant proportion of total in-country inequality: they explain over 60 per cent of total income inequality in African countries such as Angola and Madagascar, for instance, and about 40 per cent in Zambia (Shimeles and Nabassaga, 2017; Beegle and others, 2016). These spatial divides are entrenched and often persistent, despite overall economic growth, enhancements in infrastructure and technological gains

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DEPENDS LARGELY
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⁷⁴ No uniform set of criteria are currently available to distinguish urban areas from rural areas. Due to the complexity and variety of situations in which the urbanization process occurs, national statistical offices are best placed to define urban areas in their respective countries. For additional information, see United Nations (2018c).

⁷⁵ Poverty as measured by the Multidimensional Poverty Index is as high in the poorest region of India as in Malawi; the poorest region of Guatemala is poorer than Haiti; and the poorest region of Nigeria is poorer than Chad and as poor as Niger. See the Oxford Poverty & Human Development Initiative, Global MPI 2018, tables 5.1-5.6, available at: <https://ophi.org.uk/multidimensional-poverty-index/multi-resources/>. Accessed on 25 June 2019. See also Alkire, Roche and Seth (2011) for a summary of subnational disparities.

that should improve access to opportunities and resources everywhere. Certain areas benefit more from these advances for a variety of reasons, including natural resource endowments, weather conditions, market integration and access to public institutions. At the same time, the concentration of activities within cities creates economies of scale and networking effects that further benefit the richest regions.

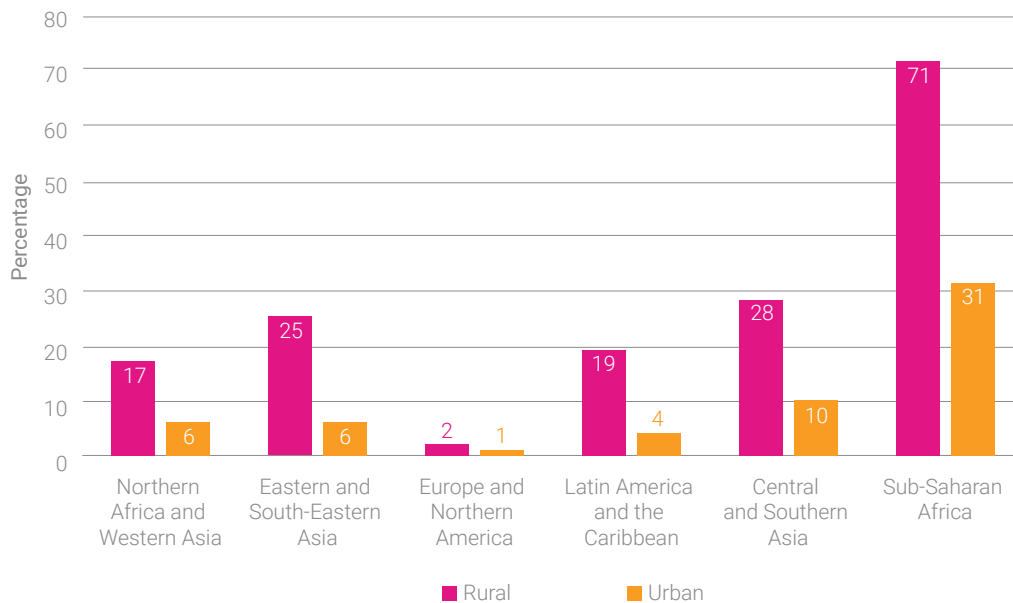
In Europe, for instance, spatial inequality within many countries expanded between 1995 and 2008 (OECD, 2018b and 2018c). Over that period, many small manufacturing cities and regions suffered losses in employment and income, while large metropolitan areas became more dynamic. The 2008 economic and financial crisis hit metropolitan areas harder than small towns and rural areas in some countries but not in others, resulting in a territorial patchwork of diverging real incomes and rates of labour force participation. In contrast, while spatial inequalities remain prominent in China, the share of provincial income inequality over total inequality declined from 35 per cent in 1995 to 11 per cent in 2013 (Jain-Chandra and others, 2018).

One of the most conspicuous forms of spatial inequality is that between rural and urban areas. On average, people in urban areas have more job opportunities and better access to education, safe drinking water, health services and high-quality infrastructure than rural populations. As a result, at least 80 per cent of people living in poverty are found in rural areas, even though rural areas account for only 45 per cent of the world's population (World Bank, 2016a; United Nations, 2018d). Based on recent estimates of multidimensional poverty, which takes into account overlapping deprivations in education, health and living standards, poverty is higher in rural than in urban areas in all regions, as shown in figure 4.1. A rural-urban gap is found even in regions where the overall prevalence of multidimensional poverty is very low – such as Europe and Northern America.

PROGRESS IN MANY INDICATORS HAS BEEN FASTER IN RURAL THAN IN URBAN AREAS. AT THE CURRENT RATE OF PROGRESS, HOWEVER, RURAL AREAS WILL STILL BE LAGGING BEHIND BY 2030

In most developed countries, disparities between urban and rural areas are easing in terms of economic structures and the quality of physical infrastructure (Champion, 2011; Champion and Hugo, 2004). Improvements in communication and transportation, for example, have allowed people to move out of cities into the surrounding countryside without losing access to urban jobs and services.

In developing countries, however, some rural disadvantages have persisted. Access to improved sanitation, for instance, has increased at a quicker pace in urban than in rural areas. Other indicators, however, suggest that a shift may be under way. Since the 1990s, evidence shows that progress against stunting has proceeded at a somewhat faster pace in rural than in urban areas; the same holds true for secondary school attendance and access to electricity (see figure 4.2). That said, even if the progress observed in most indicators from the 1990s to the 2010s continues, rural areas will still lag behind urban centres by 2030.

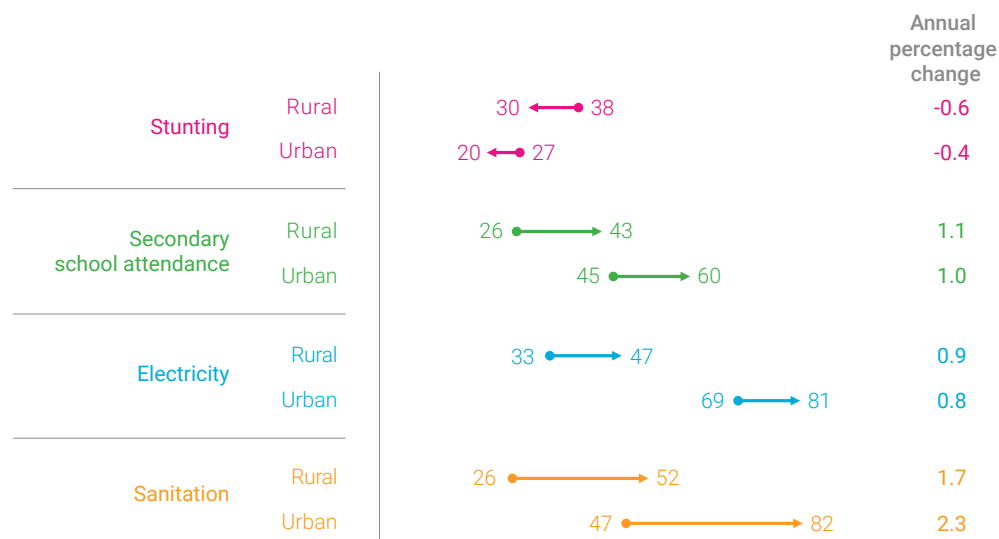
FIGURE 4.1**Percentage of the population living in multidimensional poverty, by region, 2018**

Source: Calculations based on the Oxford Poverty & Human Development Initiative's global Multidimensional Poverty Index 2018, Tables 4.1- 4.6. Available from <https://ophi.org.uk/multidimensional-poverty-index/global-mpi-2018/>. Accessed on 15 July 2019.

Note: Regional averages based on information for 13 countries and areas in Northern Africa and Western Asia, 10 countries in Eastern and South-Eastern Asia, 17 in Europe and Northern America, 20 in Latin America and the Caribbean, 12 in Central and Southern Asia, and 42 in sub-Saharan Africa. Results are not weighted by population size.

What's more, such averages hide substantial cross-country differences. The rural-urban gap in access to electricity declined by 25 percentage points in Bangladesh and by 29 percentage points in India between 1998 and 2016, but it increased by 22 percentage points in Benin from 1996 to 2011. Similarly, different indicators can show opposing trends. In Nigeria, for instance, secondary school attendance showed progress, though limited, in both urban and rural areas from 2003 to 2013, yet the number of out-of-school children increased in rural areas (UNESCO, 2015). In China, rising rural-urban inequalities across multiple indicators over the last few decades have been widely documented, although recent initiatives by the central and local governments to reduce them may have begun to bear fruit (see box 4.1).

These examples suggest that a strong focus on easing the rural-urban divide will be needed to ensure that no one is left behind. They also highlight the need to monitor trends using multiple indicators, since progress in one domain is not necessarily indicative of progress in others.

FIGURE 4.2**Trends in four selected indicators of well-being for rural and urban areas, 1990s to 2010s**

Source: Calculations based on DHS and MICS data.

Note: The averages shown are based on data for 53 countries in the case of stunting, on 50 countries for secondary school attendance, and on 55 countries for electricity and sanitation. Data collection ranges from 1993 to 1999 for the first survey, and from 2010 to 2018 for the most recent survey. A child is considered stunted if (s)he is below minus two standard deviations from the median height-for-age of the World Health Organization Child Growth Standards.

In sum, access to opportunities and resources has a clear spatial dimension: people in rural areas are worse off than urban populations, despite a shrinking of that gap in many countries.

While most evidence regarding spatial inequalities is highly aggregated and generally compares only urban to rural areas, or major subnational regions, the economic and social landscape of cities and rural areas differs widely in both developed and developing countries. Moreover, the boundaries between urban and rural areas are not clear-cut. For example, Van Duijne and Nijman (2019) have found that substantial urban growth is taking place in areas of India that are currently classified as rural in censuses and administrative sources (see also Van Duijne, forthcoming). That is, part of the population classified as rural in fact live in high-density towns and work in non-farm activities. Corridors of what are currently classified as rural villages can result in contiguous built-up areas of more than 250,000 people without any form of urban governance (ibid.). This ambiguity challenges the use of administrative data. Accurate analyses of spatial inequalities call for the use of alternative data sources, including satellite imagery.

BOX 4.1**China: bridging the rural-urban divide**

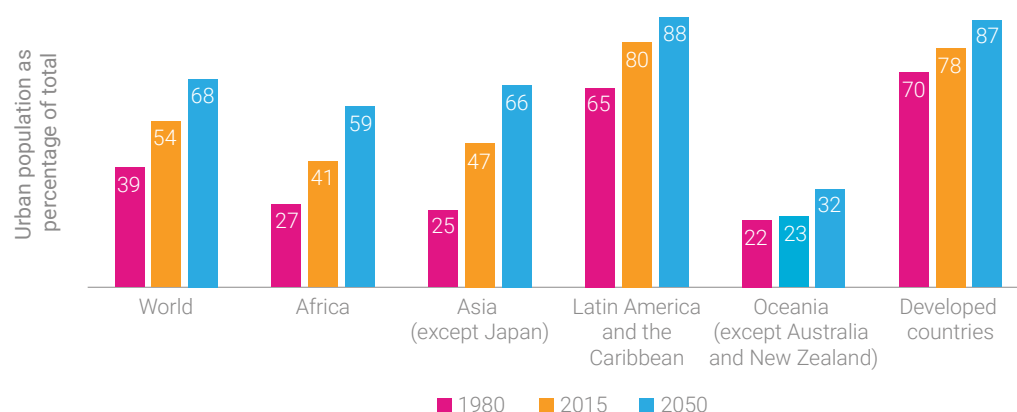
Rising rural-urban inequalities in China over the last several decades have been widely documented. From the early 1980s to the mid-2000s, the uneven distribution of economic growth, poverty reduction and public investment to the benefit of cities and industrial development resulted in significant increases in the absolute gap between urban and rural incomes (Chaudhuri and Ravallion, 2006; Whyte, 2010). Education shows large disparities as well (Zhang, Li and Xue, 2015). China's system of household registration (the *hukou* system), which severely restricts internal migration, has contributed to observed disparities through the marginalization of rural residents and rural-to-urban migrants. New migrants to urban areas often lack access to health care, education and housing due to stringent registration requirements.

Inequality between urban and rural areas explains a large share of China's income inequality and its trends. It accounted for 44 per cent of total income inequality in 1995 and continued to increase until 2007 (Jain-Chandra and others, 2018). Rural-urban inequalities in income declined rapidly after 2007 and, by 2013, constituted 34 per cent of total inequality (*ibid.*). Yet disparities remain large. In 2017, per capita disposable income was almost three times higher in urban than in rural areas: 36,000 yuan versus 13,000 yuan, respectively (NBS China, 2018).

Central and local governments in China have committed to eradicating rural poverty and improving the distribution of income. To date, measures taken include a reform of the personal income tax system, increases in the minimum wage, expansion of the Dibao minimum-income guarantee programme, increased public investment in rural infrastructure and several other pro-farmer policies. Some progress has been made in improving rural health since the implementation of the New Rural Cooperative Medical Scheme, which provides coverage to all rural inhabitants (Meng and Xu, 2014). To promote financial inclusion, the Government has expanded payment systems to rural areas and has introduced regulation for new types of rural financial service providers. As a result, rural residents are catching up to urban dwellers in terms of account ownership and the number of people saving at financial institutions (Jain-Chandra and others, 2018).

Announced reforms to the *hukou* system are also necessary to reduce the rural-urban gap. Some urban provinces have already acted to ease *hukou* restrictions. In 2016, China's Government announced its goal of expanding urban residency permits to 100 million migrant workers by 2020 (Sheehan, 2017). China's Ministry of Public Security announced that it had issued 28.9 million new urban residency permits in 2016 alone (*ibid.*). However, the Government still needs to deliver a whole range of supporting policies to achieve this goal, and it may lack the financing to do so.

FIGURE 4.3
Levels of urbanization in 1980, 2015 and projections to 2050



Source: United Nations (2018d), *World Urbanization Prospects: The 2018 Revision*.

B. An increasingly urban world

For the first time in history, more people now live in urban than in rural areas. The proportion of the world population living in cities has increased rapidly, as shown in figure 4.3. Over the next three decades, global population growth is expected to take place almost exclusively in the world's cities and towns, in part due to migration from rural areas. In developed countries and those of Latin America and the Caribbean, a large proportion of the population already resides in urban areas. Africa and Asia are still largely rural but are urbanizing faster than other regions.

In all regions, the speed of urbanization is slower now than in past decades, largely because many countries are already highly urbanized.⁷⁶ The rate of urban population growth is also declining, and is expected to continue falling until 2050, although it is still very high in Africa. Nevertheless, the total number of people living in cities is expected to grow substantially, from approximately 4.4 billion in 2020 to 6.7 billion in 2050 (United Nations, 2018d). Africa and Asia alone are projected to account for an increase of 2 billion people living in urban areas by 2050 (ibid.). In contrast, the number of people living in rural areas is estimated to decline from 3.4 billion in 2015 to 3.1 billion in 2050.

Migration from rural to urban areas has historically played a key role in the rapid growth of cities. Together with the reclassification of rural into urban communities, migration continues to be an important component of urban growth. However, natural population growth – the difference between births and deaths – currently makes a larger contribution to the growth of cities than internal migration in the majority of developing countries (United Nations, 2018d).

⁷⁶Urbanization refers to the proportion of a country's total population living in areas classified as urban. Urban population growth refers to the rate of change in the number of people living in areas classified as urban..

BOX 4.2**Brazil's planned capital: from a utopian vision to a cautionary tale**

Brasilia was planned and built from the ground up at breakneck speed between 1956 and 1961 as the new capital of Brazil. Originally envisioned as a progressive model that would guarantee a good quality of life to all its residents, Brasilia has failed to live up to its ambitions.

With a Gini coefficient of 67.2, Brasilia is the most unequal capital city in Latin America and the Caribbean (UN-Habitat, 2014). On average, the income of the population's richest decile was 87 times that of the poorest decile in 2009 (ibid.). Not only are households divided by income, but the urban space is highly segregated. This is the result of an exclusionary city model that separated working-class neighbourhoods in satellite towns (small metropolitan areas located close to the city) from wealthy households in the central part of the city as well as in gated communities. The city hosts the wealthiest population of Brazil and, at the same time, its satellite towns register Brazil's highest homicide rates (ibid.).

Like some other megatrends, urbanization has the potential to become a positive transformative force for every aspect of sustainable development, including the reduction of inequality. When properly planned and managed, urbanization can reduce poverty and inequality through increased employment opportunities and improved quality of life via better education and health. When poorly planned, urbanization can lead to congestion, higher crime rates, pollution, increased levels of inequality and social exclusion. Whether the process of urbanization is harnessed and managed, or allowed to fuel growing divides, will largely determine the future of inequality.

1. Inequality within cities: economic, spatial and social dimensions

Inequality within cities has economic, spatial and social dimensions. Economically, inequality is generally greater in urban than in rural areas: the Gini coefficient of income inequality is higher in urban areas in 36 out of 42 countries with data.⁷⁷ China is an important exception to this pattern, with a Gini coefficient that stood at 40 in rural areas and 37 in urban areas in 2014.⁷⁸

When opportunities found in cities are unevenly distributed, disadvantages tend to concentrate in specific locations, generating various forms of spatial inequality (see box 4.2). People living in disadvantaged communities often lack access to health care, schools, sanitation, piped water, employment opportunities, adequate housing and more. In the metropolitan region of Puebla-Tlaxcala, Mexico, for instance, more

⁷⁷ Calculations based on data for 16 countries in Africa, 9 in Asia, and 17 in Latin America from UNU-WIDER's World Income Inequality Database (WIID) version 4, released in December 2018. Available at: <https://www.wider.unu.edu/database/world-income-inequality-database-wiid4>.

⁷⁸ There is greater spatial integration among the economies of coastal provinces, which are more urbanized than inland provinces (Knight, 2013). Sicular and others (2007) found that, in 2002, inequality across provinces contributed more to household inequality in rural areas than in urban areas.

than 65 per cent of the population had not completed secondary education in some peripheral areas, while the share was below 20 per cent in the metropolitan core in 2010 (OECD, 2013). Life expectancy can also differ significantly by neighbourhood. In cities of the developed world such as Baltimore and London, differences in life expectancy across neighbourhoods are a staggering 20 years (OECD, 2016).

Additionally, people in low-income households – in both urban and rural areas – tend to have little or no political voice or formal representation, particularly if they live in settlements without official addresses. Inequalities in power, influence and access can help reinforce urban divisions and tilt public investment towards the interests of the elite. Moreover, political voice can be controlled through relationships that trade access to benefits for electoral support.

Social and economic conditions also vary by city size. In general, large cities – usually defined as those with a population of 1 million or more – are better served than smaller cities and towns in terms of social services and infrastructure, including safe drinking water, sanitation and electricity (World Bank, 2013b). As a result, poverty tends to be lower in large versus small cities. Cities of over 1 million host 22 per cent of Brazil's and 27 per cent Mexico's population, for instance, but they are home to 9 per cent and 16 per cent, respectively, of people living in poverty (Ferré, Ferreira and Lanjouw, 2012).

Table 4.1 shows the ratio of the share of the national population living in poverty in cities of different sizes to the share of the total population in such cities in a selection of developing countries. A ratio below (or above) 1 indicates that the prevalence of poverty in cities of a given size is below (or above) the national average. The prevalence

MEDIUM-SIZED AND,
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URBAN POOR

TABLE 4.1
POVERTY SHARE OVER PROPORTION OF TOTAL POPULATION BY CITY SIZE

Country	Urban	XL cities	L cities	M cities	S cities	XS cities
Albania	0.74	–	–	0.73	0.69	0.79
Brazil	0.87	0.41	0.86	0.71	1.00	1.39
Kazakhstan	0.75	0.13	–	0.72	1.00	1.00
Kenya	0.89	0.86	1.00	1.00	7.00	1.00
Mexico	0.65	0.59	0.46	0.64	0.75	1.17
Morocco	0.67	0.25	0.78	0.74	1.00	1.00
Sri Lanka	0.42	–	0.33	0.33	0.50	0.50
Thailand	0.55	0.08	–	0.33	0.50	0.93

Sources: Calculations based on Ferré, Ferreira and Lanjouw (2012).

Notes:

1. Ferré, Ferreira and Lanjouw (2012) define city sizes as follows: XL for cities of more than 1 million inhabitants, L for cities between 500,000 and 1 million, M for cities between 100,000 and 500,000, S for cities between 50,000 and 100,000, and XS for cities of fewer than 50,000 people.
2. The eight countries shown were selected on the basis of their interest and the availability of data to construct detailed poverty maps (ibid.).

BOX 4.3**Viet Nam: small cities home to large share of urban poverty⁷⁹**

Like many developing countries, Viet Nam is urbanizing rapidly. The proportion of the country's population living in cities is projected to increase from about 30 per cent in 2009 to 45 per cent in 2020. While poverty is still mostly a rural phenomenon in Viet Nam, urban welfare varies considerably between large and small cities. Only 1.4 per cent of residents in large cities (1 million inhabitants or more) were below the poverty line in 2010, compared to 5.8 per cent of the population in small cities (between 150,000 and 300,000 inhabitants) and 12.2 per cent in small towns (between 4,000 and 150,000 inhabitants) (Lanjouw and Marra, 2018).⁸⁰

Hanoi and Ho Chi Minh City are home to 32 per cent of the urban population but only 11 per cent of the urban poor. At the same time, 40 per cent of the population, but 70 per cent of urban dwellers living in poverty, reside in small cities and towns. Not only is poverty more prevalent in small cities, it is also deeper. Access to education and basic services, including improved sanitation and piped water supplies, is also much higher in large cities than in small ones.

However, significant variations in living standards are also found in small towns. In general, poverty is lower in towns close to other, larger, cities. Remote and isolated towns are generally poorer. Yet there is broad variation in poverty levels even among towns in similar geographic locations, suggesting that other factors, including local policies, play a role.

While households in larger cities enjoy higher living standards, on average, subjective welfare (as measured by the proportion of respondents to a 2010 household survey who rated their food consumption as sufficient) is higher in small towns and cities than in larger ones. Lanjouw and Marra (2018) argue that higher inequality in Viet Nam's large cities results in less subjective well-being, as people feel they are relatively less well-off if some of their neighbours are doing better. It is also possible that negative externalities, such as higher congestion and pollution in large cities, influence perceived consumption well-being. While additional research is needed to explain these results, the fact that some dimensions of perceived well-being do not adhere to the city-size gradient observed for poverty or access to services should be of interest to policymakers.

of poverty is systematically lower in large than in medium-sized cities. It is also lower in medium-sized cities than in small towns. Hence, medium and, in particular, small cities are home to a disproportionate share of the urban poor, as the example of Viet Nam further illustrates (see box 4.3).

Urban planning efforts have focused largely on the problems of large metropolitan areas, particularly in developing countries. As a result, these cities may be receiving a disproportionate share of public resources – in what has been called “metropolitan bias” (Ferré, Ferreira and Lanjouw, 2012). Yet smaller cities account for 58 per cent of the world's urban population and are growing faster than large cities (United Nations, 2018e).

⁷⁹ Based on Lanjouw and Marra, 2018.

⁸⁰ Based on Viet Nam's General Statistics Office/World Bank expenditure poverty line (equivalent to \$1.21 per day in 2009).

DESPITE HIGHER
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Despite higher standards of living, larger cities are more unequal than smaller cities. In Latin America and the Caribbean, for instance, the average Gini coefficient was 51.8 in cities of more than 5 million inhabitants, 45.6 for cities of between 500,000 and 1 million, and 43.4 for cities with fewer than 100,000 inhabitants in 2009-2010 (UN-Habitat, 2014).⁸¹

The relationship between city size and economic inequality has been documented in other parts of the world as well. Chen, Liu and Lu (2018) find that overall urban inequality is significantly and positively correlated with population size in China. Baum-Snow and Pavan (2013) establish a strong positive relationship between city size and wage inequality in the United States. The OECD (2018d) also finds that the larger the population of a city, the higher its degree of income inequality.

Castells-Quintana (2017) finds that inequality within countries first declines and then increases with the average size of cities, suggesting a U-shaped relationship between the two. The author uses panel data for countries with data between 1960 and 2010. The results imply that increases in a country's average city size are associated with rising inequality after a certain point. Although general estimates by the author suggest that an average city size of 2 million to 3 million inhabitants would minimize the level of inequality, countries differ greatly in the characteristics of urban areas (ibid.). "Optimal" city sizes may therefore vary widely across countries.

Inequality and poverty levels also tend to differ considerably across cities, even among large urban centres within the same country. In China, for instance, the Gini index is estimated at 50 in Shenzhen but 22 in Beijing, both cities of about 20 million people (UN-Habitat 2008). Cities have different cultural and political histories, geography and local policies and follow different development paths. Each city carves out its own unique trajectory. However, the evidence suggests that as the urban population grows, inequality is likely to increase in the absence of policies to address it.

The dynamics of clustering and isolation that operate in urban areas are created to a large extent by the way in which cities are governed (OECD, 2018d). Spending on education and social programmes is biased towards already affluent areas – widening rather than reducing intra-urban inequalities. Gated communities also contribute to spatial segregation and the widening of urban divides (see box 4.4). Low social expenditure and lack of infrastructure limit access to jobs, economic opportunities and social networks (Kilroy, 2007). The most visible example of the spatial concentration of urban poverty and disadvantage are slums.

⁸¹ The study draws upon a large sample covering 241 cities in 18 countries with five to nine time series between 1990 and 2010 for each city. The Gini coefficients reported above represent a simple average across the cities for the most recent available year: 2010 (60 per cent), 2009 (33 per cent), 2007 (4 per cent) and 2005 (3 per cent). The database comprises very small cities of less than 100,000 inhabitants (31 per cent), small cities of between 100,000 and half a million inhabitants (39 per cent), intermediate cities of between half a million and a million inhabitants (17 per cent), large cities of between 1 million and 5 million inhabitants (11 per cent), and very large cities of more than 5 million inhabitants (3 per cent).

BOX 4.4**Gated communities, symbols of exclusion**

Gated communities are separated from neighbouring areas by fences, walls or other constructed or natural barriers. Entry is selective through some form of access-control. Gated communities are a growing phenomenon in countries as diverse as Argentina, China, Indonesia, Nigeria, South Africa and the United States, and a troubling manifestation of what urban inequality can sow.

An often-positing explanation for the rise in gated communities is a fear of crime. However, this only applies in countries with very high crime rates (Cséfalvay and Webster, 2012). Research on the relationship between gated communities and crime rates in the United States fails to find a clear relationship between the two (Branic and Kubrin, 2018). Another frequently cited reason for the rise of such communities is the desire of the rich to escape from overcrowded and overregulated cities. Yet gated communities are not exclusively inhabited by the rich, and many middle-class gated communities can be found around the world. Factors driving the growth of gated communities differ from country to country, and no single, universal explanation for the rise of such communities has been found.

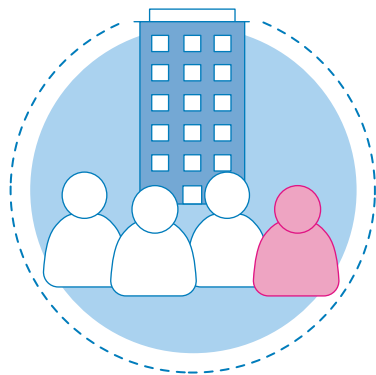
In effect, these exclusive developments create a barrier to interaction among people of different socioeconomic, ethnic or religious groups. They inhibit the formation of the very social networks that promote social mobility and economic development. Furthermore, gated communities frequently interfere with efficient urban management by limiting access to high-quality schools, health centres, libraries, parks and other, supposedly public, amenities (UN-Habitat, 2010).

In doing so, gated communities contribute to the polarization and segmentation of the urban space, with increasing levels of separation among different income and social groups. In Latin America, some of these gated communities have essentially become cities unto themselves, providing their residents all kinds of services – including schools, hospitals and restaurants – and connecting them with private highways. In Santiago de Chile, for instance, private highways connect exclusive parts of the city, which are only accessible to those living in these neighbourhoods (UN-Habitat, 2016a).

2. Slums: home to more than 1 billion people

Slums – also known as *bidonvilles*, *taudis*, *barrios marginales*, *tugurios*, *favelas* and many other names – are urban areas characterized by substandard housing, overcrowding, unsanitary conditions and lack of services. Specifically, people living in slums suffer from one or more of the following five deprivations: (1) lack of access to improved water sources, (2) lack of access to improved sanitation facilities, (3) lack of sufficient living area, (4) lack of housing durability and (5) lack of tenure security.

In 2016, one in four urban residents (over 1 billion people) lived in slums (United Nations, 2019a). For nearly 20 years, the United Nations Human Settlements Programme (UN-Habitat) has documented the multiple risks that people living in these informal settlements face. Slum dwellers suffer from chronic hunger and die younger than other urban dwellers in the same city (UN-Habitat, 2006). Moreover, the unfavourable health and safety conditions found in slums affect women, children and youth disproportionately.



In 2016, one in every four city residents, or over one billion people, lived in slums

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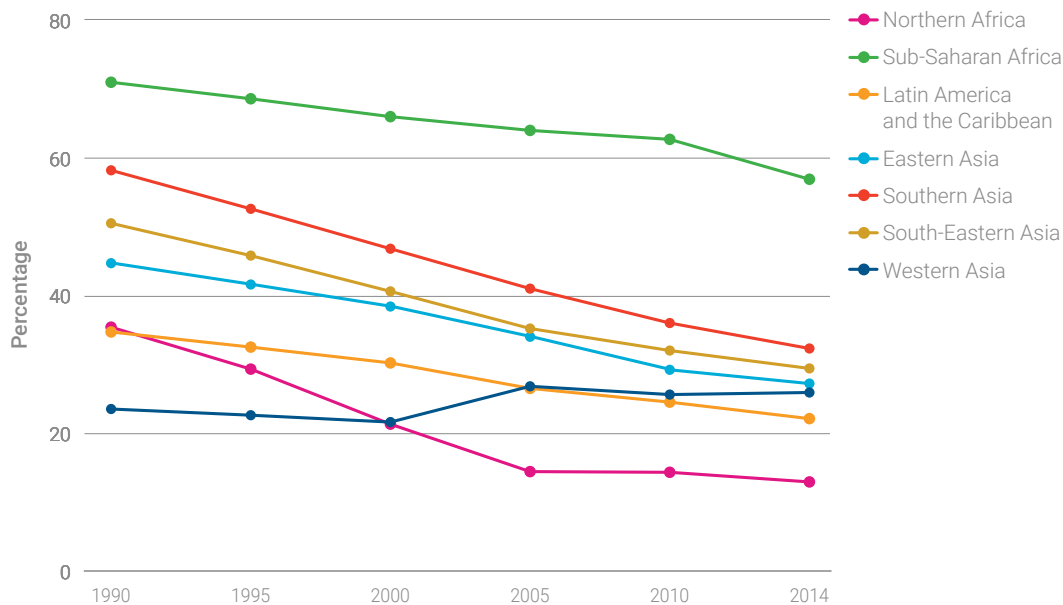
Slums not only proliferate in large cities, but can be found in smaller cities as well. For example, the proportion of people living in slums in the capital cities of Angola (Luanda), Burkina Faso (Ouagadougou) and Ethiopia (Addis Ababa) was 50, 32 and 42 per cent, respectively, in 2015. However, the proportion of people living in slum-like conditions in non-capital, smaller cities of these countries was as high as 70, 50 and 72 per cent, respectively (UN-Habitat, 2018). In some cases, slums can be found in every part of the city. In other urban centres, they are highly visible and concentrated in specific locations. In still other cities, they are located mainly at the margins.

As shown in figure 4.4, the world has made progress in reducing the proportion of people living in slums in the developing world, from 46 per cent in 1990 to 30 per cent in 2014. However, the absolute number of slum dwellers increased from 690 million to 880 million over the same period. Western Asia is the only region that saw a small increase in the proportion of slum dwellers, rising from 22.5 per cent in 1990 to 24.9 per cent in 2014; over that period, the number of people living in slums more than tripled, from 12 million to 38 million.

In Northern Africa, in contrast, the number of slum residents steadily declined from 22 million in 1990 to 11 million in 2014. The level of deprivation is low in this subregion, with most slum households suffering about one of the five deprivations that characterize slum conditions. Among the reasons for this success story are effective and sustained government policies initiated in the 1990s for slum upgrading and prevention, which contributed to reducing the incidence of urban slums by more than one third in Egypt and by more than half in Morocco.

Sub-Saharan Africa has the highest incidence of slums in the world, with 56 per cent of the region's urban population living in informal settlements in 2014. Slum upgrading and poverty reduction efforts have contributed to reducing the proportion of households living in slums by 14 percentage points since 1990. Still, due to a rapidly increasing urban population, almost 110 million people have joined the ranks of slum dwellers over the same period. In some sub-Saharan African countries, more than three in four urban residents live in informal, low-income settlements. Not only is the incidence of slums high in these countries, but the level of deprivation in some cities is severe, with more than one third of the slum population living with two or more deprivations.

FIGURE 4.4
Proportion of urban population living in slums in developing countries, 1990-2014



Source: UN-Habitat (2016b).

In absolute numbers, Asia has the largest share of the world's slum population. In 2014, the region was home to almost two thirds of all slum dwellers, or 560 million people. Slums are most prevalent in Southern Asia, with India accounting for half of all slum dwellers in the region and Bangladesh having the highest prevalence, at 55 per cent. South-Eastern Asia has the second highest rate of slum prevalence in the region, estimated at 28.4 per cent in 2014. Around 75 per cent of Eastern Asia's slum population live in China, where the prevalence of slums was 25 per cent in 2014. Western Asia has not been successful in preventing slum formation, mostly due to ongoing conflicts in Afghanistan and Yemen. In contrast, Turkey saw the proportion of slums decline from 18 per cent in 2000 to 12 per cent in 2014.

Latin America and the Caribbean saw a significant decrease in the proportion of slum dwellers –from 34 per cent in 1990 to 21 per cent in 2014, but levels and trends vary substantially across countries. Whereas 75 per cent of city residents lived in slums in Haiti in 2014, the proportion was 5 per cent in Costa Rica. The most progress was recorded in Argentina, which managed to halve its share of slum dwellers from 2000 to 2014. The level of deprivation in slums is generally low in this region, with most households suffering one deprivation. Local neighbourhood improvement programmes have promoted access to running water, sewerage, schools and primary health services. Despite these improvements, most slums are still underserved and face higher levels of crime and corruption than better-off neighbourhoods.

While slums are the most obvious symptom of a divided city, urban poverty is found outside of slums as well. In India, for instance, the proportion of the population below the official poverty line was 44 per cent in areas officially classified as slums, close to

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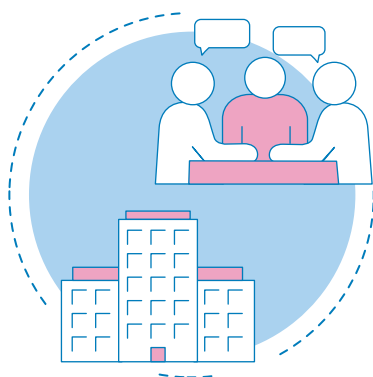
52 per cent in non-classified slums and 23 per cent in other urban neighbourhoods in 2005 (Chandrasekhar and Montgomery, 2010).⁸² In addition, over one quarter of households in slum areas have levels of expenditure that are above the official poverty line, suggesting either that some households living in slums are not poor or that the official poverty line is set too low (ibid.).

The challenges that slum dwellers face arise from inadequate infrastructure, poor housing, hazardous locations, social and economic exclusion, violence and insecurity. They are generally disempowered on account of their location and often suffer from discrimination. Like rural populations, slum dwellers are also caught in “spatial poverty traps” due to their social, economic and political exclusion, which results in an unacceptable waste of human potential.

C. Policy implications: shared prosperity or rising inequality?

People in urban areas are generally better off than rural residents. Cities offer a higher level of public services and more job opportunities. As a result, most of the world's poorest people are found in rural areas. While rural-urban disparities have lessened over time, when measured by many indicators, the rate of progress is too slow to ensure that rural areas will catch up to urban areas by 2030. Thus, leaving no one behind calls for continued recognition of the importance of rural development.

That said, urbanization is a global reality. When well-managed, it can bring new opportunities and growing prosperity. However, it can also result in deepening economic, social and spatial inequalities. Lack of opportunity tends to concentrate in specific parts of the city, preventing residents of entire neighbourhoods from accessing adequate housing, health care, schools and other services. In their most extreme form, spatial inequalities in cities lead to the expansion of slums. While the share of people living in slum-like conditions has declined, the absolute number of slum dwellers is growing.



As urbanization continues, inequality is likely to increase in the absence of policies to address it

⁸² Non-notified slums are slums that are not recognized by the Government. Lack of legal recognition may create even more barriers for inhabitants to legal rights and basic services.

Inequalities in urban areas are largely determined by the way in which cities are – or are not – designed, planned and managed. Many countries face uncontrolled urbanization processes, especially in developing countries where cities are growing rapidly. Uncontrolled growth results in the inadequate provision of public services and a failure to guarantee a minimum quality of life for all. Given the rapid pace of urbanization in the developing world, Governments in these countries must address urban inequalities now in order to leverage the potential benefits of this powerful global trend.

Location, culture, institutional capacity as well as social and economic structures create conditions specific to every city. However, a number of common elements are found in policy approaches that can contribute to reducing inequalities in line with both the 2030 Agenda and the New Urban Agenda.⁸³

URBAN
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1. Cities that work for everyone

Policies that protect the rights of all urban residents are essential to reducing the inequalities increasingly found in cities. Securing housing and land rights, in particular, is a must. Governments have often exacerbated housing crises, instead of resolving them, by cutting back funds for social housing and failing to intervene to control property and land speculation. Urban renewal efforts have sometimes resulted in the demolition of homes and the relocation of residents to areas that are far removed from livelihood opportunities. Ensuring accessible and affordable housing requires security of tenure for people living in poverty, including people in slums and unauthorized settlements. It also calls for improving their access to low-cost housing alternatives as well as subsidized housing finance.

Inefficient historical plot design and land speculation have, in many cases, resulted in patchy urban development. This, in turn, has led to land shortages and insecure land and tenure rights, which tend to disproportionately affect the poorest people. Hence, to promote greater equality, it is important that all people are on a level playing field regarding land and property rights as well as tenure security. Particular attention needs to be paid to the security of land tenure for women, since it is one key to their economic empowerment (UN-Habitat, 2016a).

Another central policy lever to reduce inequality is expanding access to basic services. Universal access to safe and affordable drinking water and improved sanitation not only promotes equality but ensures better hygiene and health throughout the city. Improving spatial connectivity is also needed to reduce inequality and enable meaningful participation in social and economic life in all parts of the city. Establishing accessible, affordable, safe and sustainable transport links between residential, commercial and industrial areas can encourage agglomeration, open up new employment opportunities, facilitate access to public goods and reduce imbalances between deprived areas and

⁸³ The New Urban Agenda was adopted at the United Nations Conference on Housing and Sustainable Development (Habitat III) in Quito, Ecuador, on 20 October 2016 and endorsed by the United Nations General Assembly on 23 December 2016.

better-off neighbourhoods. The need for greater connectivity is particularly high in sub-Saharan Africa, where convenient access to public transport was only available to 18 per cent of urban residents in 2018 (United Nations, 2019a).

Urban planning practices supported by appropriate regulations can ease the physical segregation and marginalization that contribute to inequalities in cities. Reducing segregation may involve creating spaces where different groups can coexist and providing housing solutions for different socioeconomic groups – including affordable housing for low-income households – within neighbourhoods. Public spaces can strengthen the social fabric and support civil society as well as stimulate local economic development. However, evidence also suggests that social mixing policies alone will not be enough to break the cycle of segregation (OECD, 2018d).

Cities also need to adopt more inclusive and equitable growth models. Unplanned expansions into the distant periphery, known as urban sprawl, can encroach on valuable rural and agricultural land. They can also result in fragmentation, disconnection and diminished returns to economies of agglomeration due to decreasing densities. Planned city extensions are a way of managing urban growth in an orderly manner by focusing development efforts, increasing density and promoting spatial connectivity. Additionally, cities should aim to overcome barriers to inclusion posed by disconnected open spaces by filling the gaps in a coordinated manner. This would increase density, facilitate an increase in the efficiency of public service delivery and promote the vitality of communities. A planned city extension in Ghana to the Accra metropolitan area is already under way, and cities in Belize, the Comoros, Kenya, the Philippines and Somalia are developing similar strategies (United Nations, 2018f).

Facilitating access to education and decent employment for urban residents is also key for reducing urban inequalities. In addition to formal, high-quality education, some cities have leveraged density and the concentration of businesses to create training and skills development programmes. These programmes are adjusted to local market and labour needs as well as to the city's comparative advantages, such as proximity to export opportunities. Appropriate and well-targeted actions, including demand-based vocational training programmes, offer real prospects for employment. Other cities have implemented conditional cash transfers to encourage school attendance, created lifelong learning facilities as well as developed programmes to support microenterprises and entrepreneurs.

Cities that have improved the quality of life in slums and reduced their reach have gone beyond mere beautification. They have genuinely considered the needs of residents, including by securing appropriate long-term financial investment, improving security of tenure and encouraging local economic activities (UN-Habitat, 2016b). Participatory city-wide action plans have consistently been more effective than piecemeal improvements.

Improving security of tenure entails stopping forced eviction policies, finding solutions that work for both tenant and landlord and, when relocation is necessary, creating relocation and compensation plans jointly with local communities. Encouraging local economic development that helps slum dwellers lift themselves out of poverty means actively supporting the slum economy through investment, encouragement of local initiatives, recognition of the role of women in the household economy and encouraging cooperation among slum dwellers.

Finally, solutions must be found for affordable and adequate housing, which typically fails to keep pace with urban growth. The problem is exacerbated by the fact that the formal private housing sector tends to prioritize middle- and upper-income housing. With cities in the developing world growing at a rapid pace, providing adequate housing to meet the needs of expanding low-income populations is an all too common concern. Beyond the proliferation of slums, the lack of adequate housing results in an increase in homelessness. City governments have an important role to play in addressing this ill. To address homelessness effectively, authorities must recognize its many causes. Accordingly, while housing and eviction policies are important prevention mechanisms, effective strategies require a multi-pronged approach that should also address issues such as mental health and substance-abuse. Finland, for example, has successfully decreased homelessness by providing modern housing units and tailored support services to those in need through a national programme to reduce long-term homelessness.

2. Coordinating, financing and monitoring urban policies

It is increasingly recognized that local authorities are pivotal to the realization of the Sustainable Development Goals and the New Urban Agenda. In cities such as Durban, Jakarta, Madrid and Quito, urban planning approaches are being incorporated into local development plans and connected to the 2030 Agenda and the New Urban Agenda (United Nations, 2018f).

Yet reducing urban inequality also requires coordination among national and local authorities. Addressing intersecting inequalities in income, decent work, access to public goods and services, housing and land calls for coherent and concerted policy action in many sectors. Coordination across different levels of government and different agencies is critical to ensure that initiatives to address inequality are effective. However, setting up a coordinated urban governance structure is no easy task without appropriate institutional frameworks and the participation of key stakeholders. This can be particularly challenging in the context of least developed countries.

Improved coordination and decentralization require effective financing of subnational authorities. Local finance typically comes from four sources: (1) (un)conditional intergovernmental transfers, (2) own revenue generation through local taxes and

REDUCING INEQUALITY IN CITIES REQUIRES COORDINATION AMONG NATIONAL AND LOCAL AUTHORITIES

service charges, (3) borrowing from capital markets and (4) public-private or public-civic partnerships. All four sources require careful institutional design matched with financial capacity and political openness. Cities with well-performing local authorities and sound tax bases can usually manage with less financial support from central Governments. Land-value capture, for instance, is increasingly being used to generate local revenue in cities in Brazil, China, Colombia, Egypt, India and several OECD countries to recover and reinvest land-value increases that result from public investment (United Nations, 2018f). However, implementation of effective local fiscal mechanisms has lagged in many least developed countries, which will face the steepest challenges to urban development over the coming decades.

In terms of borrowing from capital markets, development banks are financing initiatives to tackle increasing levels of inequality and exclusion found in growing urban settlements. Additionally, they are assisting city, subnational and national governments in attracting new investments for sustainable growth. The World Bank, for example, has helped 240 city governments tap into capital markets without the need for a sovereign guarantee (United Nations, 2018f).

Governments also need to improve their capacity to collect and utilize data on urban inequality. Many cities, particularly in the developing world, are stymied in their efforts to analyse and formulate urban policies to reduce inequalities due to lack of relevant information. A concerted effort – involving human, financial and technological resources – is needed to fill this gap, and will require the cooperation of national, state/provincial and local governments and national statistical offices. Local actors, including civil society, non-governmental organizations, service providers and public institutions can be empowered to participate in data collection efforts.

Whenever possible, collected data should be disaggregated by income, age, sex, ethnicity, race, migration status, disability, geographic location and any other characteristics relevant to national, subnational and local contexts. Disaggregating information at city and sub-city levels would integrate a spatial component into inequality analysis and therefore allow Governments to examine access to natural resources, physical and productive assets and local opportunities across groups. The Mexican Government, for example, has implemented a national analysis of cities with a strong emphasis on inclusion through the UN-Habitat City Prosperity Initiative. Implemented in more than 300 Mexican cities, the programme has helped the Ministry of Agrarian, Territorial and Urban Development to identify key strategic interventions that Infonavit (the largest mortgage lender in Latin America) is funding to reduce spatial inequalities and boost shared prosperity in cities. This has enabled the Government to produce more than 100 city action plans (United Nations, 2018f).

CHAPTER 5

INTERNATIONAL MIGRATION: A FORCE FOR EQUALITY, UNDER THE RIGHT CONDITIONS



CHAPTER 5

INTERNATIONAL MIGRATION: A FORCE FOR EQUALITY, UNDER THE RIGHT CONDITIONS

KEY MESSAGES

- Economic and social inequalities, as well as insecurity, influence the movement of people. Fundamentally, however, international migration is part of the development process.
- Whether migration helps to reduce inequality depends on the characteristics of sending and receiving countries and the conditions under which migration takes place.
- International migration stands a better chance of reducing inequality within and among countries and contributing to sustainable development when it takes places in a regular, orderly and safe fashion, when migrants can use their skills productively, and when remittances can be sent home at a low cost.
- With the right policies in place, lower-skilled workers and their families stand to gain the most from migration.
- Against a backdrop of growing interconnectedness, policy attempts at restricting or even trying to deter international migration are likely to be futile. Migration must be approached as an important dimension of the development process and governed accordingly.

INTRODUCTION

International migration is at an all-time high. In 2019, according to the United Nations, the number of international migrants worldwide reached an estimated 272 million – up from 174 million in 2000. Over half (about 56 per cent) of these migrants live in developed countries, where they make up about 12 per cent of the total population. Another 44 per cent reside in developing countries, where they account for about 2 per cent of the population. Almost three quarters of all migrants (73 per cent) come from developing countries (United Nations, 2019c).

International migration is a powerful expression of people's desire to improve their circumstances in a highly unequal world, whether in terms of wages, opportunities, safety or lifestyles. Millions of people move each year between countries and even continents for a variety of reasons, including to study, seek better job opportunities, marry, reunite with family members, retire or flee conflict or natural disasters. Some are forced to move to escape violence or natural disasters, but most choose to migrate to reduce what they see as gaps between their opportunities and those of people in other, usually wealthier, places. In one way or another, the desire for a better life is behind almost every migrant's unique story.

For the most part, this desire is fulfilled. Migrating involves risks and uncertainty but, in the long run, many migrants benefit from moving. They generally end up better off than people in their countries of origin in terms of employment opportunities, income, safety or overall well-being. But the opportunities generated by migration do not accrue only to those who move. The lives of millions of people and whole societies have been transformed, mostly for the better, through international migration.

Yet the costs and benefits of migration are not shared evenly by various population groups or by different countries. The 2030 Agenda highlights the role that migration can play in reducing inequality both within and among countries, as long as it is properly managed.⁸⁴ In order to contribute to a reduction in inequality, people who are disadvantaged must benefit more from the process than those who are better off, whether in terms of income, access to opportunities or political rights. Similarly, migration must bring net gains for low-income countries.

This chapter provides a review of the evidence on the relationship between international migration and inequality, focusing mainly on voluntary migration. The chapter shows that economic inequalities are just one of the many drivers of this megatrend. Differences in social, political and institutional frameworks matter as well, even for those who migrate voluntarily. Section 5.A assesses both the effect of inequality between countries on migration and the conditions under which migration can help reduce inequality. Section 5.B examines the impact of migration on inequality within countries. Section 5.C provides examples of policies that can enhance the potential of international migration to be an equalizing force.

INTERNATIONAL
MIGRATION IS
A POWERFUL
EXPRESSION OF
PEOPLE'S DESIRE
TO IMPROVE THEIR
CIRCUMSTANCES IN
A HIGHLY UNEQUAL
WORLD

⁸⁴ SDG Target 10.7 is to facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.

A. International migration and inequality among countries

1. Migration as part of the development process

Whether to migrate is a decision taken by individuals and households. Their migration choices are influenced by the economic, social and political context at home and in other countries. However, such decisions also depend on specific circumstances, preferences and networks of potential migrants and are often based on imperfect information.

Early attempts at explaining migration flows focused on economic inequality between countries or regions as their main driver.⁸⁵ Income gaps are indeed considerable between countries of origin and destination along major migration corridors. Average per capita income in Central America was about \$8,000 in 2018, for example, less than 15 per cent that of the United States, which is close to \$63,000.⁸⁶ Turkey's income per capita, at just over \$10,000, is about one fifth that of Germany's. Similar gaps are found between Algeria or Morocco and France; Ukraine and the Russian Federation; Mozambique or Zimbabwe and South Africa; Bangladesh or India and Saudi Arabia; Indonesia and Malaysia; and between other pairs of major origin and destination countries. Wage disparities, in particular, are strongly correlated with migration flows. A recent study suggests that, on average, a migrant is 10 per cent more likely to choose a specific country of destination if the mean annual wage is \$2,000 higher in that country than in other possible destinations (World Bank, 2018c).

Considering that migration choices respond to a variety of incentives and constraints, economic inequality alone is insufficient to explain the movement of people across borders. Income inequality among countries has declined since the 1980s, yet the number of migrants has continued to grow. If migration only responded to income inequality, it would also be difficult to explain why migrants do not systematically choose the richest countries, why migration levels differ among countries at similar levels of income and growth, or why some migrants return to their countries of origin even when income differentials between origin and destination remain wide.

Models that simply account for economic disparities fail to capture broader differences in social, political and institutional frameworks. Conflict and violence continue to force people out of their countries – as do, increasingly, natural disasters. But even in the absence of conflict, the functioning of institutions is a key driver of international migration. An emerging empirical literature finds that factors such as corruption and poor governance or, conversely, the rule of law and respect for civil and political rights at points of origin and destination, may have a stronger impact on the desire to migrate than income differentials (see, for instance, Ashby, 2010; Baudassé, Bazilier and Issifou, 2018; Naghsh Nejad and Young, 2016). Social protection and labour market institutions matter as well. Comprehensive, well-functioning social protection

ECONOMIC
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BORDERS

⁸⁵ See Lewis (1954) for a classic presentation.

⁸⁶ GNI per capita in current US\$ using the World Bank Atlas method, available at: <https://databank.worldbank.org/data/source/world-development-indicators>.

systems contribute to migrants' desire to stay in their new homes – especially in a context where social protection benefits and rights are not always portable across countries (United Nations, 2018a).

The relationship between institutions and migration is multifaceted: limited civil and political rights in countries of origin can increase the costs of migration, especially if the right to emigrate is formally restricted (Vogler and Rotte, 2000). Similarly, high levels of corruption may result in liquidity and credit constraints and therefore prevent all but the wealthy from migrating. Discrimination can also act as a barrier to the emigration of women and members of ethnic minorities. Under apartheid, for instance, black South Africans were formally restricted from migrating, even internally.⁸⁷ Naghsh Nejad and Young (2014) highlight the influence of cultural norms and legal restrictions (such as difficulties obtaining a passport) to explain lower levels of emigration among women in countries where their rights are most restricted.

Demographic differences between countries have also been associated with migration. Rapid population growth can put pressure on social services and infrastructure and drive unemployment up. Even where fertility is declining, large cohorts of youth entering the labour force may compel some of them to search for jobs in other countries. Population ageing, together with the growing participation of women in the labour force, may create a demand for care jobs that is unfulfilled by the native workforce and therefore provide opportunities for migrants, especially those with less formal education or skills. Thus, any effect of demographic trends on migration is mainly indirect – mediated by labour market trends and access to services. It is ambiguous as well: the propensity to migrate is not higher in those countries with the highest population growth or greatest density (De Haas, 2010).

Attempts at explaining migration from poorer to richer countries must also consider the dynamics of development. Processes of industrialization and urbanization that are associated with economic growth have traditionally involved massive displacements of people from rural areas. While many rural residents move internally, to cities, some migrate to foreign countries at a time when their own countries are growing rapidly. As countries develop, levels of education rise and household incomes grow, more people are able to cover the costs of migration in what is known as the “migration transition” (Zelinski, 1971).⁸⁸ Improvements in education bring better access to information and higher aspirations. They strengthen the ability to migrate and increase the desire to do so, especially when local economies do not offer enough decent jobs.

PROCESSES OF
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AND ABROAD

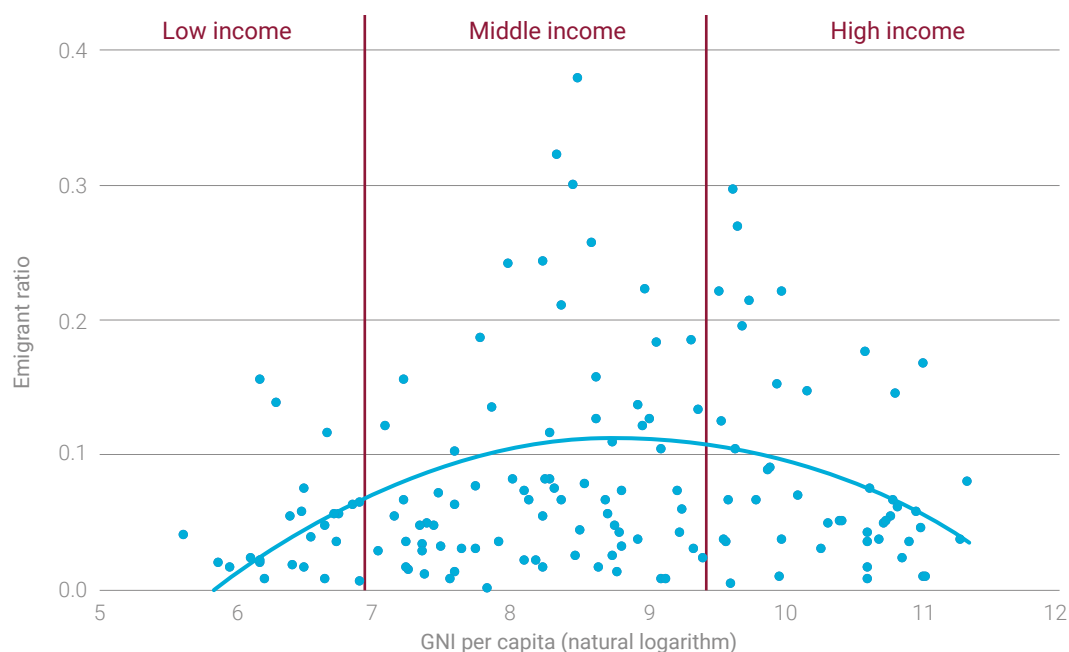
⁸⁷ Pass Laws, a form of internal passport, severely restricted movement among blacks in South Africa – making it difficult for them to migrate internationally as well. Pass Laws were abolished in 1986.

⁸⁸ While the original “migration transition” theory primarily linked migration trends to other demographic trends, the concept has been used broadly to refer to a patterned relationship between migration trends and economic and social change. De Haas (2010) questions the notion that the migration transition is a one-time event linked to traditional processes of development, noting that stagnation in one country relative to progress in other countries (that is, increasing economic or social inequalities) can create repeated cycles of emigration. Some scholars refer to “migration humps” rather than to a single migration transition (Martin and Taylor, 1996; Olesen, 2002).

As a result, middle-income countries send more migrants abroad than low-income countries. Figure 5.1 shows migration abroad (the “emigration ratio”) by each country’s income. Despite broad variation, the emigration ratio (the ratio of migrants from a particular country to the total population of that country) of middle-income countries is more than twice as large, on average, than that of low-income countries. The number of migrants abroad increases with national income per capita. It only declines with income among countries with relatively higher incomes per capita (about \$8,000 or higher). Similar relationships are found using multidimensional indicators of development such as the Human Development Index (see annex figure A.5.1).⁸⁹

While figure 5.1 shows emigration by country at one point in time, the pattern is observed across countries over time as well. Clemens and Postel (2018) show that most of the countries that have graduated from low- to middle-income status since 1960 have seen emigration rise. In their seminal work on the topic, Hatton and Williamson (1998) also described how, historically, European migration to North America usually increased as wages in origin and destination countries converged.

FIGURE 5.1
Migrants abroad by national income per capita, 2019



Sources: Based on Clemens and Postel (2018) and De Haas (2010), with calculations based on the International Migrant Stock: The 2019 Revision, available from www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp; The 2019 Revision of World Population Prospects, available from <https://population.un.org/wpp/>; and World Development Indicators database of the World Bank, available from <https://databank.worldbank.org/data/source/world-development-indicators>. All accessed on 1 October 2019.

Notes:

1. The emigration ratio is obtained by dividing the number of migrants from a particular country by the total population of that country.
2. GNI per capita in current US\$ using the World Bank Atlas method. The World Bank defines low-income countries as those with an income per capita of \$1,025 or less in 2019 (6.93 or lower on a natural logarithm scale); middle-income countries are those with an income per capita between \$1,026 and \$12,375 (6.94 to 9.42 on a natural logarithm scale), and high-income countries as those with an income of \$12,376 or higher.

⁸⁹ The Human Development Index combines indicators of health, education and income (see <http://hdr.undp.org/en/content/human-development-index-hdi>).

In sum, most evidence indicates that the relationship between development and migration is not linear: greater economic and social inequalities between countries do not necessarily lead to more migration. In general, emigration takes off once countries have started to grow economically and develop. Indeed, authors such as Clemens (2017) propose to approach the analysis of migration as a dimension of the development process.

The fact that migration and development go hand in hand does not imply that the migration process cannot be managed. It can be managed, without restricting or trying to deter human mobility, as described in section 5.C. As the United Nations Secretary-General has noted, “counterproductive policies aimed at restricting migration corrode the ability of States to (manage migration) and make migrants more vulnerable.”⁹⁰ Similarly, policies aimed at addressing what are identified as the “root causes” of migration may in some cases encourage migration for the reasons just discussed – namely, the desire and ability to migrate may increase with development and growth (Parsons and Winters, 2014; De Haas, 2007; Clemens and Postel, 2018). While domestic policies and the international community should strive to create the conditions that allow people to remain in their country, policies should also help shape migration so as to maximize its benefits. In line with the 2030 Agenda’s call to facilitate orderly, safe, regular and responsible migration, section 5.C discusses policies that will help harness the potential of this megatrend to promote development and reduce inequality among countries.

THE FACT THAT
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BE MANAGED

2. The potential of migration to reduce inequality among countries

Solid evidence shows that migration raises global economic output, especially when workers move from poorer countries to countries where they are more productive and where wages are higher (Clemens, 2011; Clemens and Pritchett, 2019; World Bank, 2005; Biavaschi and others, 2016).⁹¹ Whether migration reduces or increases inequality among countries, however, depends on how economic and other gains – including transfers of resources, knowledge, technology and attitudes – are distributed. An issue of concern is the loss of skilled workers in countries of origin in developing regions.

a. Migration of highly skilled workers

As of 2010, nearly one in six countries, including many in Africa and the Caribbean, saw more than 20 per cent of their population with tertiary education emigrate abroad (Kone and Özden, 2017). More than two thirds of these migrants go to just four developed countries – Australia, Canada, the United Kingdom and the United States (ibid.). Selective migration policies that promote the movement of highly skilled workers and raise barriers to the legal entry of less-skilled or educated migrants contribute to so-called “brain drain”.

⁹⁰ A/72/643.

⁹¹ Estimates based on different methodologies suggest that economic gains from modest increases in migration – equivalent to 3 per cent of developed countries’ labour force, according to some estimates, or about 5 per cent of the population of developing countries, according to others – would range from billions to trillions of dollars (Clemens, 2011; World Bank, 2005). Clemens (2017) suggests that even allowing 1 in 20 current residents of low- and middle-income countries to work in the richest countries would raise global economic production by more than would be achieved by eliminating all remaining policy barriers to international trade and all remaining barriers to capital flows – combined.

IN SOME COUNTRIES, RETURNEES AND MEMBERS OF THE DIASPORA HAVE BEEN A DRIVING FORCE FOR THE GROWTH OF THE SOFTWARE INDUSTRY AND OTHER HIGH-TECH MANUFACTURING SECTORS

Countries of destination benefit from the influx of skills, as section 5.B describes. In countries of origin, the emigration of skilled workers may result in an immediate loss of tax revenue and can negatively affect economic growth. But it can also have positive feedback effects. Countries of origin may benefit from the return of migrants, for instance, if they bring back skills or capital that they would not have been able to acquire at home – provided they are able to invest or use their skills productively.

Even when countries are not successful at attracting skilled workers back home, migrants abroad can invest and generate flows of knowledge, information, foreign direct investment and trade to and from the home country. In China, India and the Republic of Korea, both returnees and members of the diaspora have been a driving force for the growth of the software industry and other high-tech manufacturing sectors. The diaspora has contributed to these countries' rapid growth and consequently to the reduction of inequality between them and high-income countries.

The effects of emigration are not limited to income and assets. The possibility of obtaining higher wages abroad may motivate people in sending countries to pursue higher education. Over time, gains in education prompted by the possibility of emigrating may offset the actual emigration of some of the highly educated – resulting in a “brain gain” (Beine, Docquier and Rapoport, 2008; Dustmann and Glitz, 2011). India, which has experienced the large-scale emigration of workers in information technologies, has been more than compensated for the outflow of skills and has even created a significant service export industry.

Emigration may result in shortages of professionals with key skills, such as teachers and health personnel. In some developing countries, more than 50 per cent of native doctors were working abroad in the mid-2000s (OECD, 2010a). Included among them are small island States in the Caribbean and the Pacific as well as several countries in sub-Saharan Africa (Angola, Liberia, Mozambique, Sierra Leone and the United Republic of Tanzania) (ibid.). Whether the emigration of health personnel has had a negative impact on health outcomes in low-income countries is a matter of debate. However, studies point out that many countries are ill-equipped to absorb newly trained doctors and nurses domestically. The availability of health personnel has little effect on health outcomes if health facilities are not adequate or the institutional framework is lacking (Clemens, 2007; Bhargava, Docquier, and Moullan, 2011). In African countries, only a small minority of highly trained health professionals work in primary health care and in those places where they are most needed, such as rural areas and slums (Clemens, 2007). Many work entirely outside of the health sector (ibid.). Even if all migrant health personnel were to return, additional policy measures would be needed to improve health outcomes.

In sum, whether the emigration of skilled workers constitutes a net gain or loss to the country of origin depends on the country. The voluminous literature on this topic fails to reach a clear conclusion. The effect of skilled migration on inequality among countries

BOX 5.1**The place premium**

In general, workers who move earn higher wages than they would have earned in their countries of origin. Clemens, Montenegro and Pritchett (2008) found that, on average, the wages of migrant workers in the United States, adjusted for purchasing power, were four times higher than those of workers with identical characteristics in countries of origin in the mid-2000s. Workers with a secondary education or less could expect to earn between \$10,000 and \$15,000 in additional annual income by moving from a developing country to the United States (*ibid.*). An urban adult male born and educated in Peru, with nine years of education and working in the formal sector, for instance, earned an average of \$1,714 per month in the United States in the mid-2000s, but only \$452 (adjusted for purchasing power parity) in Peru. These large international differences in wages are sustained, in large part, by policy barriers to worker mobility (Clemens, Montenegro and Pritchett, 2016). Policy barriers to migration are, in effect, a major driver of wage discrimination – by preventing workers in poorer countries who are willing to migrate to richer countries from obtaining higher wages.

cannot be easily generalized. Inequality among low-income countries of origin and high-income countries (which are usually net receivers of highly skilled migrants) increases if gains of skills to destination countries are larger than gains in countries of origin.

b. Migration of less-skilled workers

Even though the migration of skilled workers brings particular challenges and opportunities, other types of migration affect inequality among countries through similar paths. In fact, less-skilled workers in low-income countries who move to high-income countries can see substantial increases in their income (see box 5.1). In general, they also remit a larger portion of their income to their home countries than highly skilled migrants, as discussed in section 5.B. Migrants abroad and those who return can also invest in their countries of origin, contribute to the transfer of technology and promote trade. Moreover, returnees and migrants abroad often act as agents of social or political change, contributing to the spread of democratic values. In countries with labour surpluses, emigration can also provide relief from unemployment and push wages upwards.

B. International migration and inequality within countries

The empirical evidence on whether migration helps to reduce inequality within sending and receiving countries is far from conclusive. Much depends on the characteristics of each country and on the conditions under which migration takes place. When migration is an act of desperation or where policies limit migrants' options, it is difficult for migrants to realize their full potential.

In countries of origin, much of its impact is felt through remittances and other transfers by migrant communities abroad. In both countries of origin and destination, the effect of migration is also felt through changes in wages and employment opportunities for

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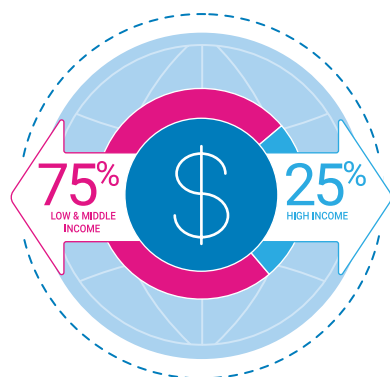
different groups of workers. While migration may affect many dimensions of inequality, there are specific concerns regarding the effect of immigration on group-based inequality in countries of destination – that is, disparities between migrants and natives of such countries.

1. The impact of remittances on income distribution

While abroad, migrants typically transfer cash or goods to their home country. Given their magnitude, remittances have gained most attention from Governments in developing countries. Officially recorded remittances reached \$689 billion in 2018 (World Bank, 2019a). More than three quarters of this amount (\$529 billion) was received by low- and middle-income countries. Excluding China, remittances to these countries are significantly larger than official development assistance or foreign direct investment flows in 2018 (ibid.).

A large body of empirical literature has documented how remittances help to reduce the scale and severity of poverty.⁹² Findings on the impact of remittances on income inequality within sending countries, however, are mixed. The amount of transfers to richer and to poorer households in the country of origin depends on how different groups remit and on who migrates. Richer and more educated migrants are less likely to remit than their less-wealthy counterparts (Faini, 2007). However, the absolute amount remitted increases with earnings. Bollard and others (2011) find that educated migrants living in select major-destination countries remit \$300 more annually, on average, than their less-educated counterparts. Despite this difference, some country-specific studies suggest that transfers from abroad constitute a larger share of income in poorer households that receive them than in richer households (Koczan and Loyola, 2018; De and Ratha, 2012). Whether they help to reduce inequality in countries of origin depends on the composition of the migrant population abroad.

Contrary to popular perception, migrants do not necessarily come from the poorest households in their countries of origin. The costs of migration, liquidity constraints, limited access to information on conditions abroad and skill-selective immigration policies prevent people living in poverty from moving, especially across borders.



More than 75 per cent of recorded remittances go to low- and middle-income countries

⁹² See, for instance, Adams and Page (2003); UNCTAD (2012); and McKenzie and Rapoport (2017).

BOX 5.2**Lending a helping hand: migrant networks**

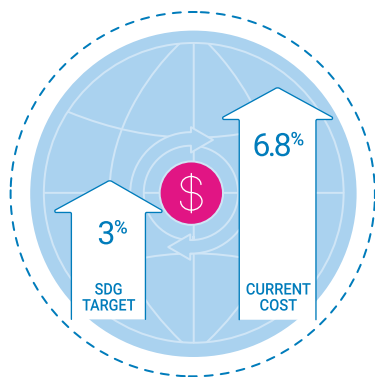
While migration can bring significant income gains, pioneering migrants often face considerable hurdles in the beginning. Difficulties in finding employment, for example, can be exacerbated by language barriers and inadequate knowledge of local customs. Over time, the continuing arrival of migrants from the same country or region results in the creation of networks between migrants and people in their country of origin. These networks can be a source of valuable information and even resources for would-be migrants. They reduce the risks of moving and the opportunity costs of migration by facilitating the transmission of knowledge about employment opportunities, earnings, housing, travel and training. Networks also help facilitate the settlement of new migrants, with lasting impacts.

Initially, these networks are disproportionately available to households from the middle or upper levels of the income distribution. At the outset, this can lead to greater income inequality in the country of origin if migrants send home remittances. As these networks grow, the social capital generated makes migration more accessible to low-income households.

Yet migrants' networks may or may not facilitate access to well-paying jobs. Informal social networks connect those looking for employment with employers quickly, but the employment found may be beneath migrants' abilities in terms of skills and qualifications. This wasted potential ("brain waste") can have negative social and economic consequences in the long term. It can lead to migrants being trapped in particular fields of low-skilled employment or ethnic enclaves (United Nations, 2016a; Filiz and Asad, 2015; Sumption, 2009). In general, there is a significant wage premium to being hired through formal recruitment mechanisms and a penalty when recruited through informal networks (Chen, Wang and Zhang, 2017, Sumption, 2009; Mosca and Pastore, 2008).

As a result of these constraints, migrants may initially come from relatively well-off households. As migrant networks expand and information on opportunities abroad spreads, the propensity to migrate may increase among lower-income households (see box 5.2). Thus, remittances may push inequality upwards at first and contribute to its reduction once more people emigrate. In practice, however, policies of destination countries that restrict the migration of less-skilled workers may stave off the potential inequality-reducing effect of remittances.

Taking Mexico as an example, those households that received remittances in the 1990s – 4 per cent of all households – were mainly from the middle of the income distribution. Remittances represented 30 to 40 per cent of the total income of households that received them (Koczan and Loyola, 2018). Over time, as the percentage of remittance-receiving households grew, households at the lower end of the income distribution were more likely than others to receive remittances. By 2014, remittances constituted a greater share of income among households in the poorest 40 per cent of the population than among wealthier households. This shift of remittance receipts over time has contributed to reductions in poverty and inequality (Koczan and Loyola, 2018;



The global average transaction cost of sending remittances is 6.8 per cent, more than double the SDG target of 3 per cent

McKenzie and Rapoport, 2007). The pro-poor pattern of remittances was even stronger during the 2008 financial and economic crisis, helping cushion the effect of this shock on poverty and inequality.

In addition to affecting income inequality directly, remittances have spillover effects. They allow increased spending or investment by recipient households in goods or services produced by other community members. Even when used for consumption, remittances generate demand and therefore have a positive impact on local employment and economic growth. Whether the benefits of growth go mostly to people living in poverty or to those who are wealthier depends on the country and the community. In general, job growth has an inequality-reducing effect, since poorer households suffer disproportionately from unemployment and underemployment. In addition, remittances enable households at the lower end of the income distribution to invest in education or in assets that increase their productivity, thereby pushing inequality downwards (Rapoport and Docquier, 2006; Ratha, 2007).

While households at the lower end of the income distribution have the most to gain from remittances, high transaction costs affect how much they actually receive. Target 10.c of the SDGs calls for reducing the transaction costs of remittances to less than 3 per cent and for eliminating remittance corridors with costs higher than 5 per cent by 2030. As of the second quarter of 2019, the global average transaction cost of sending remittances was 6.8 per cent, more than double the 3 per cent target (World Bank, 2019b). Remittance costs across many African corridors and small islands in the Pacific remain above 10 per cent (ibid.). Achieving SDG target 10.c could contribute to reducing inequality within remittance-receiving countries.

WHILE POORER
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2. Migrants and the functioning of labour markets

Migration affects the supply and demand of labour and therefore may lead to changes in wages and employment. The distributional impacts of migration depend on the relative position of migrants in the labour markets of origin and destination countries.

a. In countries of destination

In countries of destination, the effects of immigration on the labour market are at the core of often rancorous public debate. In fact, the extensive empirical evidence available indicates that immigration has a weak impact overall on average wages and employment (National Academies of Sciences, Engineering and Medicine, 2017; Docquier, Ozden and Peri, 2014; Bauer, Flake and Sinning, 2013; Castelletti, Dayton-Johnson and Melguizo, 2010). While immigration increases the supply of labour, it also adds to consumer demand for goods and services and therefore pushes employment demand upwards.

However, immigration may increase competition for certain jobs and can therefore affect the wages of specific groups of workers. In countries and regions where migrants cluster in low-skilled jobs, immigration can depress the wages of less-skilled workers and lead to an increase in income inequality. The empirical evidence available in developed countries suggests that the negative effect of immigration on the wages of native workers with low levels of education is moderate. In the United Kingdom, for example, immigration led to a 0.2 to 0.8 per cent decline in the bottom 10 per cent of wages between the 1990s and the mid- to late-2010s (Dustmann, Frattini and Preston, 2013; Migration Advisory Committee, 2018). Studies conducted in the United States indicate that, even in areas with high proportions of lower-skilled migrants, any negative effects practically disappear over the long term.⁹³

Concerns over the negative effects of immigration on wages are based on the belief that all migrants compete directly with native workers. While some of them do in certain countries and occupations, many migrant workers complement the native labour force or compete with only some native workers, even at the same skill level. Less-skilled migrant workers, for instance, often accept jobs that the native labour force is not performing – often because native workers have access to better paid or less onerous jobs. In developed countries, many manual jobs – namely in agriculture and construction – and various jobs in the services sector – childcare and domestic work, in particular – are no longer wanted by native workers at the existing wage. By offering skills that are in short supply and services that natives are not willing to provide, international migrants can contribute to the smooth functioning of the labour market.

The inflow of highly skilled migrants brings improvements in productivity as well, mainly through its role in promoting innovation (National Academies of Sciences, Engineering and Medicine, 2017). Gains to the receiving country are larger when migrants of all skill levels use their entrepreneurial expertise to set up new businesses and create new jobs. In developed countries, foreigners are more likely than nationals to establish their own businesses (OECD, 2010b; Docquier, Özden and Peri, 2014). The benefits of migration are also larger if migrants can use their skills productively. In some cases, highly skilled migrants are unemployed or work in unskilled jobs.

WHILE SOME
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⁹³ See National Academies of Sciences, Engineering and Medicine (2017) for a comprehensive summary of findings.

In general, highly skilled native workers benefit from the presence of immigrants. A majority of studies find that immigration has a positive effect on the wages and employment of highly skilled native workers (National Academies of Sciences, Engineering and Medicine, 2017; Migration Advisory Committee, 2018; Card, 2009).

In sum, immigration can increase wage inequality, especially if less-skilled immigrants compete directly with native workers. At the same time, the presence of migrants may stimulate productivity and “grease the wheels” of the labour market, thereby affecting employment positively. Policy-wise, an important question is whether migrants cluster in specific low-wage jobs because native workers no longer want those jobs or, rather, since wages remain low for certain jobs because they are often performed by migrants. Martin (2016) notes that, in agriculture, the presence of migrants lowers wage growth. It also slows down capital investments, including in machinery.

b. In countries of origin

In origin countries in developing regions, emigration can cause a loss of skilled workers, as discussed in section 5.A. Because migration is often very selective, declines in the relative supply of highly skilled workers can contribute to widening the wage gap between highly skilled and other workers and therefore push inequality upwards. Wage inequality may rise even where the emigration of workers in the middle of the skill distribution is prevalent. For example, Aydemir and Borjas (2007) find that, in Mexico, emigration rates were highest among men with “middle” levels of education (that is, they completed secondary education) between 1980 and 2000. International migration pushed the relative wage of workers in the “middle” upwards and, as a result, widened the gap between the wages of these workers and those of workers with low levels of education.

In many countries, however, highly skilled workers lack opportunities to use their skills productively. The emigration of skilled workers should have little effect on wages if they are unemployed or underemployed in their country of origin. Furthermore, the presence of migrants abroad and their eventual return can also stimulate the transfer of technology and capital. Where these transfers improve productivity and generate employment, they may help to reduce inequality.

3. Group-based inequality and the immigrant experience

While migrants generally benefit from moving, they are worse off than their native peers in countries of destination. As a result, the influx of migrants has pushed group-based inequality (“horizontal inequality”) upwards.

In the labour markets of developed countries, international migrants work more often in informal jobs, receive lower wages and endure worse working conditions than natives (United Nations, 2016a and 2018b). Their jobs are generally more unstable and, as a result, immigrants are more often unemployed than natives. In the European Union, for instance, the unemployment rate in 2017 was 6.9 per cent for the native-born population

and 13.3 per cent for migrants born outside the European Union.⁹⁴ Migrant status carries a wage penalty as well. In the United States, the earnings of Hispanic, first-generation immigrants were more than 50 per cent lower than those of white natives from 2003 to 2013 (National Academies of Sciences, Engineering and Medicine, 2015).

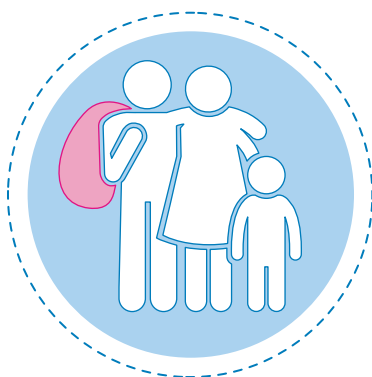
Assessing the situation of migrants in developing countries is particularly challenging due to the prevalence of irregular migration. What evidence does exist shows that migrants from other developing countries are overrepresented in the informal sector. In South Africa, the proportion of migrants working in informal and precarious jobs is twice that of natives (Fauvelle-Aymar, 2014). In countries of the Gulf Cooperation Council, international migrants are accepted under temporary guest programmes and have no avenues to permanent residency. Their temporary visas grant them few rights and have often resulted in abusive practices by employers, including confiscation of passports.

As a result of their labour market situation, migrants are at high risk of poverty. In OECD countries, immigrants are twice as likely as natives to live in households that fall within the poorest income decile and below the national poverty threshold, even at comparable levels of education (OECD, 2015b). Disparities in working poverty are even greater among highly educated workers. In the European Union, highly educated migrants who have jobs are three times more likely than their native counterparts to be poor (ibid.). Low proficiency in the country's language and lack of country-specific labour market experience has a strong effect on their employment prospects.

The disadvantages that migrants face affect their children's opportunities as well. As shown in chapter 1, the educational achievement gap between students with an immigrant background and non-immigrants is significant in OECD countries, even when controlling for their families' socioeconomic status (OECD, 2019a). The concentration of children with immigrant parents in disadvantaged schools has a negative impact on these children, as does widespread discrimination, lack of income security and the undocumented status of some parents.

To be clear, migration need not result in disadvantage or be a source of division within countries. Policy measures to uphold the rights of migrants, provide access to basic services, address discrimination and promote the social integration of migrants can

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WORSE WORKING
CONDITIONS
THAN NATIVES



In OECD countries, immigrants are twice as likely as natives to live in households which fall within the poorest income decile and below the national poverty threshold

⁹⁴ Migrant integration statistics – labour market indicators. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics_%E2%80%93_labour_market_indicators#Unemployment.

shape the degree to which migration is associated with inequality in destination countries. Access to education and the labour market, along with recognition of qualifications acquired abroad, can also protect migrants against disadvantage and exclusion.

Migration is also linked to group-based inequality in countries of origin. Examples in section 5.A illustrate that discrimination may curtail the ability of certain groups to migrate. At the same time, migration can be a way to escape prejudice and discrimination. The 1951 United Nations Convention relating to the Status of Refugees recognizes the fear of being persecuted for reasons of race, religion, nationality, membership in a particular social group or political opinion as grounds for eligibility for asylum and refugee status.⁹⁵ Members of persecuted minorities may be forced to move abroad to gain political and social or economic rights or simply to seek safety.

Migration may also affect the status of disadvantaged groups in countries of origin. While abroad, some migrants engage in political activities that affect institutions in their home countries. Even in the absence of active political engagement, behaviours may change in response to ideas from abroad. Those who stay behind are exposed to new values and norms, be it through contacts with returning migrants and relatives abroad or through diaspora networks. Social movements that have promoted the empowerment and equal treatment of disadvantaged groups have often been influenced and even supported by members of the diaspora (Mullings, 2009). For women, exposure to new values may mean emancipation from traditional roles. The departure of men from the household can also foster women's empowerment (see box 5.3).

C. Maximizing the potential of international migration

The positive effects of migration are far from guaranteed. To a large extent, how much low-income countries –and migrants, themselves – benefit from emigration depends on economic, social, cultural and political contexts as well as the conditions under which migration takes place.

Policy plays an important role in shaping these conditions. As the United Nations Secretary-General has recognized, the main obstacles to migrants maximizing their economic and social contributions are restrictive or ineffectual policies, laws and employment customs.⁹⁶ While policies alone cannot ensure that migration will contribute to reducing inequalities between or within countries, they should not support the maintenance of global inequities.

In many rich destination countries, immigration policies are highly selective. They facilitate the admission of skilled migrants while providing few pathways for the legal entry of less-skilled migrants. Yet less-educated migrants from low-income countries are likely to gain the most, relatively, from working in middle- or high-income countries.

THE MAIN
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⁹⁵ United Nations, Treaty Series, vol. 189, p. 137, Article 1.

⁹⁶ A/72/643, para. 23.

BOX 5.3**The women that stay behind**

Women account for almost half – 47.9 per cent – of all international migrants worldwide (United Nations, 2019c). Much of the discussion on international migration focuses on migrant men and women in countries of destination. Relatively less attention is given to the impact of migration on those who remain behind. Emigration can have implications for the division of labour. It can also change power dynamics within families in countries of origin. Male emigration, in particular, creates opportunities for women's employment (Ferrant and Tuccio, 2015).

The number of female-headed households is increasing globally, in part due to male out-migration. Women in such households have greater decision-making power at home and in the community. Greater autonomy for many women, including control of remittances and decision-making power over how they are spent, has been tied to improved self-esteem and elevated social status (World Bank, 2016c; Torres and Carte, 2016). However, increased autonomy does not always lead to empowerment. Additionally, women living without a spouse or partner have more responsibilities, including, frequently, labour-intensive agricultural work.

A shared concern of women acting as heads of households in traditional settings is judgement by their communities and the fear of exclusion. Women in this situation are compelled to balance the need for income and managing the household with maintaining their traditional role as caregivers for co-resident family members. Even when the number of female-headed households increases, their acceptance in certain settings may take generations (De Haas and van Rooij, 2010).

Households with the resources to hire workers can reduce the additional burden on women who stay behind. Women in less well-off households must usually manage the additional workload themselves or with their children, especially when remittances are not forthcoming. Women can be compelled to undertake insecure, poor-quality jobs or activities to try to earn additional income.

Migration also impacts family dynamics, gender roles, class and identity. Men and women who migrate bring home new values and ideas when they travel to countries with greater gender equality and democratic practices. For example, migration from countries in Northern Africa to Europe has played a role in reducing family size, increasing education and the participation of women in the labour market as well as in raising the average age of marriage in countries of origin (De Haas and Van Rooij, 2010). In Morocco, for instance, attitudes among migrant families contributed to the acceptance of nuclear families and the postponement of marriage for young women (De Haas and Van Rooij, 2010). In Nepal, women returning home from Western Asia took employment in male-dominated industries, postponed marriage and purchased land in rural areas where women rarely own property (UN Women, 2019, citing Gioli, Maharajan and Gurun 2017).

Even in the absence of legal channels, people compelled by poverty, insecurity or lack of work will seek opportunities abroad – entering, residing and often working in the destination country in an irregular manner. Doing so puts migrants at risk, contributes to their exploitation and hampers their potential contributions. On average, migrants in an irregular situation work more often in informal jobs, endure worse working conditions and earn less than migrants with legal status (Borjas, 2017; Hall, Greenman and Farkas, 2010). Almost 25 per cent of all victims of forced labour are international migrants (ILO, 2017b).

POLICY MEASURES
TO UPHOLD
THE RIGHTS
OF MIGRANTS
AND ADDRESS
DISCRIMINATION
PROMOTE
THEIR SOCIAL
INTEGRATION AND
HELP REDUCE
GROUP-BASED
INEQUALITY

Enhancing legal pathways for the migration of less-educated workers would provide a more solid basis for migrants to make positive contributions to their countries of origin and destination.⁹⁷ By adopting the Global Compact for Safe, Orderly and Regular Migration, the General Assembly committed to enhancing the availability of pathways for regular migration.⁹⁸ In most countries, there is a demand for labour that native workers cannot or are not willing to provide. Offering options for regular migration at all skill levels would help meet labour market demands, reduce irregular migration and promote the integration of migrants, allowing them to fulfil their potential.

Strengthening pathways for legal migration is necessary but insufficient to promote the inclusion and integration of migrants in countries of destination. Typically, institutional frameworks and social policies related to health, education, housing, employment and social protection matter more than targeted migrant integration policies. Equity in access to basic services, particularly health and education, is not only critical for the integration of migrants and their families, but has positive effects for societies at large. Similarly, allowing all migrants to work is vital to promote income security and social inclusion. These institutional measures can only be effective if discrimination and xenophobia are addressed in a meaningful way. That said, xenophobic political narratives are on the rise. Too often, media outlets promote disinformation and incite discrimination rather than fostering tolerance and supporting evidence-based public discourse.

The potential contributions of migrants are also limited by the fact that educational credentials are often undervalued in countries of destination. In the European Union, for example, over one third of all migrants are overqualified for their jobs (OECD, 2015b). Highly educated migrants with jobs are three times more likely than their native-born counterparts to live in poverty (ibid.). An increasing number of countries are establishing mechanisms for the assessment and recognition of qualifications earned abroad, but formal recognition does not necessarily translate into a fair assessment by employers (IOM, 2013).

In order to address the loss of skills in countries of origin and maximize “brain gain”, the Global Compact includes a commitment to build global skills partnerships among countries. The goal is to “foster skills development of workers in countries of origin and migrants in countries of destination with a view of preparing trainees for employability in the labour markets of all participating countries.”⁹⁹ Similarly, the 2030 Agenda calls for substantial increases in the recruitment, development, training and retention of the health workforce in developing countries (target 3.c of the SDGs). The creation of “skills partnerships” by which employers or Governments in destination countries may fund the training of experts in countries of origin to fill specific job gaps can help reduce the loss of skills. Some of the professionals trained may migrate to work abroad, but others are likely to stay in their countries of origin. Clemens (2015) gives examples of

⁹⁷ Some countries have recently opened legal migration pathways for less skilled migrants. Japan, for instance, approved a new scheme on 1 April 2019 to admit 345,000 foreign workers from nine developing countries over a period of five years (see www.nippon.com/en/in-depth/a06004/japan%E2%80%99s-historic-immigration-reform-a-work-in-progress.html).

⁹⁸ A/RES/73/195, 11 January 2019, Objective 5, Annex para. 21.

⁹⁹ A/RES/73/195, 11 January 2019, Objective 18, para 34.

nursing schools and training for construction workers in Western Asia and Northern Africa.¹⁰⁰ Such training partnerships allow destination countries to obtain the skills they need. They also enable countries of origin to strengthen their human capital and offer migrants the professional opportunities that migration can bring.

In addition to lifting people out of poverty, remittances can help stabilize national accounts, provide foreign currency to cover critical imports and support sovereign credit ratings. As a financial transfer from mostly high-income countries to middle- and low-income countries, remittances help reduce inequality among countries. However, financial and other barriers along many remittance corridors make sending money very costly, preventing families from reaping the full benefits of migration. Meeting the SDG target of reducing the transaction costs of migrant remittances to less than 3 per cent and eliminating remittance corridors with costs higher than 5 per cent by 2030 could significantly reduce inequalities both within and among countries.

Emigrants, or diaspora populations, have been recognized as development actors only recently.¹⁰¹ Currently, many Governments in developing countries have offices and even ministries devoted to diaspora engagement. Although many of these institutions provide services to emigrants, most are focused on encouraging migrants to send remittances and invest them in the country (IOM and MPI, 2012; Garding, 2018). Greater gains may be realized over the long run by working with members of the diaspora to promote trade and help the country of origin gain access to global networks of knowledge. Diaspora entrepreneurs are best placed to recognize investment opportunities in their countries of origin and to take advantage of them. They can also play an important role in opening markets for tourism and trade. Facilitating circular migration between institutions and companies in countries of origin and destination may also help engage members of the diaspora. Supporting migrants' political participation in countries of origin can also promote their involvement.

The fact that social protection benefits and rights are rarely portable across countries is a key obstacle to the circulation and return of migrants – one that contributes to their lack of income security. Migrants may contribute to social security schemes in their countries of destination. However, if their social protection benefits are not portable, they may be unable to preserve or transfer pensions, health insurance and other benefits if they return home. The Global Compact calls for the establishment of mechanisms for the portability of social security entitlements and earned benefits.¹⁰² Many developed countries have negotiated bilateral and multilateral agreements to ensure the adequate portability of entitlements, but many developing countries still lack any such agreements (United Nations, 2018a).

¹⁰⁰ See also OECD (2018e).

¹⁰¹ Objective 19 of the Global Compact for Safe, Orderly and Regular Migration calls for the creation of “conditions for migrants and diasporas to fully contribute to sustainable development in all countries.”

¹⁰² A/RES/73/195, 11 January 2019, Objective 22.

D. Conclusions

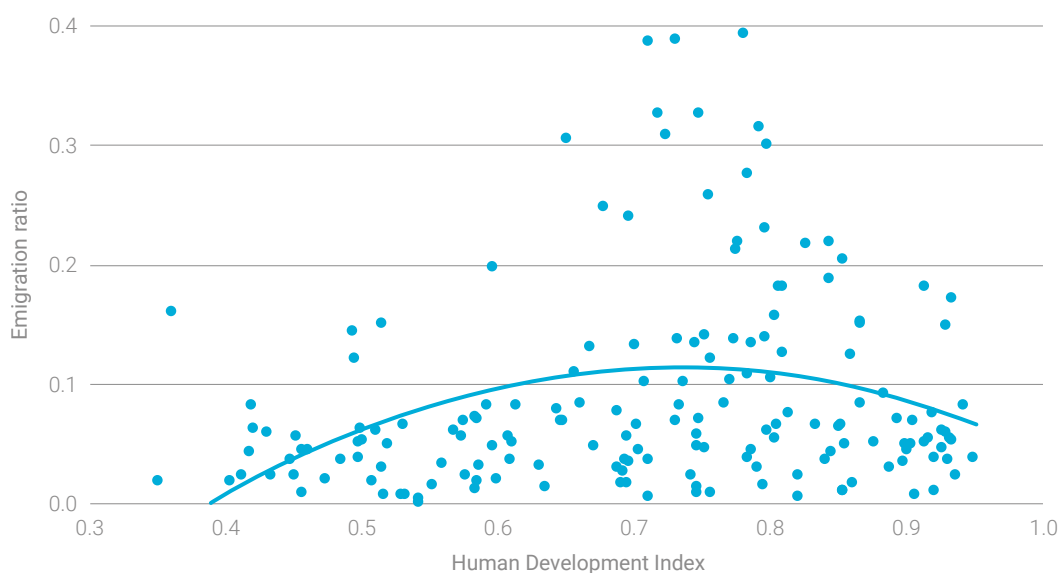
International migration has a positive effect on global economic output and helps reduce poverty in countries of origin. The contribution of human mobility to sustainable development is well recognized, as is the role that migration plays in improving people's safety, security and access to opportunity. Its effect on inequality within and among countries largely depends on the conditions under which migration takes place. Migration stands a better chance of helping to reduce inequality when migrants of all skill levels are able to migrate through legal channels, use their skills productively and send remittances back to their home country at a low cost. With the right policies in place, lower-skilled workers and their families stand to gain the most from migration.

Against a backdrop of growing interconnectedness, policy attempts at restricting or even trying to deter international migration are likely to be futile. Migration must be approached as an important dimension of the development process and governed accordingly.

ANNEX

FIGURE A.5.1

Emigration ratio by the Human Development Index of migrants' countries of origin, 2019



Sources: Calculation of the emigration ratio based on the International Migrant Stock: The 2019 Revision, available from www.un.org/en/development/desa/population/migration/data/estimates2/estimates19.asp and The 2019 Revision of World Population Prospects, available from <https://population.un.org/wpp/>. The Human Development Index 2017 is available from: <http://hdr.undp.org/en/data>.

Note: The emigration ratio is obtained by dividing the number of migrants from a country by the total population of that country. The Human Development Index combines indicators of health, education and income.

CHAPTER 6

PROMOTING EQUALITY AND SOCIAL JUSTICE IN A CHANGING WORLD



CHAPTER 6

PROMOTING EQUALITY AND SOCIAL JUSTICE IN A CHANGING WORLD

KEY MESSAGES

- The megatrends reviewed in this report present opportunities as well as challenges for the reduction of inequality. A number of countries have managed to protect the most vulnerable from the negative effects of these powerful trends while ensuring that the benefits arising from some of them are widely shared.
- There is broad agreement on the importance of universal access to quality education to break the intergenerational cycle of growing inequality and promote inclusive development. Sadly, the education system has often served to reinforce inequality rather than help to level the playing field.
- Changes under way in the world of work are major drivers of rising inequality. In order to manage these changes, Governments and the international community must strengthen labour market institutions, including those that represent workers.
- Greater redistribution through taxes and public spending is urgently needed. Yet emphasis on balancing public budgets has often resulted in declines in social spending and investments in infrastructure.
- Social protection is a crucial element of national strategies to reduce inequality. Currently, only 45 per cent of the global population is effectively covered by at least one social protection benefit.
- Mobilizing support for policies that promote more equitable societies can be difficult. Understanding the political constraints to reducing inequality and devising ways to overcome them is key to progress.
- High inequalities within and among countries are a global problem. Multilateral action is essential to address inequality and manage other megatrends – not least because the consequences of rising inequality do not respect national borders.

Rising inequalities are holding back progress towards poverty eradication and other SDGs. They are also contributing to social tensions and political instability. Technological innovation, climate change, urbanization and international migration have, in some cases, exacerbated inequality. However, the impacts of these megatrends are not set. The previous chapters show that they can be managed in an equitable manner to ensure that their benefits are broadly shared and their burdens do not fall disproportionately on those without the resources to cope and recover. Climate change, for instance, cannot be stopped or reversed in the short term, but social considerations can be made part of adaptation and mitigation policies as countries transition to green economies.

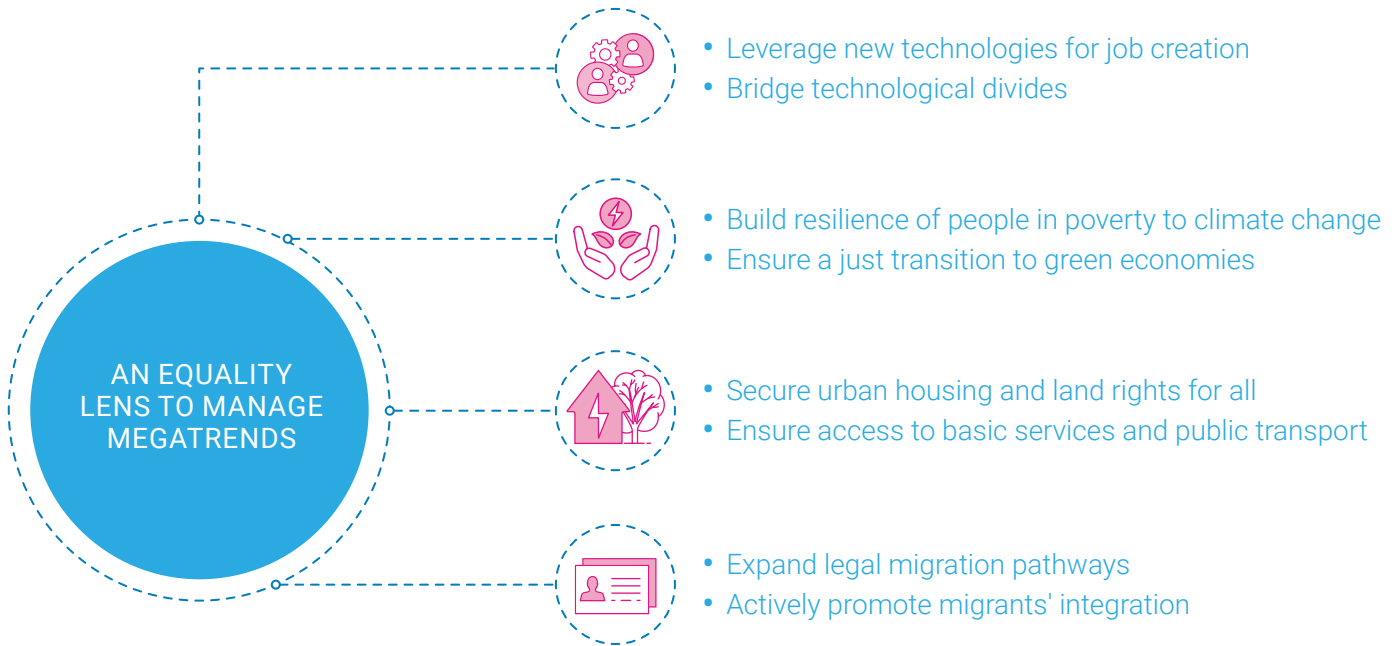
Applying an equality lens to policymaking calls for enhancing the positive impacts of these megatrends; it also means reconsidering policies that aggravate their harmful effects. While technological change may be contributing to job polarization and intensified wage inequality, for instance, financial and labour market deregulation, reduced corporate tax rates and declines in income tax progressivity have also contributed to rising inequality. Redoubling efforts to address the root causes of inequality today will open space to manage other global trends for the benefit of all. Section A points to concrete strategies to leverage the potential of the megatrends examined to reduce poverty and promote inclusion. Section B highlights the basic building blocks of an integrated policy strategy to reduce inequality within countries, based on a review of good practices. Section C emphasizes the importance of revitalizing multilateralism to address inequality among countries and other global trends.

BEYOND
PROMOTING THE
POSITIVE IMPACTS
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A. Managing global trends through an equality lens

In general, new technologies are expanding opportunities for highly skilled workers and benefiting mostly the wealthiest segments of society. Job disruption brought about by the current wave of automation and artificial intelligence is affecting mainly low- and middle-skilled workers. Furthermore, in many countries, productivity gains generated by new technologies are being captured by a small number of dominant companies.

An equality lens calls for policies and regulations that leverage the potential of new technologies to reduce poverty and create jobs, while narrowing technological divides. Currently, important differences are observed across countries in how jobs are being redesigned or made redundant in response to technological change. With the right incentives, businesses can regroup tasks into new jobs, train workers or align their workflows accordingly. The fact that some tasks traditionally performed by workers are being automated means that job profiles may change, but it does not have to lead to a loss of jobs, as new tasks are also being introduced (ILO, 2018b). Whether changes in skill needs must lead to the disappearance of jobs is as much a technological question as an institutional one.



THE POTENTIAL OF
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ACCESS TO THEM

Automation and digitalization may also allow many workers to improve their productivity and earn higher salaries, provided they are supported in adopting new tasks and making use of these new technologies. Strategies must also be in place to ensure a level playing field for businesses and to maintain a competitive environment, so that new technologies benefit the economy at large instead of reinforcing “first-mover” advantages. Without measures to prevent first-mover businesses from distorting markets in their favour, productivity differentials between businesses and workers may widen.

The potential of new technologies cannot be realized if entire segments of the population lack access to them. Even in contexts of broad access, the use of new technologies can exacerbate inequalities. Gaps in education, for instance, can widen if new technologies improve the learning outcomes of children in wealthier households disproportionately. Reducing inequality calls for closing the digital divide between and within countries. A number of countries, including some in the developing world, have made progress in extending the necessary infrastructure to rural and remote areas and in expanding education and training in the use of digital technologies.

An equality lens also calls for policies that build the resilience of those who are disproportionately exposed to the risks of climate change. This is even more pressing for people who lack the resources needed to cope and recover from its effects, including those living in poverty, small landholders and indigenous peoples. Rising temperatures and more extreme weather events are affecting both the prevalence

and depth of poverty, making it harder for people to escape poverty and increasing the likelihood that they will fall into poverty. The effects of climate change may also reduce the livelihood opportunities of future generations, especially in the most affected countries, and exacerbate downward intergenerational mobility.

Climate action and the transition to green economies offer opportunities for the reduction of poverty and inequality but, like other processes of structural transformation, also entail challenges. In order to reduce inequality, adaptation strategies must prioritize people living in poverty and other disadvantaged groups. As countries undertake the economic restructuring needed for the greening of economies, training must be readily available to ensure that displaced workers are equipped to enter new sectors. Making sure that mitigation technologies, such as renewable energy production, are broadly diffused and adopted will also be of paramount importance.

The focus on equality should therefore be an essential component of policy frameworks for a just transition. Such a transition calls for integrating climate action with macroeconomic, labour and social policies aimed at job creation, skills development and adequate support for those who will be negatively affected. Environmental taxation can play a key role in supporting this transition. However, unless environmental fiscal policies are accompanied by measures to compensate or protect the most vulnerable, they can aggravate poverty and inequality by increasing prices of basic goods and services such as food, heating and transportation.

Urbanization brings opportunities for poverty reduction and social mobility, but it can also lead to increased inequalities and social exclusion. The uncontrolled growth of many cities has resulted in inadequate provision of public services and a failure to guarantee a minimum quality of life for all urban residents. The current speed of urbanization in developing countries makes urban governance and adequate planning increasingly urgent.

While there is no one-size-fits-all solution to reducing urban inequality, some Governments have been able to address the spatial, economic and social aspects of the urban divide and promote inclusive urbanization, including in rapidly growing cities. Their strategies have four elements in common. First, they have established land and property rights, paying particular attention to security of tenure for people living in poverty. Second, they have improved the availability of affordable housing, infrastructure and basic services and access to these services, since good transport networks, including between residential and commercial areas, is key to spatial connectivity and economic inclusion. Third, they have facilitated access to education and decent employment for all urban residents. Fourth, they have put

participatory decision-making mechanisms in place to encourage input from all stakeholders in the allocation of public funds and in the formulation, monitoring and evaluation of all policies.

International migration can widen prospects for poverty reduction and social mobility as well. It can help reduce inequality between countries and does not necessarily increase inequality within countries. But the positive outcomes of migration are far from assured. Migration policies have often helped maintain inequalities within and among countries, rather than contributing to their reduction.

IF MIGRANTS
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An equality lens calls for opening avenues to the movement of migrant workers at all skill levels, ensuring that they can use their skills productively and send remittances to their home country at a low cost. Countries of destination must also do more to promote the integration of migrants, uphold their rights, provide access to social services and address discrimination against them. If migrants are adequately supported and migration is properly managed, its benefits will far outweigh its challenges.

The megatrends examined in this report interact with each other in multiple ways, which may have implications for inequality. Advances in technology hold great potential for reducing carbon emissions and slowing climate change, for instance. Rapid urbanization can make people more vulnerable to the impacts of climate change, yet cities have been at the forefront of efforts to combat it. Although the synergies and trade-offs between these different trends are not the focus of this report, they make it even more apparent that the substantial challenges and opportunities they pose cannot be addressed in isolation.

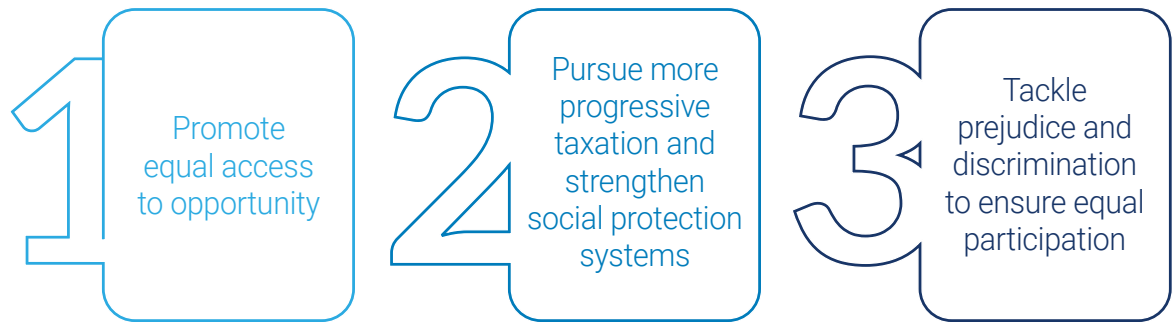
B. Reducing inequality within countries: what experience can teach us

The commitment shown by Governments in adopting the 2030 Agenda for Sustainable Development and its Goal 10 has not yet been matched with effective action. Inequalities within many countries continue to rise.

Clearly, no single set of policies is applicable to all countries or in all contexts. Instead, this report highlights three basic building blocks of a coherent and integrated policy strategy to reduce inequality in all its dimensions.¹⁰³ First, addressing the root causes of inequality calls for promoting equal access to opportunities. Second, creating a policy and institutional environment conducive to the reduction of inequality requires macroeconomic policies and institutions oriented towards this goal. Third, in order to reduce inequality, countries must address prejudice and discrimination and promote the participation of disadvantaged groups in economic, social and political life.

¹⁰³ In December 2017, the General Assembly encouraged the United Nations Secretary-General to "include best practices in the reduction of inequalities within and among countries in the *Report on the World Social Situation 2019*" (A/RES/72/141, para.71). The findings and conclusions contained in this section respond to this request.

THREE BUILDING BLOCKS TO REDUCE INEQUALITY



Ample evidence points to what has and has not worked to reduce inequality under each of these basic pillars. As this section's policy review suggests, inaction is due not to lack of sound technical advice or even, in most cases, adequate capacity. Rather, mobilizing support for many of the policy responses to inequality can be an uphill battle: depending on how they are designed and implemented, efforts to reduce inequality will inevitably challenge the interests of certain individuals and groups. At their core, they affect the balance of power. Understanding the political constraints to reducing inequality and devising ways to overcome them is key to breaking the current stalemate.

1. Expanding people's access to opportunity

Ensuring equal opportunity is an aspirational and distant goal. It calls for giving all children the same chances to advance their capabilities and to reap returns to their education through decent jobs, regardless of where they live and the conditions in which they were raised. Education, health and labour market policies affect the distribution of human capital, skills and wages. In principle, they should foster intergenerational mobility and affect how incomes are generated, reducing disparities in market (primary) income.

There is broad agreement on the importance of ensuring universal access to quality education, in particular, to expand access to opportunity. That said, the education system has often served to reinforce inequality rather than help to level the playing field.

a. Education: the great equalizer?

Increasing school enrolment and educational attainment should allow growing shares of the population to make a decent living and enjoy income security. In its initial stages, the expansion of education may result in increasing wage and income inequality. But as the number of people with secondary and higher education grows, wage differences between more and less educated workers (the "skill premium") should decline. The expansion of education should also promote meritocratic systems that primarily reward skill and effort, rather than wealth, social class or group ascription.

UNDERSTANDING
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In practice, improving access to education does not always result in lower inequality. Much depends on how educational policy is designed and implemented. While primary school enrolment has increased worldwide, many children are still out of school, particularly those living in poverty. The provision of education and other basic services remains fragmented and exclusionary in many countries. Moreover, vast differences are found in the quality of education provided to children in urban and rural areas, or from more and less wealthy families, even under conditions of near-universal coverage. Children in middle- and high-income households living in urban areas often benefit more from government spending on education than low-income groups in rural areas due to the unequal distribution of funding (UNICEF, 2015). At the global level, the share of government spending on education in national budgets is lower in low- and middle-income countries than in high-income countries. As a result, the education system has often served to reinforce inequality rather than give every child an equal chance of succeeding.

In some cases, increases in education have not kept pace with the changing demands of the labour market. Goldin and Katz (2008) argue, for instance, that rising inequality in the United States since 1980 stems, in part, from the fact that the education system has not supplied the type and amount of skills needed during this period of skill-biased technological change. The proportion of highly educated workers has grown, but not enough to keep up with the labour market's changing needs. As a result, the skill premium has increased.

In general, ensuring funding for the expansion of quality primary education and enforcing compulsory schooling up to lower secondary education have helped boost equitable access, as has the universal provision of pre-primary schooling. In Europe, the expansion of public pre-primary education has proven more effective in reducing earnings inequality than any other measures aimed at making educational systems more inclusive and equitable – such as raising the duration of compulsory schooling, prescribing standardized tests or strengthening school accountability (Checchi and van de Werfhost, 2014). Disadvantages faced by children based on their family background are more likely to manifest in situations where schooling starts at a later age.

In many developing countries, educational policies have prioritized funding for tertiary education, often to the detriment of funding for primary and secondary education, in what has been termed the “tertiary tilt” (Carnoy, 2011; Gruber and Kosack, 2014). This tilt has pushed income inequality upwards, as students from high-income families are better positioned to enrol in tertiary education and benefit from it than students from low-income families, who benefit the most from public investment in primary and secondary education.

What's more, the expansion of education has not been accompanied by systematic improvements in the quality of education. Large proportions of students do not achieve minimum proficiency in reading and, in some cases, learning outcomes

are deteriorating (UNESCO, 2019). In fact, the data available suggest that improved access to education has often resulted in increased inequality in learning outcomes (Torpey-Saboe, 2018). Disparities between schools or programmes based on geography, socioeconomic status, race and ethnicity can be found in most education systems. Moreover, better-off families can fund private, supplementary forms of education for their children. If inequalities in learning outcomes continue unabated, education will contribute to rising inequality.

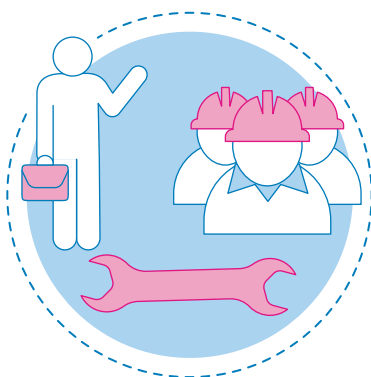
Countries that have made progress in improving learning outcomes have invested in training teachers and have increased their salaries; they have also made efforts to deploy teachers equitably across regions and areas. These include countries in developed regions, such as Australia, Finland, Japan and Sweden, as well as those in developing regions, including Brazil, China, Kazakhstan and the Republic of Korea (Wei, Andree and Darling-Hammond, 2009, and Global Campaign for Education and Education International, 2012). Some countries still need to establish minimum levels of proficiency and many must finance national assessments to evaluate learning outcomes, teacher training and curricula.

b. Investing in work

Improvements in education will have little effect on inequality without successful school-to-work transitions and decent job prospects. In its recent report, the Global Commission on the Future of Work noted the stark contrast between the transformative changes under way in the world of work and the level of preparedness of Governments and the international community to manage them (ILO, 2019). An initial step towards addressing this disconnect is to increase investments in labour market institutions, including those that represent workers, and policies such as minimum-wage laws and active labour market policies.

Growing vulnerability in the world of work has taken place alongside declines in membership in trade unions. The percentage of employees who are members of trade unions declined in 60 out of 88 countries with data between 2004 and 2016.¹⁰⁴ In OECD countries, where the collective representation of workers has traditionally been highest, trade union membership is half of its 1985 level (OECD, 2017a).

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The percentage of employees who are members of trade unions declined in 60 out of 88 countries with data between 2004 and 2016

¹⁰⁴ ILOSTAT database, trade union density rate (%). Available at: <https://ilostat.ilo.org/data/>. Accessed on 1 August 2019.

On average, unionized workers earn higher wages than their non-unionized counterparts, with the union-wage effect being greater among less-skilled workers than among skilled workers, especially in the public sector (Card, Lemieux and Riddell, 2018; Herzer, 2016; Freeman, 2009). However, unions organized around the traditional employer-employee relationship are not well-suited to giving voice to those who are self-employed or in informal employment.

The growing incidence of non-standard forms of employment and the persistence of informal employment have created momentum for different forms of collective representation. Associations of self-employed workers or cooperatives – two different types of membership-based organizations – have improved the terms on which workers in vulnerable employment engage in the labour market. Some of these associations represent members' interests with local authorities, rather than their employers, and so resemble social movements more than conventional trade unions (World Bank, 2012; Agarwala, 2013). The main limitation of these forms of organization is that they usually do not have a legal mandate to participate in collective bargaining directly. Supporting laws can make new forms of association fit for collective representation. For now, they cannot substitute for traditional trade unions.

Unions are also adjusting to changes in the world of work. Some have expanded membership to workers under non-standard contracts or have lobbied to promote their rights (OECD, 2019c). In the United Kingdom, for instance, drivers for the platform Uber were reclassified from independent contractors to workers covered by minimum wage laws and other basic provisions after a union took their case to an employment tribunal in 2018.¹⁰⁵ Ireland is considering a bill to prohibit “bogus self-employment” – when workers for a company are classified as independent contractors while working regularly for one business. There is also scope to expand union membership to workers in informal employment. Considering the ongoing changes in the world of work, unions will also have to find ways to connect with workers outside traditional workspaces, advocate for new forms of decent employment that ensure worker protection and offer new services, such as the sharing of information about portable benefits.

Wage-setting mechanisms must also be strengthened. Well-designed minimum-wage policies are key to ensuring income security. They have helped reduce wage inequality without reducing employment levels, partly because minimum wages are set at very low levels.¹⁰⁶ While these policies only cover workers in formal employment, evidence from developing countries indicates that minimum wages can drive increases in earnings in the informal sector as well, mainly because they are taken as a reference for less-skilled workers throughout the economy (Rani, 2017; Dinkelman and Ranchhod, 2012; Khamis, 2008).

¹⁰⁵ The state of California, in the United States, has recently reclassified Uber drivers from individual contractors to company workers as well.

¹⁰⁶ See, for instance, Bourgignon (2015), Godoy and Reich (2019), Freeman (2009) and Betcherman (2012).

All workers, regardless of wage or skill, will experience an increasing number of job transitions over the course of their lives. Active labour market policies can support these transitions by improving job matching and fostering new job opportunities. Such policies are well recognized and accepted by Governments. However, their ability to reach the poorest is contingent on how the programmes are designed and implemented. Often, they are not located in the neediest areas and not enough mechanisms are put in place to effectively target the poorest households. Traditional job search assistance, for instance, has not been effective in countries with large informal sectors, where most workers are self-employed and engaged in agriculture. New technologies can extend the reach of mediation and improve information on job opportunities.

Despite their significance during this time of transition, labour market policies alone will not bring about the structural transformations necessary to create decent work for all and promote inclusive economic growth. A policy environment conducive to the creation of more and better jobs requires macroeconomic policies oriented towards such goals.

2. Promoting redistribution and strengthening social protection

The strategies highlighted in the previous section should help curb disparities in market income and thereby reduce the burden on redistributive policies. However, the evidence available indicates that disparities in market income have risen in most countries in recent decades, including those that have seen inequality in disposable incomes decline.

Fiscal and monetary policies affect inequality not only because they have a direct bearing on income distribution, but also through their role in mobilizing resources for social policies, including social protection. Choices regarding taxes and spending are, in fact, at the heart of the social contract. Trust in Governments and institutions is higher where taxes and social transfers are perceived to be effective and equitable (OECD, 2019d). At the same time, confidence in public institutions is essential to ensuring fiscal performance and preserving the social contract.

Macroeconomic and social policies have often had opposing effects on the creation of decent work and the reduction of inequality. When aimed at short-term stability, macroeconomic policies have focused narrowly on keeping inflation at low levels and controlling fiscal deficits. Emphasis on balancing public budgets has resulted in declines in social spending and public investment in infrastructure and technologies, all of which are critical to reducing inequality. There is now global agreement on the need to enhance policy coherence.¹⁰⁷ A sustained reduction of inequality calls for aligning macroeconomic policy frameworks with social goals.

A SUSTAINED
REDUCTION OF
INEQUALITY CALLS
FOR ALIGNING
MACROECONOMIC
POLICY FRAMEWORKS
WITH SOCIAL GOALS

¹⁰⁷ Target 17.13 of the SDGs is to enhance global macroeconomic stability, including through policy coordination and policy coherence. Target 17.14 is to enhance policy coherence for sustainable development.

a. The potential of progressive taxation

The effect of fiscal policy on inequality depends on how progressive the tax system is and on how much people living in poverty benefit from social protection transfers and public services. Taxes and transfers play an important role in reducing income inequality in developed countries, yet they have failed to correct the trend towards rising inequality, as shown in chapter 1. Fiscal redistribution is much more limited in developing countries given their stronger reliance on indirect taxes, which are usually regressive. In fact, consumption taxes often increase the prevalence of poverty (Inchauste and Lustig, 2017). Their negative effect can be stronger than the poverty-reducing impact of public transfers and services.

Broadening the redistributive impact of taxation calls for increasing direct taxation, raising taxes at the top of the income distribution and lessening the tax burden on people at the bottom.

MORE
REDISTRIBUTION
CALLS FOR
INCREASING DIRECT
TAXATION, RAISING
TAXES AT THE TOP
OF THE INCOME
DISTRIBUTION AND
LESSENING THE TAX
BURDEN ON PEOPLE
AT THE BOTTOM

Narrow tax bases, high levels of informality, capital flight, illicit financial flows and weak tax administrations have typically limited the ability of Governments in developing countries to collect personal income taxes. Adjusting exemptions and deductions can help expand the tax base and improve the redistributive impact of income taxation in many of them. Despite a global commitment to enhance revenue administration, non-compliance with income tax requirements and tax evasion remains high.¹⁰⁸

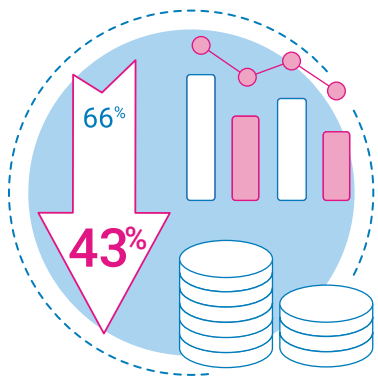
Given the increasingly globalized nature of trade and business, there are limits to what countries can achieve on their own. As global firms grow, production becomes more fragmented and the relevance of intangible assets such as intellectual property increases, making the taxation of capital increasingly challenging. International tax cooperation is essential to ensure sustained tax revenues. The United Nations Committee of Experts on International Cooperation in Tax Matters provides an inclusive venue for cooperation and standard-setting on international taxation with special attention given to developing countries.¹⁰⁹ Recent multilateral initiatives aimed at improving coherence and transparency in addressing tax avoidance are also steps in the right direction. They include the Global Forum on Transparency and Exchange of Information for Tax Purposes, the OECD/Group of 20 Base Erosion and Profit Shifting (BEPS) Project and the Inclusive Framework on BEPS, as well as the Addis Tax Initiative and the Platform for Collaboration on Tax.¹¹⁰ Yet progress has been very slow.¹¹¹

¹⁰⁸ In the Addis Ababa Action Agenda, Governments agreed to enhance revenue administration through modernized, progressive tax systems, improved tax policy and more efficient tax collection as well as to work to improve the fairness, transparency, efficiency and effectiveness of our tax systems (General Assembly resolution 69/313, para. 22).

¹⁰⁹ The Committee of Experts on International Cooperation in Tax Matters is a subsidiary body of the United Nations Economic and Social Council tasked to develop policy and practical guidance on international tax matters.

¹¹⁰ The Platform for Collaboration on Tax is a joint effort launched in 2016 by the International Monetary Fund, the OECD, the United Nations and the World Bank Group to intensify the cooperation among these organizations on tax issues.

¹¹¹ The Inclusive Framework on BEPS currently has 135 members and 14 observers, including over 70 per cent of non-OECD and non-Group of 20 countries. They are now designing new international tax rules, including to address tax challenges arising from digitalization (OECD, 2019c). The Addis Tax Initiative coordinates technical assistance among its members, including 24 partner countries in the developing world, 19 developed countries and several supporting organizations, and broad-based capacity building in partner countries.



In countries of the OECD, top income tax rates fell from 66 per cent in 1981 to 43 per cent in 2018

In countries of the OECD, top income tax rates fell from 66 per cent in 1981 to 43 per cent in 2018 (OECD, 2019e). However, there is no empirical evidence to suggest that the top marginal rates common in the 1980s have been harmful for economic growth (IMF, 2017b; OECD, 2015a). In addition, the share of market income earned by the top percentiles has grown, and there may be scope for increasing top marginal tax rates. Enhanced tax collection and enforcement are also needed with respect to top earners who often escape taxation altogether.

Taxes on wealth and property can play an equally important role in increasing redistribution and have gained traction in recent political debates. Income from wealth (profits, interest and capital gains, in particular) is generally taxed at lower rates than labour income. This is in part because wealth income is more responsive to taxation – that is, there are more options to avoid taxation and savings can be invested abroad – and its measurement is more challenging. However, given the amount of revenue that can be raised through wealth and property taxes, Governments should consider devoting resources to their enforcement.

Addressing inequality also calls for lessening the tax burden on people at the bottom of the income distribution. Raising minimum income tax thresholds and reducing the burden of indirect taxation can help make tax systems more progressive. Lower tax rates on basic goods, such as staple foods, may be warranted.

b. Strengthening social protection

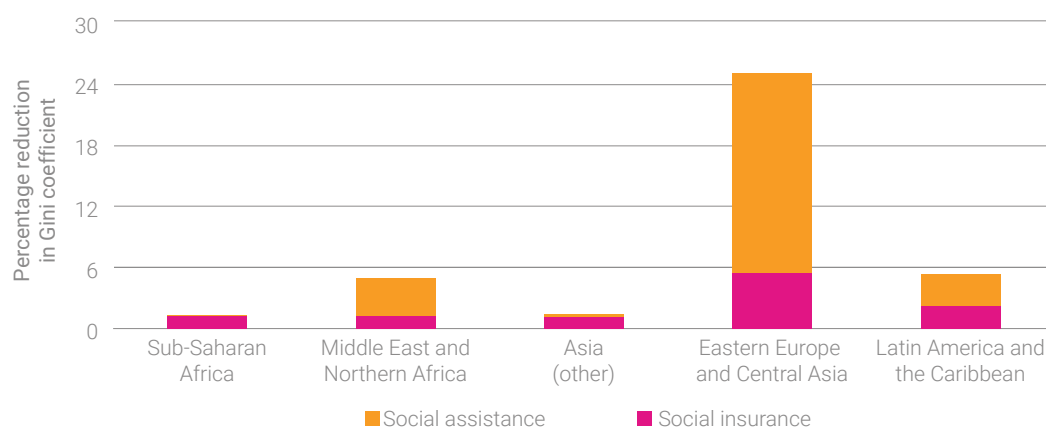
The value of social protection to shield individuals and families from shocks and alleviate poverty has been broadly recognized. A system combining contributory social insurance and tax-funded social assistance programmes to cover unemployment and disability benefits, child benefits, old-age pensions and access to health care offers basic income security at all stages of the life cycle.

Coverage by at least one social protection scheme ranges from close to 90 per cent of the population in Europe to less than 15 per cent in Africa (ILO, 2017a). As a result, its impact on income inequality varies by region, as shown in figure 6.1. Among the regions shown, the combination of social insurance and social assistance has the greatest equalizing effect in countries of Eastern Europe and Central Asia. In countries and regions where informal employment is widespread and overall institutional capacity

is weak, including many countries in Asia and sub-Saharan Africa, tax-funded social assistance programmes have the most impact on inequality as measured by the Gini coefficient. However, the situation varies considerably by country. Social protection transfers have had a strong equalizing effect in countries such as Brazil, Mongolia and South Africa, where expenditure in social protection is relatively high (United Nations, 2018a).

Countries often use a variety of universal and targeted social protection schemes. Social assistance schemes are usually means-tested or targeted to groups with observed disadvantages. Under perfect schemes, targeting can bring efficiency gains. However, accurate targeting requires administrative capacities that many countries lack. Inaccurate means targeting leads to significant undercoverage, excluding many potential beneficiaries (Brown, Ravallion and van de Walle, 2016). In general, simpler tests that exclude only the most affluent from accessing benefits reduce errors of exclusion and do not cause excessive leakage to those not living in poverty (United Nations, 2018a; Kidd and others, 2018).

FIGURE 6.1
Impact of social insurance and social assistance programmes on the Gini coefficient of income in selected regions



Source: World Bank, The Atlas of Social Protection Indicators of Resilience and Equity (ASPIRE) database. Available from <http://datatopics.worldbank.org/aspire/home>. Accessed on 30 July 2019.

Note: The figure shows weighted regional averages of the Gini coefficient reduction owing to social protection programmes as a percentage of the Gini coefficient of market (pre-transfer) income. The estimates are based on data from the most recent household surveys, conducted between 2000 and 2016, for 35 countries in Sub-Saharan Africa (Benin, Botswana, Burkina Faso, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Eswatini, Gabon, Gambia, Ghana, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Senegal, South Africa, South Sudan, Sudan, Togo, Uganda, United Republic of Tanzania, Zambia, Zimbabwe), 6 countries in Middle East and Northern Africa (Djibouti, Egypt, Iraq, Jordan, Tunisia, Yemen), 23 countries in Asia (other) (Afghanistan, Bangladesh, Bhutan, Cambodia, Fiji, Kiribati, Lao People's Democratic Republic, Malaysia, Maldives, Marshall Islands, Micronesia (Federated States of), Mongolia, Nepal, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga, Viet Nam), 24 countries and areas in Eastern Europe and Central Asia (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Kosovo, Kyrgyzstan, Latvia, Lithuania, Montenegro, Poland, Republic of Moldova, Romania, Serbia, Slovakia, Tajikistan, Turkey, Ukraine, Russian Federation), and 21 countries in Latin America and the Caribbean (Argentina, Belize, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay).

Even in contexts of universal coverage, some groups of the population may face barriers to accessing benefits. For example, in many countries, persons with disabilities confront physical and administrative hurdles in having their eligibility assessed (United Nations, 2018a). For migrants, benefits earned in one country are rarely portable to other countries. Lack of information and discrimination can limit access to social protection by these and other groups.

Removing barriers and promoting the effective coverage of disadvantaged groups can help reduce group-based inequality. Linking entitlement to unemployment benefits to individuals rather than jobs, for instance, can improve coverage for workers under non-standard contracts. Improving migrants' coverage calls for ensuring access to social protection in countries of destination and the adequate portability of benefits across borders. Multilingual and accessible information campaigns about eligibility can help increase coverage among people who are not fluent in the official national language/s. In all cases, beneficiary involvement in design and implementation is crucial to identifying and addressing barriers to access.

Measures to increase coverage will have little impact on reducing inequality and poverty if the benefits received fail to guarantee basic income security. Tax-funded transfers often fall short. In countries with data, the median level of benefits provided through tax-funded pensions, for instance, represents less than 40 per cent of the minimum wage, on average.¹¹² If social protection systems are to have a meaningful impact, many countries will need to increase investments in social protection and sustain such investments through economic cycles.

A growing number of countries in developing regions already spend significant proportions of their GDP on social protection. Brazil, for instance, spent over 18 per cent of its GDP in 2015 on social protection;¹¹³ Mongolia spends over 15 per cent and Egypt over 11 per cent of GDP. Many countries have space to mobilize additional domestic resources. Some least developed countries will, however, need substantial development assistance to close gaps in social protection floors (Bierbaum and others, 2016). Dismantling administratively complex and costly targeted schemes would also help reduce costs. This is one argument used by proponents of a universal basic income, as discussed in box 6.1.

The right to social security is set forth in the Universal Declaration of Human Rights. Lack of comprehensive, well-functioning social protection systems challenge social solidarity and, as the next section argues, weaken public support for redistribution.

EVEN IN
CONTEXTS OF
UNIVERSAL SOCIAL
PROTECTION
COVERAGE, SOME
GROUPS OF THE
POPULATION
FACE BARRIERS
TO ACCESSING
BENEFITS

¹¹² Calculations based on the International Labour Organization's World Social Protection database. Available at: www.social-protection.org/gimi/Wspr.action. Accessed on 31 July 2019.

¹¹³ Following the general elections in 2018, there is uncertainty concerning the future state of social protection and other social policies as described in chapter 1 (box 1.3).

BOX 6.1**The viability of a universal basic income: the jury is still out**

Interest in a universal, unconditional cash transfer, or universal basic income (UBI), has been growing globally in the context of ongoing debates on changes in the world of work. Proponents see its potential to compensate workers for increasingly insecure employment and to avoid overly bureaucratic social protection systems. Opponents argue that it would discourage workers from finding or remaining in jobs. Concerns that recipients would spend funds unproductively are also widespread. Pilot trials of the UBI, including in Finland, in Ontario, Canada, in the Otjivero-Omitara area of Namibia and in the Indian state of Madhya Pradesh have been short-lived and politically contentious (Henley, 2018; Gollom, 2018, Banerjee, Niehaus and Suri, 2019). Their long-term effects are therefore unknown.

The feasibility of financing a UBI that would substitute for other public transfers and the trade-offs it would entail depend on the country context. Even in countries of the OECD, current spending on social protection would not be enough to cover a UBI at or even close to the poverty line – estimated at 50 per cent of the median disposable income (OECD, 2017b). For example, a basic income for working-age adults that would cost the same as existing transfers and tax exemptions would reach 21 per cent of the poverty threshold in Italy, 33 per cent in the United Kingdom and 50 per cent in France (*ibid.*). People living in poverty stand to lose the most from the dismantling of current, progressive transfers and services. Without targeting or much higher spending, the risks of falling into poverty can increase as current recipients of social protection lose out.

Proposals have been made for “partial” UBIs that would complement, rather than replace, existing schemes (IMF, 2017b; OECD, 2017b). Indeed, most developed countries and some developing countries already have a vast number of universal schemes, such as child and family benefits and social pensions. These countries should first focus on improving the coverage of these schemes, rather than replacing them.

3. The political economy of redistribution

In 2014, 60 per cent of respondents to a survey across developed and developing countries agreed with the statement that “the gap between the rich and the poor is a very big problem” (Pew Research Center, 2014). With changes in emphasis, the policy prescriptions summarized in this chapter have been recommended for decades. Despite widespread concern about inequality, mobilizing support for these policies has often proven challenging.

INEQUALITIES IN
POLITICAL POWER
AND INFLUENCE
HINDER EFFECTIVE
ACTION TO REDUCE
INEQUALITY

Inequalities in political power and influence can hinder action in this regard. Some groups have more power, knowledge, resources and capacity to organize than others. When groups are well organized, they are more effective at blocking policy measures that undermine their interests or lobbying for those that promote those interests. Wealthy individuals, corporations and, in some countries, members of certain ethnic groups have more access than others to political institutions such as political parties as well as the media. Numerous historical examples can be found of economic elites ensuring that the policies and institutions that benefit them are maintained (see, for instance, Acemoglu and Robinson, 2002 and 2012).

The failure of taxes and transfers to reduce the gap between the rich and those living in poverty may also have undermined the legitimacy of fiscal systems and trust in institutions. Two thirds of the population in the Group of 20 countries distrust politicians when it comes to the tax system (IFAC and ACCA, 2019). Lack of trust in institutions, in turn, hinders action to address inequality. Political institutions that fail to curb inequalities disenfranchise those segments of the population that may otherwise push for greater redistribution, including lower- and middle-income groups, as discussed in chapter 1.

In an historical review of social spending and economic growth, Lindert (2004) argues that as democracies matured and people were given the right to vote, the middle classes came to oppose targeted tax spending on programmes for people living in poverty. Instead, they gave support to social services, social pensions and comprehensive social insurance that, in principle, addressed the needs of most members of society. Targeting schemes at people living in poverty can indeed erode political support for redistribution and result in low funding (Gelbach and Pritchett, 2002). Korpi and Palme (1998) labelled this trend “the paradox of redistribution”, noting that the more countries targeted redistribution, the less likely they were to reduce poverty and inequality.¹¹⁴

Under a universal social policy framework, demand tends to rise for well-functioning public services and good-quality programmes. Universal policies therefore enjoy broader public support in the long term. In addition, the empirical literature has failed to demonstrate that targeted programmes are more cost-effective at reducing poverty and inequality than universal ones (Ravallion, 2007b; Coady, Grosh and Hoddinott, 2004; Murgai and Ravallion, 2005). Clearly, even in policy frameworks grounded in universalism, certain segments of the population face greater challenges than others in overcoming poverty and exclusion. Targeted and other special measures may be necessary to reach these groups. However, targeted measures work best when they complement – rather than replace – universal policies (United Nations, 2018a).

Historically, the creation of political coalitions among groups with common interests helped garner support for redistributive policies. Yet coalitions that proved essential in the past may be eroding. Piketty (2018) argues that global integration and the expansion of education have eroded traditional class-based coalitions for redistribution and have opened new cleavages, namely between groups that support global integration and those that do not, as well as between educated and wealthy elites, on one hand, and between different groups of less skilled workers, on the other. He argues that new egalitarian-internationalist political platforms will be necessary to unite low-income groups with low education from different backgrounds in support of redistribution.

INCLUSIVE AND
PARTICIPATORY
POLITICAL
INSTITUTIONS
CREATE CHECKS
AND BALANCES
THAT PREVENT
THE ABUSE
OF POWER

¹¹⁴ Lack of funding for measures targeted at people living in poverty led the American politician and social scientist Wilbur Cohen to state that “programmes for the poor will most likely be poor programmes” (American Enterprise Institute for Public Policy, 1972).

While broad support for policies that reduce inequality has often followed periods of social upheaval or economic transformation, political action should not require extreme circumstances. Institutions and norms that promote open and inclusive processes create the conditions needed for the reduction of inequality, as do accountable Governments that encourage such processes. Inclusive and participatory political institutions create checks and balances that prevent the abuse of power. They are necessary to avoid violent expressions of social discontent. Although a comprehensive account of the institutional transformations required is beyond the scope of this report, an essential first step is to actively address prejudice and discrimination.

4. Tackling prejudice and discrimination

Discrimination remains a pervasive driver of inequality. As shown in chapter 1, societies continue to make distinctions based on ethnicity, race, sex and other characteristics that should have no bearing on people's achievements or on their well-being. The 2030 Agenda calls for eliminating discriminatory laws, policies and practices and for promoting appropriate legislation, policies and action in this regard (target 10.3, Goal 10).

Historically, many laws and policies have explicitly limited or denied rights to specific groups. Democratization and the demand for equal rights have led many Governments to repeal discriminatory laws and policies that sustain unfair treatment. Most constitutions now enshrine the principles of equality and non-discrimination. However, formal discrimination persists. In 2006, for instance, 196 ethnic or religious minorities worldwide faced some form of overt political discrimination (University of Maryland, 2015; see also box 6.2). According to the World Bank, 104 countries have laws restricting the types of jobs that women can perform (World Bank, 2018d).

Governments are increasingly implementing legislation designed to prevent discrimination in areas such as employment, education, health, housing and political participation. However, the impact of this legislation is mixed, particularly in the case of measures intended to address discrimination in the labour market (United Nations, 2016a; Marcus Mdee and Page, 2016). Enforcement of anti-discrimination laws is challenging and often inadequate. Ministries of justice, the police force and other law enforcement institutions must have significant administrative capacities, as well as thorough knowledge of the law and resources, to respond. Meanwhile, acts of discrimination are grossly underreported. Many people do not know that they are legally protected against such acts and may not know how to report them.

Beyond repealing discriminatory laws and introducing preventive measures, many countries have resorted to affirmative action to favour groups that were discriminated against in the past. This includes quotas or reservations to improve the representation of women or minority ethnic groups in decision-making roles, quotas and scholarships to improve access to education, and preferential treatment in hiring for certain jobs.¹¹⁵

¹¹⁵ As of 2015, 130 countries had some form of electoral quotas for women (Hughes and others, 2019).

BOX 6.2**The Rohingya in Myanmar: citizenship denied on the basis of ethnicity**

In Myanmar, the Citizenship Law of 1982 states that, in order to become a citizen, an individual must belong to one of 135 recognized national ethnic groups or prove that their ancestors settled in the country before 1823 (Minority Rights Group International, n.d.). Citizenship is therefore based on ethnicity, which is prohibited by numerous international human rights agreements. Members of the Rohingya minority and other Muslim groups are not included in the list of recognized ethnic groups and could not document the date of their ancestors' arrival in the country. As a result, most members of these groups are effectively stateless.

Since 1982, the primary documents held by stateless persons, including the Rohingya, to confirm their legal residence in Myanmar had been temporary identity certificates. Those certificates expired in 2015 and the "identity card for nationality verification" that replaced them has been widely viewed with suspicion. Take-up has been very low and, as a result, most Rohingya today have no valid identity document. This discriminatory treatment has led to the denial of other rights, including the right to social security and basic social services.

Affirmative action campaigns have been effectively carried out in both developed and developing countries, especially to increase the responsiveness of Governments to the needs of women and ethnic minorities (Chattopadhyay and Duflo, 2004; Beaman and others, 2012). However, the implementation of such campaigns can be challenging. They can generate stigma and, at times, raise tensions among groups rather than dissipating them. In some cases, quotas have opened opportunities only for women or members of ethnic minorities of higher socioeconomic status, while leaving those living in poverty underrepresented (Marcus, Mdee and Page, 2016). The preferential treatment of some groups over others has also been questioned on the grounds that it violates the principles of non-discrimination and equal protection for all. Under the international human rights framework, affirmative action measures are justified when they present "reasonable, objective and proportional means to address discrimination".¹¹⁶

Beyond these special measures, addressing the root causes of discrimination calls for structural reforms, starting with the justice system and other national institutions. Even though justice is fundamental to a fair and inclusive society, most people living in poverty and those who suffer from discrimination are denied access to it. Ensuring equal access to justice for all will involve, among other things, promoting campaigns to enhance legal awareness and literacy, scaling up services to provide advice and assistance, developing alternative dispute resolution mechanisms and, ultimately, improving the institutional framework for resolving disputes, conflicts and crimes (United Nations, 2016a; Manuel and Manuel, 2018).

ADDRESSING THE
ROOT CAUSES OF
DISCRIMINATION
CALLS FOR
STRUCTURAL
REFORMS,
INCLUDING
PROVIDING
EQUAL ACCESS
TO JUSTICE FOR
ALL AND REMOVING
OBSTACLES
TO POLITICAL
PARTICIPATION

¹¹⁶ Committee on Economic, Social and Cultural Rights, General Comment No. 20, para. 9.

Discrimination challenges the ability of those affected to have their voices heard and their concerns translated into meaningful action. A key and basic step to promote their inclusion is to remove obstacles to political participation, including the right to vote. Creating an enabling environment for social movements and local associations that give disadvantaged groups a voice and agency to articulate their interests is also important. These grass-roots movements have traditionally raised and advanced issues that have subsequently become important priorities for Governments. They have helped avoid violent expressions of discontent and opened space for dialogue.

C. Reducing inequality in an interconnected world

While the role of Governments and other national stakeholders remains key, high inequalities within and among countries are a global problem, as are the other megatrends examined in this report. One country's action on climate change or international migration – or lack thereof – has costs and benefits for other countries. The imbalance, for example, between top greenhouse-emitting countries and those suffering the most from the impacts of climate change, has been well documented. Decisions taken by one country can also have ramifications for other countries through trade, finance and investment. None of these issues can be addressed unilaterally.

Moreover, in an interconnected world, national policymaking is increasingly constrained by the decisions of other countries. For instance, Governments have little leeway in taxation policy when attempts at increasing taxes can be easily undermined by illicit financial flows and transnational tax competition. Cross-border trade, finance, intellectual property rights and official development assistance also affect inequality and require international cooperation.

At this critical time, multilateralism is under attack in many countries and trust in public institutions is lacking. Although the multilateral order could be more fit for purpose, the current world challenges call for strengthening it, rather than dismissing its value.

1. A crisis in multilateralism?

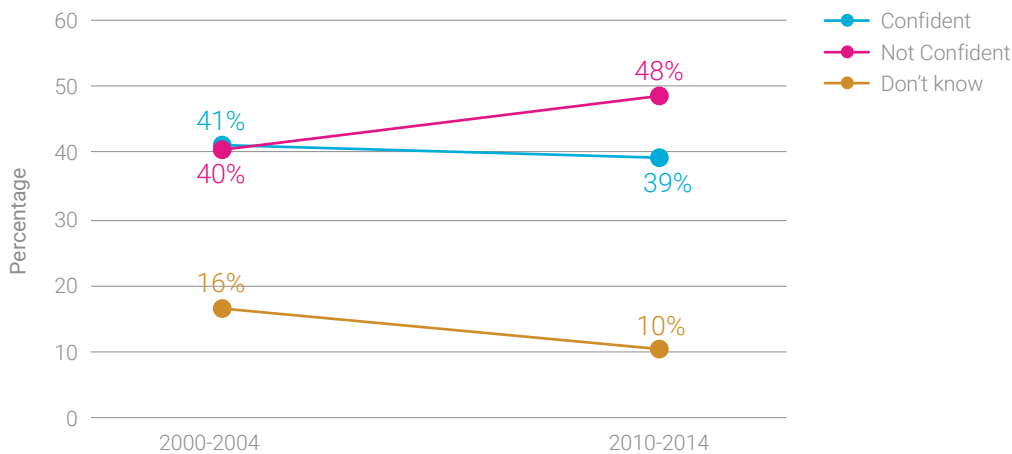
In his speech to the General Assembly in September 2018, United Nations Secretary-General António Guterres stressed that: “Trust is at a breaking point. Trust in national institutions. Trust among states. Trust in the rules-based global order... We must repair broken trust. We must reinvigorate our multilateral project.”¹¹⁷ The rise of nationalism in various countries, flaring trade tensions as well as the difficulty Governments face in reaching global agreements on trade and other issues are frequently cited as features of this crisis.¹¹⁸

¹¹⁷ The full speech is available at: <https://www.un.org/sg/en/content/sg/statement/2018-09-25/secretary-generals-address-general-assembly-delivered-trilingual>. Christine Lagarde, former managing director of the International Monetary Fund, also gave a speech in 2018 in which she called for a “new multilateralism . . . more inclusive – open to diverse views and voices. It must be more people-oriented – putting human needs first. And it must be more effective and accountable – delivering results for all.” This speech is available at: www.imf.org/en/News/Articles/2018/10/11/sp101218-new-economic-landscape-new-multilateralism.

¹¹⁸ For example, see speeches from over 50 national representatives at the United Nations General Assembly's commemorative meeting observing the United Nations International Day of Multilateralism and Diplomacy for Peace in 2019 (GA/12140). Available at: www.un.org/press/en/2019/ga12140.doc.htm.

GLOBAL
CHALLENGES
CALL FOR
STRENGTHENING
THE MULTILATERAL
ORDER, RATHER
THAN DISMISSING
ITS VALUE

FIGURE 6.2
Percentage of the global population with confidence in the United Nations



Source: World Values Survey Wave 4 (2000-2004) and Wave 6 (2010-2014). Available at: www.worldvaluessurvey.org/wvs.jsp. Accessed on 30 August 2019.

Empirically, the information available suggests some decline, even within a 10-year period, in levels of trust or confidence in international actors and cooperation at the global level. According to data from the World Values Survey, the percentage of respondents who do not have confidence in the United Nations, for instance, increased from 41 per cent in 2000-2004 to 49 per cent in 2010-2014 – while the percentage of those who trust the institution has remained close to 40 per cent (see figure 6.2).

Recent political trends in many countries indicate that growing sectors of the population have grievances with political institutions – and those who have them are voicing them louder, affecting political systems. Research has also shown that people's level of trust or confidence in national institutions and their trust in international ones go hand in hand (Armingeon and Ceka, 2014; Dellmuth and Tallberg, 2015; Brewer, Gross and Vercellotti, 2018). Growing concerns that national institutions are not representing the interests of the majority may be contributing to the sense that global institutions are only serving powerful economic interests (United Nations, 2019d). Decrease in general support for the European Union, for instance, has been linked to a decline in trust in national governments following the 2008 economic and financial crisis and its negative impact on the most vulnerable communities (Armingeon and Ceka, 2014; Algan and others, 2017). Indeed, in recent years, populist politicians in various countries have attacked globalization and multilateralism as an elitist package that has failed to promote the interests of voters.

An alternative view, however, is that multilateralism is simply undergoing a transformation due to shifts in relative global economic power and political influence in past decades. Grabel (2018) argues that the system governing global finance has become decentralized since the 2008 financial crisis. Gradual changes – including

the proliferation of bilateral and regional investment treaties – have left global finance more fragmented and multipolar. This transition may be perceived as a crisis, but it may also bring opportunities for reform.

The emergence of new multilateral development banks has been interpreted as a response to the lack of representation of developing countries at the highest levels of decision-making in established multilateral institutions (Wang, 2017; Suchodolski and Demeulemeester, 2018).¹¹⁹ The multilateral framework is indeed likely to change with the emergence of new economic powers. Whether this leaves multilateral institutions in crisis will depend largely on how able they are to adapt to the new reality.

2. Revitalizing multilateralism to reduce inequality

Cooperation among countries remains essential for ensuring equitable and inclusive development – not least because the consequences of rising inequality and unsustainable growth do not respect national borders.

For many years, the United Nations system has been calling attention to the asymmetries between the pace of global integration and the prevailing regulatory framework.¹²⁰ Progress in strengthening the international regulatory framework has been lacking. Yet the multilateral system has been able to galvanize commitment on important issues and reach ground-breaking global agreements in recent years.

In 2015, world leaders agreed to a sustainable development agenda that is far-reaching and tackles issues on which there had not been prior consensus. Key among them is the reduction of inequality, including within countries. In 2013, the World Bank also adopted “promoting shared prosperity” as one of its twin overarching goals – the other being to end extreme poverty.

The Addis Ababa Action Agenda – also agreed to in 2015 – set out the means to implement the SDGs and commits countries to inclusive and equitable development through global cooperation in various areas.¹²¹ This includes a pledge to enhance domestic tax systems, combat tax evasion and corruption and reduce opportunities for tax avoidance and international tax competition that undermines domestic resource mobilization efforts. It also contains commitments to ensure that borrowing and lending are sustainable and equitable and lays out the obligations of wealthier countries regarding official development assistance.

The Paris Agreement laid out a global framework to combat climate change and adapt to its effects through national actions, with enhanced support to assist developing countries in doing so. Developed-country parties to the United Nations Framework

COOPERATION
AMONG COUNTRIES
REMAINS ESSENTIAL
– NOT LEAST
BECAUSE THE
CONSEQUENCES
OF RISING
INEQUALITY AND
UNSUSTAINABLE
GROWTH DO
NOT RESPECT
NATIONAL BORDERS

¹¹⁹ For example, the New Development Bank is a joint venture among Brazil, Russian Federation, India, China and South Africa to support infrastructure and sustainable development in developing countries. The Asian Infrastructure Investment Bank, initiated by China and jointly founded by 57 member countries from Asia and elsewhere, focuses on mobilizing resources to invest in infrastructure in Asia.

¹²⁰ The International Labour Organization established the World Commission on the Social Dimension of Globalization in 2002 and issued its Declaration on Social Justice for a Fair Globalization in 2008.

¹²¹ The Addis Ababa Action Agenda of the Third International Conference on Financing for Development (General Assembly resolution 69/313).

Convention on Climate Change committed to jointly mobilize \$100 billion annually by 2020 to support the climate financing needs of developing countries. Multilateral development banks have also stepped up their efforts to support climate action. The European Investment Bank recently pledged to shift 35 per cent of its lending towards sustainable economic activity; the New Development Bank, established by Brazil, Russian Federation, India, China and South Africa, pledged 66 per cent; and the Asian Development Bank 75 per cent (Larsen, 2018). These institutions have also effectively stopped financing upstream oil and gas, and coal-fired power plants. Last year development banks provided upwards of \$35 billion in climate finance.

Most recently, in agreeing to the 2018 Global Compact for Safe, Orderly and Regular Migration, countries recognized that a cooperative approach is needed to optimize the overall benefits of migration for sustainable, equitable development. The Compact was also an acknowledgement that addressing the risks and challenges for individuals and communities in countries of origin, transit and destination will require intensive multilateral efforts.

Finally, progress has also been made in fostering concerted efforts by international organizations to support more equitable growth through tax cooperation, as discussed in section 6.B.¹²²

Moving from commitments to a sustained reduction in inequality and an equitable sharing of the benefits of development requires concerted efforts and political will. Despite successes in reducing extreme poverty and infant mortality and expanding access to education, large regional disparities – as well as disparities among groups – persist, and many countries are off track on a range of SDGs (United Nations, 2019a). Recent estimates suggest an additional \$2.6 trillion in funding annually would be required for 155 developing countries to meet the Goals in five areas – education, health, roads, electricity, and water and sanitation – by 2030 (Gaspar and others, 2019). The United Nations (2019e) recently called for governments to recommit to the Addis Agenda and strengthen collective action to address global challenges to sustainable development. This includes reforming the rules of global trade, addressing the sustainability of international borrowing and lending, as well as increasing levels development assistance.

The need for greater international cooperation to broaden and strengthen technology transfer and diffusion mechanisms remains clear. Bridging the persistent technological divide among countries will require a more flexible approach to international property rights to enable an easier transfer of technology. It will also require multilateral efforts to craft new regulatory mechanisms for managing frontier technologies in ways that do not exacerbate inequalities. These efforts should bring together all stakeholders:

¹²² A global financial registry has also been suggested to support progressive taxation (World Inequality Lab, 2017). Tax and regulatory agencies would be able to check that taxpayers properly report assets and capital income independently of whatever information offshore financial institutions are willing to provide. This would also allow Governments to close corporate tax loopholes by enforcing a fair distribution of tax revenue globally for corporations with increasingly complex overseas operations.

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Governments, companies and scientists, as well as civil society and academia. They must strike a balance between fostering innovation and efficiency on the one hand, and fairness, equality and ethics on the other (United Nations, 2018b). Finally, despite the efforts of some countries, the world is currently off track in meeting the targets of the Paris Agreement (UNEP, 2019). Concerted multilateral efforts are required to avoid the worst consequences of climate change, including rising inequalities. These efforts may be less forthcoming, however, after the 2017 announcement by the United States of its withdrawal from the Agreement. Developing countries still require greater financial and technological support for adaptation and mitigation. This will involve the provision of dedicated climate finance to support disaster resilience and incentivize disaster risk reduction, among other things. It will also mean ensuring that new technologies to combat climate change are available equitably through green technology transfer and rethinking the rules on intellectual property rights – to give Governments the leverage to disseminate these technologies more broadly in the larger public interest (United Nations, 2019e). All countries need to find ways to decouple economic growth from unsustainable production and consumption.

The evidence presented in this report affirms the critical role of multilateral action to address the driving forces of inequality under the global social contract provided by the 2030 Agenda. Moving from commitment to action requires concerted political will from national Governments. Multilateral institutions must themselves be fully committed to government efforts to reduce inequalities. Effectively supporting those countries that need it the most calls for a more inclusive multilateralism, giving adequate voice to all regions and to different stakeholders within countries. It means setting global rules that people can trust – rules calibrated towards shared prosperity and social, economic and environmental sustainability.

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Despite extraordinary economic growth and widespread improvements in well-being over recent decades, inequality remains high within and across countries.

Today, powerful economic, social and environmental forces are affecting inequality. The World Social Report 2020 examines the impact of four such global trends: technological innovation, climate change, urbanization and international migration.

Rising inequality is not inevitable, according to the report. National policies and institutions can help ensure that the benefits of these global trends are broadly shared and their negative effects do not fall disproportionately on those who lack the resources to cope and recover.

How these trends are addressed will largely determine the shape of our common future.



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