Perspectives on Global Development 2019

RETHINKING DEVELOPMENT STRATEGIES

OECD DEVELOPMENT CENTRE

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Foreword

Since 2010, the OECD Development Centre's *Perspectives on Global Development* (PGD) series has investigated the increasing economic weight of developing countries in the world economy, a phenomenon referred to as "shifting wealth". In 2008, the share of non-OECD countries in world gross domestic product surpassed that of OECD member countries. This effectively helped put many developing countries on a converging economic path with the richer countries of the world. On account of such a global transformation, development concerns of all sorts have been deeply affected. Each subsequent edition of the PGD has examined the effect of this trend on development, focusing on different policy concerns, from social cohesion (2012) and industrial policy (2013) to productivity and the middle-income trap (2014) and, most recently, international migration (2017).

The 2019 edition focuses on development strategies. The People's Republic of China continues to re-invent itself and its relation with the rest of the world. Several countries have graduated from aid, while many others continue to be overburdened with poverty. Policy concerns and development blueprints are in sharp need of a facelift. Lessons have been learned from the past, yet several paradigms have fallen short of their goal of development and poverty reduction – in part because today's challenges are different to those of yesterday. At the same time, tools, partners and policy responses are multiplying and wider than ever.

The report builds on the growing body of research by the Development Centre that looks at the changing facets of development and the challenges, new and old, developing countries must face in today's world. In so doing, it seeks to trigger a larger debate on the unique paths taken by developing countries, as well as the implications for domestic policy and international aid donors. To that end, the report has four main strands:

- analysing the current status of shifting wealth
- comparing the development trajectories of early industrialising countries with the emerging economies of today
- critically decomposing the paradigms developed by leading international thinkers and followed by practitioners and policy makers since the end of the Second World War
- investigating the challenges that developing countries will need to face and that will impact how they assemble their development strategies.

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Table of contents

Tables

Figures

Boxes

Abbreviations and acronyms

5G	Fifth generation of cellular mobile communications
ADB	Asian Development Bank
AfDB	African Development Bank
AI	Artificial intelligence
AIDS	Acquired immune deficiency syndrome
AIIB	Asian Infrastructure Investment Bank
AU	African Union
BEPS	Base Erosion and Profit Shifting
BLI	Better Life Index
BRI	Belt and Road Initiative
BRICS	Brazil, Russian Federation, India, China, South Africa
BRIICS	Brazil, Russian Federation, India, Indonesia, China, South Africa
CDP	Committee for Development Policy
CGD	Center for Global Development
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DAC	Development Assistance Committee
DAG	Development Assistance Group
ECLA	Economic Commission for Latin America
ECLAC	Economic Commission for Latin America and the Caribbean
ESCAP	Economic and Social Commission for Asia and the Pacific
EU	European Union
EVI	Economic Vulnerability Index
FAO	Food and Agriculture Organization
FDI	Foreign direct investment
FSU	Former Soviet Union
G7	Group of Seven
GATT	General Agreement on Tariffs and Trade
GCC	Gulf Cooperation Council
GDP	Gross domestic product
GFC	Global financial crisis
GHG	Greenhouse gas
GNI	Gross national income
GNP	Gross national product
Gt	Gigatonne
GVCs	Global value chains
HDI	Human Development Index
HDR	Human Development Report
HIPC	Heavily indebted poor countries
HIV	Human immunodeficiency virus
IADB	Inter-American Development Bank
IBRD	International Bank for Reconstruction and Development
ICT	Information and communication technologies
IDA	International Development Association
IDS	International Development Statistics

ILO	International Labour Organization
IMF	International Monetary Fund
IoT	Internet of Things
IPoA	Istanbul Programme of Action
IT	Information technology
LDC	Least developed country
LLDCs	Landlocked developing countries
M&A	Mergers and acquisitions
MDC	More developed country
MDGs	Millennium Development Goals
MNCs	Multinational companies
NAEC	New Approaches to Economic Challenges
NDB	New Development Bank
NEDS	National economic development strategies
NGOs	Non-governmental organisations
OAU	Organisation of African Unity
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OEEC	Organisation for European Economic Co-operation
PD	Participatory development
PDIA	Problem driven iterative adaptation
PGD	Perspectives on Global Development
PPI	Producer Price Index
PPP	Purchasing power parity
PVCCI	Physical Vulnerability to Climate Change Index
R&D	Research and development
RMB	Renminbi
SAPs	Structural adjustment programmes
SDGs	Sustainable Development Goals
SEZs	Special Economic Zones
SIDS	Small Island Developing States
SME	Small and medium-sized enterprise
SO_2	Sulphur dioxide
SOE	State-owned enterprise
TB	Tuberculosis
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
UNIDO	United Nations Industrial Development Organization
US	United States
USD	United States dollar
WDR	World Development Report
WEF	World Economic Forum
WHO	World Health Organization
WPC	World Poverty Clock
WTO	World Trade Organization

Editorial

Over the last decades, progress has created unprecedented wealth and opportunities. By all available measures, the world never had it so good. And yet resentment is growing everywhere, for the benefits have not been equally shared. In the most advanced countries, struggling middle classes are growing disenchanted as the rich get richer and trust in institutions wanes. In poorer countries, the situation is different: first, there are blind spots in this global prosperity, places caught in fragility and conflict, where human suffering and poverty remain pervasive. Second, in places where the most spectacular progress in poverty reduction and human development has been achieved, persistent inequalities have been brewing dire social tensions.

Our historical, collective thinking on the development process over the past 50 to 70 years is therefore at odds with the recent development experience of many countries. We continue to think of economic development and human development as two separate things, whereas they need to be seen as one sole process. At the same time, the world has deeply changed, and much of this is due to the rise of emerging economies. The People's Republic of China, but also Brazil, India, Indonesia, South Africa and the Russian Federation, for instance, are increasingly taking a larger stake at the world's table and engaging in the development processes of others. Since 2010, the *Perspectives on Global Development* has been monitoring how development is being shaped by these changes we are experiencing.

The transformation in global economic geography is not something that happened overnight, however. It has been a long gradual process, which makes its impact on development less discernible.

Things have indeed changed – but not everything. Mainstream thinking on development put on a shiny new pair of glasses sometime after the Second World War, and while it wipes them clean once in a while, those same glasses remain on today.

Yet, we need new glasses. More specifically, the time has come to reconsider development strategies. The OECD has indeed begun rethinking strategies, for instance, through its New Approaches to Economic Challenges (NAEC) and Better Life Initiative (BLI) work streams, but we need more. We need to fully acknowledge the plurality of individual development pathways and that the multidimensional process of development requires a new vision for global co-operation.

Mario Pezzini
Director, OECD Development Centre
Special Advisor to the OECD Secretary-General on Development

Executive summary

"Rethinking Development"

Ideas about development have evolved since the Second World War, with different paradigms dominating mainstream thinking and practice at one time or another. A focus on industrialisation, planning and growth in the post-war years gave way to ideas about structural transformation in the 1960s and dependency theory in the 1970s. The "Washington Consensus" of the 1980s and 90s prioritised macroeconomic stability and promoted structural adjustment. Since the 2000s, a goal-based approach has led to the creation of the Millennium Development Goals and their successor, the Sustainable Development Goals.

While there is still no standard definition, a consensus is emerging that development has to do with real improvements in people's quality of life and well-being. But how can this be achieved? Could policies that led to development in early industrialising countries be repurposed as gold standards to follow in developing countries? The pathways of recently industrialising countries such as the People's Republic of China (hereafter "China") have not followed mainstream paradigms. This raises questions on what types of strategies countries should use to reach higher and sustainable levels of well-being.

Development strategies must respond to a new global context

A major transformation in the global economy has taken place over the past three decades. Since the 1990s, emerging economies such as China and India have grown faster than the OECD average. Combined with their large populations, these growth differences have reshaped the global macroeconomic landscape.

The emergence of this new global economic geography happened in three distinct periods:

- The opening of China, India and the former Soviet Union to world markets was felt from the 1990s.
- A second period, from 2001 to the 2008 global financial crisis, saw pervasive convergence of poor countries. Rapid urbanisation and industrialisation in Asia led to rising commodity prices.
- A recent period in the 2010s, in which convergence has temporarily slowed down is driven by the global recession and China's transformation from a manufacturing and export-led economy to one based on services and consumption, which led to a slump in commodity prices.

This transformation of economic geography had a profound effect on global development. It re-drew the map of economic relations in terms of trade, finance and migration. It boosted global growth, lifting millions out of poverty. And it changed global governance architecture.

By 2010, developing countries accounted for 42% of global merchandise trade. South-South flows made up half of that total. China has played a central role: since the global financial crisis, Chinese imports have been the driving force for South-South trade.

Emerging economies also became important providers of development finance; emerging donors increased their share of development finance other than Official Development Assistance from 6% to 13%. China's Belt and Road Initiative, a large international development strategy focused on connecting countries with China, is further deepening South-South integration.

Development strategies cannot assume that economic growth will automatically generate improvements in well-being

Economic growth in the South has not solved all problems. Absolute and relative poverty have risen in some countries, income inequality has increased in many instances, and environmental degradation has accompanied industrialisation and urbanisation.

That GDP growth has not solved all problems should not come as a surprise. Even Kuznets, who first defined GDP in 1934, had warned against using it as a measure of welfare. Yet at the Bretton Woods conference ten years later it became the main tool for measuring a country's economy and for decades GDP growth was viewed as a good proxy for more general development.

A more holistic view of development that looks at different dimensions of well-being, their distribution across a population, and their sustainability, tells a more complex story.

Globally, well-being indicators have been closely correlated with GDP per capita. However, the relationship between well-being and GDP per capita has changed over time. Two periods can be identified:

- From 1820 until 1870, countries with higher GDP per capita did not always report better well-being outcomes. During the early years of industrialisation, between the 1820s and 1870s, the rate of GDP growth for industrialised countries was around 1-1.5% per annum. Although relatively slow, GDP growth was underway, but had almost no positive impact on well-being. This "early growth paradox" was the price that early industrialisers paid for rapid urbanisation and proletarisation.
- After 1870 the correlation between GDP per capita and well-being measures became stronger, due to cheaper American food imports in Europe boosting real wages, the rise of democratic regimes, breakthroughs in medical knowledge and social policy measures. Many improvements in well-being outcomes occurred without necessarily improving in GDP per capita.

Since the 1950s, newly emerging countries which began to grow rapidly have been distinguished from the early developers by the phenomenon of "catching up" or GDP per capita convergence:

- In Latin America and Asia, well-being gains were stronger than the gains in GDP per capita (life expectancy, education), but not in all dimensions.
- In Africa, improvements in well-being achieved relatively better results than GDP per capita, but there remains a constant and growing gap with the rest of the world.

Development strategies need to respond to new trends and challenges

Beyond goals of economic growth, most national development plans being designed today do focus on social inclusiveness and environmental sustainability. However, few show awareness of mega trends and the challenges and opportunities they present.

Some challenges have been faced before: the potential slowdown of global growth, trade protectionism, the rise in inequality, population growth and weakening global governance.

However, new challenges have emerged that early industrialising countries did not face. These include new global rules, high interdependence between countries, unprecedented population booms, high mobility, risk of pandemics and climate change. They also include new technologies, spanning digitalisation, automation, artificial intelligence and biotechnology.

Development strategies for the 21st century

Emerging economies have taken and will take different development paths than early industrialisers. Indeed, in the wake of the transformation of global economic geography, new strategies include greater South-South co-operation, policies linking migration and development, and novel ways to extend social protection.

Experience suggests that strategies are a useful tool to ensure balanced growth, inclusive of social and environmental matters. Rather than forging a singular development paradigm for all countries, history teaches us that development strategies are most effective when they are multisectoral, participatory, location-specific and embedded in multilateralism, and when the necessary resources and political will are available to ensure implementation.

Chapter 1. Development strategies for the 21st century

In 2008, the weight of developing and emerging economies in the global economy tipped over the 50% mark for the first time. Since then, the Perspectives on Global Development *series has been tracking the shift in global wealth and its impact on developing countries. This chapter provides an overview of the 2019 edition, which investigates the process of such transformation of economic geography in the context of the post global financial crisis, China's gradual transformation and new sources of growth for continued shifting wealth. It also analyses development pathways beyond economic terms, exploring well-being across the developing world. It draws lessons from development paradigms over the past 70 years, showing that developing nations in the 21st century have to invent their own, original pathways to greater well-being and sustainability and that international co-operation needs to adapt to the new context.*

In 2008, the weight of economic output produced by developing countries began exceeding 50% of global output. In that same year, the OECD Development Centre began tracking the shift in global wealth and its impact on development: not only were developing countries new important actors in the global economy, but the shift was structural and here to stay. The opening up of the People's Republic of China (hereafter "China"), India and the former Soviet Union (FSU) economies created spillovers and new linkages for global labour markets and commodity exports. Many countries benefited, and seemed set on a path to economic convergence with the richest. The overall picture was positive for development.

Subsequent *Perspectives on Global Development* (PGD) reports also warned, however, about the pitfalls of the transformation in economic geography. These reports put the challenges of fostering social cohesion, adapting industrial policies, boosting productivity and leveraging migration for development in the light of new international realities. The ripples of the global financial and the refugee crises, for example, created or exacerbated social stress in many countries around the world. This tested the strength of the new global engines of growth, and support for multilateralism and globalisation. To make the most of such transformation, developing countries needed to reinforce their employment and social protection systems, invest in soft and hard infrastructure, diversify and generate linkages with other parts of their economy, develop skills and integrate migration into their development strategies.

How much longer can the dividends of the transformation of economic geography benefit development? Growth in China has significantly slowed down. The country has acknowledged that its economic model must adapt to new circumstances, taking on a more inclusive and social approach (World Bank, 2013[1]). The slowdown of global trade since the global financial crisis (GFC) of 2008-09 and the rise of trade protectionism have changed the narrative on globalisation. Will globalisation continue, and in which form? In addition, the emergence of technologies such as digitalisation and automation, as well as trends such as the backlash against migration, have brought new global challenges and opportunities. What does this imply for the rest of the world, particularly for the poorest countries that are struggling and not necessarily on a converging path with richer economies?

The *Perspectives on Global Development 2019* report sets out to answer these questions by first investigating the current context of the new economic geography, what China's transformation has meant for development perspectives and new factors that may push the change in economic geography process forward. This also includes examining how the transformation of economic geography has affected countries beyond economic terms, exploring well-being across the developing world. It also draws lessons from development paradigms that have demanded action over the past 70 years to adequately cover the diversity and complexity of development paths actually taken by countries. Confronted with novel mixes of economic, social and environmental challenges, developing nations in the 21st century have no choice but to invent their own, original pathways to well-being and sustainability, an essential element of which is the designing process and content of development strategies. Rethinking international co-operation beyond financial aid and fostering more effective exchanges of social and human capital have therefore become necessary.

The report carries four main messages:

- The global shift in wealth will continue despite the changing role of China and lower levels of global liquidity, buoyed by growth in India and other new

low-cost labour manufacturing hubs and stronger links between developing countries. This new era calls for new forms and sources of finance, trade and knowledge sharing.

- There is a better understanding about the limitations of gross domestic product (GDP) per capita as an indicator of development. Economic growth is no longer quality growth. Compared to early industrialisers, developing countries today are growing faster, but improvements in well-being outcomes have been much slower for the same rate of economic growth. Economic growth must therefore be matched by investments and policy efforts that improve well-being outcomes and ensure sustainability.
- The development experience is different today, as countries are confronted with challenges like never before. The new development context has new rules, new environmental constraints, new technologies and more competition. Development strategies need to adapt to these changes, and reflect a country's context, endowments and institutions. Rather than following a singular paradigm, development strategies should be context-specific, and based on the principles of being participatory, place-based, multisectoral and multilateral.
- Facing the complexity of today's challenges implies a plurality of development pathways. Development paradigms have broadened significantly over time to include many new elements beyond a pure focus on economic growth. However, they continue to promote an approach that envisions a singular pathway to development for all countries, embodied in the idea that development starts with financial capital.

New currents for shifting wealth

Since the 1990s, China and India have experienced a considerable growth lead over the OECD average. Along with several other large emerging economies, they began reshaping the global macroeconomic landscape. Combined with large populations, these growth differences have translated into a new world economy. Countries with the largest economic size are no longer also the richest in terms of GDP per capita. China has become the world's largest economy with GDP measured in purchasing power parity (PPP) terms and the second largest behind the United States when measured in nominal values. In 2008, the weight of developing and emerging economies in the global economy tipped over the 50% mark (expressed in PPPs) for the first time (Figure 1.1).

Over time, shifting wealth has been redefined, both by the effects of the GFC and the repositioning of emerging economies, particularly China and India. The emergence of this new global economic geography is best explained in three distinct periods of growth performance (Figure 1.2).

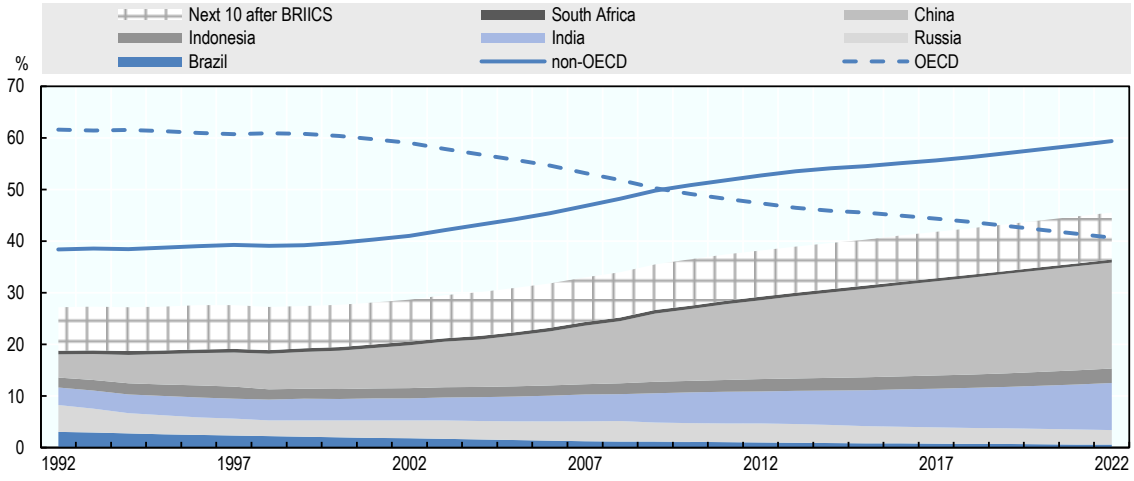
- 1990-2000: An initial "opening up" period, initiated by China's cautious market reforms in agriculture and foreign investment in 1978, India's gradual economic liberalisation in 1991 and the dissolution of the FSU in the same year. With China embarking on even more robust privatisation reforms in the late 1980s, the initial opening of China, India and the FSU to world markets was really felt from the 1990s onwards (Pomfret, 1996[2]).
- 2001-08: A second period, from the financial crisis, which saw pervasive convergence of poor countries largely due to increasingly China-centric growth.

Rapid urbanisation and industrialisation in Asia, in particular, led to rising demand and price for fossil fuels and industrial metals.

- 2009-present: A recent period during the 2010s, in which shifting wealth has shown signs of a temporary slowdown. This has been driven by both the global recession in the aftermath of the GFC and China's economic transformation from a manufacturing and export-led economy to one based on services and domestic consumption. As Figure 1.3 shows, however, convergence has still occurred in the 2010s in many poorer countries towards the average of the G7 countries.

Figure 1.1. Shifting weight in global economic activity will continue, but at a slower pace

Share in global GDP (in percentage, 1992-2022)



Note: The next ten largest economies after Brazil, the Russian Federation (hereafter "Russia"), India, Indonesia, China, South Africa (BRIICS) and the OECD are: Saudi Arabia, Iran, Viet Nam, Nigeria, Thailand, Egypt, Argentina, Pakistan, Malaysia and the Philippines. Projections start in 2017.
Source: IMF (2017[3]), *World Economic Outlook 2017 (database)*, GDP based on PPP share of world total, https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

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Figure 1.2. The three phases of shifting wealth

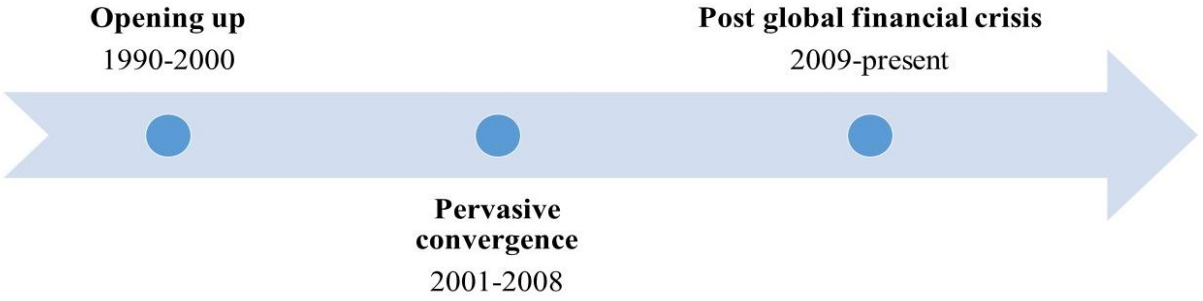
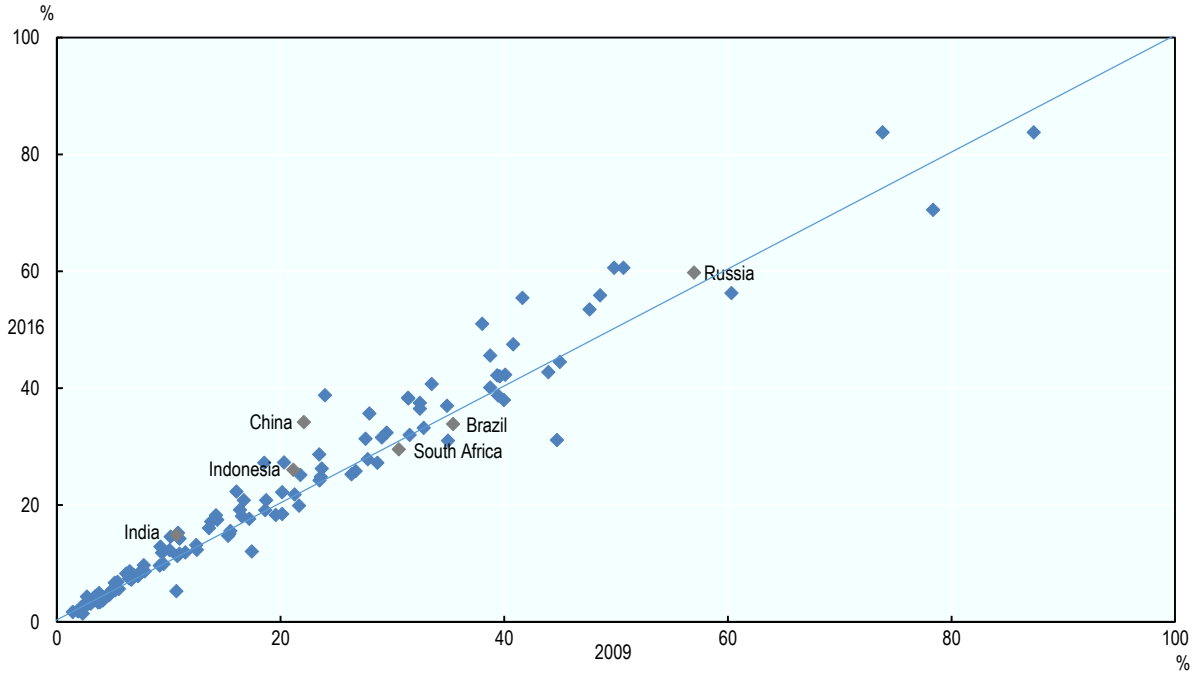


Figure 1.3. Convergence slowed post-GFC

GDP per capita relative to average GDP in the G7 (2009-16)



Note: GDP per capita of developing countries relative to the G7 average for the years 2009 compared to 2016. The 45-degree line represents stagnation of per capita income in relative terms; the diamonds above the line indicate relative convergence of developing countries; those below the line are falling behind.
Source: IMF (2017[3]), *World Economic Outlook 2017 (database)*, GDP per capita, constant prices (PPP, 2011 international dollars), https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

StatLink https://doi.org/10.1787/888933856530

Both the GFC and China's transition implied a slump in oil and metals prices. This burdened commodity exporters, but also stimulated growth in commodity-importing countries. But this period is also highlighted by persistent productivity differential between developed and developing countries, despite economic growth (OECD, 2014[4]). As a consequence, income differentials between the two groups of countries remain large. International migration, for example, continues to flow towards the richest countries of the world (OECD, 2016[5]).

Shifting wealth has had a profound effect on global development. First, it re-drew the map of economic relations in terms of trade, financial flows and international migration. Second, it boosted global growth, lifting millions out of poverty. Third, it changed global governance, giving developing countries new roles, but also requiring them to craft new strategies. The rising living standards that came with globalisation supported the view of trade as a key engine of economic growth, for both the global North and South.

Such transformation of global economic geography is bound to continue reshaping and driving development in poorer countries for the foreseeable future, buoyed by the rise of India and other low labour cost manufacturing hubs (Deloitte Global, 2016[6]) as well as the growth of South-South linkages. Indeed, the dynamism of South-South economic ties has been an essential element of the new economic geography. By 2010, developing

countries accounted for around 42% of global merchandise trade and South-South flows made up about half of that total. The poorest countries have benefited as well, as trade between least developing countries and the global South has doubled in the share of total exports from the South since 1995. At the same time, large emerging countries became important providers of development finance.

Throughout this process, China has played a central role. Since the GFC, Chinese imports have been the driving force for South-South trade. Furthermore, China's Belt and Road Initiative is deepening South-South integration.

However, despite the gains made with the transformation of economic geography, economic growth in the South has not solved all problems. First, the commodity boom did not resolve domestic economic and productivity issues. Second, development is inherently more complex and multidimensional than income can summarise alone. Some old problems have persisted, and new ones have emerged.

Economic growth has not solved all development issues

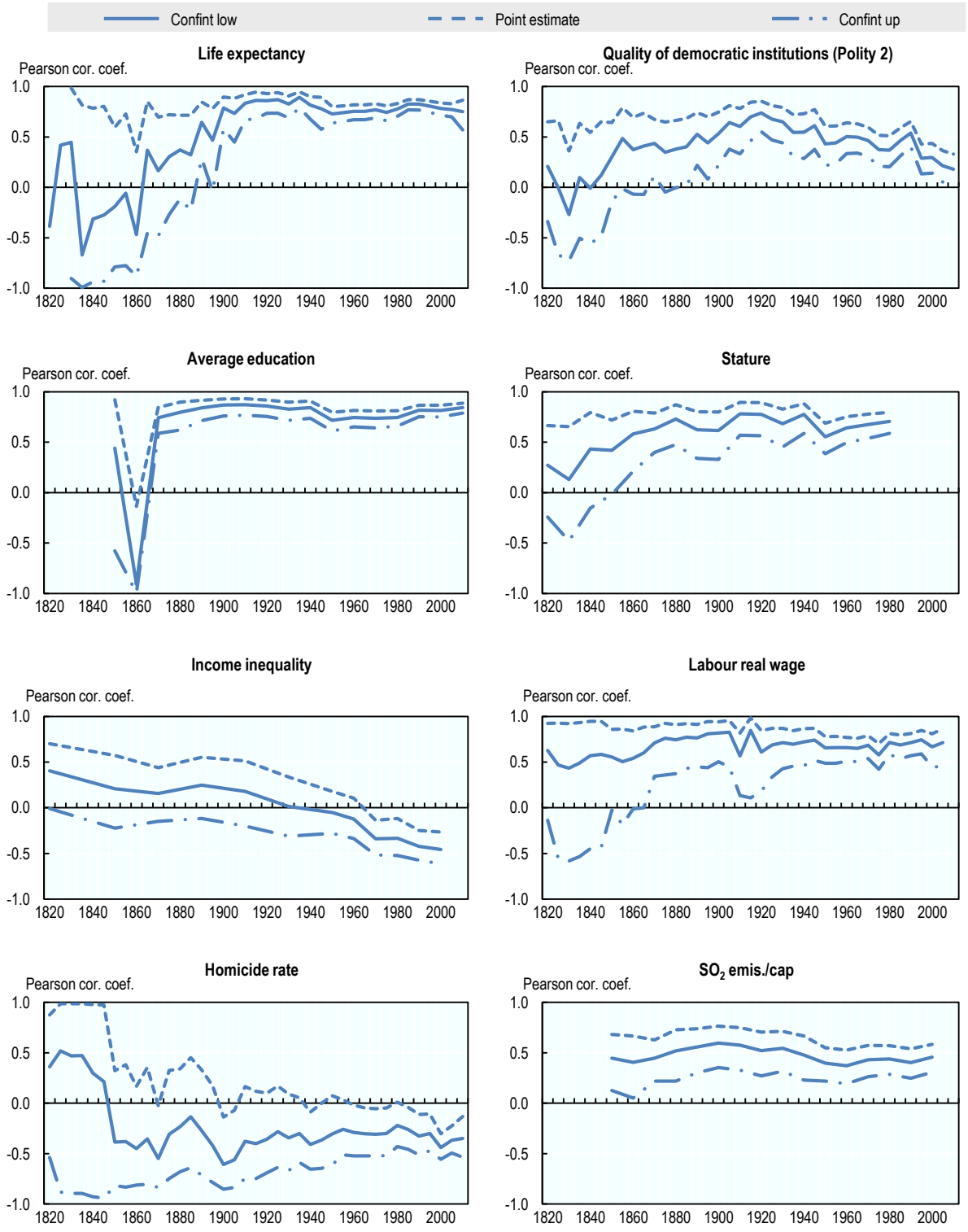
A more holistic side of development that considers material conditions and quality of life tells a more complex story, however. Absolute poverty, for instance, continues to rise in some countries, despite unprecedented rates of economic growth (World Bank, 2018[7]), and inequality continues to worsen in many countries (Alvaredo et al., 2017[8]). Less than half the world's population has access to any social protection (ILO, 2017[9]), with coverage particularly low in Africa and Asia. At least half of the world's population also do not have access to essential health services, and each year, large numbers of households are being pushed into poverty because they must pay for health care out of their own pockets (WHO and World Bank, 2017[10]). Moreover, according to the latest comparable data produced by the ILO (2018[11]), 61% of global employment is informal employment, equating to more than two billion people worldwide. Development is inherently complex and the combination of the transformation of economic geography, economic convergence and the dynamic movement of well-being factors adds further complications. It has blurred a previously clearer line between a "developed" and a "developing" country.

Is the unequal pattern of economic and non-economic outcomes a natural part of the development process? What lessons can be drawn from historical experience? Well-being indicators have historically been closely correlated with GDP per capita. Since the Industrial Revolution, countries with higher per capita GDP have experienced higher education, real wages, average height and life expectancy outcomes, as well as more democratic institutions.

The strong correlation between well-being and GDP per capita has not always been the case, however (Figure 1.4).[1] In the early and mid-decades of the 19th century, countries with higher GDP per capita did not necessarily report better well-being outcomes. Then, starting in the late 19th century, the correlation between GDP per capita and well-being measures became stronger, and eventually well-being even began outpacing GDP per capita growth. Policies played a role in this, including the availability of cheaper American foodstuffs in Europe, the rise of democratic regimes, breakthroughs in medical knowledge and new social policy measures.

Figure 1.4. A link between GDP pc and some dimensions of well-being emerged after 1870

Correlation between GDP per capita and various well-being dimensions (1820-2010)



Note: Figures show Pearson correlation coefficient between various well-being indicators and logged GDP per capita per five-year period, as well as 80% confidence intervals; pc = per capita.

Source: Authors' calculations based on Clio-Infra (2017[12]), Clio-Infra Database (various indicators), http://www.clio-infra.eu.

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In today's context, the relationship between GDP per capita and well-being has again changed. Since the 1950s, later developers and emerging economies have been distinguished from earlier developers by the rate of their economic growth and the phenomenon of "catching up" or GDP per capita convergence. While the early industrialisers grew at rates of 1-1.5% during the periods where well-being outcomes took off dramatically, emerging economies have been growing above 5%. Figure 1.5 charts changes in well-being unexplained by GDP per capita to investigate the relationship between per capita GDP and well-being.[2] In general, there is a delinking between well-being outcomes and GDP per capita over time, but unlike convergence on economic growth, where emerging economies are growing much faster than the early industrialisers, emerging economies are not outperforming the richest countries in the world in improvements in well-being. In other words, there does not appear to be a "catch-up" with respect to well-being outcomes. Their fast growth has yielded different results across regions, and not necessarily improvements in well-being to the same extent as the early industrialisers:

- The long-term trend of increasing well-being is relatively robust in Latin America and Asia for some outcomes. Well-being gains since the 1940s and 1950s, for example, have been generally stronger than the gains in GDP per capita, for life expectancy and years of education for example, but not all outcomes. Moreover, low-income countries in Latin America have relatively struggled to gain more in terms of well-being, relative to GDP per capita.

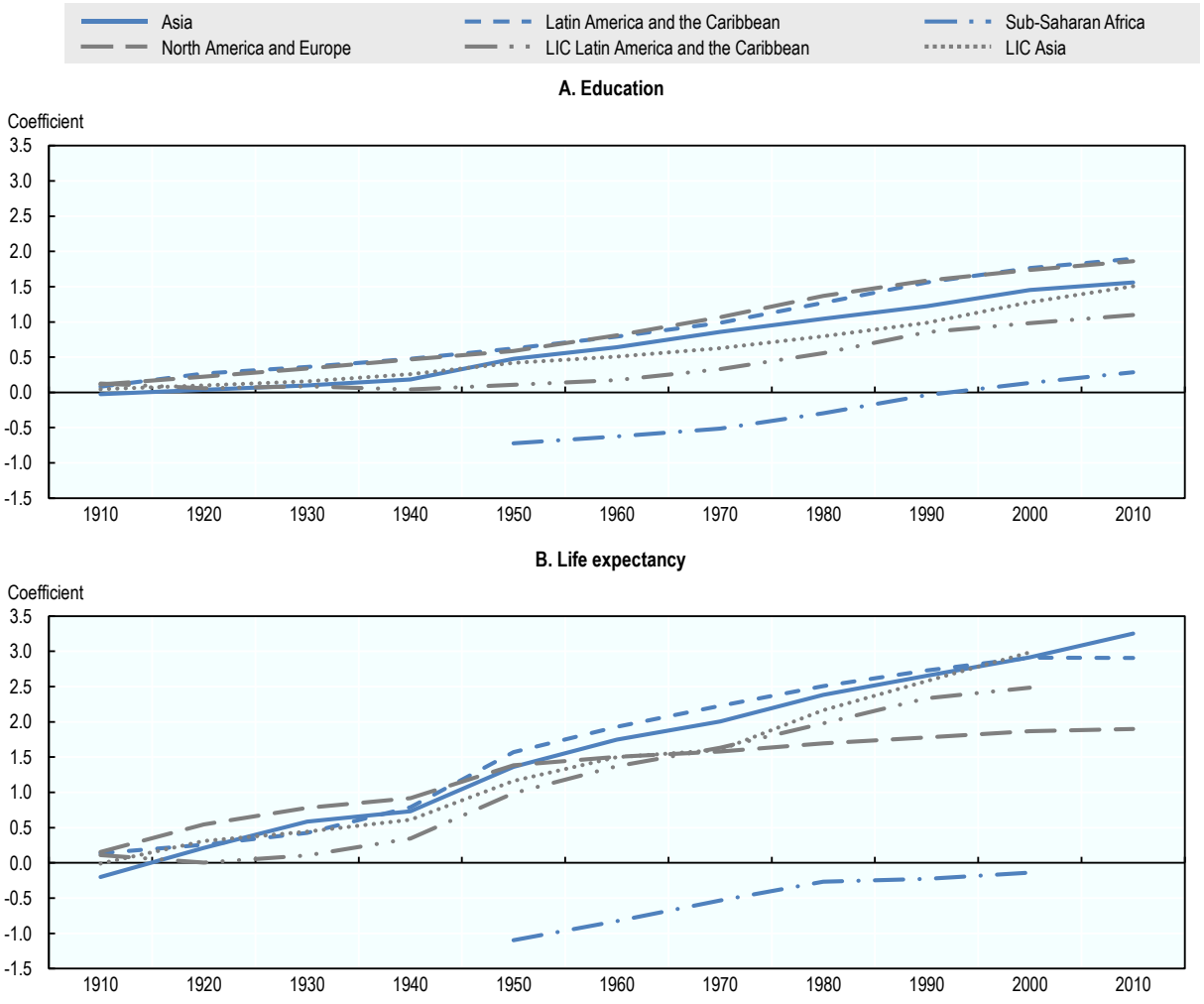
- In sub-Saharan Africa, improvements in well-being since the 1950s achieved relatively better results than GDP per capita, but they are also characterised by a constant and sometimes growing gap with the rest of the world. Compared to achievements in the rest of the world, Africa could gain more in terms of well-being, relative to its growth in GDP per capita.

This analysis highlights several stark differences between the world of early industrialisers, and the world emerging economies now inhabit. Economic growth, albeit slower, was of greater quality for early industrialisers than it has been for many emerging countries in recent years. Indeed, the quality of economic growth in developing countries has been inadequate, and not emphasised enough (Haddad, Kato and Meisel, 2015[13]). On the other hand, in developing countries where policies were pursued to adequately solve well-being issues, reaching high levels of well-being outcomes came more quickly than it did for early industrialisers (Figure 1.6).

The persistent gap in productivity, extreme poverty and well-being outcomes between developed and developing countries suggests that economic growth has not been enough to solve all issues. Development strategies need to encompass a broader picture of development, rather than remain on a narrow focus on economic growth.

Figure 1.5. Well-being outcomes are outpacing GDP, but not to the extent expected

Change in various well-being variables not explained by GDP per capita (1910-2010)



Note: LIC stands for low-income country, as per the World Bank's categorisation in 2018. A value of zero implies that changes in well-being outcomes are entirely explained by changes in GDP per capita.
Source: Authors' calculations based on Clio-Infra (2017[12]), *Clio Infra (database)*, Average years of education, life expectancy at birth (total), http://www.clio-infra.eu (accessed in July 2018).

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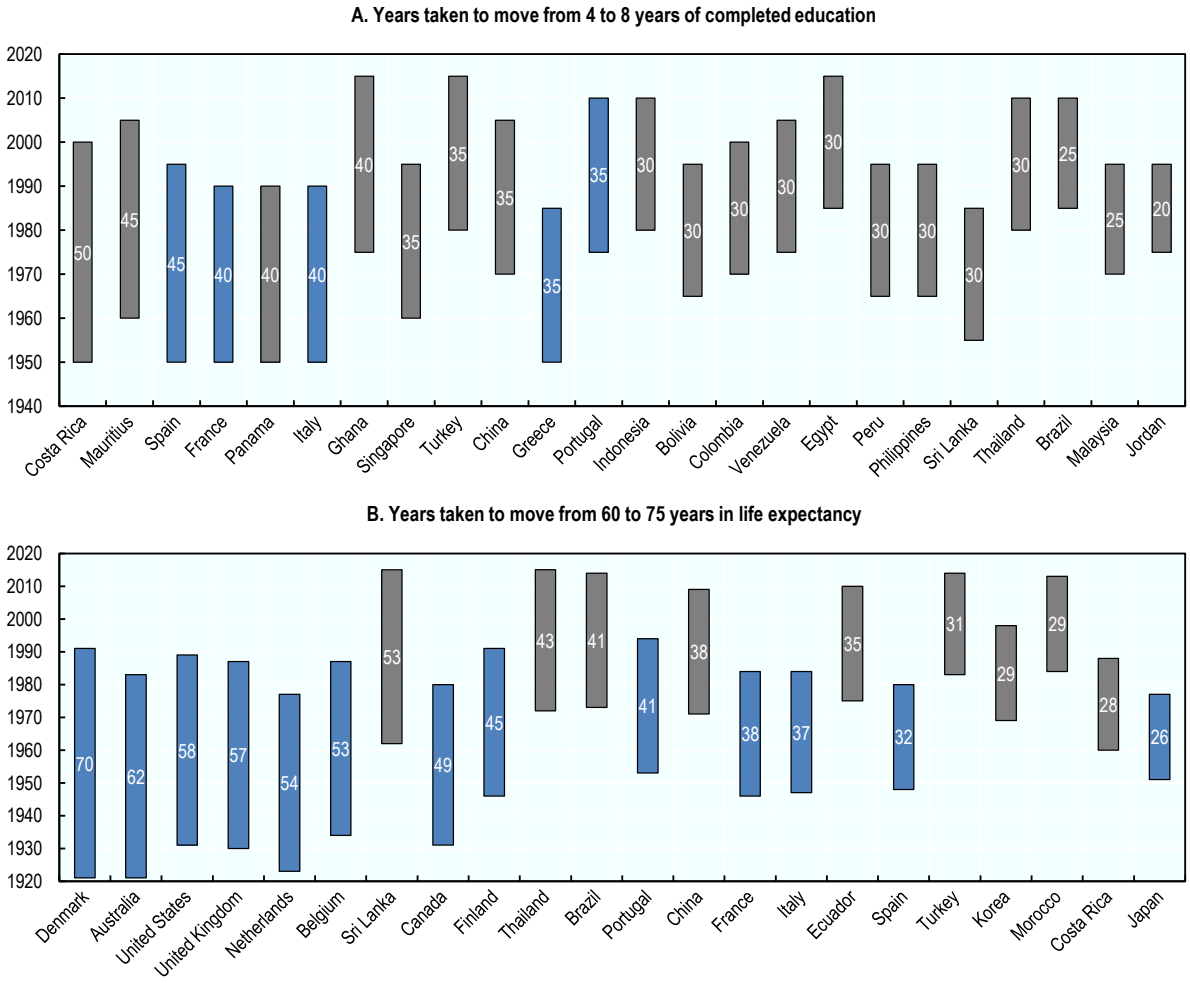
Figure 1.6. It has taken less time for new emerging economies to reach the same levels of well-being as developed economies



Note: Early industrialisers highlighted in blue, emerging economies in grey.
Source: Authors' calculations based on Clio-Infra (2017[12]), *Clio Infra (database)*, Average years of education, life expectancy at birth (total), http://www.clio-infra.eu (accessed in July 2018).

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Thinking on development strategies has broadened, but financial capital transfers remain the starting point

Development economics, and more generally development thinking, has changed significantly since it was conceived at the outset of the Second World War. In fact, development has not turned out the way it was historically envisioned, and there have been, and continue to be, paradoxes confronting mainstream development thinking. For instance, while the middle-class has thrived in some economies, extreme poverty continues to be a problem. While the adoption of some technologies has been quick in some developing countries, there are still wide productivity gaps between several developing and developed economies. And economic growth has not reduced informal employment, nor reduced international migration – in fact, international migration has even increased along with it.

One element of the debate has remained contentious: could policies that led to successful and sustainable development in the early industrialising countries be repurposed as gold standards to follow in developing countries? Conversely, are the paths of developing countries sufficiently different to warrant alternative approaches?

Development today is often associated with GDP, but that idea is relatively modern. Although Simon Kuznets had defined GDP in 1934, it only became the main tool for measuring a country's economy at the Bretton Woods conference ten years later. Using GDP as a measure of development was sensible, but it had limitations as a measure of human welfare. It was an adequate measure if the goal of economic development was simply to provide the means to improve living standards. GDP growth continues to be viewed as a good proxy for more general development in a country.

But even Kuznets, at the time of his report, had warned against using GDP as a measure of welfare. In the years following the Second World War, material wealth would not unquestionably translate into better health care, education and housing for a country's residents. In short, GDP did not capture individual well-being.

Development thinking has indeed progressively expanded beyond a focus on GDP growth. In fact, broad strokes on development thinking can be deciphered, specifically on what was perceived to be the fundamental factor in kick-starting development:

- Industrialisation, growth and modernisation (1944-1961)
- Structural transformation (1960s)
- More independence in developing economies (1970s)
- Macroeconomic stability: The Washington Consensus (1980s-2000s)
- Goal-based development (2000s-present).

Three overarching discourses have influenced development thinking during these decades: the term and objectives of development, the role of states and markets, and the importance of the international (as opposed to the domestic) environment. A consensus is indeed emerging that development has to do with real improvements in people's quality of life and their level of satisfaction.

Despite the broadening approach to development, an underlying assumption that has persisted over time is that development starts with input of financial capital. This ignores the fact that the absorptive capacity of financial resources in developing countries is limited. But it also had important ramifications on how development strategies were interpreted and carried out. With financial capital as the starting point, economic growth is deemed necessary, often sufficient and becomes the focus of each strategy, translating to an assumption that all countries evolve through a similar path, tracked by GDP per capita. In turn, this implies that lessons learned from the past can be mimicked by others.

Development strategies have applied broad assumptions and simplifications to harness resources, scale interventions and streamline policy, also with implications for a one-size-fits-all approach to development. It reinforced a silo approach to policy and sectors in developing countries and a dichotomous donor vs. recipient arrangement in international co-operation, rather than harnessing a more comprehensive international co-operation for knowledge-sharing. This has become all too important in the context of a rapidly changing world, where technology, demography and growing doubt of the benefits of globalisation are turning many assumptions on their head.

The current global context challenges countries like never before

Rather than trying to mimic past development paths, countries need to adapt strategies that reflect their own endowments, cultures and institutions. They also need to navigate many new challenges and a complex international landscape that previously industrialising countries did not face. And they must do this within the context of balancing economic, social and environmental pathways.

Some challenges have remained relatively similar. These include the potential slowdown of global growth, increased trade protectionism, rise in inequality, population growth and weakening global governance. For many of these challenges, development thinkers and practitioners understand the potential solutions and risks based on past lessons, and many of these have been integrated into national development and donor strategies.

However, new challenges have emerged, for which past lessons do not offer clear solutions. These include new global rules and interdependence between countries, unprecedented population booms with high mobility, risk of pandemics, climate change and environmental degradation. They also include new technologies, including digitalisation, automation, artificial intelligence and biotechnology, which will affect the job creation potential of growth, the speed and breadth of transition towards a low-carbon economy and the ability to mitigate against and adapt to climate change. The way countries face such challenges will further diversify development paths.

Transitioning towards a low-carbon economic model has, for instance, become critical. From 1750 to 2014, some 405 Gt of carbon (1.484 Gt of CO_2e) were released to the atmosphere from burning fossil fuels and producing cement. Half of these cumulated emissions have occurred since 1990 (Le Quéré et al., 2015[14]). In 2014, global CO_2 emissions totalled 36 Gt out of which 24 Gt were emitted by non-OECD countries (World Bank, 2018[15]). Together with the historical footprint of OECD countries, the world has now reached a point where ongoing carbon-led growth in the range of 36 Gt/year will make emission reductions within the boundaries set by the 2015 Paris Agreement increasingly difficult.

The transformation of global economic geography is creating opportunities to do things differently

Past national experiences suggest that supporting balanced, comprehensive and inclusive development requires a national development strategy. Beyond goals of economic growth, most national development plans increasingly focus on aspects of inclusiveness and environmental sustainability. However, their implementation continues to drag. Countries rarely develop how they will achieve their stated objectives. A review of several national development plans suggests that few countries demonstrate awareness of the mega trends and the challenges and opportunities they can leverage from them. Neither do these plans explicitly address implementation and resourcing. Several reasons explain this, including governmental capacity, financial constraints and the difficulties of navigating the political economy of reform.

The future tailwinds of shifting wealth, however, buoyed by growth in India, new sources of low-cost manufacturing and South-South linkages, will provide an opportunity to reform and design novel strategies. Several other factors will positively support implementation of development plans. These include favourable demography, continued urbanisation, lower commodity prices and rising wages in China. Indeed, in the wake of the transformation of economic geography, new forms of strategies are emerging, such as

better outreach of social protection, linking migration to development outcomes, investing in secondary cities and integrating the informal economy into development plans. Transforming the challenges of the new economic geography into opportunities will remain at the heart of development strategies for the 21st century.

Continuous economic growth, for instance, does not necessarily mean more production-based emissions. Reductions in carbon emissions during periods of economic growth have been achieved not only by technological change and efficiency gains, but also through fuel switching from carbon-intensive sources (from coal to oil to gas) and increasing use of renewables. In fact, while output in China more than tripled and total emissions increased by 187% between 2000 and 2014, energy intensity dropped by 36% and carbon intensity by 30% during the same period, and this trend will likely continue. Chinese production may strongly be decarbonised in the near future, as the Chinese government continues to push for innovation in its renewable energy sector (IEA, 2017[16]).

Development strategies should be context-specific, but based on a common set of principles

There is no standard definition of development and no single paradigm can sum up how best to juggle the objectives of development, the role of the state and the market, and the importance of the international vs. the domestic. A consensus is emerging that development has to do with real improvements in people's quality of life, and how satisfied they are with it. Over 70 years, economic and societal objectives have come and gone. Most have now been summarised in the 17 Sustainable Development Goals (SDGs) to end poverty, protect the planet, and ensure peace and prosperity for all, yet institutions and policies in countries as well as donors today are ill-equipped to face the challenges required to meet the objectives set out by the SDGs (OECD, 2018[17]). There is a need for donors to align behind national country strategies, and support their implementation beyond official development assistance (OECD, 2018[18]).

Today's theorists, for good reasons, also think more about addressing environmental and climate issues. They have the advantage of building on a vast array of earlier development thinking. They can come up with more holistic and realistic approaches, adapting them to local conditions and needs.

What works best in development – state-led vs. market-led, and inward vs. outward-orientation – is better known today. The capability to switch between possible strategies seems to be a key feature of developed market economies. It allows for swift action, and co-ordination among governments, particularly when an economic crisis looms. Moreover, some of the ultra-liberal arguments in favour of free markets and free trade have lost their traction. In a borderless world, regulatory frameworks and rule of law do not operate uniformly.

Nevertheless, each shift of development thinking brought lessons learned on what works and what does not. Foreign aid and capital are important, but not enough, since there needs to be sequencing and strategy on how best to deploy them. Unbalanced growth can work, but too much emphasis on one sector can backfire if the linkages between sectors are poor. Macro-stability is fundamental, but again it is not enough in itself: incentives for the private sector, ensuring better end outcomes for the poorest and enhanced roles in global value chains are also essential.

The rules of the game have changed. Development thinking today takes place in a much broader institutional context. What was once an exclusive circle of Western aid agencies, think tanks, academic institutions and international organisations, has now become a more global effort. It includes state and non-state actors and experts from the developing world. This expanded group has made available an increased amount of development data and information. It has made the discourse surrounding development topics not only more complex, but also more contested. Consensualisation of generated development knowledge has therefore assumed even greater importance.

Today's global context also includes institutions like the World Trade Organization, the United Nations Climate Change Conference and the Conference of the Parties, and the World Intellectual Property Organization. Although world tax or migration governance organisations do not exist, international co-operation in these domains is increasing. Examples include the Base Erosion and Profit Shifting multilateral instrument and the Global Compact for Safe, Orderly and Regular Migration. These provide new benefits and constraints within which countries need to find their path. It also occurs within new challenges with respect to, for example, automation, digitalisation and climate change.

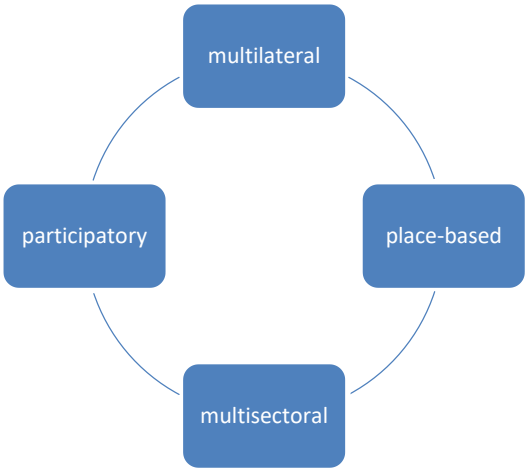
Whatever worked a century ago will at the very least need to be adapted towards new strategies and new forms of co-operation. For example, while earlier industrialising countries relied on building a domestic supply chain, which took decades to develop, countries today are able to join global supply chains, benefiting from various elements of offshored production (Baldwin, 2011[19]).

Perhaps a single global development paradigm can therefore not be generalised, but principles on which to create a positive path for countries can nevertheless be deciphered. Good practice suggests that strategies should be multisectoral, participatory, location-specific and within the context of multilateralism (Figure 1.7). They should be designed and implemented holistically, ready to face the widening complexity of today's challenges. They should involve a broad range of actors, drawing on a variety of knowledge and viewpoints. They should be place-based, reflecting differences in both rural and urban locations, as well as the whole spectrum of a country's territory. And they should be discussed and shared within a multilateral framework, underlying the need for new forms of co-operation, knowledge-sharing and protection of global public goods.

The Marshall Plan provided an important lesson, only appreciated well after its time: development occurs in a context of international co-operation. Indeed, after the Marshall Plan and the Organisation for European Economic Co-operation were dissolved, the OECD was created to preserve the lessons learned. The idea behind the Marshall Plan shifted from a financial aid instrument towards an international knowledge-sharing platform.

Mutual learning remains a key component for development, particularly as countries experiment with new strategies. Careful experimentation with different development strategies and guided improvisation have been key in today's emerging economies. Development policy and projects are essentially policy experiments in which governments have bounded knowledge and difficulties anticipating the outcomes of their actions. Instead, government officials need to zigzag to reach desirable outputs and outcomes via a series of reviewing, learning and adjustment cycles. Occasionally, as Albert Hirschman pointed out, a "hiding hand" helps to "beneficially hide difficulties" from them. In addition, the policy-making process needs to be more participatory to overcome such bounded knowledge.

Figure 1.7. Core elements of a development strategy



The rest of the report discusses the issues detailed above in greater detail. Chapter 2 updates the analysis on shifting wealth, accounting for the ongoing transformation in China and emphasising the growing links between developing countries. Chapter 3 discusses the importance of looking beyond GDP per capita as an indicator of development. It looks back in time to compare how well-being and GDP per capita evolved in early industrialising countries, as well as in newly emerging ones. Given the recent mixed experience in developing countries, Chapter 3 provides a historical view of the paradigms that have shaped the approaches of policy makers and donors on development, with the goal of showing that no single paradigm can work in all countries. Finally, Chapter 4 describes today's development context, amid the challenges countries must manoeuvre around and ultimately include in their development strategies.

Notes

[1] The global sample includes up to 159 countries, but varies by year and indicator depending on coverage.

[2] This is done by regressing the well-being measures (standardised to have zero mean and unit standard deviation for comparability) on the logarithm of per capita GDP and a set of time dummies. Time dummies capture the additional well-being compared to 1910 (or the earliest year of observation) that is not explained by the level of per capita GDP in that period.

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Chapter 2. New currents for shifting wealth

The 2010 Perspectives on Global Development *(PDG) report argued that global wealth in the world had shifted, changing the course of development for lower- and middle-income countries. This chapter syntheses findings of the previous PGD editions and regional economic outlooks. It updates the trend towards the transformation of economic geography and economic convergence, focusing on its sustainability, in light of the fact that the People's Republic of China (hereafter "China") has begun rebalancing its economy in the context of its 2030 strategy. In addition, it takes stock of developments with respect to economic growth and the roots of the shifting wealth phenomenon. It further assesses the domestic and international drivers behind these developments.*

Chapter 2.
New currents for shifting wealth

Over the last three decades, the rebalancing of the global economy, spurred by the faster growth of the developing world, has gone through various phases

1990-2000
Opening up
→
2001-2008
Pervasive convergence
→
2009 - present
Post global financial crisis

Climbing the ladder

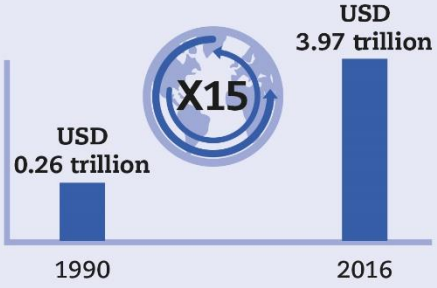
Since 1990, **54** developing countries climbed into a higher World Bank income classification

Extreme poverty is falling

The world share of people living in extreme poverty outside of China fell from **29% to 12%** between 1981 – 2013

The shift in global wealth will continue, spurred by South-South linkages, new engines of growth and sources of development finance

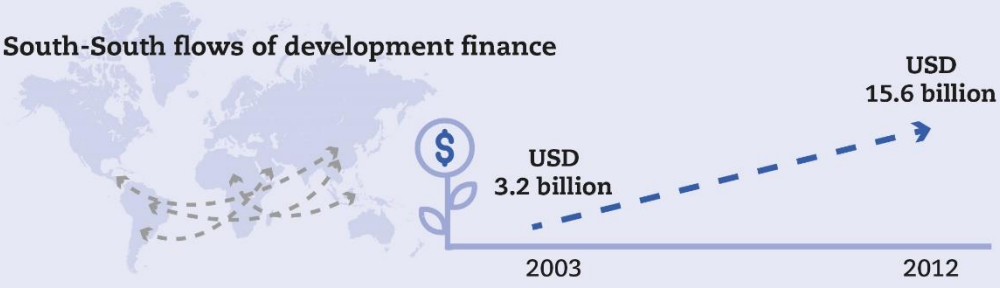
South-South trade



The China-India twin turbo

Contribution to global GDP growth

South-South flows of development finance



Since its inception in 2010, the OECD Development Centre's *Perspectives on Global Development* series has investigated the increasing economic weight of developing countries in the world economy, a phenomenon referred to as "shifting wealth" (OECD, 2010[1]) (Box 2.1).

The global macroeconomic effects emanating from shifting wealth run deep throughout the developing world and crucially determine how poor countries deal with reducing poverty. Consequently, the transformation of economic geography has redefined development strategies and partners for poor countries. It has changed output linkages between emerging and developing countries, wages and terms of trade, and not least the geography of development finance.

With appropriate strategies, low-income developing countries could grow faster, lifted by the weighty fast-growing emerging economies. The initial opening of the People's Republic of China (hereafter "China") and India has hurt some middle-income countries in the short term. However, the sustained growth of these two emerging economic giants improves the long-term prospects of both low- and middle-income countries.

This sixth edition of the series, Rethinking Development Strategies, picks up on the shifting wealth theme by examining the rise of emerging economies and the implications for international relations. It pays particular attention to China's evolving role.

The following chapter contains three main messages:

- Since the 1990s, shifting wealth has evolved in three distinct phases: an opening up phase (1990-2000), a phase of pervasive convergence (2001-08), and a post global financial crisis (GFC) phase (2009-present).
- Although shifting wealth has slowed down since the GFC, largely due to China's domestic economic transformation, economic convergence continues.
- This continuation is buoyed by growth in India, new low-cost labour manufacturing hubs and strong South-South linkages between developing economies.

Box 2.1. Earlier editions of the PGD examining shifting wealth

The five earlier editions of the series each examined shifting wealth from a particular policy focus:

- The inaugural 2010 PGD, introduced the theme of Shifting Wealth, describing the new geography of development finance and the economic gravity shift towards the East and South, focusing on the increasing potential of South-South linkages.
- The 2012 edition, *Social Cohesion in a Shifting World*, examined social cohesion in fast-growing developing countries and provided policy makers with recommendations for ways to strengthen it.
- The 2013 edition, *Industrial Policies in a Changing World*, shed light on the renewed interest in industrial policies in developing countries.
- The 2014 edition, *Boosting Productivity to Meet the Middle-Income Challenge*, argued that for sustained convergence developing countries needed to boost competitiveness and narrow their significant productivity gap with advanced economies.

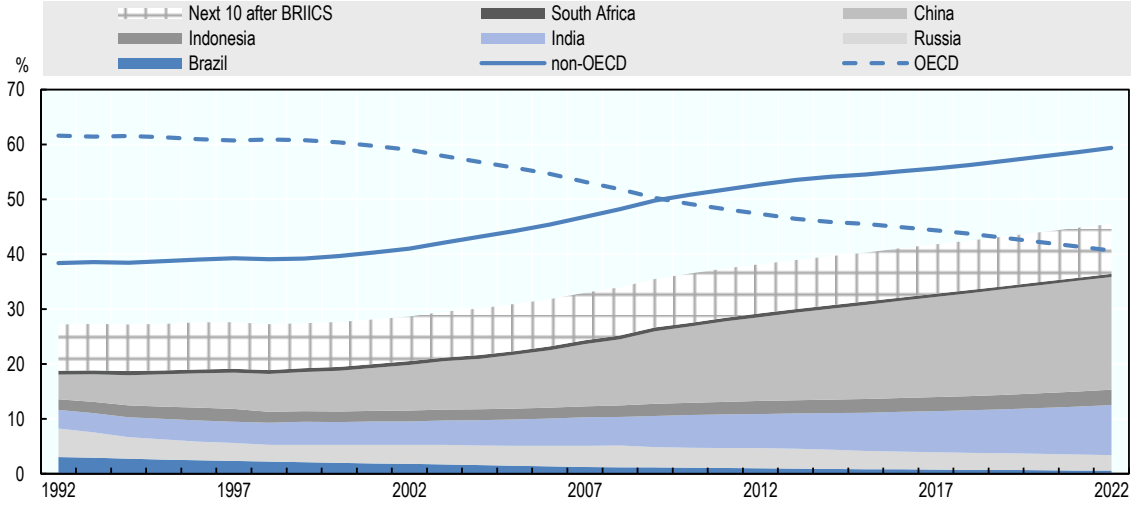
- The 2017 edition, *International Migration in a Shifting World*, described the evolution of international migration globally. It examined how the transformation of economic geography has impacted migration flows, focusing on the role of migration and non-migration policies in developing countries of origin and destination. It argued for the need for better national and global governance on migration policy to maximise the impact of migration on development.

Three phases of shifting wealth

Since the 1990s, China and India have grown much faster than OECD economies. Several large emerging economies began shaping the global macroeconomic landscape. Combined with very large populations, these growth differences have translated into a new world economy: the countries with the largest economic size are no longer also the richest countries in terms of gross domestic product (GDP) per capita. China has become the world's largest economy with GDP measured in purchasing power parity (PPP) terms and the second largest behind the United States when measured in nominal values. The year 2008 was a watershed in global development as the weight of developing and emerging economies in the global economy tipped over the 50% mark (expressed in PPPs) for the first time (Figure 2.1).

Figure 2.1. Shifting weight in global economic activity is likely to continue, but at a slower pace, mostly because of the slowdown in China

Share in global GDP (in percentage, 1992-2022)



Note: The next ten largest economies after Brazil, the Russian Federation (hereafter "Russia"), India, Indonesia, China, South Africa (BRIICS) and the OECD are: Saudi Arabia, Iran, Viet Nam, Nigeria, Thailand, Egypt, Argentina, Pakistan, Malaysia and the Philippines. Projections start in 2017.
Source: IMF (2017[2]), *World Economic Outlook 2017 (database),* GDP based on PPP share of world total, https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

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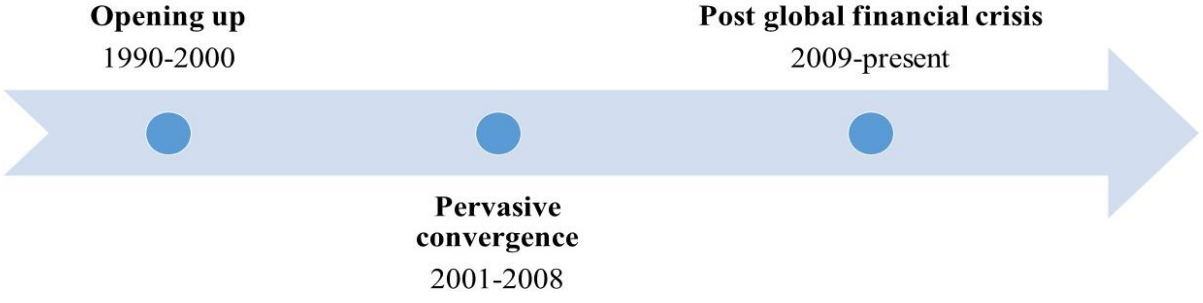
Three different periods of shifting wealth can be distinguished: an initial opening up phase, a convergence and spillover period, and a "new normal" or post-crisis phase (Figure 2.2). Each of these three phases differs importantly. Consequently, the entire globalisation period since 1990 may entail structural breaks that are often ignored. Distinguishing three phases of shifting wealth provides a richer menu for the formulation of strategies by developing countries; ignoring them might lead to costly strategic mistakes.

The 1990s represent a highly volatile period, particularly for the impact of several financial crises on emerging and developing economies. Conversely, the 2000s can be considered a more tranquil period for developing countries. The latter period was marked by enhanced integration of the global economy, the rising profile of China in the world economy (joining the World Trade Organization [WTO] in 2001) and high global liquidity. This configuration explains that the weight of OECD member countries in global economic activity held steady at roughly 60% throughout the 1990s, with the residual non-OECD weight at 40%. From the 2000s, the shift in global activity started to move in favour of the non-OECD world, which caught up with OECD member countries in 2009. From then, the non-OECD countries have extended their weight of global GDP: their relative share now assumes 60%, with the OECD at 40%. Within three decades of shifting wealth, we have witnessed a reversal in PPP-adjusted GDP weights in the world economy in favour of non-OECD countries. The weight of China and India's output in the global economy has grown consistently throughout the three decades (Figure 2.2).

The emergence of the new global economic geography – shifting wealth – is thus best explained in three distinct periods of growth performance. Over the course of nearly three decades, starting in 1990, the global economy underwent structural transformation that shifted the world's economic centre of gravity eastwards and southwards, from OECD countries to emerging economies.

Figure 2.2. The three phases of shifting wealth



Opening up (1990-2000)

After years of relative isolation from the global economy, the initial "opening up" phase is best exemplified by three developments. These comprise China's cautious market reforms in agriculture and foreign investment in 1978, India's gradual economic liberalisation in 1991 and the dissolution of the former Soviet Union (FSU) in the same year. However, with China embarking on a second stage of more robust privatisation reforms in the late 1980s, the initial opening of China, India and the FSU to world markets was really felt from the 1990s onwards.

The world market economy experienced a significant supply shock through the tripling of the effective labour supply. The entry of many new workers into the global labour force, following the opening of formerly closed large economies, created a big wage shock. In the first years of the 1990s, the integration of China, India and the FSU brought new labour forces of 750 million, 450 million and 300 million respectively to the world economy. Along a core model of economic development, the Lewis (1945) or surplus labour model, the modern sector – and by extension the world economy – temporarily faced an unlimited supply of labour at near subsistence wages. As predicted by the Stolper-Samuelson theorem, the labour supply shock led to a drop in the price of wage-intensive goods. This, in turn, caused a reduction in the equilibrium wage; alternatively, low wage flexibility led to job losses.

The arrival of 1.5 billion workers doubled the number of people working in open, market-oriented economies, which halved the global capital-labour ratio (OECD, 2010[1]). Large emerging countries opening to trade increased the share of global workers with basic education. This, in turn, lowered the world average land/labour ratio. The relative endowments of other countries thus shifted in opposite directions, which tended to move their comparative advantage from labour-intensive manufacturing (Wood and Mayer, 2011[3]). Industrialisation and urbanisation in the emerging giants stimulated demand and prices of fossil energy and industrial metals, which in turn transferred wealth to their exporters.

During the 1990s, the convergence of developing countries relative to the Group of Seven (G7) average was mixed. Figure 2.3 shows that Brazil, South Africa and especially the Russian Federation (hereafter "Russia") underperformed in the BRIICS group of countries (Brazil, Russia, India, Indonesia, China and South Africa). The three Asian BRIICSs – China, India and Indonesia – enjoyed growth rates sufficiently high to help their incomes converge towards G7 levels. For Latin America and sub-Saharan Africa in particular, the decade proved to be yet another period of disappointment after the "lost decade" – the debt-crisis prone 1980s. For countries of the FSU, long and deep recessions dominated the early years of the decade. Transitioning towards a market economy proved anything but easy, and some countries experienced major setbacks in human development.

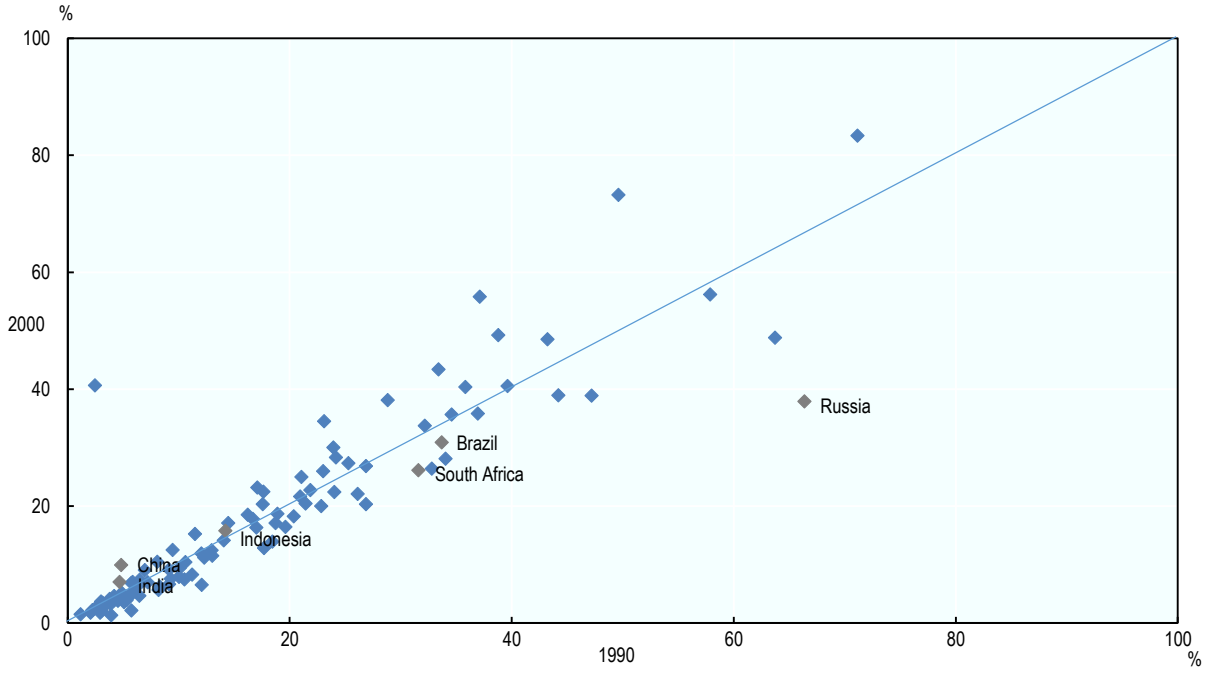
Concerns that the entry of China into world markets would lead to deindustrialisation of other developing (and advanced) countries were confirmed (Rodrik, 2016[4]). While Asian countries and manufacturing exporters have been largely insulated from "premature deindustrialisation" – manufacturing activity, in part, even shifted to China's neighbours – Latin American countries were especially hard hit. In addition, disruption in Russia and financial crises in some emerging countries of Asia and Latin America initially delayed output and welfare gains expected from liberalisation during the 1990s. Meanwhile, Africa suffered from a protracted debt crisis before debt was relieved at the end of the decade.

Pervasive convergence (2001-08)

The second phase of shifting wealth, from 2000 to the 2008 GFC, saw pervasive convergence of poor countries largely due to increasingly China-centric growth. Rapid urbanisation and industrialisation in Asia, in particular, led to rising raw material prices for fossil fuels and industrial metals. While oil and metal producers benefited, most OECD member countries as net commodity importers suffered depreciating terms of trade and losses in purchasing power.

Figure 2.3. Mixed convergence during the opening up phase

GDP per capita relative to average GDP in the G7 (1990-2000)



Note: GDP per capita of developing countries relative to the G7 average for the years 1990 compared to 2000. The 45-degree line represents stagnation of per capita income in relative terms; the diamonds above the line indicate relative convergence of developing countries; those below the line are falling behind.
Source: IMF (2017[2]), *World Economic Outlook 2017 (database)*, (GDP per capita, constant prices (PPP, 2011 international dollars), https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

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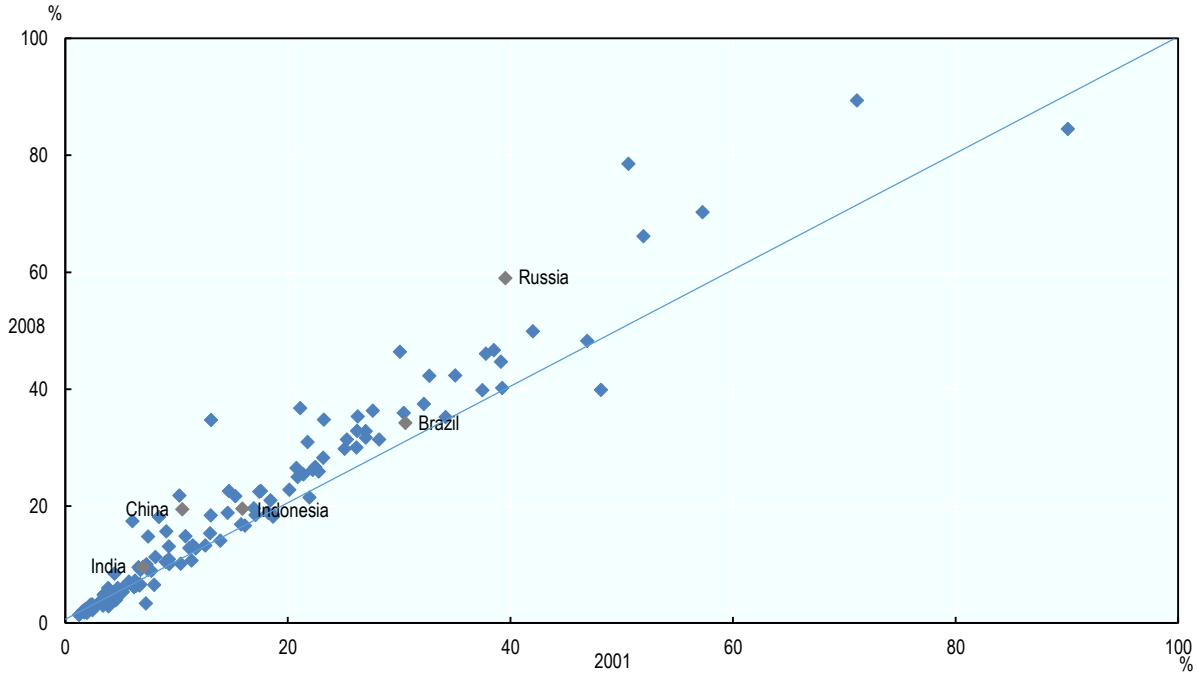
Simultaneously, net foreign assets positions turned in favour of China and oil producers whereas the United States' net foreign debt position bulged, as a result of growing current account deficits. As global trade became increasingly imbalanced, China became singled out with respect to their currency management. In some circles, deindustrialisation in OECD member countries was attributed to external deficits. However, and in contrast, current account surpluses of around 100 countries had largely risen in response to the US current account deficit – the excess of US domestic investment over US national savings – during the 2000s (OECD, 2010[1]).

While large countries with very high growth, such as China and Russia, tended to attract the headlines, important economic acceleration also occurred among smaller countries. Every continent shared in this phenomenon. The new millennium saw the resumption – for the first time since the 1970s – of a trend towards strong convergence in per-capita incomes with the high-income countries. Converging countries are defined as those countries doubling the average per-capita growth of the high-income OECD countries.

In the 2000s, convergence became pervasive. The number of converging countries increased by nearly seven times, from 12 to 83, during the period. Meanwhile, the number of poor low-income countries more than halved from 55 to 25 (Figure 2.4).

Figure 2.4. Pervasive convergence largely due to China-centric growth

GDP per capita relative to average GDP in the G7 (2001-08)



Note: GDP per capita of developing countries relative to the G7 average for the years 2001 compared to 2008. The 45-degree line represents stagnation of per capita income in relative terms; the diamonds above the line indicate relative convergence of developing countries; those below the line are falling behind.
Source: IMF (2017[2]), *World Economic Outlook 2017 (database)*, GDP per capita, constant prices (PPP, 2011 international dollars, https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

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Apart from strong domestic economic growth and improving human development in emerging economies, shifting wealth forged the direct channels of interaction – mainly trade, lending and foreign direct investments – between the emerging giants and poor countries. These links between the largest converging economies and the rest of the developing world intensified throughout the pre-crisis period. The realignment of the global economy accelerated, including during the crisis years 2007 and 2008 as large converging countries remained in recession only briefly.

Around 2000, China's influence also began to expand beyond goods and commodity markets into global financial markets. Seen initially as a producer of cheap consumer goods, China became the world's biggest holder of US government debt. This accumulation by the Chinese government of foreign assets raised the country's global, financial and macroeconomic importance. This had a dampening effect on US and hence world interest rates. This, in turn, added to lower interest rates caused by global wage pressures. China's output gap, the difference between actual and potential growth, would henceforth have repercussions on key global interest and exchange rates. Moreover, many emerging economies moved from being net debtors to net creditors, due to high domestic saving rates and rapidly increasing foreign reserves through exports, particularly in Asia.

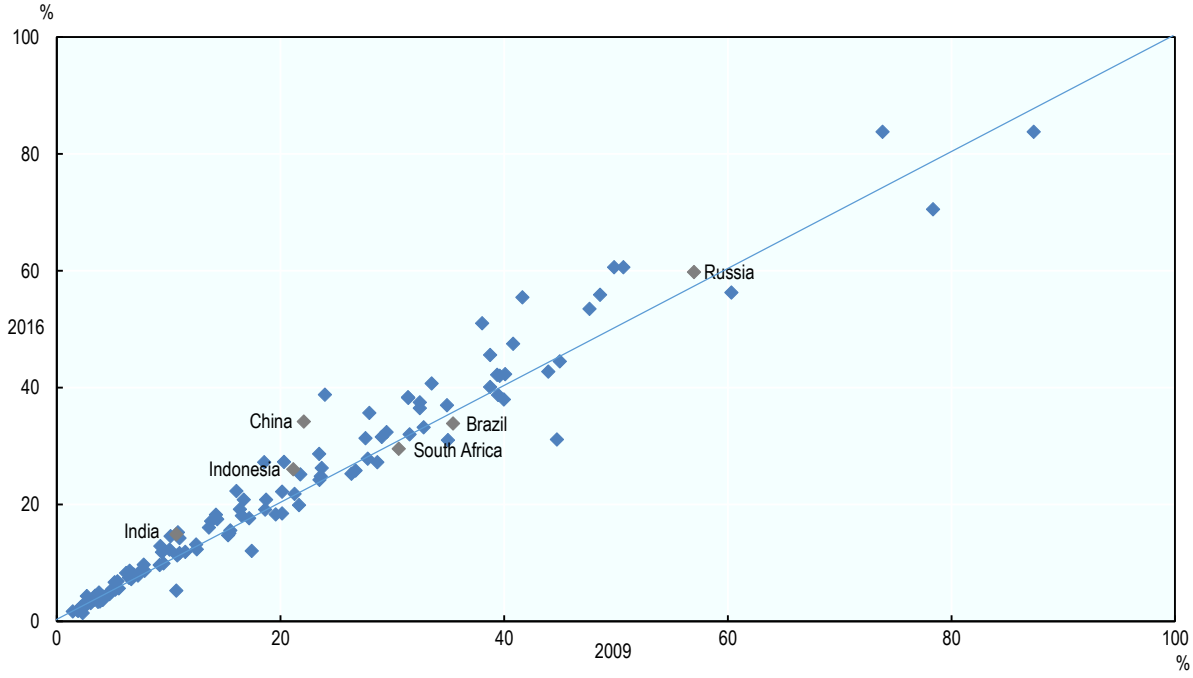
Backed by a growing surplus on the current account in their balance of payments and by high raw material prices, the oil-rich countries – as well as China – accumulated large foreign exchange reserves and increasingly real assets held in sovereign wealth funds. The switch of many emerging countries from net debtor to net creditor position stimulated both South-South trade and capital flows, further fuelling growth. A new geography of development finance had emerged, with emerging donors and lenders complementing the traditional donors (OECD Development Assistance Committee, DAC).

Post global financial crisis (2009-present)

In the third phase during the 2010s, the shifting wealth process has shown signs of a temporary slowdown. This was driven by both the global recession in the aftermath of the GFC and China's economic transformation from a manufacturing and export-led economy to one based on services and consumption. Both the GFC and China's transition implied a slump in oil and metals prices. This burdened commodity exporters, but also stimulated growth in commodity-importing countries.

Figure 2.5. Convergence slowed post-GFC

GDP per capita relative to average GDP in the G7 (2009-16)



Note: GDP per capita of developing countries relative to the G7 average for the years 2009 compared to 2016. The 45-degree line represents stagnation of per capita income in relative terms; the diamonds above the line indicate relative convergence of developing countries; those below the line are falling behind.
Source: IMF (2017[2]), *World Economic Outlook 2017 (database)*, GDP per capita, constant prices (PPP, 2011 international dollars), https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

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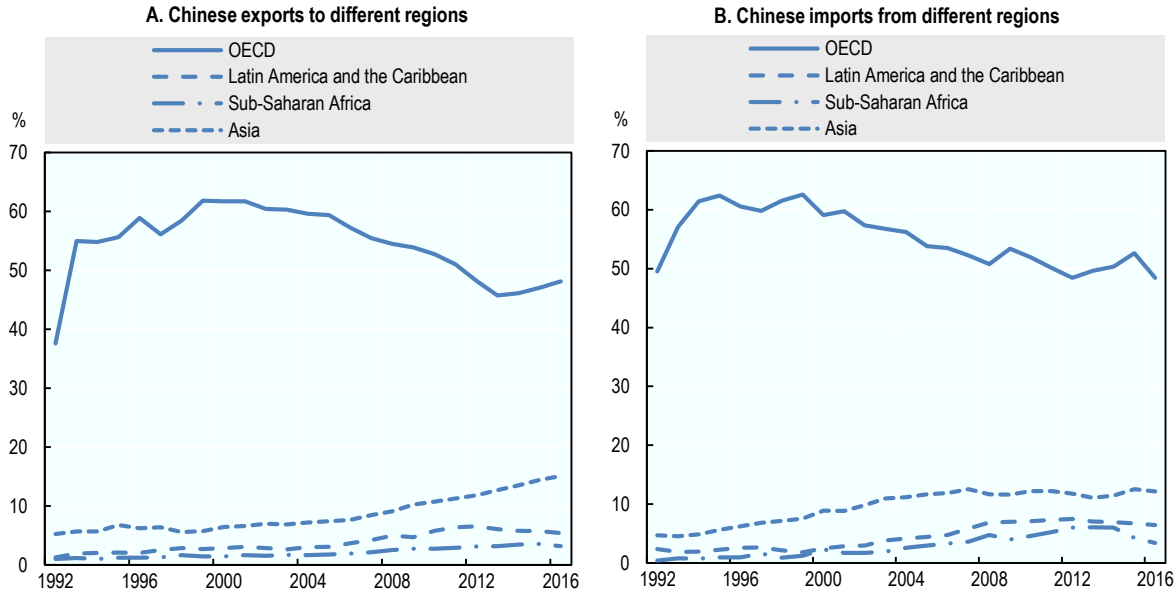
The growth differential between OECD and non-OECD countries began to narrow after its peak in 2009 during the crisis. Ten years since the 2008 tipping point, the pace of shifting wealth has slowed after the heady times of the 2000s. This change has taken place against a backdrop of fading external tailwinds, the rebalancing in China and depressed raw material prices that have affected commodity exporters. Although it is still very integrated in world trade, China's participation in global value chains (GVCs) is no longer its main trade driver since the GFC. As Figure 2.5 shows, however, convergence has still occurred in the 2010s in many poorer countries towards the average of the G7 countries.

The economic growth regime that prevailed until the end of the 2000s, in which external demand played a leading role, is no longer in place. Thus, the dynamics of China's foreign trade changed. Domestic demand and domestic capacity are now the major factors influencing the evolution of China's foreign trade with important consequences for the geographic orientation of China's exports and imports (Lemoine and Unal, 2017[5]).

Figure 2.6. China's trade rebalances towards developing economies

Chinese exports and imports across regions (1992-2016)



Note: Regional trade is expressed in percentage terms of total trade.
Source: Authors' calculations based on World Bank (2018[6]), *World Integrated Trade Solution (database)*, https://wits.worldbank.org/ (accessed in April 2018).

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Simultaneously, the dominance of high-income countries in China's trade has steadily been reduced as trade has been rebalanced towards developing economies (Figure 2.6). In Africa, for example, growth shifted from West to East as a result. Meanwhile, new global projects were undertaken such as China's Belt and Road Initiative (BRI). They have fostered infrastructure finance and thus helped to start removing a central growth bottleneck in low- and middle-income countries. Finally, on the back of reform and favourable demography, India has joined China's high growth path.

Developing countries may well enjoy a twin-turbo growth engine in the coming years. While China's growth has been coming down from unsustainable levels, India's growth

has been rising – erratically so, however, given the impact of extreme weather. Consequently, the process of shifting wealth is not over. Instead, it has changed shape, becoming based on a broader foundation of actors and a reinforcement of mutual economic interdependencies.

The benefits and costs of shifting wealth to OECD member countries

The benefits of shifting wealth, including to the OECD, are well known. North and South, the rising living standards that came with globalisation initially lent widespread support to the view of trade as a key engine of economic growth. The expansion of GVCs became a strong driver of productivity, boosting intermediate trade – a boon for OECD producers of equipment goods. Exports from formerly poor countries translated into higher consumption and thus imports, not least OECD-based luxury brands. Intensified specialisation meant an improved allocation of resources also in OECD member countries. Consequently, capital and jobs shifted away from their least competitive uses and lowest added value towards higher-income sectors. Consumers in the OECD benefited from a higher purchasing power of wages with the drop in prices of low-skilled goods. They also enjoyed more product choice. The deterioration of China's terms of trade through the mid-2000s indicates that its exports made the world better off (Wolf, 2006[7]). Improvements in the range and quality of exports, greater technological dynamism, better prospects for doing business and a larger consumption base all generated substantial welfare benefits for OECD countries. Overall, shifting wealth is a win-win phenomenon.

Nonetheless, the term "shifting wealth" has been criticised for conveying the dangerous notion of winners and losers. Consequently, the rise of protectionism and nationalism in some OECD member countries risks bringing the emergence of developing countries and the corresponding rapid reduction of global poverty to an end.

The challenge consists in an uneven distribution of shifting wealth benefits. Many major economic trends – globalisation, digitalisation and robotisation – are good for society on average, but not automatically good for everyone; they also generate losers, especially in the labour market. Besides mass immigration, these losers can play a decisive role in the rise of populism. An appropriate policy answer in advanced countries requires a sound diagnosis.

Global economic development brings unprecedented business opportunities and new jobs, including to the OECD. Rather than taking satisfaction in the movement, however, some view economic growth in the South as a threat. In contrast to the conventional "win-win" view of globalisation, recent studies on the "China shock" focus on how surging imports from China are costing jobs and have caused poverty to rise in the United States and elsewhere.

Autor, Dorn and Hanson (2016[8]) trace the substantial adjustment costs and distributional consequences of trade. These are most discernible in the local US labour markets in which industries exposed to foreign competition are concentrated. They also find adaptation in local labour markets to be slow. Specifically, they show wages and labour-force participation rates remaining depressed and unemployment rates remaining elevated for at least a full decade after the commencement of the China trade shock.

In the former mainstream consensus, trade could be strongly redistributive in theory, but was relatively benign and frictionless in practice. Evidence from the United States and elsewhere has challenged this view (Beyer and Stemmer, 2016[9]). Wood (2018[10]) has calculated (for 2011) trade estimates of the impact on labour demand in all OECD

member countries of exports of manufactures and services from the South (all non-OECD countries). The base case shows that imports from the South reduced demand for labour in manufacturing by 18 million jobs.

The "elephant graph" of Lakner and Milanovic (2016[11]) demonstrates how the distribution effects of globalisation and technological change have put a strain on the OECD middle-class. The graph depicts income gains at each point of the global income distribution for the 20 years spanning the fall of the Berlin Wall to the 2008 financial crisis. Alvaredo et al. (2018[12]) updated the graph for the *World Inequality Report 2018* for 1980 to 2016. The trough of low growth is identified with the bottom 90% in the United States and Western Europe (the global 50-95 income percentile). Higher income growth has been appropriated by the Asian middle class and the global top 1% income group (Sandefur, 2018[13]). The 50-95 income percentile mostly located in the OECD constitutes many frustrated voters.

The "China shock" literature does not suggest protectionism, but it risks being exploited by those who favour this policy response. Lower employment in certain sectors or regions in OECD member countries has resulted largely from technological changes rather than from trade (Dauth, Findeisen and Suedekum, 2017[14]). However, the two drivers are not always easily disentangled. Labour-displacing improvements in technology stimulated by trade and offshoring of technology have been suggested as further channels by which globalisation has harmed manufacturing jobs. In the OECD, both globalisation and technological change affect a middle class that is often marked by employment in industrial sectors, which has lost its good jobs or is afraid of imminent job losses.

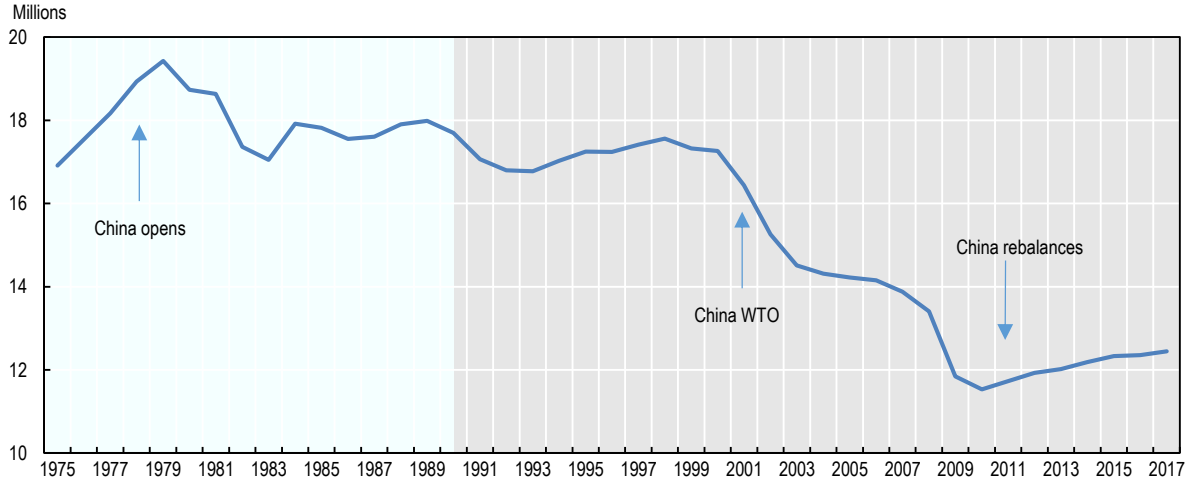
Yet job losses from import competition alone do not provide the full picture. In fact, while the manufacturing share in aggregate employment in the US has been decreasing for decades, the share in real output remained roughly constant, largely due to improvements in productivity (Baily and Bosworth, 2014[15]). Moreover, by focusing on job gains from China-enhanced globalisation instead, Feenstra, Ma and Xu (2017[16]) show that the net manufacturing job impact was negative between 1991 and 2007, but balanced for an extended observation period 1991-2011. A positive net job effect exists for the United States since 2009 as Figure 2.7 suggests.

Analysis of globalisation often misses the three distinct phases that emerging countries have experienced and are still going as described above. Policy makers forgo the benefits of globalisation if their protectionist responses are only informed by the first opening phase of the 1980-90s. Changes in the global labour supply and of China's fast transition to a "new normal" are reversing important wage and price trends.

Since the third phase of shifting wealth (from 2009 onwards), China has been transforming its production and trade patterns towards consumption, away from investment and intermediate GVC trade. The growth of global labour has peaked as China's labour supply has been largely absorbed and its population begun to age rapidly, and as India's fertility rate has come down (Goodhart and Pradhan, 2017[17]). A slowing working-age population will increasingly be mirrored by a rising middle-class consumer population. This stimulates "ordinary" global trade based mainly on local inputs and domestic demand fuelled by higher consumption, whereas intermediate processing trade has begun to stagnate (Lemoine and Unal, 2017[5]). Asia-driven wage pressures felt in the OECD are thus probably a thing of the past, with China's wages rising rapidly in both dollar and yuan terms due to a shrinking labour force and increasing domestic productivity (Figure 2.8).

Figure 2.7. Since the start of China's economic transformation, US manufacturing jobs have started to rebound

US manufacturing jobs (1975-2017)



Note: The shaded area represents the shifting wealth period.
Source: US Bureau of Labor Statistics (2018[18]), *Employment, Hours, and Earnings from the Current Employment Statistics survey (National) (database)*, All employees, manufacturing, seasonally adjusted, https://data.bls.gov/timeseries/CES3000000001 (accessed in May 2018).

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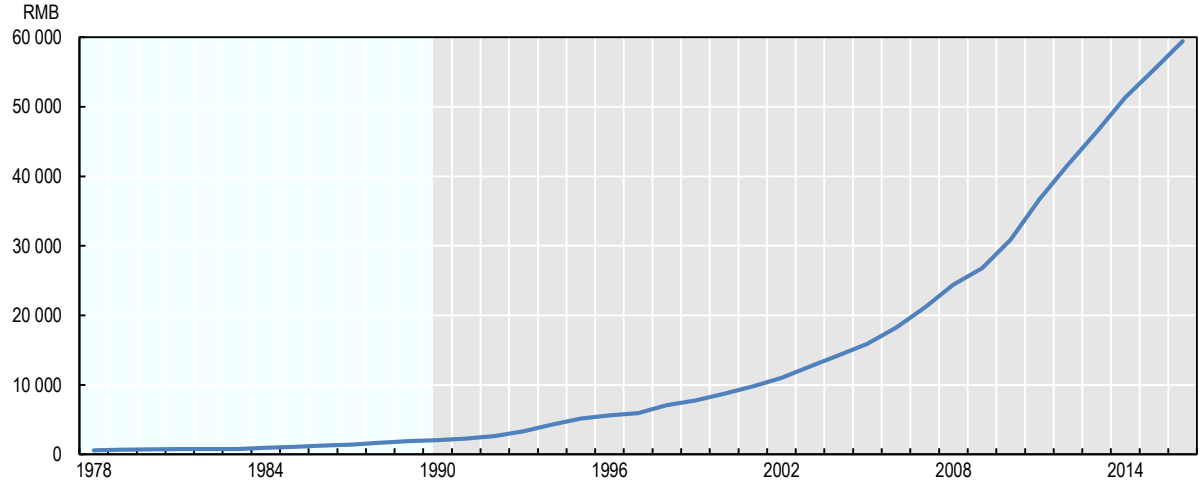
Figure 2.8. Wages in China are rising rapidly

Manufacturing wages in China, expressed in annual averages over time (RMB, 1978-2017)



Note: The shaded area represents the shifting wealth period.
Source: CEIC (2018[19]), *China Average Annual Wage: Manufacturing*, China average annual wage: Manufacturing (annual averages over time in RMB, https://www.ceicdata.com/en/china/average-wage-by-industry-urban-nonprivate/avg-annual-wage-manufacturing (accessed in May 2018).

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Why shifting wealth matters for the South

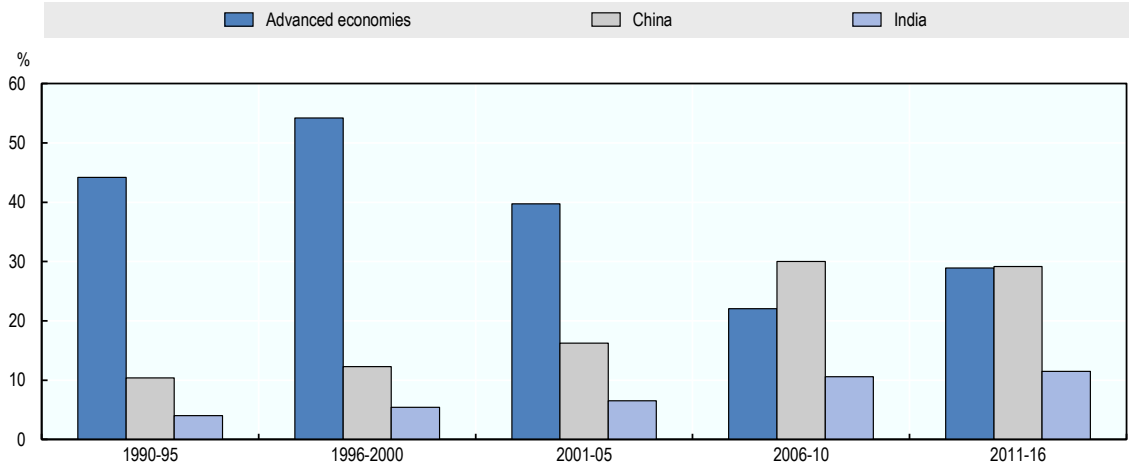
Shifting wealth has had a profound effect on global development since 1990. First, it re-drew the map of economic relations in terms of trade, financial flows and migration. Second, it boosted global growth, lifting millions out of poverty during the process. Third, it changed the global governance context, which meant that developing countries assumed new roles, but also needed to craft new strategies.

Global linkages

From the perspective of poor countries, the most important consequence of China and India's entry into the global economy operated through both global and direct linkages (see the section on "Shifting wealth – a driver for South-South integration" below). The global impact has been visible in the contribution of the Asian giants to global growth (Figure 2.9). This is apparent both through their impact on the global terms of trade (Figure 2.10) and in the shift in net foreign asset positions towards emerging surplus countries (Figure 2.11) that subsequently financed development loans, grants and direct investment.

Figure 2.9. China and India have increasingly contributed to global economic growth, yet at a slower pace during the last decade

Contributions to global growth (percentage)



Note: Advanced economies consist of currently 39 countries as defined by the IMF.
Source: IMF (2017[2]), *World Economic Outlook 2017 (database)*, GDP, current prices (PPP, international dollars), https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

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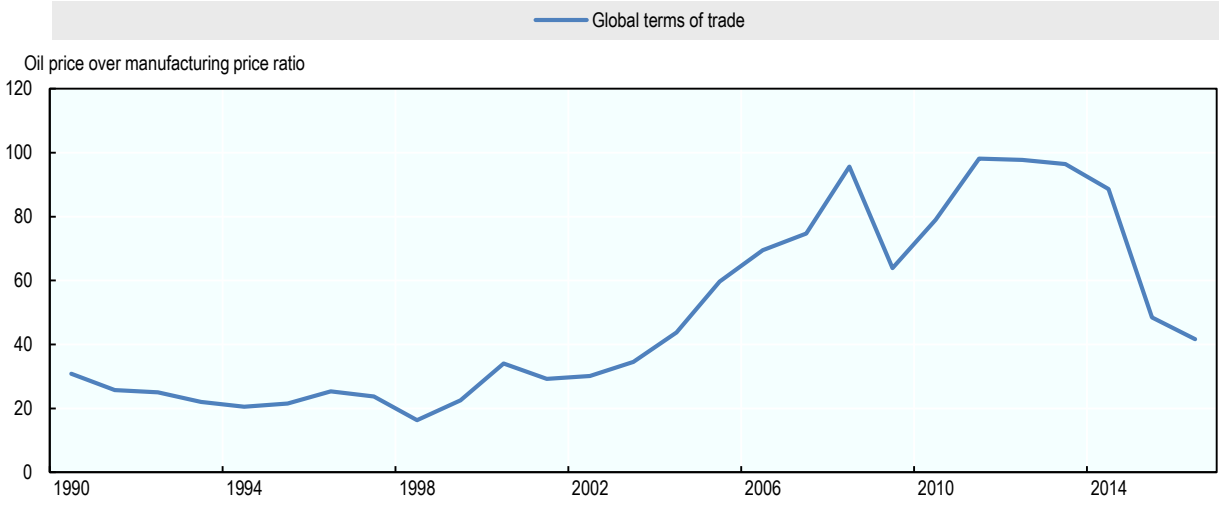
Growth in low- and middle-income economies from 2000 onwards has depended more on growth in China than on the G7. This constituted a reversal from the traditional OECD dominance in determining non-OECD growth (Garroway et al., 2012[20]). China's growth impact was not limited to oil-exporting developing countries, but pertained to non-oil exporting countries as well.

China and India's high growth has boosted global growth in recent years. From 2011 to 2016, China's relative contribution to global growth was on par with advanced countries. This occurred despite per capita GDP growth falling in China from a top rate of 13.6% to 6.1% over 2007-16. India's contribution to global growth has also risen since the early 2000s, on the back of a per capita income growth rate oscillating between 8.8% and 5.9% over 2010-16. However, China has contributed almost 30% to global growth in recent years, approximately 20 percentage points more than India.

As India is more closed and still considerably poorer than China, it cannot yet offset the impact of China's slowdown on global growth and trade. Meanwhile, India has taken the lead over China in terms of GDP growth (but not growth in GDP per capita), with favourable demographics that encourage domestic savings and investment. In future decades, shifting wealth may well benefit from the China and India twin-turbo.

Figure 2.10. Shifting wealth reversed the decade-long deterioration in terms of trade for many developing economies exporting commodities

Terms of trade measured as the ratio between the oil price average relative to G7 manufacturing producer prices (1990-2016)



Note: Global terms of trade are expressed as the ratio between crude oil price average and the G7 producer price index (PPI) for manufacturing. This ratio shows that (net barter) terms of trade of non-oil exporting developing countries suffer when oil prices go up relative to manufacturing prices.
Sources: Authors' calculations based on World Bank (2017[21]), *Commodity Markets Outlook*, Crude oil ($/bbl), http://pubdocs.worldbank.org/en/817261508960786112/CMO-October-2017-Data-Supplement.xlsx (accessed on February 2018); and OECD (2017[22]), *OECD Data (database)*, Producer price indices (PPI), https://data.oecd.org/price/producer-price-indices-ppi.htm (accessed in February 2018).

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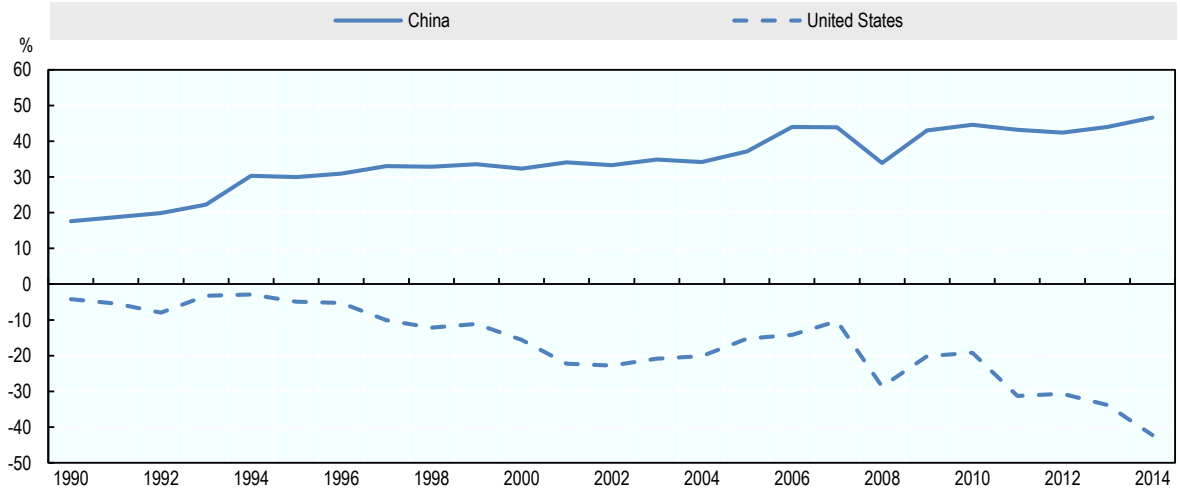
Shifting wealth reversed the decade-long decline in terms of trade for countries exporting raw materials. Until about 2000, continuing technological advances promoted the widely shared view that each unit of output required fewer units of raw-material input to produce; in other words, it was believed GDP was becoming "lighter". Demand for commodities was perceived to remain subdued even in the face of robust economic growth. In fact, after 2000, demand for commodities was strong, on the back of high

urbanisation rates in Asia. By the onset of the GFC in 2008, oil prices had quadrupled and prices for metals had almost doubled from 1995 levels. The changing terms of trade had major strategic implications for poor countries, framing the design of policies covering, for example, aid, foreign investment, trade negotiations and industrial strategies. For instance, whereas South Africa's garment and textile industry came under tremendous pressure, Angola, a net oil exporter, benefited from strong rents from oil extraction.

Figure 2.11. Shifting wealth has triggered a shift in net wealth from advanced economies towards China and other large emerging economies

External wealth expressed in net foreign assets in percentage of GDP (1990-2014)



Source: Authors' calculations based on Lane and Milesi-Ferretti (2018[23]), "The External Wealth of Nations Revisited: International Financial Integration in the Aftermath of the Global Financial Crisis", https://doi.org/10.1057/s41308-017-0048-y.

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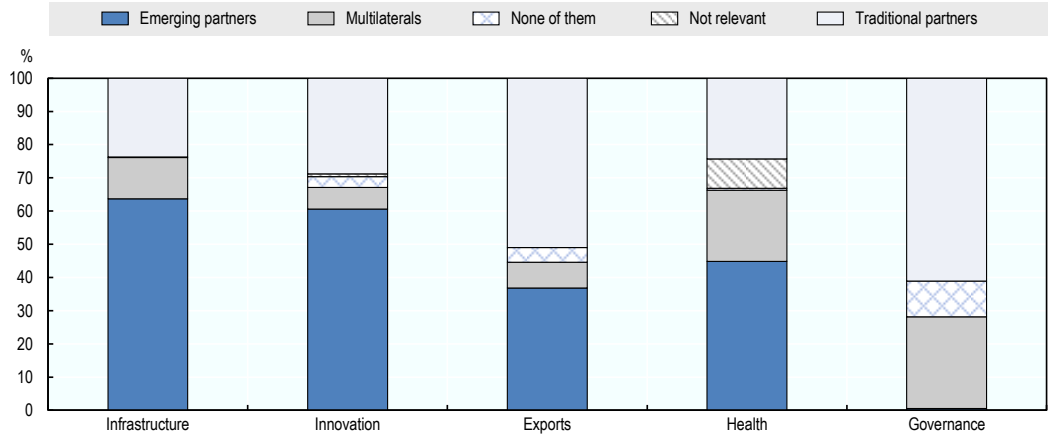
Shifting wealth also created a new geography of development finance. A central feature has been the shift in net wealth from advanced economies towards China, Brazil, Russia and the Gulf States during the 2000s. Data demonstrate the switch in net foreign assets as a percentage of GDP for China and the United States (Figure 2.11). Driven by growing current account surpluses (mostly reflecting US deficits), these emerging countries accumulated assets worth trillions of US dollars. The focus was initially on financial assets (foreign reserves) at their central and national development banks. Increasingly, it concerned real assets held by sovereign wealth funds and other public savings vehicles. More recently, the rise of assets in development banks owned or founded by China and other large emerging countries such as Brazil and the Gulf States has boosted development finance.

Low-income countries could thus increasingly source capital flows from cash-rich emerging countries rather than from mostly OECD-country sources as they had before. The switch from advanced country to converging country sources of finance brought with it a higher share of state-sponsored capital as opposed to purely private sector sources. The diversification of capital sources brought benefits, unsurprisingly welcomed by recipients since they expanded their policy options.

Figure 2.12. Emerging partners boosted policy options for Africa

Based on a survey of perceived competitive advantage of development partners



Note: The stakeholder survey was conducted in 40 out of 51 African countries covered in the report.
Sources: OECD et al. (2011[24]), *African Economic Outlook 2011: Africa and its Emerging Partners*, http://dx.doi.org/10.1787/aeo-2011-en; Reisen and Stijns (2011[25]), *How emerging donors are creating policy space for Africa*, https://voxeu.org/article/how-emerging-donors-are-creating-policy-space-africa (accessed in May 2018).

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Emerging partners boosted new sectors and finance mechanisms. Aid is only one element of their toolbox, reflecting striking differences in engagement philosophies with traditional donors. Emerging donors offer broader sources of finance; more appropriate technology and training; low-cost and speedy infrastructure; and cheap generics, machinery and consumer goods. China has a perceived comparative advantage in building infrastructure, India in providing cheap generics, as well as skills and services, and Brazil in helping agriculture and agro-processing. To Africa, the emerging partners offered new opportunities to trade goods, knowledge and models. A survey on 40 African countries in 2011 found that emerging partners were relatively well perceived in the realms of infrastructure and innovation (Figure 2.12).

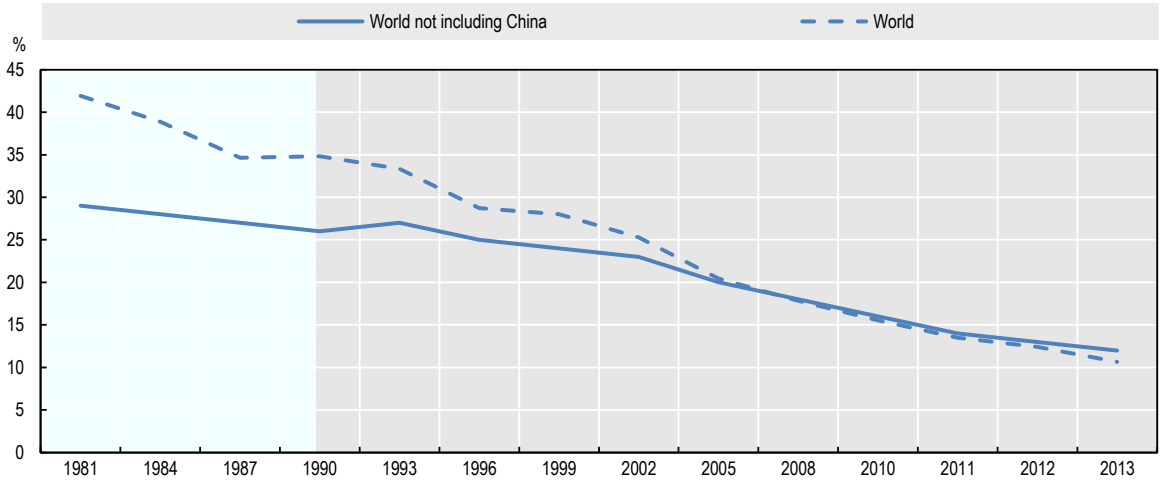
Growth expansion and poverty reduction

China became a global growth engine that was an additional driving force behind the growth performance in converging countries. Given the positive link between economic growth and poverty reduction (provided that economic inequality is sufficiently low), China's growth likely translated into poverty reduction in poor countries. Estimates for 52 low- and middle-income countries from 1990 to 2000 had put the elasticity of poverty to growth at around minus two (Chhibber and Nayyar, 2008[26]). A rise of one percentage point in China's annual per capita income growth, given the poor-country growth elasticity of 0.34 estimated by Garroway et al. (2012[20]) would thus translate into a 0.68% reduction in poverty in poor countries. In this sense, China may have been the most potent poverty reduction engine outside its borders during the first decade of the 21st century.

The World Bank defines extreme poverty as living with less than 1.90 international USD per day. Measured by this benchmark, extreme poverty in China, which affected 88% of its one billion people in 1981, had all but been eliminated by 2013. According to the World Bank, extreme poverty stood at 1.9% by 2013 in China, affecting 26 million Chinese.

Figure 2.13. China's economic growth helped diminish the share of global population living in extreme poverty

Extreme poverty defined as living below 1.90 international USD per day



Note: The shaded area represents the shifting wealth period.
Source: World Bank (2018[27]), *World Development Indicators (database)*, China share of world poverty, http://databank.worldbank.org/data/source/world-development-indicators (accessed in February 2018).

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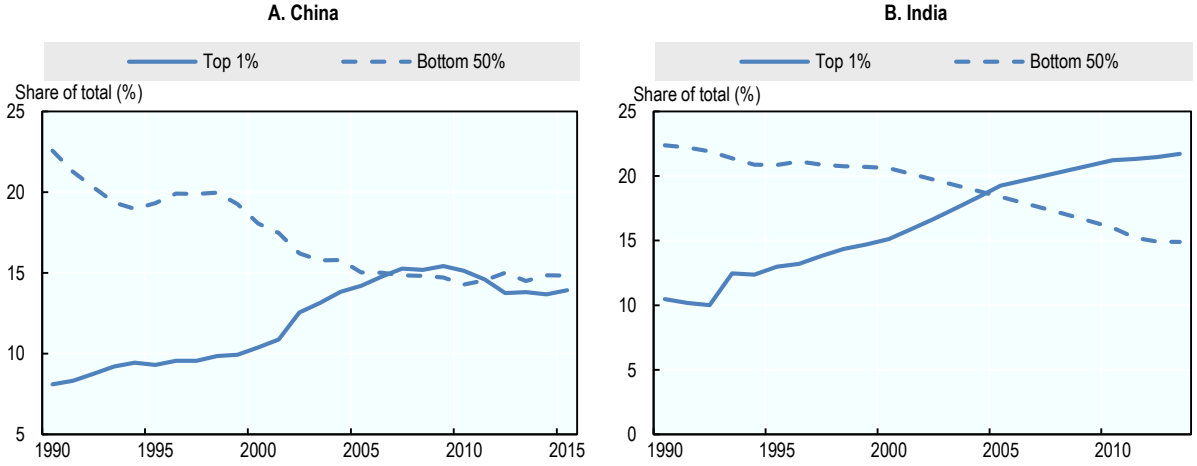
However, the substantial decline of global poverty was not only due to the poverty decline in China. According to Roser and Ortiz-Ospina (2018[28]), the world share of people living in extreme poverty outside China had fallen from 29% to 12% between 1981 and 2013 (Figure 2.13). During that period, world population grew from 4.5 billion to 7 billion. Despite rapid global population growth, the number of people outside China affected by extreme poverty had diminished from more than 1 billion to 743 million over 1981-2013. The decline in extreme poverty occurred despite growing inequality within countries.

Figure 2.14. Income inequality rose in both China and India

Inequality expressed as the top 1% and the bottom 50% of the income distribution (1990-latest)



Note: Latest data for China are 2015 and for India are 2013.
Source: World Inequality Lab (2018[29]), *World Inequality Database*, Top 1% share, Bottom 50% share, https://wid.world/data/ (accessed in February 2018).

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As an indicator of (rising) income inequality of the two Asian giants, Figure 2.14 presents, the percentage share of the top 1% (solid) and the bottom 50% (dotted) of pre-tax national income for both China (1990-2015) and India (1990-2013). Until the third sub-period of shifting wealth (post GFC, 2009-present), income inequality deteriorated continuously in China. Nonetheless, this trend has subsided since 2007; instead, income shares have stabilised. By contrast, income inequality in India – already higher than in China – continued to rise until 2013, the last year of observation. Comparable data from the *World Inequality Report 2018* for the observation period since 1990 are not available for the other BRIICS.

Data for Brazil indicate unbroken income inequality: the top 1% reaps almost 30% of national income, the bottom half not even 15%, on a flat trend during the 2000s. Russia in the 1990s suffered a steep rise of the national income share appropriated by the top 1%, from egalitarian levels (around 5%) to 26.9% in 2007. Since then, the income share of the top 1% has come down to around 20%.

Wealth inequality within countries has recently experienced mounting interest in research (Piketty, 2014[30]). World wealth inequality, however, also depends on the rise or fall of wealth across countries and regions. The role of the fast-growing developing economies is an important element in the evolution of wealth inequality.

The 2001-08 phase of rapid income convergence of low- and middle-income countries in the wake of China's commodity-hungry growth spurt has not only lowered global income inequality. It also helped lower global wealth inequality, despite higher within-country income and wealth inequality. Median and mean household wealth rose in all developing regions. Shifting wealth seems to have contributed – as it did for global income equality – to slightly more global wealth equality (Table 2.1).[1]

Table 2.1. Net household wealth

Expressed in percentage of world total

	2000	2010	2017
Africa	0.9	1.2	0.9
Asia-Pacific (excluding Japan)	7.3	11.1	11.2
China	4.1	7.5	10.3
India	1.0	1.7	1.8
Latin America	3.0	3.7	2.9
Total South	**16.3**	**25.2**	**27.1**
Europe	29.6	33.7	28.4
Japan	17.0	10.7	8.4
North America	37.1	30.4	36.0
Total North	**83.7**	**74.8**	**72.8**

Note: Net household wealth is defined as the marketable value of financial assets plus non-financial assets (principally housing and land) less debts. World total net household wealth has risen from USD 117 trillion at the end of 2000 (a mean of USD 31 415 and a median of USD 1 867 for the 3.7 billion adults, defined as older than 20 years) to USD 280.3 trillion by mid-2017 (a mean USD 56 541 and a median of USD 3 582 for 5 billion adults).
Sources: Credit Suisse Research Institute (2017[31]), *Global Wealth Databook 2017*, http://publications.credit-suisse.com/index.cfm/publikationen-shop/research-institute/global-wealth-databook-2017-en/ (accessed in March 2018); Davies, J., R. Lluberas and A. Shorrocks (2010[32]), *Global Wealth Databook 2010*, https://publications.credit-suisse.com/tasks/render/file/index.cfm?fileid=88DC07AD-83E8-EB92-9D5C3EAA87A97A77 (accessed in March 2018).

Over the period 2000-17, net household wealth shifted East and South. Consequently, global household wealth inequality has been reduced during the 2000s. Most of the shift towards the South occurred during the first decade of the new millennium when income convergence was rapid, not least due to booming raw material prices. In the 2010s, by contrast, gains in the percentage share of world household wealth were given back by Africa and Latin America; only China kept gaining a higher relative share in world wealth.

Table 2.2 reveals the first decade of the 21st century lowered global wealth inequality, and also generated remarkable gains in median wealth.[2] Broadly, median net wealth per adult doubled in all non-OECD regions listed in Table 2.2 during 2000-10. Since then (post GFC), however, median wealth kept rising only in China, dropping sharply in Africa. Despite being shown in constant US dollars, the numbers may indicate that sharp real depreciation of local currencies in countries with net raw material exports have dented mean household wealth and inflated household debt. This may also be the result of a lower demand for commodities in China.

Table 2.2. Median net wealth per adult

Expressed in constant USD

	2000	2010	2017
Africa	499	939	438
Asia-Pacific	1 322	3 400	2 997
China	2 349	4 628	6 689
India	704	1 301	1 295
Latin America	3 099	6 388	5 159
World	**1 867**	**3 709**	**3 582**

Note: Asia-Pacific including Japan.
Sources: Credit Suisse Research Institute (2017[31]), *Global Wealth Databook 2017*, http://publications.credit-suisse.com/index.cfm/publikationen-shop/research-institute/global-wealth-databook-2017-en/ (accessed on March 2018); Davies, J., R. Lluberas and A. Shorrocks (2010[32]), *Global Wealth Databook 2010*, https://publications.credit-suisse.com/tasks/render/file/index.cfm?fileid=88DC07AD-83E8-EB92-9D5C3EAA87A97A77 (accessed in March 2018).

Diverse regional growth dynamics

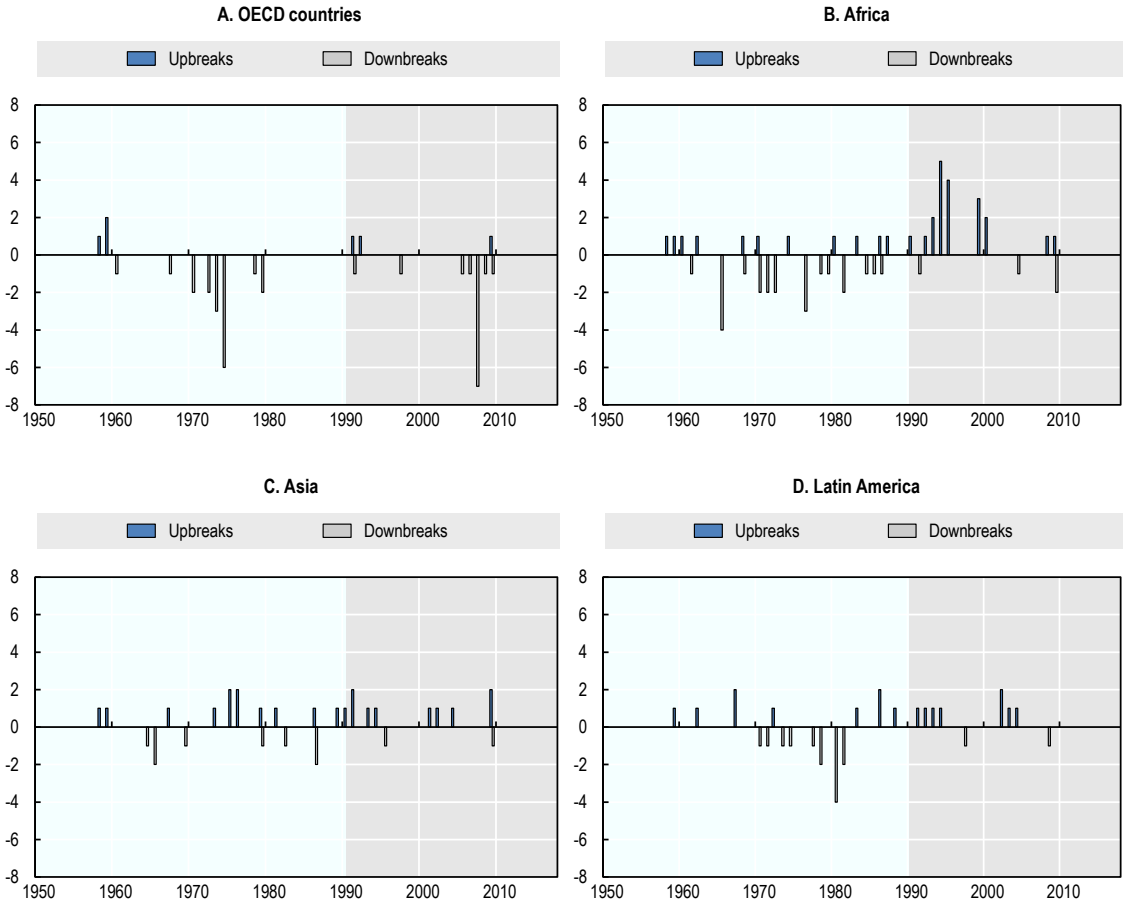
Aggregating countries across regions often disguises underlying heterogeneous growth dynamics. Strong economic growth episodes are not confined to certain periods or regions. In fact, many economies have experienced this growth at some point and increasingly so during the shifting wealth period. Volatility persisted throughout the 1990s, but has come down in the shifting wealth sub-periods since the early 2000s.

Figure 2.15 takes a longer perspective on economic growth and presents growth break estimates across economies on GDP per capita data. Breaks are defined as growth accelerations or upbreaks if average growth after the break exceeds the average growth rate during the previous period; downbreaks are defined as rapid growth slowdowns. Results obtained on the period prior to shifting wealth are comparable with earlier findings in the literature such as, for instance, Berg, Ostry and Zettelmeyer (2012[33]) and Kar et al. (2013[34]).

Developing countries observe more upbreaks than downbreaks in per capita GDP growth. Positive growth spurts have particularly dominated since the inception of shifting wealth, which produced an almost equal amount of upbreaks between 1990 and 2017 than in the previous four decades. Africa and Asia, with respectively 65% and 45% of total growth accelerations during shifting wealth, profited the most from this period of global prosperity. Judging by the number of rapid growth slowdowns, the GFC seems to have affected developing economies less. This picture stands in stark contrast to the experience of OECD countries. In this latter group, sustained growth decelerations predominate, and break patterns coincide with the major productivity slowdowns in the 1970s, as well as during and after the recent financial crisis. In turn, growth accelerations in developing countries tend to coincide with productivity rises (De Gregorio, 2018[35]).

Figure 2.15. During shifting wealth, growth accelerations appeared predominantly in developing economies

Growth accelerations and rapid slowdowns by region (1950-2017)



Note: The break analysis is based on the Bai and Perron (2006[36]) algorithm computed through a Stata routine provided by Kerekes (2011[37]): 26 OECD member countries with a total of 37 breaks, 97 non-OECD countries with 122 breaks; minimum growth spell length of 8 years. The shaded area represents the shifting wealth period.

Source: IMF (2017[2]), *World Economic Outlook 2017 (database)*, GDP per capita, constant prices (PPP, 2011 international dollars), https://www.imf.org/external/pubs/ft/weo/2017/02/weodata/index.aspx (accessed in December 2017).

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Growth performance and development in transition

Shifting wealth has on balance supported sustained growth transitions to higher income status, especially in the 2000s. It continues to do so in the 2010s despite a slowdown in growth rates. Many low-income and middle-income countries crossed to higher income brackets, while reversals were extremely rare. Likewise, many countries graduated from International Development Association (IDA) eligibility, while returns to IDA eligibility were the exception. For low-income countries, measured economic vulnerability declined markedly, especially in the wake of multilateral debt relief in the 2000s (but some debt stress returned recently).

Still, a country's growth does not necessarily go hand in hand with increased well-being for its citizens. Unless policies to counteract such trends are put in place, significant development vulnerabilities often remain. In fact, inequality can grow, even as countries become more prosperous. This is particularly relevant for countries with limited economic diversification, or those more exposed to the adverse impacts of climate change, rendering them more fragile. Therefore, GDP and other income-focused indicators are not all that matter. Further metrics to measure sustainable development are required. These need to trace vulnerabilities such as poverty, fragile middle classes, economic instability, regional disparities, insecurity, and unequal access to education and health services.

There are several ways to measure economic performance and transition. Among the most common measures are the World Bank's country income status and a country's IDA eligibility (i.e. aid dependence). A third, broader, measure of transition is the United Nations' Least Developed Country (LDC) categorisation.

Table 2.3 presents country income classifications for 25 "converging" countries that managed to exceed average G7 growth rates during 1990-2016. While not all countries shown managed to cross income-classification thresholds, those that have converged in relative terms can be identified in all three developing regions. The table identifies 20 transitions from low- to lower-middle to upper-middle or to high-income status as defined by the World Bank. China climbed two income categories, from low- to upper-middle income status. Chile, Uruguay and Panama reached high-income status, the only "converging" countries leaving the "middle-income trap" behind during the period of shifting wealth.

However, climbing the economic ladder is by no means automatic and reversals of fortunes often occur. For instance, Argentina and Russia were downgraded from high to upper-middle income in 2014. And although convergence in income levels may have been achieved, development challenges and pockets of fragility remain across income levels.

Since the establishment of IDA in 1960, there have been 44 transitions from IDA eligibility. Several countries have transitioned more than once as they had to return to IDA eligibility. Eleven countries suffered such reversals in IDA eligibility, with most transitioning during the 1980s and particularly exposed to commodity prices, political instability and debt stress (Sumner, 2016[38]).

Table 2.3. Transitions in World Bank income status

GNI (Gross national income) per capita classification

Country	Initial Income Level	1990s	2000s	2010s
Africa				
Burkina Faso	Low-income	Low-income	Low-income	Low-income
Egypt	Low-income	Lower middle-income	Lower middle-income	Lower middle-income
Mauritius	Lower middle-income	Upper middle-income	Upper middle-income	Upper middle-income
Mozambique	Low-income	Low-income	Low-income	Low-income
Lesotho	Low-income	Low-income	Lower middle-income	Lower middle-income
Uganda	Low-income	Low-income	Low-income	Low-income
Asia				
Bangladesh	Low-income	Low-income	Low-income	Lower middle-income
Cambodia	Low-income	Low-income	Low-income	Lower middle-income
China	Low-income	Lower middle-income	Lower middle-income	Upper middle-income
India	Low-income	Low-income	Lower middle-income	Lower middle-income
Indonesia	Low-income	Low-income	Lower middle-income	Lower middle-income
Lao PDR.	Low-income	Low-income	Low-income	Lower middle-income
Malaysia	Lower middle-income	Upper middle-income	Upper middle-income	Upper middle-income
Nepal	Low income	Low-income	Low-income	Low-income
Pakistan	Low-income	Low-income	Lower middle-income	Lower middle-income
Sri Lanka	Low-income	Lower middle-income	Lower middle-income	Lower middle-income
Thailand	Lower middle-income	Lower middle-income	Upper middle-income	Upper middle-income
Turkey	Lower middle-income	Upper middle-income	Upper middle-income	Upper middle-income
Viet Nam	Low-income	Low-income	Lower middle-income	Lower middle-income
Latin America				
Chile	Lower middle-income	Upper middle-income	Upper middle-income	High-income
Costa Rica	Lower middle-income	Lower middle-income	Upper middle-income	Upper middle-income
Dominican Republic	Lower middle-income	Lower middle-income	Upper middle-income	Upper middle-income
El Salvador	Lower middle-income	Lower middle-income	Lower middle-income	Lower middle-income
Mexico	Lower middle-income	Upper middle-income	Upper middle-income	Upper middle-income
Panama	Lower middle-income	Upper middle-income	Upper middle-income	High-income
Peru	Lower middle-income	Lower middle-income	Upper middle-income	Upper middle-income
Uruguay	Upper middle-income	Upper middle-income	Upper middle-income	High-income

Note: The country income classifications are derived from the World Bank and represent income thresholds as of 1 July 2018. Only countries with a continuous G7-relative per capita improvement throughout the entire shifting wealth period are presented.
Sources: Authors' calculations, based on World Bank (2018[39]), *World Bank Country and Lending Groups*, Historical classification by income, https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups (accessed in August 2018).

Focusing on countries from Africa, Asia and Latin America, Table 2.4 presents the recent history of IDA graduation and reversals for the three sub-periods of shifting wealth – the 1990s, 2000s and 2010s. The volatile 1990s had nine episodes of reversals – a return to IDA eligibility – but only four graduation episodes. This was a result of debt overhangs and slumping commodity exports, which in turn triggered capital flight. The Heavily Indebted Poor Countries (HIPC) initiative of the World Bank and International Monetary Fund (IMF) was rolled out in 1996; the Multilateral Debt Relief Initiative followed in 2005. Unsurprisingly, the debt relief initiatives stopped the trend towards IDA reversals in the 1990s. However, the decade of "pervasive convergence" – the 2000s up to the GFC – failed to leave marks in the IDA graduation process as only Indonesia graduated from IDA eligibility. During the 2010s, India – IDA's most important client – graduated (with

several other countries). This triggered intense debate about the future of IDA and other multilateral concessional windows (Garroway and Reisen, 2014[40]). The 2010s saw only one reversal back to IDA eligibility: conflict-ridden Syria.

Table 2.4. IDA eligibility and LDC graduation/reversals

	1990s	2000s	2010s
IDA graduates	The Philippines (1993)	Indonesia (2008)	Angola (2014)
	China (People's Republic of) (1999)		Azerbaijan (2011)
	Egypt (1999)		Bolivia (2017)
	Equatorial Guinea (1999)		India (2014)
			Sri Lanka (2017)
			Viet Nam (2017)
IDA reversals	Cameroon (1994)	Papua New Guinea (2003)	Syrian Arab Republic (2017)
	Republic of the Congo (1994)		
	Côte d'Ivoire (1994)		
	Egypt (1991)		
	Honduras (1991)		
	Indonesia (1998)		
	Nicaragua (1991)		
	Nigeria (1989))		
	Zimbabwe (1992)		
LDC graduates	Botswana (1994)	Cabo Verde (2007)	Maldives (2011)
			Samoa (2014)
			Equatorial Guinea (2017)

Sources: IDA Graduates, World Bank (2018[41]), *IDA Graduates*, http://ida.worldbank.org/about/ida-graduates (accessed in April 2018); and UN (2018[42]), *List of Least Developed Countries (as of March 2018)*, https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/ldc_list.pdf (accessed in March 2018).

Graduating from LDC status

A third measure of economic transition, the LDC status, is more concerned with a multidimensional range of factors than the World Bank country income status and IDA eligibility. The United Nations has designated 47 countries as LDCs, which together have more than a billion people. The LDCs comprise a category of states that are deemed highly disadvantaged in their development process, for structural, historical and geographical reasons. These countries are also characterised by their vulnerability to external economic shocks, natural and human-made disasters, and communicable diseases. The United Nations Economic and Social Council reviews the list of LDCs every three years in light of recommendations by the Committee for Development Policy (CDP). The CDP uses poverty (per capita gross national income), human assets (nutrition, health, school enrolment and literacy) and economic vulnerability (e.g. exports and agricultural production, see below) to determine LDC status.

To graduate out of LDC status, a country must reach certain thresholds in two of the three indicators over two reviews. Since its inception in 1971, more countries have been given such a status than have graduated from it. In fact, from 1972 to 1991, 23 countries were added to the LDC list, joining the original 24 countries. The first country to graduate was Botswana in 1994, during the first phase of shifting wealth. However, in contrast to the transitions based on mere economic performance, only one country (Cabo Verde) graduated in the first decade of the 2000s. Since then, the Maldives (2011), Samoa (2014)

and Equatorial Guinea (2017) have graduated, with Vanuatu and Angola expected to leave the LDC status soon. The lower transition count, compared to the two measures above, reflects the importance of the multidimensionality of development and that social outcomes do not always piggyback economic development. The absence of returns to LDC status also suggests the UN measure is a more appropriate indicator of sustainable development.

The Fourth United Nations Conference on the LDCs adopted the Istanbul Programme of Action (IPoA) in May 2011 for the decade 2011-20. It reflects a common vision and strategy for the sustainable development of LDCs with a strong focus on developing their productive capacities. A broad range of actors is expected to contribute to IPoA implementation, including donor countries, developing countries, parliaments, the private sector, civil society, the UN system, and international and regional financial institutions. LDC IV Monitor, a partnership established by eight organisations (including the OECD Development Centre) aims to help deliver commitments to the LDCs more effectively in order to help them meet the criteria for graduation. This is closely related to the objective to achieve sustained, equitable and inclusive economic growth in LDCs to at least a level of 7% annually. The IPoA focuses on reducing vulnerabilities of LDCs and addresses new challenges to development. This includes the effects of the interlinked food, fuel and economic crises and climate change, with a strong focus on structural transformation through increasing productive capacity.

To be sure, there is tentative evidence that LDCs have made progress on two accounts: a) in reducing economic vulnerability; and b) in shifting resources from low-productivity to high-productivity areas. But global warming increasingly raises LDC physical (rather than economic) vulnerability. Higher physical shock exposure undermines resource shifts into promising high-productivity areas such as horticulture and tourism. Both shifts are connected prerequisites for a sustained transition for LDCs.

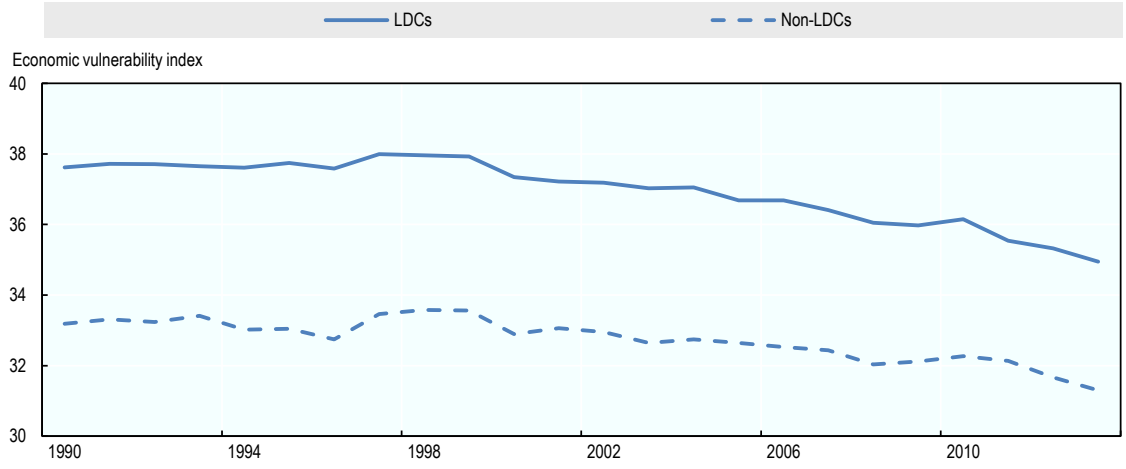
Assessing LDCs' shock exposure beyond policy shortcomings has produced two kinds of vulnerability indices (Guillamont, 2011[43]). These have recently been used for allocation of European Union (EU) development funds:

- Structural economic vulnerability (as measured by the UN Economic Vulnerability Index, EVI). EVI is a composite split evenly between "exposure" (size, location, agricultural share) and "shock intensity" (both natural and trade). EVI would be used for the allocation of development assistance.[3]
- Physical Vulnerability to Climate Change Index (PVCCI). PVCCI is split evenly between "risks related to progressive shocks" (flooding due to sea-level rise; increasing aridity) and "risks related to the intensification of recurrent shocks" (rainfall; temperature). PVCCI could be used for the allocation of adaptation resources.

Structural economic vulnerability measured by the EVI is significantly higher in LDCs than in non LDCs on average over 1990-2013. Although average EVI has decreased in both categories of countries, it has decreased faster in LDCs than in non-LDCs in recent years. This is especially the case since 2003-04 when debt relief had been granted to 145 countries, as shown in Figure 2.16, for 1990-2013 countries (Feindouno and Goujon, 2016[44]).

Figure 2.16. Evolution of the economic vulnerability index

Expressed as annual averages across country groups



Note: The index is constructed using eight different vulnerability components: population size, remoteness from world markets, export concentration, share of agriculture, forestry and fisheries in GDP, share of population living in low elevated coastal zones, export instability, instability of agricultural production, victims of natural disasters. The higher the index, the more economically vulnerable the country or region.
Source: Feindouno and Goujon (2016[44]), *The retrospective economic vulnerability index, 2015 update*.

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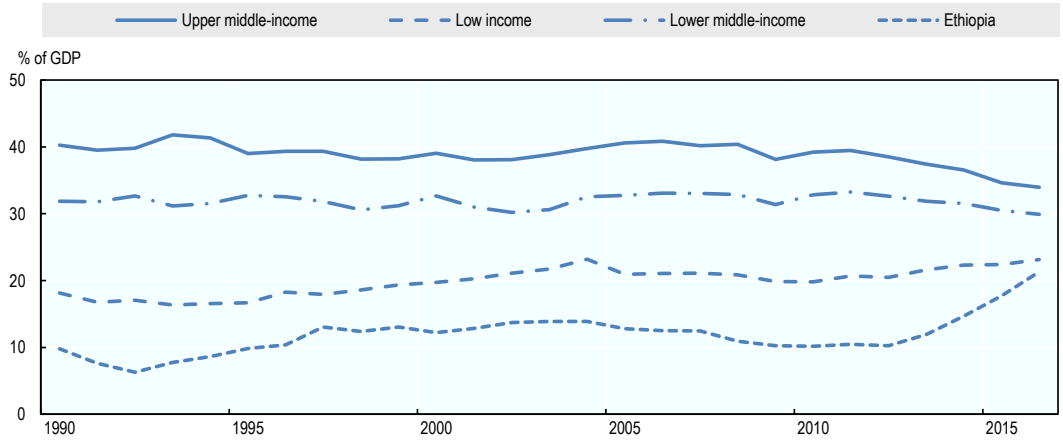
The EVI indicator seems to be blind to looming debt problems, although LDCs have a low degree of debt tolerance. While their official sovereign (Paris Club) and multilateral debt was relieved by debt relief in the mid-2000s, private-sector debt and emerging-partner (mostly China) debt has risen fast in some countries. Debt burdens and vulnerabilities have risen significantly since 2013 in many developing countries. This reflects a mix of factors, including exogenous shocks and loose fiscal policies (Diao, McMillan and Rodrik, 2017[45]). At the end of 2017, 68% of LDCs were assessed as under severe or moderate debt distress; two were in default (IMF, 2018[46]). Two-fifths of LDCs (most of them in sub-Saharan Africa) faced significant debt challenges in 2017, up from one-fifth in 2013/14. Most debt-distress LDCs were classified as "diversified exporters" (rather than simply fuel or copper), reflecting weaker fiscal revenues and spending overruns, but also higher capital spending.

Whether sustained development requires higher industrialisation or whether "premature deindustrialisation" will stop development underway is open to debate (Sumner, 2018[47]). First, a sustained development process requires a shift of resources from low-productivity to high-productivity sectors (Lewis, 1954[48]). Second, it requires a larger share of resources devoted to sectors with potential for rapid productivity growth.

Diao, McMillan and Rodrik (2017[45]) confirm the importance of Lewis-type structural change for recent growth acceleration in low-income countries. However, in contrast to earlier East Asian experiences, rapid industrialisation does not seem to have driven recent growth accelerations in middle-income countries. The industry share (expressed as value added in percentage of GDP) in both the upper- and lower-middle income groups has reverted from peaks of the mid-2000s (Figure 2.17).

Figure 2.17. Industry share in GDP has reverted from peaks in upper- and middle-income countries, but recently picked up in low-income countries

Expressed in percentage of GDP



Source: World Bank (2018[27]), *World Development Indicators (database)*, Industry (incl. construction), value added (% of GDP), http://databank.worldbank.org/data/source/world-development-indicators (accessed in February 2018).

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Stalled manufacturing globally has worried many development experts that African LDCs have lost the opportunity to emulate East Asia's economic trajectory. Yet Africa has performed relatively well. Low-income countries saw their industry share slowly but steadily rise, especially in the 1990s and 2010s. This was not merely a reflection of commodity cycles, as illustrated by the spectacular case of Ethiopia.

However, Africa seems to owe structural transformation not only to traditional industries, but to new developments in tradable services and agro-industries that resemble traditional industrialisation (Coulibaly, 2018[49]). Aside from horticulture and agro-business, these new industries include information and communication technology-based services and tourism.

Shifting wealth – a driver for South-South integration

South-South integration has also supported development in transition. In fact, the dynamism of South-South economic ties has been an essential element of shifting wealth since the 1990s.

In his 1979 Nobel Prize lecture, Sir Arthur Lewis (1979[50]) had already envisaged the important role of South-South trade for sustained GDP convergence of the southern world:

> *The real problem is whether LDCs will persist in rapid growth despite the slowdown of the MDCs [More developed countries]. If the economy is still dependent, the balance of payments will pull it down; but if it has attained self-sustaining growth, the weakness in the foreign exchanges merely launches a drive*

> *to export to other LDCs, and the weakness in the balance of payments is then only transitional. If a sufficient number of LDCs has reached self-sustaining growth we are into a new world. For this means that instead of trade determining the rate of growth of LDC production, it will be the growth of LDC production that determines LDC trade, and internal forces that will determine the rate of growth of production. (Lewis, 1979[50])*

Are we into that new world imagined by Arthur Lewis 40 years ago? The answer is yes and no.

Yes, because the non-OECD countries have increased their share in world output, merchandise trade and finance (including remittances). The corresponding trends will be documented in the following sections. Yes, because the relative shift in net foreign assets positions (the shift in net wealth) away from the group of OECD member countries has helped fund the creation of a new geography of development finance, not least the Belt and Road Initiative (BRI) by the Chinese government.

No, because China dominates the respective non-OECD shares in world output, merchandise trade and finance. This holds in a directly observable sense, but also indirectly as China's rise and development cycles have impacted global factors. This, in turn, has (temporarily) raised non-OECD shares in the aggregate, especially during the second period (2000-09) of shifting wealth. The most striking example is the temporary rise of oil and metal prices that led to rising shares of non-OECD raw material exporters in world trade.

Much of South-South integration was driven by raw materials, especially during the 2001-08 phase of pervasive convergence:

- Higher prices for raw materials boosted export values for net commodity exporters and the import bills of net commodity importers, including China, which boosted South-South trade value.
- Higher resource rents filled foreign exchange reserves and assets of sovereign wealth funds in oil- and copper-producing countries, which were reinvested in and lent to developing countries.
- Immigration into the Gulf States was stimulated by higher oil earnings, boosting remittances especially to South Asia.
- Swaps – where revenues from the export of natural resources are used as collateral for a loan to finance infrastructure development – stimulated South-South co-operation in new ways not accounted for by conventional official development assistance (ODA).

Subsequently, developing economies met the strong decline in commodity prices with generally deeper integration on both the trade and financial sides. Policy initiatives by the Chinese government have thereby turned out to be key in fostering this shift to deeper South-South integration.

South-South trade

By 2010, developing countries accounted for around 42% of global merchandise trade, with South-South flows making up about half of that total (UNCTAD, 2013[51]). South-South trade has risen fast both as part of extended global production networks and to

satisfy the demands of a growing middle class. The dollar value of South-South trade multiplied more than 13 times to USD 4 trillion in 2016 since China joined the WTO in early 2001 (Figure 2.18). In contrast to a drop in North-North trade and stagnation in South-North trade, South-South trade remained dynamic even in the post-crisis period.

The impressive headline development of South-South trade, however, disguises quite an uneven pattern, as will be shown below in some detail:

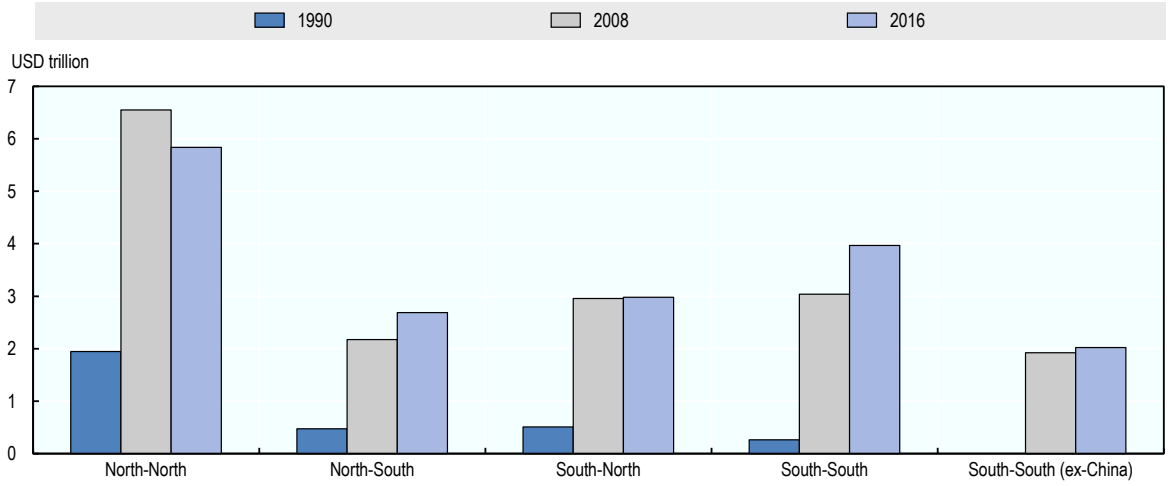
- South-South trade has remained dynamic even post GFC, thanks to China and the LDCs.
- Correcting for China and LDCs, South-South trade shares have declined as a percentage of "southern" exports over the past two decades, reflecting lower South-South shares in the exports of middle-income countries.
- As South-South trade has been increasingly China-centric, there are doubts whether it can still offer a developmental promise absent in North-South trade. It is reassuring, though, that LDCs managed to double their share in intra-South trade since 1995.

Much developmental hope has been attached to the rise in South-South trade, resonating with the former structuralist literature, inspired by the 1950 Prebisch-Singer hypothesis. The structuralist school had argued that North-South trade would leave the South in a constant state of underdevelopment, because of deteriorating terms of trade, slow technology transfer and concentration on low-end products. South-South trade, by contrast, would benefit developing countries by stimulating the product and geographical diversification of their exports, thus reducing vulnerability to output cycles in the North (Didier, 2017[52]). The PGD 2010 (OECD, 2010[1]) pointed to further benefits of South-South relative to North-South trade: more trade creation than trade diversion in practice; better learning-by-doing effects; intermediate technology transfer; proximity; and eased integration into global value chains.

The outstanding role of China driving South-South trade and the role of booming oil and metal prices have often been obfuscated (see e.g. Aksoy and Ng, (2014[53])). However, China has largely driven the surge in South-South trade, directly and indirectly, accounting for almost half of South-South exports. China's directly measurable impact is clearly indicated by the right column in Figure 2.18, which depicts South-South trade excluding China: excluding China's (direct) share from the trade data shows stagnation of South-South trade from 2008. While that trade was virtually nil in 1990, it had reached USD 1.9 trillion by 2008, thanks to rising raw material prices and Chinese infrastructure building. As it is difficult to disentangle raw material prices and capacity building from the trade data, these are China's indirect drivers of South-South trade. In addition to its importance in Southeast Asia, China became Africa's biggest commercial partner in 2009 (AfDB/OECD/UNDP, 2017[54]), while expanding commercial ties with Latin America too (OECD/CAF/UN ECLAC, 2015[55]).

Figure 2.18. South-South trade is still dynamic, but China-centric

Expressed in USD trillion



Note: North refers to developed countries and South refers to developing countries, according to the classification in the UNCTAD Handbook of Statistics, i.e. excluding transition economies.
Source: Authors' calculations based on UNCTAD (2018[56]), *International trade in goods and services (database)*, Merchandise: Intra-trade and extra-trade of country groups by product, annual, http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx (accessed in April 2018).

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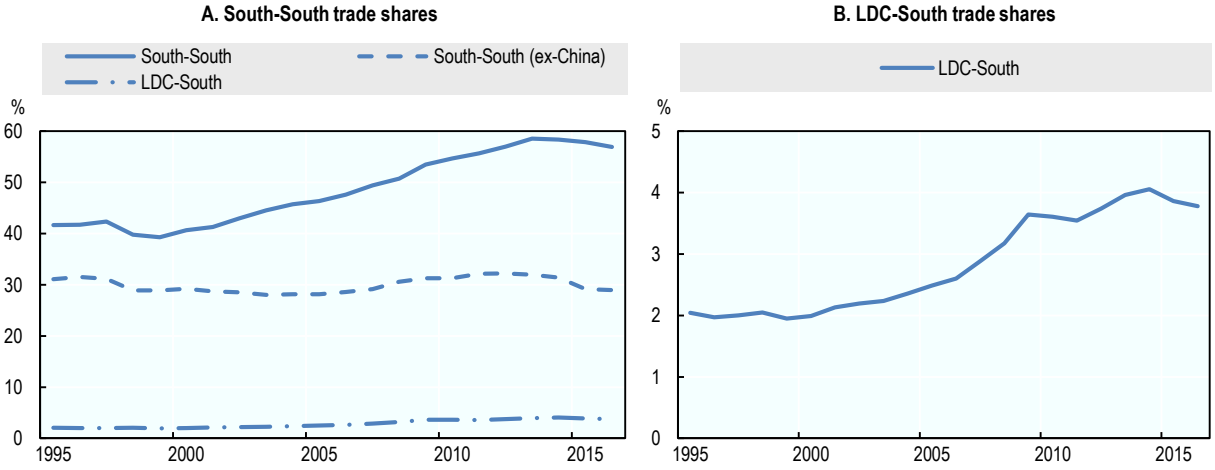
Figure 2.19 (Panel A) indicates the percentage shares in total southern exports of total South-South trade, South-South trade excluding China, and LDC-South trade. South-South trade clearly got a boost from China's WTO accession and booming raw material prices, particularly from 2001 (42.3%) to 2013 (58.5%). Excluding China from the trade data, however, indicates a flat trend in southern intra-group trade shares during the observation period, oscillating around 30%. This trend in South-South trade is particularly driven by middle-income countries (excluding China). LDC-South trade shares have increased over this period (Figure 2.19, Panel B). Finally, the cyclical upswing of advanced (northern) countries may explain the recent drop in total South-South trade shares.

With South-South trade being China-centric and China's economy increasingly resembling advanced economies, it is an open question whether South-South trade can still offer a developmental promise that might be missing in North-South trade. Therefore, Figure 2.19 (Panel B) zooms in on LDC-South trade shares 1995-2016 (as percentage of total southern exports). That share doubled from 2% to 4% during the past two decades, particularly since China's WTO accession in 2001. The continuous rise of the poorest countries' share in South-South trade – through peaks and troughs of the commodity cycle – should be indicative of positive development factors. Most likely it reflects improved infrastructure that helps facilitate trade, but also regional integration (such as in West Africa) and other South-South free trade agreements (Wignaraja and Lazaro, 2010[57]). With China's transitioning to the "new normal", developing economies may increasingly profit from a transferral of manufacturing activities to low-cost destinations.

Figure 2.19. While South-South trade has expanded and become more China-centred, the LDCs have doubled their trade share with the South

Trade shares between specific groups of countries (1995-2017)



Note: Trade shares are expressed as percentages of total southern exports.
Source: Authors' calculations based on UNCTAD (2018[56]), *International trade in goods and services (database)*, Merchandise: Intra-trade and extra-trade of country groups by product, annual, http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx (accessed in April 2018).

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The role of China in South-South trade

Since the GFC, Chinese imports have been the driving force for South-South trade. World imports determine the export potential for developing countries, but were almost flat between 2008 and 2016 as a result of cyclical and structural factors. Chinese imports, by contrast, continued to grow. The percentage share of China's imports in world imports has surged since China's WTO accession, from 2.3% the year before to 9.7% in 2016, the latest year for which comparable trade data are available. Table 2.5 presents world trade as trends in imports over 1990-2016.

Table 2.5. Imports of goods and services

World imports expressed in current USD trillion

	1990	2000	2008	2016
World imports	4 304	7 893	19 455	20 139
China's share (in percentage)	**1.1.**	**2.3**	**5.9**	**9.7**
South (excluding China) (in percentage)	**21.3**	**22.7**	**26.8**	**28.0**

Source: Authors' calculations based on UNCTAD (2018[56]), *International trade in goods and services (database)*, Merchandise: Intra-trade and extra-trade of country groups by product, annual, http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx (accessed in April 2018).

The fast growth of China's market share in the world can be explained through several transforming factors. Until the mid-2000s, China's export performance was based on strong price competitiveness due to two reasons. First, rural surplus kept labour costs

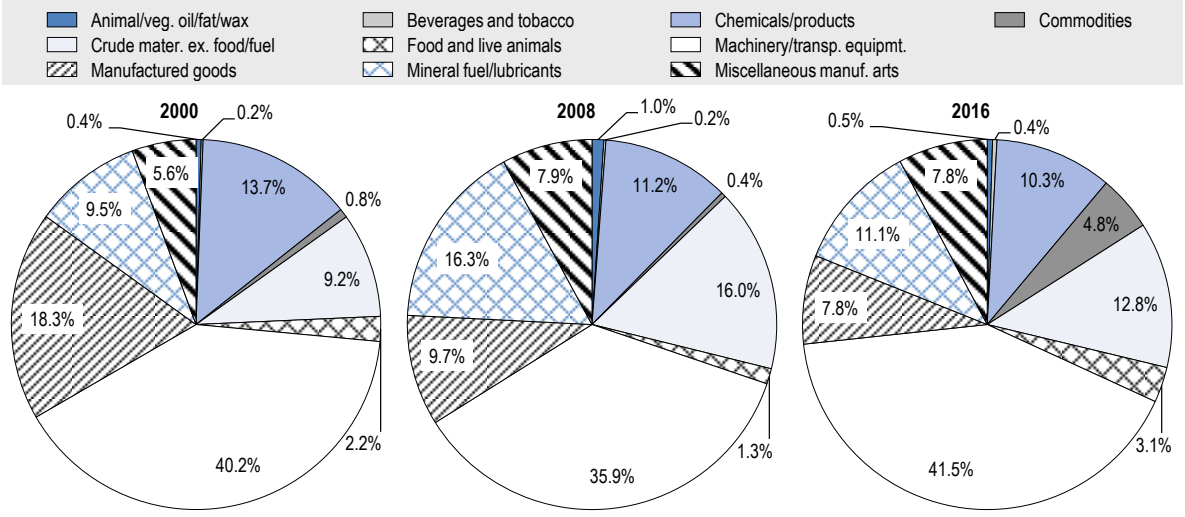
down. Second, the yuan stayed competitive despite surpluses in the balance of payments. China's import growth expanded fast during the 2000s (Table 2.5).

China's position in world trade continues to rise. However, this situation no longer seems to stem primarily from its participation in global GVCs (Lemoine and Unal, 2017[5]). While processing activities have declined rapidly, China's ordinary trade has proved relatively resilient. It has become the most dynamic component of China's international trade. The sectoral and geographical characteristic of ordinary trade is quite different from that of processing trade. Ordinary imports are primarily intended to be marketed or used domestically.

Figure 2.20 presents pie charts on China's import composition for the years 2000 (pre-WTO), 2008 (GFC) and 2016 (latest). Manufactured goods (consisting mostly of electronics) and chemicals declined steadily as a share of China's imports. Meanwhile, miscellaneous manufactures and food imports rose. The cyclical component machinery and transport equipment remained China's most important import category. Its share of fuel- related imports has come down quite markedly since 2008.

Figure 2.20. China's imports became more balanced towards domestically used and marketed goods

Goods imported (percentage of total imports)



Source: Authors' calculations based on UN (2018[58]), *Comtrade (database)*, Imports of goods (percentage of total Chinese imports), https://comtrade.un.org/data (accessed in June 2018).

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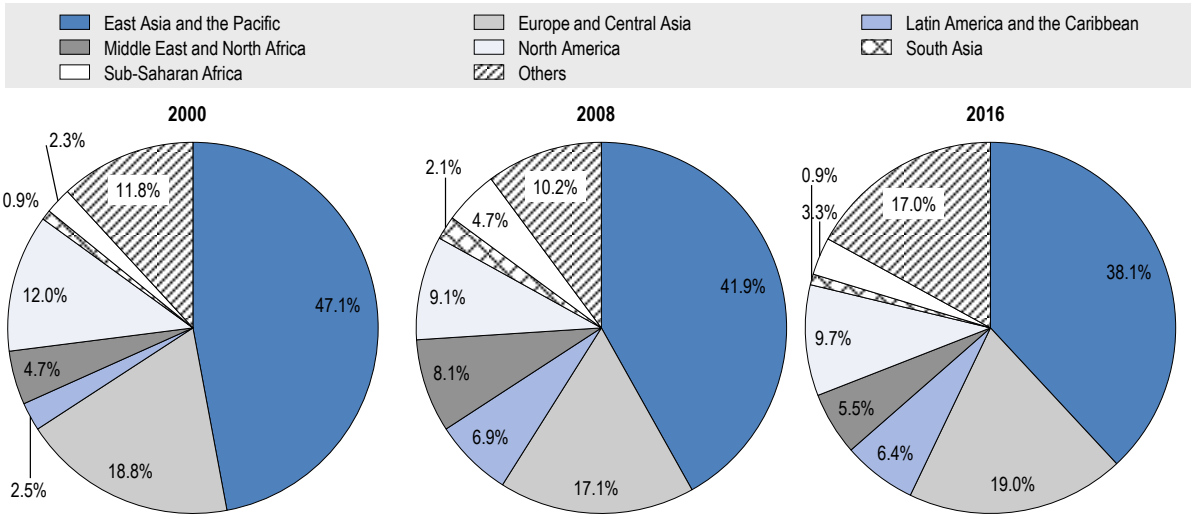
The relatively lower importance of fuel and metals also explains why the share of developing regions came back overall between 2008 and 2016. The continuous slide in the import share from East Asia indicates the relatively lower importance of processing GVC trade in China's foreign trade (Figure 2.21). In the years before, notably Latin America and sub-Saharan Africa had enjoyed growing shares in China's imports until the GFC.

Figure 2.21. China increasingly imports from regions other than East Asia

Regional trade shares (percentage of total imports, 2000; 2008; 2016)



Source: Authors' calculations based on UN (2018[58]), *Comtrade (database)*, Regional trade shares (percentage of total Chinese imports), https://comtrade.un.org/data (accessed in June 2018).

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Complex cross-border production-sharing activities related to GVCs were the most important force driving globalisation and the growth of global GDP during 1995-2000 and 2000-08 before declining during 2012-15 (WTO, 2017[59]). GVCs create new opportunities for developing countries, increase their participation in global markets and enable them to diversify exports. However, they have apparently not been inclusive enough to foster South-South links. Proximity to the world's three major production hubs and high-income markets – the United States, Asia and Europe – is highly important (WTO, 2017[59]). It also matters for developing countries to which degree trade partners are integrated within regional GVCs.

Many developing countries are increasingly involved in GVCs, carrying out different steps in partitioned production processes (Cadestin, Gourdon and Kowalski, 2016[60]). Southeast Asian economies and those in Europe and Central Asia show the highest degrees of participation, while Middle East and North African countries also have relatively high participation rates. South Asia, along with regions in sub-Saharan Africa, trail behind. Southeast Asia – the region with some of the most comprehensive and deepest regional integration agreements among developing countries – has the highest average share of intra-regional GVC participation. In the rest of the developing world, the share of intra-regional GVC participation is lower than the share of extra-regional links (Kowalski et al., 2015[61]).

WTO (2017[59]) reports a reduction in cross-country production-sharing in complex GVC during the economic recovery since 2011, contrasting with patterns in three previous recovery periods over the past 20 years. Indeed, the structure of value-added creation (pure domestic production, traditional trade production, simple GVC and complex GVC) during the economic recovery since 2011 reverses previous patterns. Unlike the rapid globalised production driven by the growth of complex GVC activities in previous

periods, the economic recovery since 2011 has less cross-border production-sharing activities in complex GVCs. This may also mean the China-centric growth of middle- and low-income countries observed during the 2000s has been lower since 2011.

A new geography of South-South development finance

Especially since the early 2000s, large emerging countries have become important providers of development funds. Shifting wealth has allowed governments to tap a bigger pool of "transformative infrastructure finance" and to choose from more financing options (Xu and Carey, 2015[62]). From a long-term development perspective, infrastructure finance is arguably the most important prerequisite to close the infrastructure gap. This gap has been identified as the major bottleneck for delivering on growth and on the Sustainable Development Goals (SDGs), notably in Africa. Much of the new funding supply is through official bank credit outside the Paris Club framework, however. This, in turn, has amplified concerns that a new debt overhang might be building in the absence of a concerted mechanism for debt prevention and resolution.

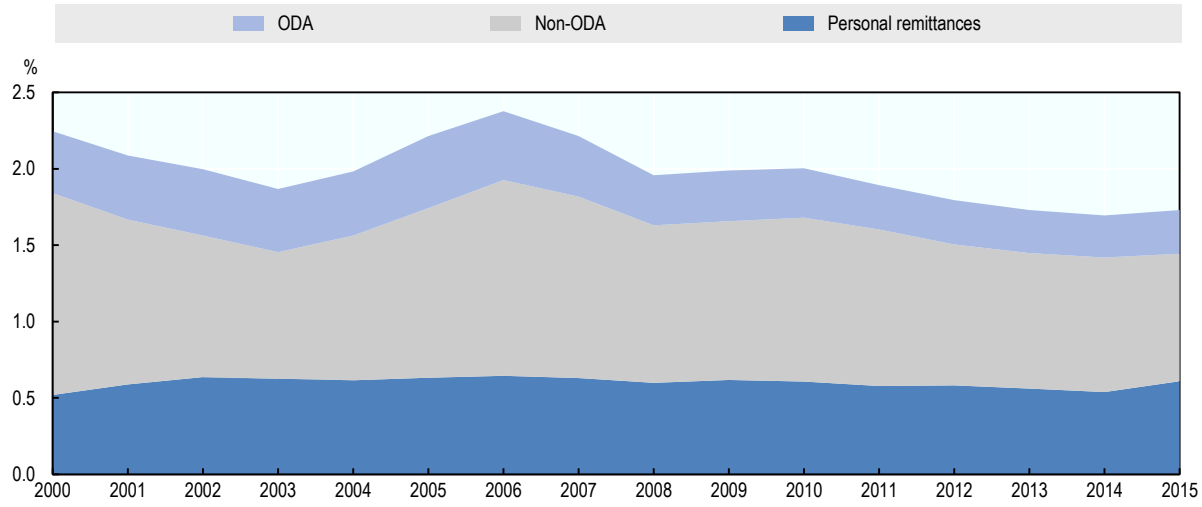
The rise in South-South finance is being channelled through three major vehicles: i) increased remittances within the non-OECD area, often resulting from commodity riches; ii) growing corporate equity participation via mergers and acquisitions (M&A), as well as greenfield foreign direct investment (FDI) by emerging multilateral companies; and iii) an extension of bilateral and multilateral bank credit supply, notably by China. The overall rise of development funds has occurred despite a downward trend of ODA as a fraction of recipient countries' rising GDP. Western donors, including private ones, had reduced investment in infrastructure in the past decades. Instead, they devoted more attention to poverty reduction, health, good governance and climate change mitigation.

Total external development finance to all developing countries more than doubled between 2003 and 2012 to USD 269 billion (Prizzon, Greenhill and Mustapha, 2016[63]). In 2012, development finance flows beyond ODA by DAC donors – excluding FDI, portfolio equity and remittances – accounted for USD 120 billion, or around 45% of total development finance; 13% of this USD 120 billion was from so-called emerging donors, such as Brazil, China, the Gulf States, India, Malaysia, Russia and Thailand.

Over recent years, remittance flows – funds sent by migrants living and working abroad to their home countries – have been increasing in line with expanding developing countries' GDP (Figure 2.22). Booming oil prices translated in higher demand for immigrants in the construction and other service sectors of the Gulf States and Russia. While private capital mainly flows to emerging countries, remittances are particularly important in poorer countries where they can represent up to a third of national GDP. India, China, the Philippines and Mexico receive the largest remittances in the world by amount. As a share of GDP, however, smaller countries such as Tajikistan (42%), Kyrgyzstan (30%) and Nepal (29%) were the largest recipients.

Figure 2.22. Remittances have been increasing with developing economies' GDP

External financial receipts (percentage of developing economies' GDP in PPPs, 2000-15)



Note: The figure presents three-year moving averages, scaled by developing economies' GDP based on PPPs.
Sources: Authors' calculations based on World Bank (2017[64]), *Migration and Remittances Data*, http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/brief/migration-remittances-data (accessed in July 2018); OECD (2018[65]), *International Development Statistics (IDS) online databases*, Total net ODA disbursements from all donors to developing countries, https://stats.oecd.org/qwids/#?x=1&y=6&f=3:51,4:1,5:3,7:1,2:262&q=3:51+4:1+5:3+7:1+2:262+1:1,2,25,26+6:2005,2006,2007,2008,2009,2010,2011,2012,2013,2014,2015 (accessed in July 2018).

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The top five immigration countries, relative to population, are outside the high-income OECD member countries (World Bank, 2016[66]): Qatar (91%), United Arab Emirates (88%), Kuwait (72%), Jordan (56%) and Bahrain (54%). Due to an upsurge in migration, remittance flows into developing countries sprang up in the 1990s, becoming another important financial resource for developing countries. During 1970-2000, workers' remittances to sub-Saharan Africa only reached 2.6% of GDP. This inflow was clearly lower than its official inflows that added up to 11.5% of sub-Saharan Africa's GDP (Buch and Kuckulenz, 2010[67]). This trend contrasted to North Africa and the Middle East, which received almost 9% of GDP through remittances over that period. By 2015, remittances represented the largest source of external finance for many developing countries, ahead of ODA and FDI. At that time, worldwide remittance flows were estimated to have exceeded USD 601 billion. Of that amount, developing countries were estimated to have received about USD 441 billion, nearly three times the amount of ODA.

Table 2.6. Developing country FDI outflows and inflows

Expressed in USD billion

	1990	2000	2008	2016
FDI outflows				
LDCs	0.0	2.1	18.4	11.9
China	0.8	0.9	55.9	183.1
Total South	**13.1**	**90.0**	**288.6**	**383.4**
FDI inflows				
LDCs	0.6	5.3	32.3	37.9
China	3.5	40.7	108.3	133.7
Total South	**-**	**233.8**	**592.7**	**646.0**

Source: Authors' calculations based on UNCTAD (2018[68]), *Foreign direct investment (database)*, Foreign direct investment: Inward and outward flows and stock, annual, http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740 (accessed in May 2018).

FDI flows have increasingly turned into a two-way street since the GFC. Traditionally, and until the late 1990s, developing countries have hosted FDI rather than being the source of FDI flows. While inward FDI has plateaued for many emerging economies in the 2010s, much of the dynamism is now in outward FDI. Table 2.6 provides evidence on FDI outflows and inflows for the years 1990, 2000, 2008 and 2016. Up to the GFC, Latin American companies used to spearhead outward investment from emerging economies. Since then, China raised its percentage share in developing-country FDI outflows from 1% in 2000 to almost 50% by 2016. Chinese multinationals have increasingly taken the M&A route for their overseas expansion, particularly after the GFC of 2008-09.

Greenfield investment, i.e. investments in new assets, is an important mode of entry for Indian and Malaysian multinationals compared to M&A. Indeed, India and Malaysia are the only other emerging countries besides China listed among the top 15 countries for greenfield FDI in 2016. Emerging countries continue to primarily invest South-South in other emerging and developing economies, as most emerging economies' regional markets serve as the primary destination for their outward greenfield FDI flows. The share of outward FDI projects of the largest 20 emerging countries (in value) directed to the Asia-Pacific region has declined, but has increased to Africa, Latin America and especially North America (Casanova and Miroux, 2017[69]).

The poorest countries classified by UNCTAD as the LDC group have started to participate at last in hosting considerable FDI inflows as a proportion of their GDP. South-South FDI contributed to that new trend, with growing activity from many firms in China, Brazil, India and South Africa.[4]

Intricately linked to FDI are Special Economic Zones (SEZs) that have proven to be a key element of economic development and strategic planning in many developing countries. Initially set up as export processing zones for rather labour-intensive manufacturing, contemporary SEZs have begun incorporating higher value-added components.

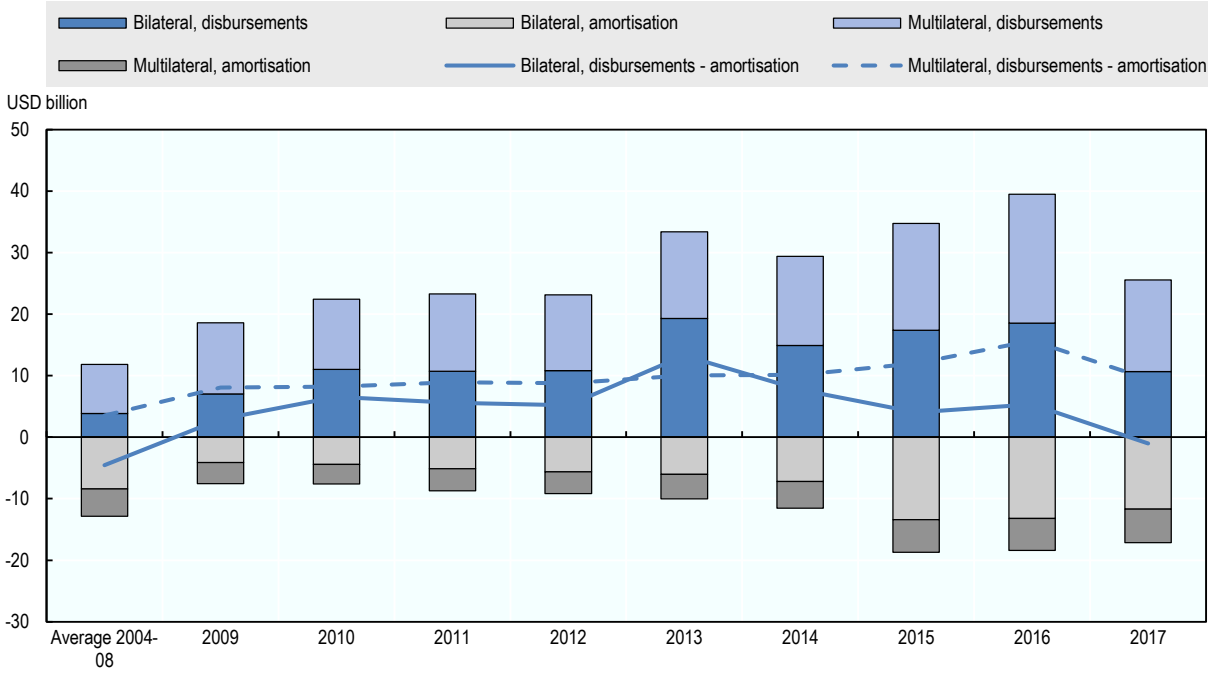
Since the inception of shifting wealth, the numbers of SEZs in developing economies have increased from only 176 zones in 47 countries in 1986 (Boyenge, 2007[70]) to over 4 300 in more than 130 countries in 2015 (The Economist, 2015[71]). Zones in East Asia early on led the climb up the value chain.[5] Elsewhere, countries such as the Dominican Republic are shifting towards technology-intensive sectors such as the automotive industry through settling a variety of upstream suppliers (WTO, 2017[59]).

China has been establishing SEZs at home since 1979. Building on this experience abroad, China has been setting up "overseas zone programmes" since 2000 either to establish value chains or profit from economic co-operation and mutual learning through joint zones. This engagement, however, is still regionally concentrated. By 2014, out of the initial 50 foreign zones supported by the Chinese Ministry of Commerce, 44 were built in Asia and only six in Africa (Bräutigam and Tang, 2014[72]).

In the 2000s, China became a global leader in official bank credit for infrastructure funding. This funding benefited Africa above all, building roads, dams, bridges, railways, airports, seaports and electricity grids. Meanwhile, China established several bilateral and multilateral funds across the world, in addition to two policy banks, the China Development Bank and the Export Import Bank of China. Figure 2.23 suggests (for Africa) that in recent years multilateral flows have substituted for bilateral official lending flows. Despite steady growth in private sector funding in the past decade, official development finance backs 80% of Africa's infrastructure funding (ECN, 2015[73]). China has also pioneered a host of bilateral and regional development funds in the wake of founding the Belt and Road Initiative (BRI) in 2013 (see the section on China's Belt and Road Initiative below). These funds add upwards of USD 100 billion in development finance. A major portion of these Chinese investments is in Asia; the largest is the USD 40 billion Silk Road Fund established in 2014 (Gallagher, Kamal and Wang, 2016[74]).

Figure 2.23. In Africa, multilateral flows have substituted for official bilateral lending flows

Bilateral and multilateral disbursements and amortisation (USD billion, 2004-17)



Note: Values for 2017 are based on projections.
Source: Authors' calculations based on World Bank (2018[75]), *International Debt Statistics (database)*, Various indicators, http://databank.worldbank.org/data/reports.aspx?source=International%20Debt%20Statistics (accessed in March 2018).

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In 2015, two new multilateral financial institutions of consequential size and scope became legal entities. China led the creation of the Asian Infrastructure Investment Bank (AIIB), while the BRICS nations (Brazil, Russia, India, China and South Africa) championed and owned the New Development Bank (NDB). The NDB aimed to strengthen co-operation among the BRICS and beyond. The advent of these new multilateral development banks reflects a decentralisation of power from the Bretton Woods system and a shift in terms of soft power distribution beyond the G7. Their potential role and influence stems from: i) the size of their lending activity, even relative to long-established institutions such as the World Bank and the Asian Development Bank (ADB); ii) their relatively high capitalisation; and iii) their focus on infrastructure – a sector vital for growth and development. AIIB and NDB are expected to add significant financing capabilities with combined loan portfolios estimated at USD 230 billion (Reisen, 2015[76]).

Staying outside the relatively transparent DAC framework, China does not disclose comprehensive or detailed information about its international development finance activities. Aid Data (Dreher et al., 2017[77]) constructed a dataset with a new methodology for tracking underreported financial flows. According to these new data, the scale and scope of China's overseas infrastructure activities now rival or exceed that of other major donors and lenders. Between 2000 and 2014, the Chinese government committed more than USD 350 billion in official finance to 140 countries and territories in Africa, Asia and the Pacific, Latin America and the Caribbean, the Middle East, and central and eastern Europe. Transport and power generation are the two main sectors financed. Chinese co-operation also invests significantly in health, education, water and sanitation, agriculture, and other social and productive sectors.

Chinese official finance consists of ODA, which is the strictest definition of aid used by OECD-DAC members, and other official flows. China provides relatively little aid in the strictest sense of the term (development projects with a grant element of 25% or higher). A large proportion of the financial support that China provides to other countries comes in the form of export credits and market or close-to-market rate loans. Table 2.7 provides a calculation of the weighted average of China's development finance that was extended at concessional ODA terms: 24.5% for 2000-14.

Table 2.7. Recipients of Chinese official finance (2000-14)

World region	Total (in USD billion)	ODA terms (in %)	Number of projects
Africa	118.1	58	2 345
Eastern Europe	56.7	3	171
Latin America	53.4	12	317
South Asia	48.8	10	423
Southeast Asia	39.2	7	507
Other Asia	28.5	6	183
Middle East	3.1	1	93
Pacific	2.8	3	265
Total/Average	350.6	24.5	4 304

Source: Authors' calculations based on AidData (2017[78]), *AidData's Global Chinese Official Finance Dataset, 2000-2014, Version 1.0*, https://www.aiddata.org/data/chinese-global-official-finance-dataset (accessed in March 2018).

Africa benefited most from Chinese development finance during 2000-14 – in terms of amounts, degree of concessionality (percentage share at ODA terms) and number of

projects (Table 2.7). Zimbabwe, Angola, Sudan, Tanzania, Ghana, Kenya and Ethiopia headed the ranking of Africa's recipients in number of projects. Africa has received more Chinese ODA-like finance than all other developing regions in the world combined.

Infrastructure funding has risks for low-income countries with low debt tolerance, however, despite its transformative nature. China and other emerging creditors supply much of their new funding through official bank credit outside the Paris Club framework. International organisations and private institutions in Washington, DC, however, have voiced concerns that the absence of a concerted mechanism for debt prevention and resolution might lead to a new debt overhang. Greater borrowing opportunities have provided more room to expand development-oriented spending and address infrastructure gaps. However, long-term growth is enhanced only if borrowed funds are used productively, yielding a high economic rate of return that exceeds borrowing costs. Unfortunately the IMF (2018[46]) has noted that higher budgetary borrowing levels have been associated with a drop in public investment in many low-income and developing countries.

The IMF is particularly worried by the rise of debt since 2013 and by its composition in several post-HIPC countries now judged at high risk of, or in, debt distress. Those countries are all African: Cameroon, Chad, Democratic Republic of the Congo, Ethiopia, Ghana, Mauritania, Mozambique and Zambia. Their rise in debt levels has been financed by an increasingly fragmented composition of emerging bilateral creditors, commercial external creditors and the domestic financial system. By contrast, the contribution of traditional creditors (the multilateral development banks and Paris Club creditors) has been modest; they tend to limit provision of loans to such high-risk countries, or are more likely to provide grant finance in such cases.

China's Belt and Road Initiative

China's Belt and Road Initiative (BRI) is deepening South-South integration in the post-GFC period. Officially announced in September 2013 and incorporated into the Chinese constitution in October 2017, the initiative envisions the establishment of the Silk Road Economic Belt and the 21st Century Maritime Silk Road. It intends to promote connectivity and economic co-operation along the proposed Belt and Road routes, encompassing large areas of the Association of Southeast Asian Nations region, Central Asia, the Middle East and Eastern Europe.[6]

The BRI has both economic and political goals for China, but low-income countries may receive the greatest benefits. From an economic perspective, China hopes that new trade routes, markets and energy resources will help develop its own infrastructure capabilities and reduce cyclical input and output dependencies. In addition, the BRI is meant to help China take a leading role in establishing a multipolar world order. However, low-income countries participating in the BRI could reap the biggest developmental benefits, provided some prerequisites are met. For instance, China has placed political emphasis on developing links with countries along the China-Pakistan Economic Corridor and pledged to deepen economic ties with Viet Nam, Sri Lanka, Cambodia, Lao People's Democratic Republic, Myanmar and several eastern African countries.

Upon completion in 2049, the BRI envisages to reach more than 60% of world population and cover over 50% of global trade. This scale makes it the largest and most ambitious geo-economic vision in recent history. Although the BRI officially covers 87 countries, China's trade and investment links are so far concentrated on a relatively narrow number of Southeast Asian countries. By either providing new trade connections or upgrading

existing ones, trade time reductions across regions are estimated to range for individual countries somewhere between 26% (Republic of Moldova) and 63% (Myanmar). Improved connectivity also results in an increase in bilateral trade of at least 15% on average (World Bank, 2018[79]). To date, Chinese investment in transportation alone has resulted in about 2 100 infrastructure projects, (CSIS, 2018[80]). Whether the BRI will provide deeper economic and political integration of the countries concerned remains to be seen from a historical perspective.

Capital needs for fully implementing the BRI are estimated from USD 1 trillion to USD 8 trillion (Hurley, Morris and Portelance, 2018[81]).[7] By the end of 2016, China's big commercial banks and policy banks had shouldered 97% of the (debt) financing (Deloitte, 2018[82]). In addition, the BRI has been accompanied by the foundation of BRICS-centred multilateral lending institutions, the AIIB and the NDB. Chinese officials also have encouraged participation by traditional multilateral institutions like the World Bank, the ADB and the African Development Bank (AfDB). The Silk Road Fund provides financing to predominantly Chinese state-owned enterprises – from State Grid to shipping companies such as COSCO. The Chinese development banks, in turn, grant financial support to infrastructure projects in countries along the BRI economic corridors. Despite sometimes rivalling other development finance institutions from the West in granting concessional loans, there is no zero-sum competition as projects are often co-funded or China takes credit risks that other Western institutions do not.

The economic logic of connectivity and increasing economic integration on a trans-continental scale pursued by the BRI is strong. This is especially true given that globalisation appears to be in retreat in the face of rising protectionism and economic nationalism. In a widely quoted study, ADB (2017[83]) asserts that in USD 26 trillion in infrastructure investments are needed over 2016-30 in Asia alone to maintain 3% to 7% economic growth, eliminate poverty and respond to climate change. The economic benefits for participating countries from economically viable projects under the BRI would flow from the fact that infrastructure projects tend to relieve the most binding growth constraints. To be sure, the employment of Chinese labour and construction materials during BRI development may help slightly alleviate China's industrial overcapacities at home (Dollar, 2015[84]).

BRI corridors will entail higher benefits if partner countries lower cross-border transaction costs and import tariffs (Ramasamy et al., 2017[85]). A 30% decline in both impediments would generate, for instance, economic gains of 1.8% growth in GDP for China and anywhere from 5.3% to 16.9% of GDP for other participating member countries. Improving the quality of infrastructure in countries with less efficient trade regimes and border administration may result in only limited export gains.

Not all projects under the BRI seem economically viable at first glance, particularly if they are undertaken in less solvent economies (OECD, 2018[86]). This suggests they have been included for either geo-political reasons or to determine the better security-cost trade-off by testing multiple and potentially competing routes (Pomfret, forthcoming[87]). Passages such as the China-Pakistan Economic Corridor or the China-Iran train link are to traverse some of the most conflict-ridden and politically unstable parts of the world (Menon, 2017[88]). The risks to large-scale investments are considerable unless issues of security for investments, infrastructure, freight and transport are properly addressed.

Washington-based institutions, such as the IMF and World Bank, are also worried about prospective debt distress in connection with the BRI. A Center for Global Development (CGD) paper identified a subset of 23 countries to be significantly or highly vulnerable to

debt distress, of which ten are Asian and four African. The CGD analysis finds in general, however, that the BRI is unlikely to cause a systemic debt problem in the regions of focus. While the aggregate numbers look large, they should be assessed against the size of the economies likely to benefit from BRI investments. In these cases, amounts are consistent with current levels of infrastructure investment. In addition, some of the China-sourced financing will likely substitute for other debt sources.

Notwithstanding such concerns for the debt potential of the BRI, the CGD analysis seems unfair to China. First, by its very nature, the debt potential of China's just-started initiative is virtually impossible to quantify. Second, expansive OECD monetary policies since the GFC have provided strong incentives for the recent debt build-up in developing countries, yet that major policy incoherence is often taken as a given. Third, these debt sustainability concerns seem to neglect the rise in debt service capacity that may result from China's "transformative" infrastructure funding, which will be increasingly enshrined in the BRI.

Outlook

The outlook for shifting wealth is uncertain, depending more than ever on conducive policy implementations at the global and local level. Most developing countries will enjoy favourable demographics and urbanisation to both stimulate investment and productivity. China's more balanced economy will favour exports of consumer goods from low-income countries, including agricultural, and the relocation of manufacturing. As the BRI is implemented, infrastructure bottlenecks to growth will gradually subside.

Development in transition will have to deal with slower convergence speed, the middle-income trap, labour-reducing technology, and protectionism and relocation trends in advanced economies, and financial stress from key currency fluctuations and tightening global liquidity.

Notes

[1] Since 2010, the Credit Suisse Research Institute's Global Wealth Report has been the leading reference on global household wealth (for more details, consult Davies, Lluberas and Shorrocks (2018[90]), (2017[89])).

[2] Due to lack of data on standard deviation underlying the various data on household wealth, Table 2.2 neither provides evidence on skewness nor on the Asia-Pacific region excluding Japan.

[3] The UN uses a further indicator to determine which countries are eligible to enter or leave the LDC category: the Human Assets Index, a measure of the level of human capital. The idea behind it: low levels of human assets indicate major structural impediments to sustainable development.

[4] Net FDI flows do not necessarily constitute net capital flows as they are often financed in the host country's domestic financial markets; multinational companies try to keep currency and expropriation risk down.

[5] For instance, over two decades, labour-intensive industries fell from about 50% of the turnover in zones in Korea and Chinese Taipei to about 10% in the mid-1990s; by then, technology-intensive industries contributed over 80% (White, 2011[91]).

[6] The Belt and Road Initiative aims to connect Asia, Europe and Africa along five major routes. The Silk Road Economic Belt focuses on: (1) linking China to Europe through Central Asia and

Russia; (2) connecting China with the Middle East through Central Asia; and (3) bringing together China and Southeast Asia, South Asia and the Indian Ocean. The 21st Century Maritime Silk Road, meanwhile, focuses on using Chinese coastal ports to: (4) link China with Europe through the South China Sea and Indian Ocean; and (5) connect China with the South Pacific Ocean through the South China Sea.

[7] The highest estimate to be found in the media according to Hurley, Morris and Portelance (2018[81]).

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Chapter 3. Then and now: Differences in development trajectories

The process of a shifting economic geography has sped up economic convergence for many developing countries. However, strong economic growth in the South has not solved all problems in countries undergoing rapid economic transformation, and development paths have looked different from one country to the next. That is because development is an inherently more complex and multidimensional concept than gross domestic product (GDP) can summarise by itself. This chapter explores development patterns beyond GDP alone in a long-term historical perspective. It discusses the meaning of development in light of current discussions on "Beyond GDP", provides evidence on GDP and well-being outcomes since 1820 in a broad range of developing and emerging economies, and compares the experience of early industrialising countries versus more recently emerging economies.

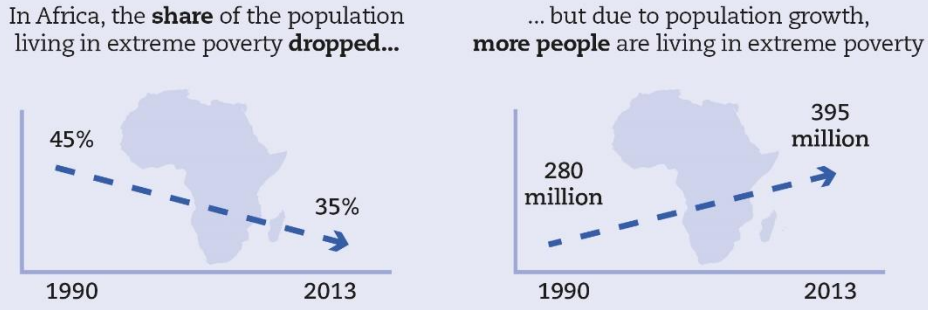
This chapter was prepared jointly by the OECD Development Centre, the OECD Statistics and Data Directorate and researchers from the Clio-Infra team at the University of Utrecht. In particular Rijpma, van Zanden and Mira d'Ercole (2018[1]) provides the basis for the sections on the historical and regional analyses of well-being presented in this chapter.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

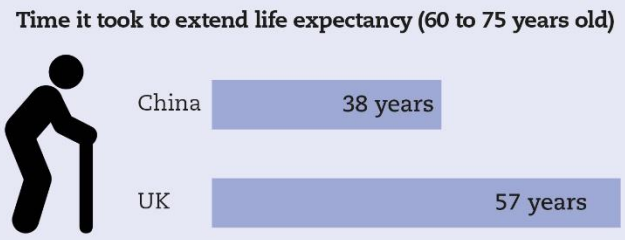
Chapter 3. Then and now: Differences in development trajectories

Countries that had their economic take-off in the second half of the 20th century grew much faster than the early industrialisers did

Yet despite this growth, poverty is growing in some places and well-being gains could have been even higher



However, for the emerging economies that do succeed, it is taking less time to improve well-being outcomes



The world economy is characterised by a radical process of a transforming economic geography due to the strong economic growth experienced by a range of emerging and developing countries. Economic growth in the South has not solved all problems, however. Development is inherently more complex and multidimensional than gross domestic product (GDP) growth alone can summarise. In spite of economic growth, some old problems have persisted, and new ones have emerged. This chapter analyses development outcomes beyond GDP per capita in a long-term historical perspective. In doing so, it explores whether the development paths of more recently emerging economies delivered different results in terms of growth and well-being to those of countries that industrialised earlier.[1]

It analyses a broad range of outcomes, such as poverty, inequality, health, education, environmental quality and personal security. It also compares the experiences of these countries since the 1950s with that of countries in the "old world" that experienced economic take-off in the 19th and early 20th centuries.

How did the relationship between growth in GDP and other measures of economic, social, political and environmental development evolve over time? Did economic growth and industrialisation in the 19th century have the same impact on people's well-being as it did in the more recently emerging economies?

Findings suggest that countries in different eras have distinct experiences of growth. Catch-up growth in the People's Republic of China (hereafter "China") and India in the late 20th century, for example, had a different impact on well-being than it did during the early industrialisation of countries such as Sweden and Germany in the 19th century. With respect to annual GDP per capita growth,[2] the former two countries experienced rates of 5% to 10%, while the latter two had rates of at most 2%. Higher GDP growth provides the means for well-being to grow faster as well. However, the degree to which GDP growth is translated into better well-being outcomes varies substantially. Sometimes it does not translate at all.

This chapter is based on a broad set of well-being measures developed by economic historians and included in the OECD's *How Was Life?* report (van Zanden et al., 2014[2]).[3]

- It begins by briefly revisiting the meaning of "development". It also reflects on initiatives to measure performance "beyond GDP" launched in the aftermath of the Stiglitz-Sen-Fitoussi report in 2009.
- It then presents evidence on how the relation between levels of real GDP per capita and well-being measures has changed globally since 1820.
- The chapter then examines trends since the 1950s in a range of dimensions of people's lives for 23 emerging economies,[4] based on the Clio-Infra database. It identifies similarities and differences amongst countries across different periods.
- The next section identifies key patterns in the experiences of nine countries in the developed world that industrialised earlier (1820-1950).[5] It also compares the experience of "early" and "late" industrialisers, showing how gains in well-being lagged behind GDP growth in the early industrialisers over this earlier period.
- The final section summarises key findings from the analysis, highlighting the need to rethink development paradigms in light of evolving relationships between economic growth and well-being outcomes.

The three main messages of this chapter are that:

- Development is more than growth in per capita GDP; a broad array of indicators is needed to measure development.
- GDP per capita and well-being outcomes are not always linked.
- The quality of economic growth in recently industrialising countries has not matched that of the early industrialisers: well-being gains could have been even greater given the rapid pace of growth.

"Development" of what?

In 1969, Dudley Seers argued that the nature of the main challenges confronting the developing world in the post-war period had been fundamentally misconceived:

> *This (challenge) has been seen as achieving an increase in the national incomes of the "developing countries", formalised in the target of 9% growth rates set for the first development decade. Of course, we have all been aware that development consists of much else besides economic growth. [...] Yet little more than lip service is paid to it [...] [T]he experience of the past decade makes this belief look rather naïve [...] Now that the complexity of development problems is becoming increasingly obvious, this continued addiction to the use of a single aggregative yardstick in the face of the evidence takes on a rather different appearance, it begins to look like a preference for avoiding the real problems of development. (Seers, 1969[3])*

Fifty years after these remarks, Seers' challenge has not yet been met with an adequate response. However, recent developments make it possible to address the challenge more systematically than possible before. In 2009, the Commission on the Measurement of Economic Performance and Social Progress released a seminal report. The commission, convened by former French President Nicolas Sarkozy, stressed the limits of GDP as a metric of welfare. It called for a move from measuring economic production as the sole metric towards consideration of outcomes for people. This approach should stress the importance of combining GDP with broader metrics of household economic well-being, quality of life and inequality, as well as the sustainability of these outcomes over time (Stiglitz, Sen and Fitoussi, 2009[4]). Since then, the OECD has played a central role in moving this agenda forward by regularly monitoring a range of well-being indicators for its member countries.

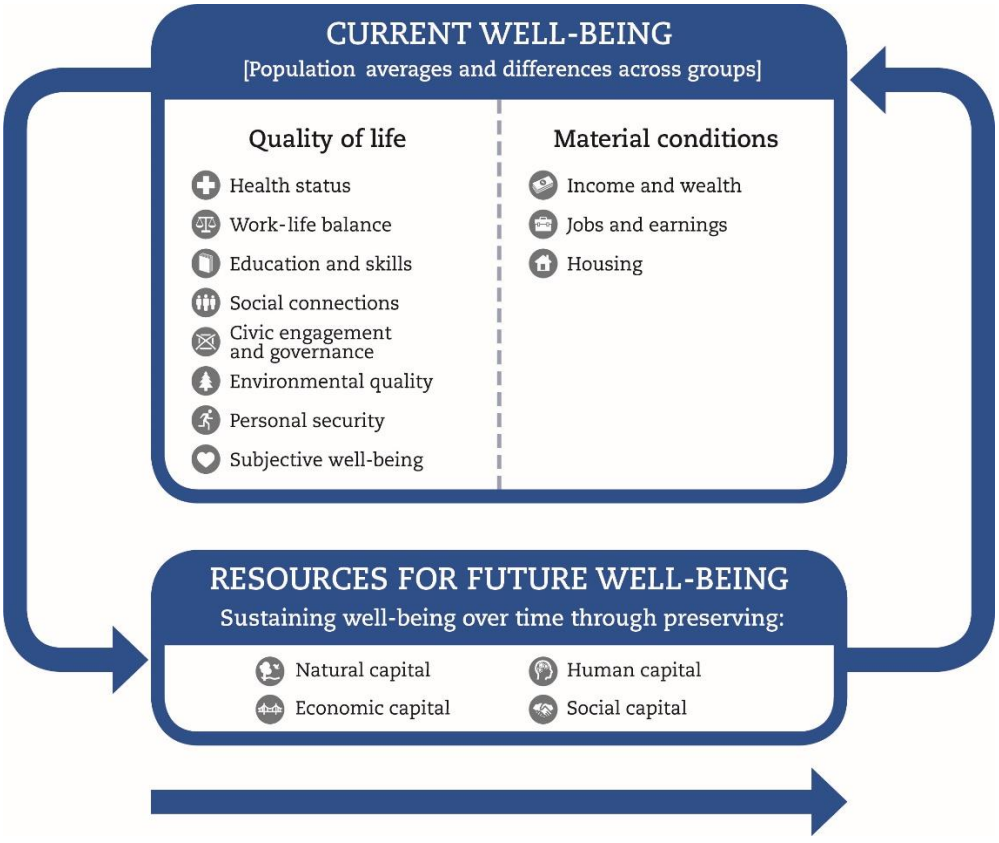
The notion of well-being is close to that of human development promoted by Sen (1999[5]), amongst others, which underpins the work of many United Nations (UN) agencies. It focuses on outcomes and opportunities that are intrinsically important to people in themselves (an end) rather than only as an instrument to achieve something else (a means); on the diversity of these outcomes; and on their irreducibility to a single aspect (e.g. no amount of income can offset the lack of basic freedom).

Sen's concept of "capabilities" stresses the importance of understanding development as a process that enlarges one's choices. However, the OECD's *How's Life?* report recognises that measurements based on outcomes is often the best that can be achieved. Several key principles inform this work. First, it is concerned with people rather than with aggregate economic conditions. Second, it focuses on well-being outcomes – aspects of life that are

directly and intrinsically important to people – rather than the inputs and outputs that might be used to deliver those outcomes.[6] It does this for two reasons. Inputs may be poorly correlated with the resources devoted to achieve well-being outcomes; and a different combination of inputs and outputs may be equally effective in delivering the same result. Third, it emphasises the importance of inequality in each well-being outcome. Fourth, it considers both objective and subjective aspects of life, as people's evaluations and feelings matter as much as the objective conditions in which they live. Lastly, it considers the sustainability of such outcomes. This approach does not imply ignoring the importance of GDP and economic growth. Rather, it recognises that these are means to an end rather than ends in themselves.

These principles have informed the framework shown in Figure 3.1 for OECD member countries (OECD, 2017[6]). Current well-being is described through 11 dimensions belonging to the broader domains of quality of life and material conditions. The assessment of future well-being is based on changes in a range of resources. Benefits extend to tomorrow, but are affected by today's actions; these resources are grouped under the categories of economic, natural, human and social capital. The framework is operationalised through a set of headline indicators pertaining to average well-being outcomes and inequalities, as well as resources to ensure sustainability.

Figure 3.1. The OECD well-being framework



Source: OECD (2017[6]), *How's Life? 2017: Measuring Well-being*, https://doi.org/10.1787/23089679.

How well does this approach describe the development experience of poorer countries? Analysis of the literature suggests that none of the dimensions in Figure 3.1 can be deemed irrelevant in less developed countries. While there are differences in the relative importance of various aspects of life depending on national circumstances, most dimensions are also common across countries. They differ more in the way they are labelled than in terms of what they regard as most salient. The framework in Figure 3.1 would need to be adapted to better fit the realities and concerns of poorer countries.[7] However, differences across countries are more likely to appear in terms of the importance attributed to the different dimensions by people living in the country themselves (Boarini, Kolev and McGregor, 2014[7]). This conclusion is also in line with the *Voices of the Poor* studies by the World Bank in the late 1990s (Narayan et al., 1999[8]). These studies highlighted the importance of complex needs (i.e. the needs of voice and recognition and of avoiding shame and isolation) as opposed to the simple needs of food and shelter, even amongst the poorest people, in the poorest countries – a finding that runs contrary to the view of a rigid hierarchy of needs shaped by different stages of economic development of countries.

The OECD *How Was Life?* describes long-term development patterns in a broader range of countries and in longer perspective (starting in the 1820s) (van Zanden et al., 2014[2]); (Box 3.1), based on a similar methodology to the *How's Life* report.[8] Naturally, this type of historical analysis must contend with a range of practical problems. Historical data are simply not available for some of the dimensions included in Figure 3.1.[9] In other cases, available data may refer to concepts that only crudely approximate the variable of interest. Data limitations also make the conceptual distinction between well-being today and well-being tomorrow less applicable to historical analysis. However, decades of historical research have also generated a wealth of measures for various aspects of people's lives. These can be systematically gathered and, to some extent, compared across countries and time. This undertaking aims to be *approximately right* rather than *exactly wrong*, which is what happens when one summarises the development experience of countries through changes in their GDP per capita.

The *How Was Life?* report presented evidence on the multidimensionality of development in a long-term historical perspective. A sub-set of these variables (Table 3.1) is used in this chapter to shed light on the relationship between GDP per capita and various well-being variables, and to compare the development experiences of countries around the world and in different time periods. This analysis shows that, while there are strong correlations between GDP per capita and most dimensions of people's life across countries and over time, the correlation is not always linear, with different patterns of leads and lags and shifts in the relationship between GDP and well-being variables.

Box 3.1. The Clio-Infra project and How Was Life? report

Clio-Infra is an international inter-disciplinary effort by a team of economic historians to systematically chart the various dimensions of development between 1500-2010. Clio-Infra builds on a pioneering effort to compile a set of comparable indicators of economic development for the world economy stretching back 1 000 years (Maddison, 2001[9]).

The *How Was Life?* report (van Zanden et al., 2014[2]) was the culmination of Clio-Infra. The report included data for six (population weighted) world regions. These comprised Western Europe; East Europe and former Soviet Union; Western offshoots (Australia, Canada and the United States); Latin America and Caribbean; sub-Saharan Africa; and the Middle East and North Africa. Analyses are based on all countries in the Clio-Infra database with sufficient data, and a separate series for 25 of the largest countries in the world. These countries are Argentina, Australia, Brazil, Canada, China, Egypt, France, Germany, Indonesia, India, Italy, Japan, Kenya, Mexico, Nigeria, the Netherlands, Poland, the Russian Federation (hereafter "Russia"), Spain, South Africa, Sweden, Thailand, Turkey, the United Kingdom and the United States. Data generally refer to national states based on existing borders. This implies that (when possible) the dataset took the most recent borders as reference and corrected earlier data for changes in borders whenever they occurred. In cases where the same approach could not be adopted in the past, data refer to countries based on their historical borders.

The data in *How Was Life?* and used for this chapter are state-of-the-art estimates by economic historians for various countries. They are harmonised to the extent possible by project participants. These estimates pertain to GDP and GDP per capita; real wages of unskilled labourers, educational attainment, life expectancy, population height, casualties from homicides, political institutions, emissions of carbon dioxide and nitrates, and biodiversity loss. Data on income inequality and gender inequalities, as well as a composite index of well-being, were also included in the report.

Data in *How Was Life?* were presented as decadal averages. As data coverage increases for more recent periods, imputations were used for missing countries in earlier periods. For all series, data quality (for individual countries and decades) was assessed based on three criteria. The first is credibility (the degree to which the sources of the data can be confidently relied upon). The second is accuracy (the extent to which the data are deemed to be valid and to reliably represent what they purport to measure). And the third is comparability (the extent to which data from different sources measure the same concept and are collected based on the same methodology).

Based on these criteria, four types of data were distinguished:

- high quality, produced by an official statistical agency (national or international) or by researchers using techniques that ensure equivalent credibility
- moderate quality, produced using historical sources and methods comparable with (but not necessarily identical to) those applied by official statistical agencies
- low quality, resulting from historical research in a data-scarce environment and making use of indirect data and estimates
- estimates based on guesses, conjectures and interpolation between benchmark years, where there may be significant inconsistencies between countries or gaps in coverage.

Table 3.1. Well-being variables from the Clio-Infra database

Well-being outcome	Variable name	Max	Min
Health status	Life expectancy at birth	83.1 years (+)	14.5 years (-)
Political institutions	Composite measure of political regimes (Polity2)	10 (+) fully democratic	-10 (-) fully authoritarian
Education	Average years of completed education	13.6 years (+)	0.01 years (-)
Human height	Average height of different birth cohorts	183 cm (+)	152 cm (-)
Income inequality	Gini coefficient	0.74 (+)	0.21 (-)
Earnings	Number of consumption baskets purchased with the real wages of a male unskilled worker in building industry	355 subsistence baskets (+)	0.5 subsistence baskets (-)
Personal security	Homicide rate	82 homicides per 100 000 inhabitants (-)	0 homicide per 100 000 inhabitants (+)
Environmental quality	Sulphur dioxide emissions per capita	425 (-) kg SO_2 per capita	0 (+)
Global well-being	Composite indicator of well-being	3.7 (+)	-1.6 (-)

Note: (+) indicates that higher values of the variable (e.g. education) are increase well-being, while (-) indicates that higher values of the variable (e.g. income inequality) lower well-being. Subsistence baskets are a measure of goods based on a standard amount of caloric and protein intake (van Zanden et al., 2014[2]). The composite indicator of well-being is linear measure consisting of nine variables: GDP per capita, real wages, height, life expectancy, average years of education, income inequality, governance, species abundance and homicide rate.
Source: Clio-Infra (2017[10]), Clio-Infra (database), www.clio-infra.eu (accessed in July 2018).

Development is a complex and multidimensional concept

The story of economic growth since 1990 is relatively positive, as shown in Chapter 2. The transformation of economic geography has raised the prospects of growth for many developing countries, placing them on a converging path with the world's more developed economies.

However, a more holistic view of development, one that considers the material conditions (e.g. income) as well as quality of life (e.g. health, education) that contributes to well-being, tells a more complex story: in spite of economic growth, in certain countries the number of people living in extreme poverty is rising, the gap between rich and poor is growing, and environmental outcomes are deteriorating. The combination of a transforming economic geography, economic convergence and the dynamic movement of such well-being outcomes has blurred a previously clearer line between a "developed" and a "developing" country.

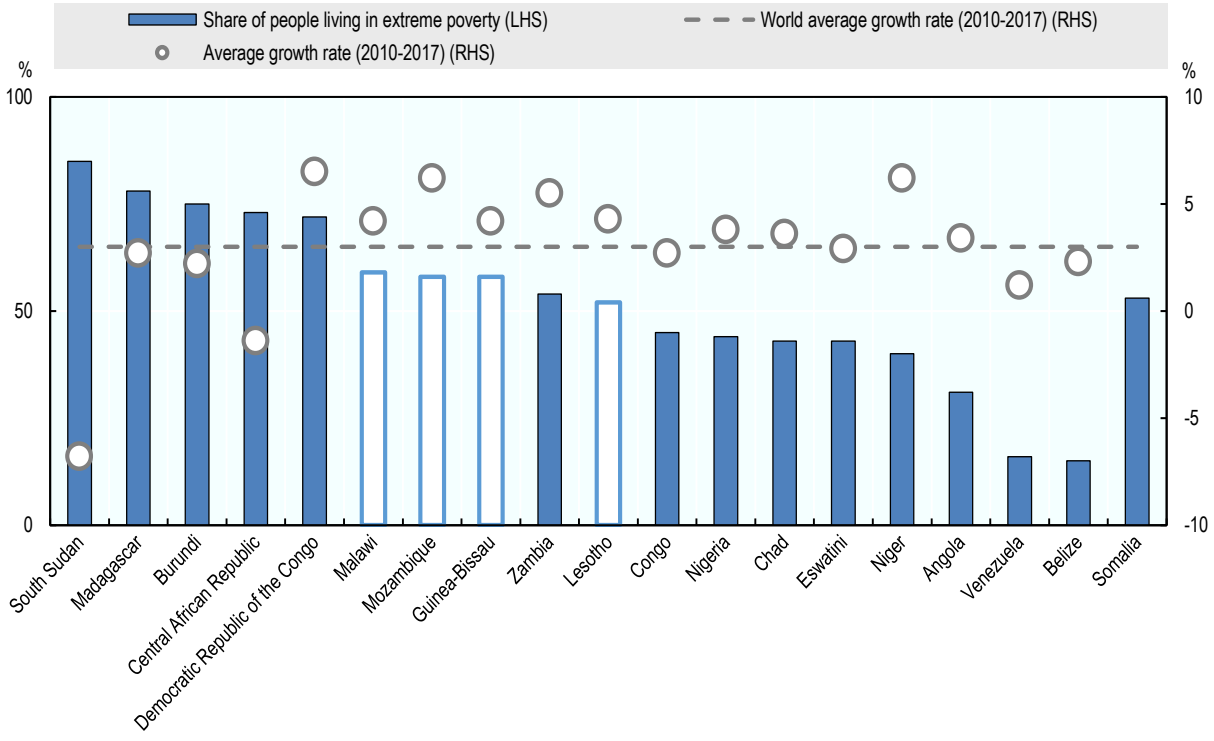
Since the inception of the Millennium Development Goals (MDGs), there has been tremendous progress on poverty reduction. In fact, the MDG target to reduce extreme poverty by half by 2015 was met five years ahead of schedule (United Nations, 2015). China reduced extreme poverty amongst its population from 67% to 2% from 1990 to 2013, or from 755 million people to 25 million. The number of people living below the extreme poverty threshold outside of China was also reduced by 337 million from 1990 to 2013, despite rapid population growth (World Bank, 2018[11]). The Sustainable Development Goals (SDGs) build on the momentum of the MDGs.

But these great economic leaps over the two previous decades, and the continued growth by some of the world's poorest countries, is not enough to end extreme poverty. In Africa, for example, although the share of the population living in extreme poverty dropped from 56% in 1990 to 43% in 2012, the absolute number of people living in extreme poverty has grown substantially over this time period due to the region's rapid population growth (Beegle et al., 2016[12]).

The World Poverty Clock (WPC) provides real-time estimates and monitoring against the first SDG of ending extreme poverty. According to the WPC, an estimated 641 million people were still living below the extreme poverty line of USD 1.90 per day in the world in July 2018. More than one-third of the extreme poor lived in three countries: Democratic Republic of the Congo, India and Nigeria. Despite GDP growth above the world's average of 3% from 2010 to 2017 in several developing countries, the projected number of poor people will still be higher in 15 countries by 2030, the target year of the SDGs. Moreover, more than half of the population in 12 countries lives in extreme poverty. However, prospects are improving in countries such as Guinea-Bissau, Lesotho, Malawi and Mozambique, where the extreme poverty rate is decreasing (Figure 3.2).

Figure 3.2. Despite GDP growth, extreme poverty is increasing in several countries

Share of extreme poverty among total population (percentage, 2018) and GDP per capita growth (percentage, 2010-17)



Note: Solid blue bars represent countries in which absolute poverty is increasing. Empty bars represent countries in which absolute poverty is decreasing.
Sources: World Poverty Clock (https://worldpoverty.io) and World Bank (2018[11]), *PovcalNet (database)*, http://iresearch.worldbank.org/PovcalNet/home.aspx (accessed in May 2018).

StatLink https://doi.org/10.1787/888933857024

Poverty is not the only thing that matters; how benefits of growth are distributed within countries is equally important (Islam (2006[13]); Khan (2007[14])). Income inequality has been increasing within countries such as China and India despite the GDP growth and convergence experienced by developing countries over the past two decades (Alvaredo et al., 2017[15]). Not all countries are equally affected, however. Unlike the recent experience in developed economies, the rich get richer in developing countries, but the poor get richer as well. Recent increases in inequality in more developed economies are largely because the rich gain, whereas the poor do not (Lang and Mendes Tavares, 2018[16]).

Developments in other well-being outcomes matter just as much. Eroding living conditions in many developing countries in the 1950s and 1960s, amid a wave of enthusiasm in development and a push for industrialisation, sowed the seeds for thinking about development beyond income and its distribution. Dudley Seers, as well as Robert McNamara and Amartya Sen, would bring greater policy importance to poverty reduction and improvements in non-economic outcomes to the development agenda in the 1970s. Inspired by the work of Sen, the United Nations launched the Human Development Report in 1990. More recently, the MDGs in 2001 and their successor, the SDGs in 2015, further cemented the importance of looking beyond GDP for development. They brought it to the mainstream.

The relationship between well-being and GDP per capita is complex. Individual satisfaction with standards of living, for instance, does appear to increase with countries' GDP per capita. However, the relationship is not linear. Furthermore, the variance in the relationship is not uniform at different levels of GDP per capita. According to a Gallup survey, the share of people dissatisfied with living standards in their country varied widely by country in the first third of the GDP per capita ranking, and less so at higher levels of GDP per capita (Figure 3.3).

Countries share challenges across income thresholds. Indeed, when looking across a series of development outcomes, income groups are not sufficient to characterise the level of the development challenges faced by individual countries.

Income groups do provide a good indication of the prevalence of extreme poverty, however. According to recent analysis by the OECD Development Centre (OECD, 2017[17]), only the Republic of Congo, among all middle-income countries, had a level of extreme poverty that would correspond to that of low-income countries. This is in line with findings in the literature that economic growth plays a major role in the reduction of extreme income poverty (Dollar and Kraay, 2002[18]).

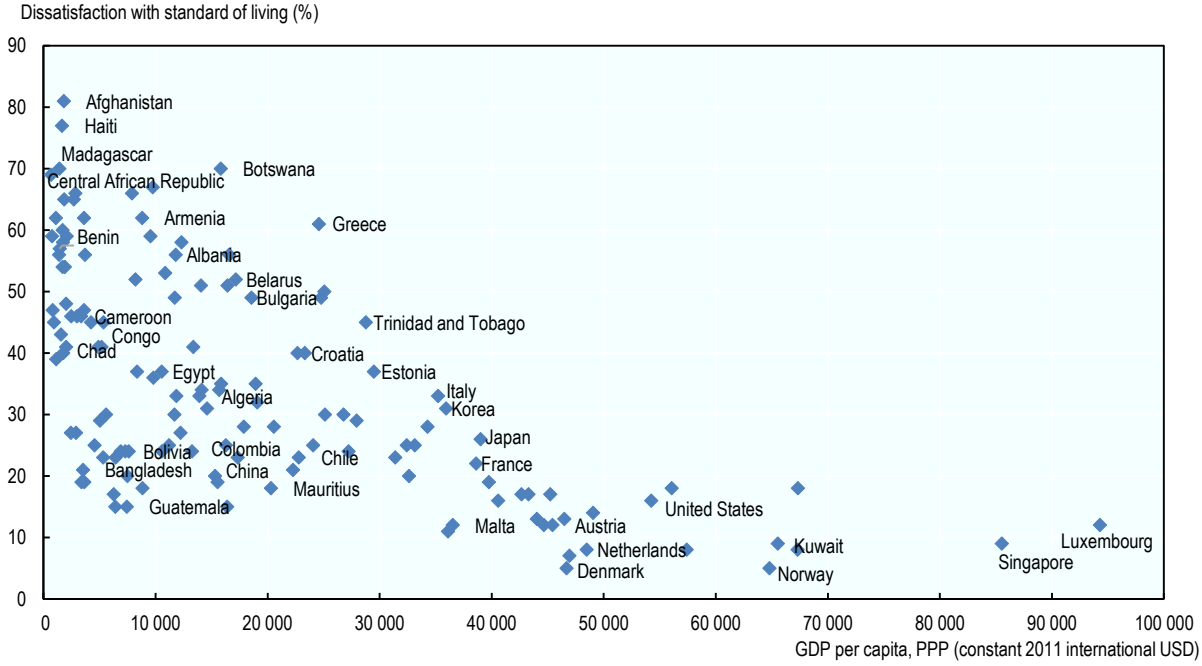
In contrast, income groups provide a poor indication of the level of inequality. Countries' gross national income (GNI) per capita and the Gini coefficient, a standard measure of income inequality, are not closely correlated. Not surprisingly, 13% of high-income countries have levels of inequality that could well be found in low-income economies. Moreover, almost half of all middle-income countries have high levels of inequality (with a Gini coefficient above 0.4). This is consistent with findings in the literature that several countries transitioning to middle-income status in the past decades have experienced growth with significant inequality increases (Sumner, 2016[19]).

There is consensus on the need for relatively poorer countries to grow faster and that this economic growth is fundamental for their development (Milanovic, 2016[20]). GDP measures domestic production and remains a useful indicator to track this aspect of development. However, when discussing well-being outcomes for individuals in a

society, GDP and GDP per capita are less useful concepts. For example, GDP per capita should not be conflated with income, as calculations of GDP include the income that accrues to non-residents, for example multinational companies that may repatriate profits. In this way, GDP per capita does not reveal the average income of individuals, one of the dimensions of well-being under the broader domain of "material conditions".

Figure 3.3. The relationship between dissatisfaction with standard of living and GDP per capita is not linear

Dissatisfaction with standard of living vs GDP per capita (in 2017)



Note: Shown on the y-axis is the share that answered 'dissatisfied' to the question "Are you satisfied or dissatisfied with your standard of living, all the things you can buy and do?".
Note by Turkey:
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
Note by all the European Union Member States of the OECD and the European Union:
The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.
Source: Roser and Ortiz-Ospina (2018[21]), *"Global Extreme Poverty"*, https://ourworldindata.org/extreme-poverty.

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A broader concept of development requires a different approach to measurement. Moving beyond GDP metrics as the sole indicator, measuring development requires a range of indicators of well-being outcomes and data on how well-being outcomes are distributed across a population.

Historical GDP per capita and well-being

What is the link between people's well-being and GDP per capita, and how has it changed since 1820? Globally, well-being indicators have been closely correlated with GDP per capita.[10] Countries with higher per capita GDP have experienced higher levels of education, real wages, average height and life expectancy, as well as lower homicides and more democratic institutions.[11] Some indicators, such as income inequality and homicides, have had a much weaker relation with GDP per capita, correlations that became negative only in the mid-19th century and in the early 20th century, respectively (i.e. eventually, countries with higher GDP per capita tended to have lower income inequality and homicide rates).

The relation between various aspects of well-being and GDP per capita has changed over time. Two periods can be identified (Figure 3.4).

In the first period, from the middle decades of the 19th century until around 1870, countries with higher GDP per capita did not always have better well-being outcomes. On average, they experienced lower life expectancy and higher homicides, as well as institutions that were no more democratic than in other countries. This suggests that, in this phase, economic growth and industrialisation did not necessarily contribute to the well-being of the population. During the first 50 years of economic growth amongst early industrialisers, gains in well-being were relatively small and sometimes even negative.

In the second stage, which began in about 1870, the correlation between GDP per capita and well-being measures became stronger. This convergence reflected several developments.

First, the import of cheaper American foodstuffs to Europe resulted in a dramatic decline in food prices, which helped raise real wages and consumption levels (O'Rourke, 1997[22]).

Second, while the early stages of industrialisation took place in non-democratic regimes, by the end of the 19th century many industrialising countries had become democratic.

Third, breakthroughs in medical knowledge – such as the germ theory of diseases developed by Pasteur – created the right conditions for much more effective health care. Often, this combined with the growing attention paid to public health issues by governments. As a result, life expectancy started to rise in Europe and its overseas offshoots after 1870, driven by declines in child mortality.

Fourth, the first policy measures to address social concerns, likely driven by the extension of voting rights to working classes, were introduced in Europe. These included bans on child labour and legislation concerning maximum working hours. As a result, a link emerged on a global scale around 1870 between GDP per capita and life expectancy, human height or democratic institutions (Figure 3.4). This was a shift from the mid-19th century where there was no such correlation. Similar developments can be identified for other well-being indicators.

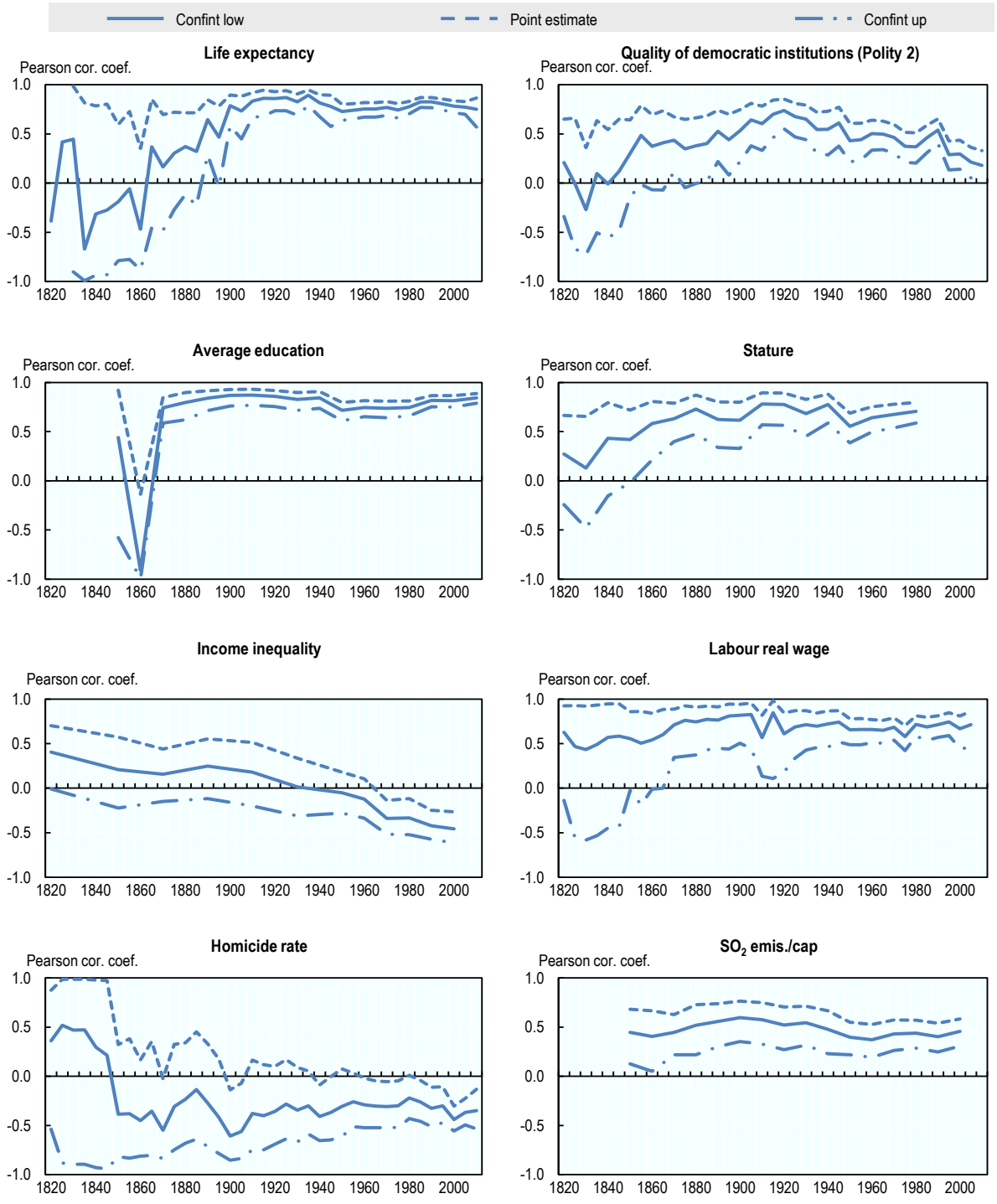
The 19th century, therefore, first saw a divergence, with well-being lagging behind progress in GDP per capita. This was followed by a certain convergence between per capita GDP and various measures of well-being. This is confirmed through a cross-sectional correlation between GDP per capita and measures of well-being at different periods.

Figure 3.4 shows how these correlation coefficients changed over time at the global level. They were often low, sometimes even negative, in the first half of the 19th century. They increased and became positive from the late 19th century onwards. The panel includes the full set of countries. However, because economic growth was limited to early industrialisers, the experience of these countries drives most of the correlation results at the global level observed in the 19th century.

Cross-country correlations between GDP per capita and various well-being measures are only one part of the story. For many indicators in the 19th century, there was no additional well-being accrued beyond those explained by increases in per capita GDP. This changed, however, in the 20th century, when some indicators began delinking from GDP per capita. Figure 3.5 charts changes in well-being unexplained by GDP per capita to investigate the relationship between per capita GDP and well-being.[12] A value of zero implies that levels in well-being outcomes are entirely explained by levels in GDP per capita.

Figure 3.4. A link emerged between GDP per capita and some dimensions of well-being only after 1870

Correlation between GDP per capita and various well-being dimensions (1820-2010)



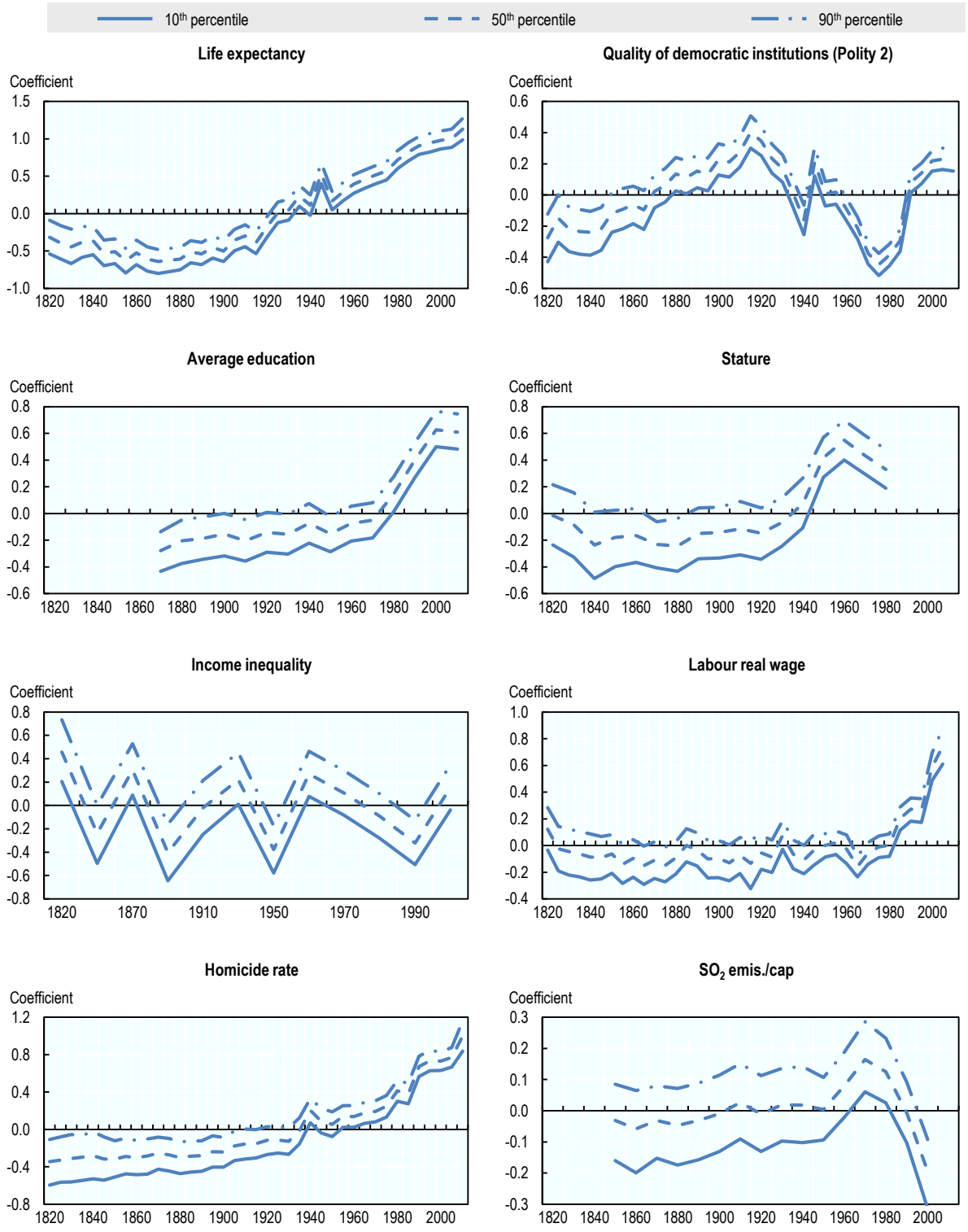
Note: Pearson's correlation coefficient between various well-being indicators and log GDP per capita for each five-year period, as well as 80% confidence intervals. The global sample includes up to 159 countries, but varies by year and indicator depending on coverage.

Source: Clio-Infra (2017[10]), *Clio Infra*, http://www.clio-infra.eu (accessed in July 2018).

StatLink https://doi.org/10.1787/888933857062

Figure 3.5. GDP and well-being outcomes gradually delinked in the 20th century

Change in various well-being variables not explained by GDP per capita (1820-2010)



Source: Clio-Infra (2017[10]), *Clio Infra*, http://www.clio-infra.eu (accessed in July 2018), based on authors' calculations.

StatLink https://doi.org/10.1787/888933857081

This also signalled a new era in the relationship between GDP per capita and well-being. Well-being now often increased more rapidly than implied by GDP growth alone. This delinking is most pronounced for life expectancy. By the end of the 20th century, life expectancy had increased by 15 years (one standard deviation) more than would be expected from per capita GDP alone. Similar patterns apply to height and education. In the case of real wages, per capita GDP levels explain most of the difference between countries; decoupling does occur in the last two decades. An unexplained effect of higher GDP on democracy (Polity 2) emerged in the second half of the 19th century. Apart from trends in the other direction during the Second World War and in the 1960s and 1970s, this effect has stayed largely in place.[13] In the case of sulphur dioxide (SO_2) emissions (hazardous to human health as well as flora and fauna), evidence of a drop relative to what could be expected based on per capita GDP alone is not observed until 2000.

Personal security is the one well-being dimension that deviates from the pattern of delinking from GDP per capita. In the second half of the 20th century, homicide rates were higher than could be expected from countries' per capita GDP. However, homicide data do not go far back in time for many developing countries, relative to the other variables. Lastly, the unexplained effects for income inequality are somewhat declining. This means that countries become more equal than expected from changes in per capita GDP levels. However, the pattern is erratic, likely due to data quality issues.

What explains this delinking between GDP growth and well-being during the 20th century? The answer lies in autonomous changes in the regimes, policies and technology that produce well-being outcomes. Delinking is particularly clear in the case of health status. The relationship between life expectancy and GDP per capita shows a constant upward shift starting in 1870, with the realisation of the first great breakthroughs in medical sciences. Shaped by technology and policies, such as public sanitation, the health system constantly improved health outcomes without necessarily requiring increases in GDP per capita – a phenomenon known as the shifting Preston curve (Preston (1975[23]); Bloom and Canning (2007[24])).

A similar evolution also occurred in terms of the average years of education in countries. Since the 1960s, increasingly higher levels of educational attainment were realised without increases in GDP per capita. This result may reflect the impact of government policies, but also structural changes in the economy and individual preferences. This delinking points to a virtuous effect. On the one hand, parents may prefer to invest more in the education of their children, or adults may want to invest more in upgrading their own skills. On the other hand, increasing skills helps achieve better GDP per capita.

Overall, however, across-the-board shifts in the relation between well-being and GDP per capita only partially explain improvements in various measures of well-being. As described above, this effect is important for life expectancy, and for educational attainment since the 1960s. The absence of an autonomous shift in environmental variables (such as sulphur emissions) from their relation with GDP per capita implies that environmental degradation increased with economic production. Technological change seemed to only have a small effect in delinking, and improving, environmental degradation in light of economic growth.

Well-being outcomes in recently emerging and developing countries

How has well-being evolved in more recently emerging and developing countries, along the eight measures discussed above?

This section looks more specifically at development since the 1950s for four key regions, focusing on countries that are either large in terms of population or characterised by contrasting developments within the region. As in Figure 3.5, the analysis looks at both actual developments in different well-being variables and at levels predicted by GDP per capita.[14] Unless stated otherwise, regional averages are always taken from *How Was Life?* (van Zanden et al., 2014[2]). They are population-weighted averages based on all countries in the region for which there is data and imputations for the countries where the data are missing.[15]

Since the 1950s, late developers, which began to industrialise and grow rapidly only in recent decades, have been distinguished from the early developers by the phenomenon of "catching up", or GDP per capita convergence. In the 19th century, the differences in GDP per capita between the most advanced countries and the rest of the world were relatively small. Indeed, the rate of economic growth of the fastest growing countries was no higher than 2%. This changed dramatically during the 20th century. The gap between the more productive countries and the rest of the world widened, creating a large potential for catching up. The former Soviet Union during the first stages of central planning, Japan after 1950 and Southeast Asian countries that industrialised more recently achieved rates of economic growth ranging from 5-10% annually. These rates were much higher than the early industrialisers in the 19th century experienced. This catching up also had an impact on well-being outcomes in these countries, which could also increase much faster. Not all countries in the global South were equally successful in this respect, however.

Latin America has seen mixed progress in well-being compared to GDP

Latin America has historically been a fascinating laboratory of experiments, with alternative policy measures adopted by both left- and right-wing governments. The long-term trend of improving well-being outcomes in education and health is quite robust for the region, while inequality has remained high and personal security has decreased sharply. In some dimensions, well-being gains since the 1950s, for example, are stronger than for GDP per capita. Based on Clio-Infra data for Latin America, the region's performance in terms of well-being was poor prior to 1950. This poor performance occurred even though average GDP per capita in the region was above the global average. In 1930, for example, the global average was USD 1 673, while the average for Latin America was USD 1 795 (van Zanden et al., 2014[2]).

Before the 1950s, however, Latin America was doing worse in terms of all well-being measures than in terms of GDP per capita compared to the rest of the world. The region was particularly characterised by high income inequality, with the highest Gini coefficient worldwide in 1929. Moreover, democracy scores were the lowest in the world. Key metrics were also all below world averages. These included average and educational attainment (2.0 vs. 2.5), the share of population having attained at least basic education (36% vs. 41%) and average life expectancy (37.8 vs. 40) (van Zanden et al., 2014[2]).

This pattern was partially reversed in the second half of the 20th century, despite much slower GDP growth than the global average. In 1950, GDP per capita in Latin America was about 20% higher than that of the rest of the world. This margin remained more or less unchanged until the 1980s. This changed in 2000 and 2010, when GDP per capita was 90% of the global average in Latin America. Strong GDP growth in East Asia, the heart of the transformation of economic geography, combined with the "lost decade" of poor growth in Latin America in the 1980s were the main drivers of this reversal. In 1980, Latin American GDP per capita was more than twice the level of East Asia. It now lags by about 30%.

Since the 1950s, the development of the well-being dimensions of education, health and political stability in Latin America has followed a different pattern to that observed for GDP per capita. First, average years of education grew more rapidly than the global average. In 1980, this dimension was equal to the global average, but by 2010 it was 5% above that level. Life expectancy at birth already exceeded the global average in the 1950s, and since the 1980s the difference widened to 3.5 years (van Zanden et al., 2014[2]). The continent's democracy scores have risen dramatically since the 1970s. They are now amongst the highest in the global South, far outperforming Africa and Asia. However, personal security (homicide rates), real wages and inequality are the region's lagging well-being outcomes compared to the rest of the world.

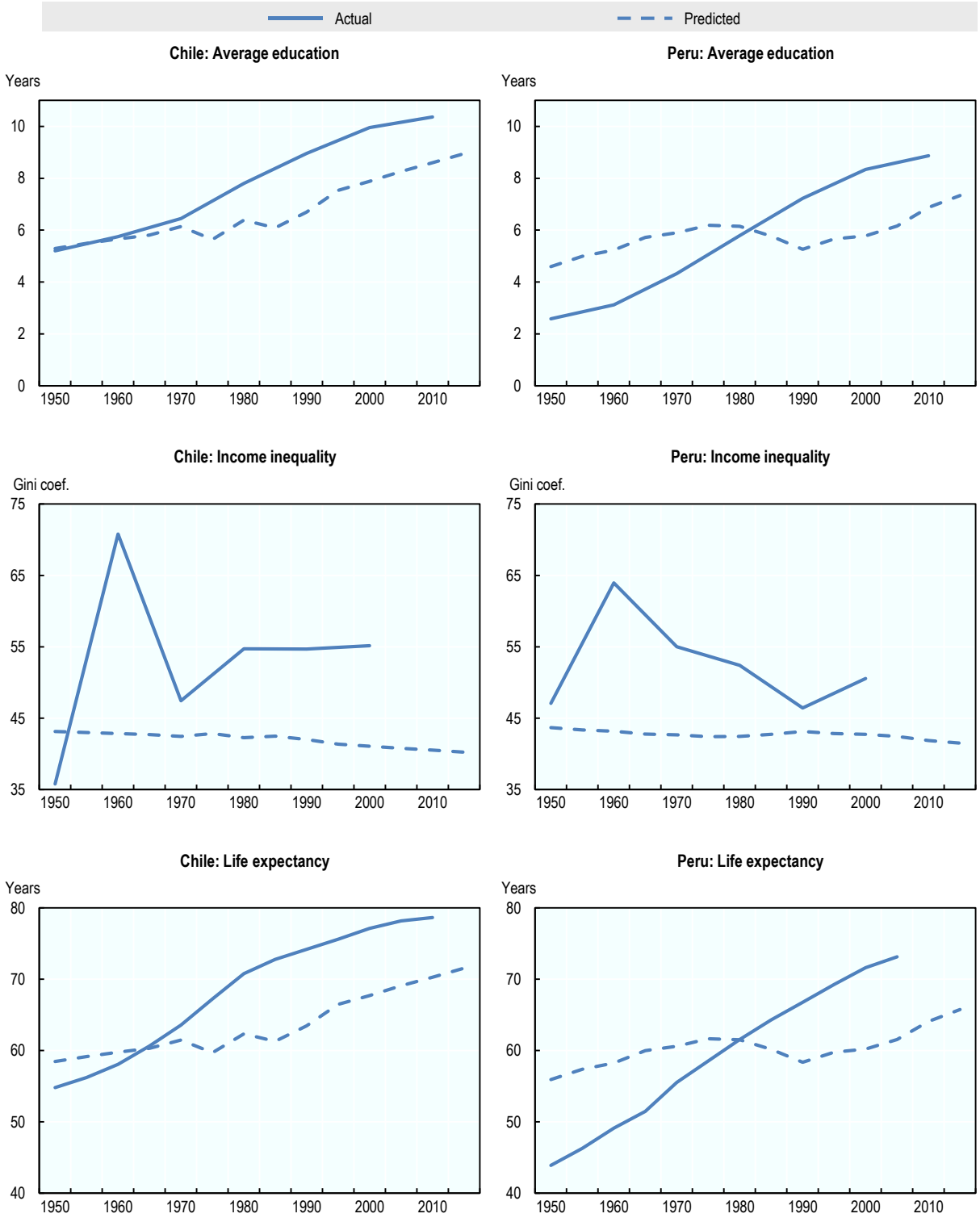
Annex Figures 3.A.1-6 (available on line only) provide well-being outcomes for the six previously discussed measures and their predictions. These are based on what could be expected given their per capita GDP between 1950 and 2010. The figure confirms that economic growth in these six countries (Argentina, Brazil, Chile, Mexico, Peru and Venezuela) has been generally unstable. Declines in predicted well-being are frequent, reflecting episodes of lower GDP per capita. Conversely, the evolution of well-being has been much more stable. Furthermore, its growth curve was hardly affected by large swings in GDP per capita, which illustrates the delinking between GDP and well-being discussed in the previous section. Figure 3.6 below presents a sample of three well-being outcomes for Chile and Peru.

Well-being in terms of life expectancy and education years has been steadily increasing. Democracy has also strongly improved. In 1950, the quality of democratic institutions (the "polity2" variable) was generally lower than would be expected based on GDP per capita. By 2005, it is much ahead. However, notable temporary setbacks can be observed in all six countries. Brazil, Mexico and Venezuela experienced dramatic increases in homicides, whereas one would expect a slow decline linked to higher GDP per capita. Another setback was experienced in income inequality, which is generally higher than would be expected, although less so in Argentina and Venezuela. However, data on income inequality end in 2000, thereby missing much of the more recent decline.

Chile is the most successful country in the region in terms of GDP growth, more than doubling its GDP per capita since the 1990s to 144%. Only Peru comes close to matching this performance (132%). Brazil and Argentina also grew rapidly in the 2000s, but both experienced events in the 2010s that undid some of the earlier gains. Chile's GDP performance was much more stable. This may be related to the tradition of coalition governments and the absence of the more extreme political tensions experienced by Brazil and Argentina.

Figure 3.6. Well-being outcomes have been better than would be predicted by GDP in Latin America

Actual and predicted well-being outcomes in selected Latin American countries (1950-2010)



Sources: van Zanden et al. (2014[2]), *How Was Life?: Global Well-being since 1820*, http://dx.doi.org/10.1787/9789264214262-en; and Clio Infra (2017[10]), *Clio Infra*, http://www.clio-infra.eu (accessed in July 2018), based on authors' calculations.

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Chile's record in improving several well-being outcomes is even stronger than that recorded by GDP. Average years of education and life expectancy have both increased by more than what would have been expected based on per capita GDP alone. Only for real wages and income inequality does Chile do worse than would be expected based on GDP. Well-being outcomes have performed considerably better in Chile since the 1970s, including education and life expectancy, and for homicide rates throughout the period. For both Chile and Peru, improvements in several well-being dimensions, namely life expectancy and education, preceded stronger GDP.

Venezuela is an outlier in many ways. As an oil-producing country, its per capita GDP levels have been high, but this has not translated into better well-being measures such as higher education and life expectancy or lower homicide rates. Only income inequality has been relatively lower and real wages high relative to its per capita GDP and to other Latin American countries. In recent decades, well-being measures in Venezuela deteriorated strongly. Homicide rates are now very high, both real wages and democracy have declined, and income inequality has risen strongly.

After spiking during the 20th century, income inequality decreased in the past two decades, although Latin America remains the most unequal region. Since about 2000, policy makers in several countries in the region gave priority to reducing income inequality and poverty, and increasing the well-being of the (poor) population in general. This can be seen as an attempt to correct the high level of income inequality, which has been and remains a dominant feature of Latin America throughout the decades. Amidst the global boom in international commodity prices in the 2000s, including for oil, there is evidence that Latin American governments were successful in reducing income inequality and poverty– particularly in Bolivia, Ecuador, Argentina and, to a lesser extent, Brazil and Chile (Lustig, Pessino and Scott, 2013[25]).

Poverty reduction in the first decades of the 21st century in Latin America has been remarkable. Today only 3.7% of the population lives under the international extreme poverty threshold of USD 1.90 per day (2011 PPP), compared to 11.5% in 1999. Three countries more than halved extreme poverty during the period. The rate in Brazil dropped from 12.7% to 5.5% over 2003-11. In Bolivia and Ecuador, it dropped from 18% to 7% and from 10% to less than 5%, respectively, between 2003-15. But other countries – Peru, Colombia and Paraguay – did equally well. The average poverty rate of Latin America fell from 12% to 5% over 2002-13 (World Bank, 2018[11]). The only exception to this pattern is Venezuela, which experienced a dramatic increase in extreme poverty up to 2005 (the latest year with data available).

There are two reasons for the decline in income inequality and poverty. First, government spending increased on social programmes. Second, the premium of skilled wages fell due to the expansion of education and the compression of the wage distribution (Lustig, Pessino and Scott, 2013[25]).

Therefore, over the past 50 years Latin America has been much more successful in increasing the well-being of its population in several dimensions than in generating GDP growth. It is perhaps the best (regional) case of the de-linking between GDP and certain well-being outcomes.

Sub-Saharan Africa shows great diversity in development trajectories, as well as in the relation between GDP and well-being outcomes

Until recently, the GDP growth record of sub-Saharan Africa was poor; in 1950, the average GDP per capita of the African countries for which data are available was about 40% of the global average, a level that fell to 20% by 2010. The 1960s and 1970s showed positive GDP growth, and the gap with the global average increased only marginally. However, between 1970 and 2000 no economic growth was achieved (GDP per capita was USD 1 282 in 1970 and USD 1 099 in 2000). Only since 2000, the era of shifting economic geography, did economic growth become positive again (with GDP per capita increasing to USD 1 481 in 2010).[16] Overall, the continent achieved average real annual GDP growth of 5.4% between 2000 and 2010. Economic growth, however, slowed down recently, reflecting a sharp drop in commodity prices (AUC/OECD (2018[26]); Leke and Barton (2016[27])).

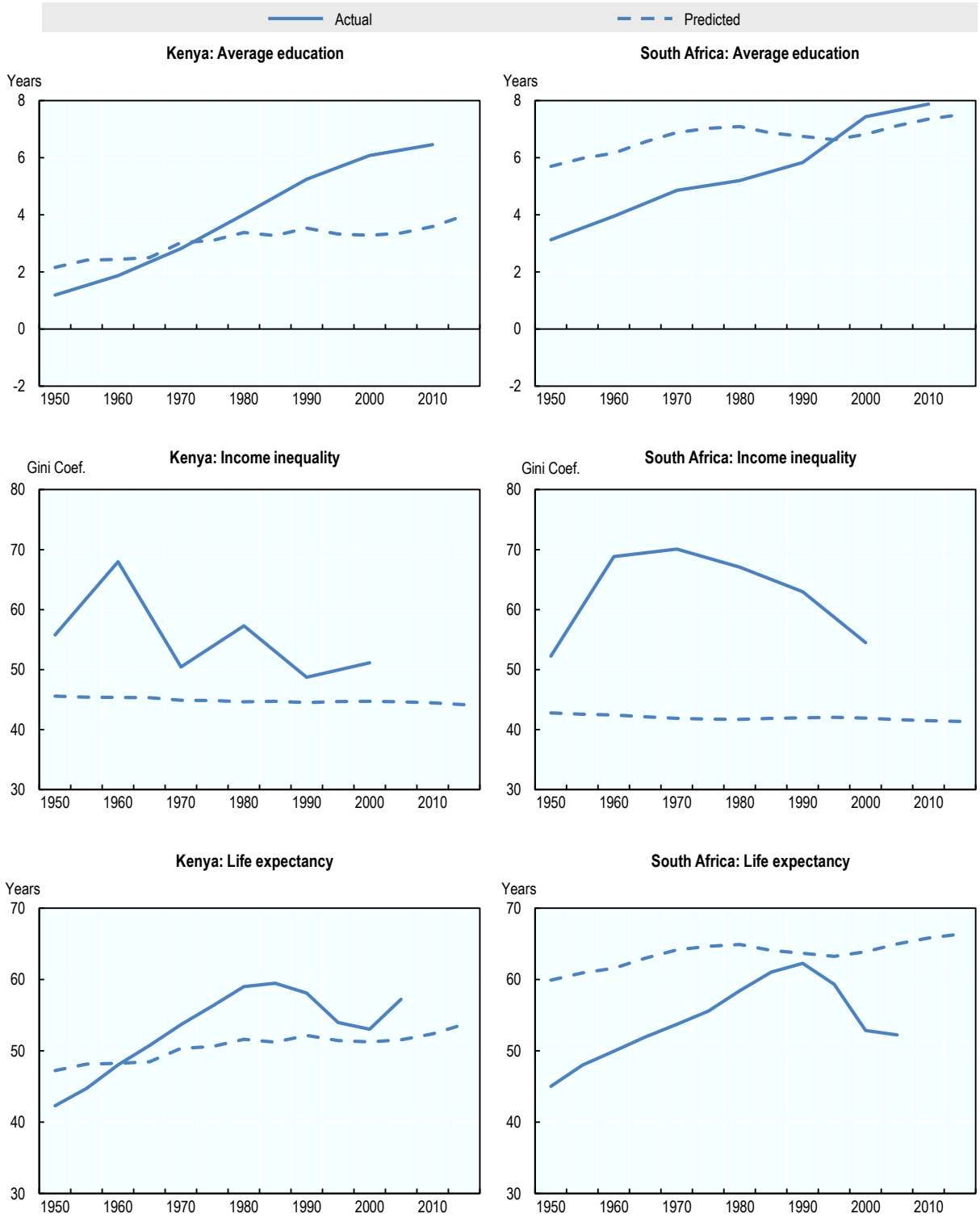
Improvements in well-being since the 1950s were somewhat better than for GDP per capita. However, they were also characterised by a constant and sometimes growing gap with the rest of the world. Average years of education in sub-Saharan Africa increased strongly – from 0.8 to 4.2 between 1950 and 2010. Still, all other regions did (much) better, and the absolute gap with the global average increased. Similarly, life expectancy in the region also increased from 38 to 52 over the 1950s-2000s. However, it was still lower than elsewhere in the world, and the gap with the global average remained constant at around 25%. Income inequality was and remained relatively high. Only the democracy index shows consistent progress in the region. Democratic rights were poorly protected in the 1970s and 1980s, but have improved considerably since then. Overall, the Clio-Infra composite well-being index suggests a considerable improvement for the region from about 1950 – after a long period of little change between 1850 and 1950 (van Zanden et al., 2014[2]). That said, variation within the region is substantial, both between countries and when comparing actual well-being and the level predicted by per capita GDP.

Developments in eight well-being indicators amongst six countries in the region – Burkina Faso, Ghana, Kenya, Nigeria, Uganda and South Africa – as well as changes predicted based on GDP per capita are depicted in Annex Figures 3.A.7-12 (available on line only). Figure 3.7 below presents a small sample from the full annex figures.

South Africa has always been one of the most prosperous countries of sub-Saharan Africa. Its average levels of GDP per capita are three to four times higher than the sub-Saharan African average. Economic growth has, however, been modest in recent years; since the start of the millennium, GDP per capita has increased by only 1% annually. Income inequality declined somewhat, although South Africa remains one of the most unequal countries in the world. It has a Gini coefficient far higher than would be expected based on per capita GDP alone (Annex Figure 3.A.8, available on line only). Personal safety in South Africa has also improved, though homicide rates are still more than five times higher than would be expected based on its economic record. Since the end of apartheid, South Africa has exceeded its expected performance in education and democracy. However, these positive developments were overshadowed by the decline in life expectancy; the spread of HIV/AIDS reduced life expectancy from 62 to 52 over 1990-2005. A recent study concluded that in 2015 life expectancy for women in South Africa was the lowest in the world: 48.7, compared to 50.7 for men– a notable gender difference given that typically women live longer than men elsewhere in the world (He, Goodkind and Kowal, 2016[28]).

Figure 3.7. There is a wide diversity in well-being trajectories across Africa

Changes in actual and predicted well-being in selected African countries, 1950-2010



Source: Clio-Infra (2017[10]), *Clio Infra*, http://www.clio-infra.eu (accessed in July 2018), based on authors' calculations.

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South Africa's record in terms of reducing extreme poverty is also rather poor, although the share of the population living below the poverty line fell from 29% in 1993, to 26% in 2006 and to 19% in 2014 (Sulla and Zikhali, 2018[29]). However, the Moatsos (2017[30]) estimates, which refer to the costs of a "bare bone" consumption basket and are available on an annual basis, show an even smaller decline: from 46% in 1994, to 50% in 2004 and to 36% in 2014. Social transfers went up since the end of apartheid, but structural problems with the labour market continue to plague the South African economy.

In most of the six sub-Saharan African countries included in Annex Figures 3.A.7-12 (available on line only), the trend in well-being has been upward, usually due to improvements in years of education and life expectancy. In this respect, developments in sub-Saharan Africa within the global context of strong increases in educational attainment and health status appear to be independent of economic growth. The development of democratic institutions is much less consistent. In fact, it is characterised by huge swings due to alternations between dictatorship and more democratic phases. However, the trend is upward in most cases and certainly since the 1990s (Annex Figure 3.A.11). Real wages, when data are available, have largely been flat and differences between the six countries are small. For Ghana, Kenya and Nigeria, real wages are what would be expected given per capita GDP in these countries. Real wages are higher than expected in Burkina Faso and Uganda, but much lower than expected in South Africa, a reflection of the country's high inequality.

The HIV/AIDS crisis has strongly affected the well-being of large parts of the continent beyond just South Africa. Civil wars (in Uganda, for example, in the 1970s) and political instability in general may have contributed to stagnation in life expectancy observed since the 1970s. Instead of profiting from the autonomous shifts suggested by the Preston curve, countries such as Kenya, Uganda and Nigeria showed a strong stagnation or even decline in life expectancy, though it was followed by a recovery in the 2000s.

Looking at the record of the six sub-Saharan African countries in reducing extreme poverty, a mixed picture also emerges. Some countries were quite successful. Botswana, Burkina Faso and Uganda combined moderate to fast GDP growth with a strong reduction of extreme poverty. Angola, on the other hand, was dynamic in terms of GDP growth, thanks mainly to growing revenues from oil production (and the end of a civil war). Yet extreme poverty remained high in Angola – more than 80% of the population was living below the USD 1.90 per day poverty line. Nigeria, an even more important oil exporter, has seen its GDP per capita double since 2000. However, its level of extreme poverty remained almost unchanged (at about 70%). Kenya and Tanzania, which are often compared to each other, experienced a convergence in their poverty rates. Kenya – the more successful market-oriented economy – did not register much progress with poverty reduction. Conversely, Tanzania's level of poverty fell to the much lower level prevailing in Kenya.

The overall picture in sub-Saharan Africa is one of many different development trajectories. These depend on economic starting points, rates of GDP growth and types of growth achieved, particularly the importance of strategic exports like oil. Extreme poverty is declining substantially in only a few countries. Poverty rates are, in most African countries, still very high. They do not show the same systematic decline that was observed in Latin America.

Asia has high but declining well-being benefits from economic growth

Asia, especially the area stretching from the Eastern Mediterranean Sea to South China, was the core of the world economy until it was overtaken by Western Europe in the early modern period (late 15th and early 16th century) (Maddison, 2001[9]). At the start of the 19th century, GDP per capita in Western Europe was two to three times the level of China, India or Indonesia. This divergence rapidly increased in the 19th century. When Europe industrialised, large parts of Asia lagged behind and saw their share in manufacturing output decline rapidly due to European competition. In the second half of the 19th century, only Japan successfully emulated the European model of labour-intensive and export-oriented industrialisation. After 1950, other Asian economies – Chinese Taipei, Korea and Singapore – developed similar outward-oriented development strategies to profit from opportunities in international markets. This strategy then spread to other parts of the region: Thailand, Malaysia, Indonesia and, more recently, Viet Nam. Since the 1980s, India and China developed their own versions of such open door policies, with great success, and account for much of the process of a transforming economic geography and the rise of the BRICS (Brazil, Russia, India, China and South Africa).

In 1900, GDP per capita in East and Southeast Asia was about USD 600 on average. This was only 20% of the level of the most advanced countries in Western Europe, and 50% of the global average. In 1950, levels of real GDP per capita of the region increased only marginally to about USD 660, whereas the global average had gone up by 70%. Until the 1970s, the gap between Asia and Europe did not show any signs of closing. The exceptions to this rule were Japan and a few of the other "flying geese" – countries that adopted an economic strategy based on technological leadership, regional hierarchy and international trade – which took off in the slipstream of Japan's success. The market-oriented reforms of the 1980s and 1990s, and their impact on China and India, triggered GDP convergence. The most dramatic change was the switch to markets and international openness that occurred during the years of Deng Xiaoping's leadership (1978-1989). For India, the turning point was 1991, when the economic liberalisation of the country really started. In Indonesia, the third largest country in the region, fast GDP growth began about 1970. It was associated with the Suharto regime's New Order economic policies. The economic success of all these changes is well-known. Since 1990, GDP per capita increased by more than 5 times in China, and by 3.5 times in India – a pace unmatched in history. However, India and Indonesia still display large gaps in GDP per capita with Europe, while China is making much faster progress. China's GDP per capita is now attaining a level of about half the Western European average.

Gains in some dimensions of well-being, although not all, have been spectacular as well. Annex Figure 3.A.13-18 (available on line only) show various well-being measures for the six largest Asian countries (China, Indonesia, India, the Philippines, Thailand and Viet Nam) (Figure 3.8 below shows a small sample from the complete annex figures). For China there was hardly any increase in well-being before 1940, but this changed after the communist takeover of 1949. In 1958, China introduced the Great Leap Forward, a large economic and social programme to rapidly propel the country towards socialism. After this catastrophic programme ended in 1962, life expectancy began a spectacular growth (from 33.7 years in the 1930s to 65.4 years in the 1970s). Since then, the increase has been slower, up to 73.9 years in 2000. Educational attainment has been the second source of rapid increases in well-being in China. This was partly because the Chinese state invested a lot in education, but primarily because Chinese parents invested heavily in the education of their children. The one-child policy introduced in 1979 was perhaps the most

effective instrument to enhance investment in education. Following the introduction of this policy, average years of education began a strong rise, growing faster than per capita GDP in the 1950s and 1960s. Average years of schooling increased from 1.7 years in 1950 to 6.9 years in 2000.

There were no gains in terms of political rights, however, according to the polity2 measure in Annex Figure 3.A.17. Income inequality in China was already low in the 1950s. Given the country's per capita GDP, it dropped further during the first decades of communism (1950s-1960s). However, from the 1970s onwards income inequality has increased dramatically. The Gini coefficient increased from 0.28 in 1970 to 0.44 in 2000 – roughly the same level observed in other countries with a similar level of GDP per capita.

Improvements in India's well-being were much more gradual (Figure 3.8 and Annex Figures 3.A.13-18). There was hardly any GDP growth before 1948, but since then, the trend has been upward, with a decisive acceleration in the 1980s. In the colonial period, life expectancy already began rising from 23.7 years in the 1900s to 32.6 years in the 1940s. At independence, life expectancy was still lower than what would be expected given India's (low) per capita GDP. After independence, a steady rise took place, especially from the 1950s to the 1970s. India today has a higher life expectancy than could be expected based on its per capita GDP.

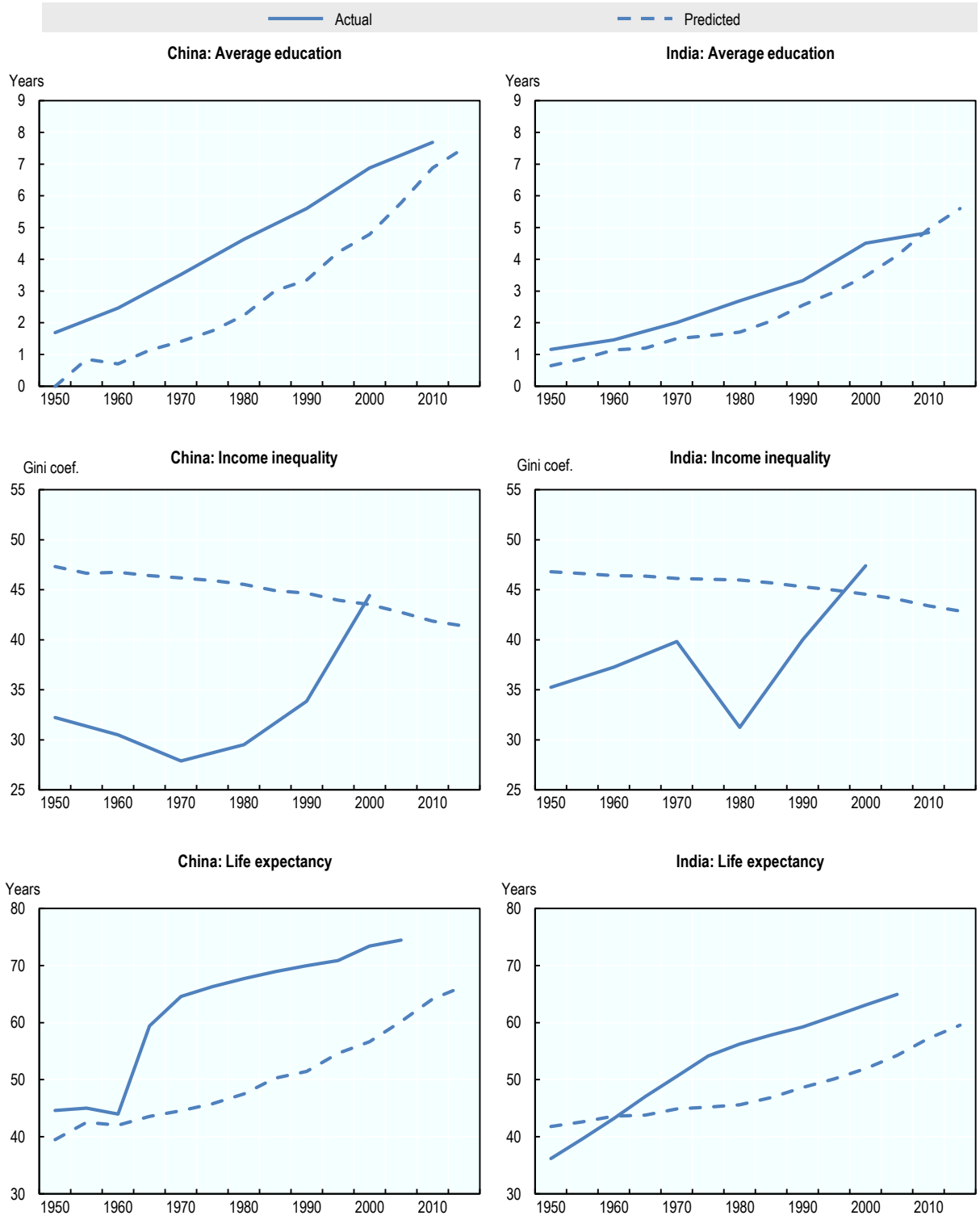
India, however, has not done as well as other Asian countries in other well-being indicators. Average years of education stood at a very low level of 2 years in 1890 and this further declined to 1.2 years in 1950. The colonial state failed to enhance the general education of India's growing population, and the demand for human capital remained low. After 1950, average years of education increased steadily, but it is never higher than expected based on per capita GDP. By 2000, gains in average years of education had not kept pace with India's recent increase of GDP growth. Furthermore, the overall trend in income inequality is upward, and unskilled labourers' real wages were essentially flat. Both developments contradict what could be expected from India's per capita GDP growth. Conversely, India's strong record as a democracy stands out compared to both its Asian peers and to what is expected based on per capita GDP levels. This diversity of well-being developments, some of them countering GDP growth, show again the two are not always correlated.

Generally, however, well-being in Asia has shown tremendous progress, particularly with respect to extreme poverty. China achieved the most spectacular increases in well-being in the last 50 years or so (see Figure 3.8). Extreme poverty declined in equally dramatic fashion, despite a strong increase in income inequality. India's poor population as a share of total population declined according to World Bank data from 54% in 1983 to 46% in 1993, 38% in 2004 and 21% in 2011.

The continued high level of extreme poverty in India has been the subject of debate (Dréze and Sen, 2013[31]), but seems beyond dispute. Bangladesh and Pakistan, which grew much less strongly in terms of GDP per capita, managed to lower extreme poverty in a much more significant way. Pakistan, for which data seem to be best, lowered its poverty rate from 62% in 1983 to 6% in 2013.[17] Indonesia, the other giant in this region, experienced a spectacular decline of extreme poverty based on World Bank estimates, from 70% in 1987 to 7.5% in 2015. However, Moatsos only finds a halving of poverty rates in the country between 1983 (57%) and 2014 (29%). Other countries in the region – Thailand, Malaysia, Philippines and Viet Nam – managed to lower poverty levels into single digits (less than 10% of the population). No data are available for Cambodia and Myanmar.

Figure 3.8. There have been positive returns on well-being outcomes in Asia

Changes in actual and predicted well-being in selected Asian countries, 1950-2010



Sources: van Zanden et al. (2014[2]), *How Was Life?: Global Well-being since 1820*, http://dx.doi.org/10.1787/9789264214262-en; and Clio-Infra (2017[10]), *Clio Infra*, http://www.clio-infra.eu (accessed in July 2018), based on authors' calculations.

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Sen (2011[32]) stressed the relative success of the Chinese state-led model in terms of well-being.[18] He concluded that "those who are fearful that India's growth performance would suffer if it paid more attention to social objectives such as education and health care should seriously consider that notwithstanding these social activities and achievements, China's rate of gross national product (GNP) growth is still clearly higher than India's". Sen argued that China outperformed India in well-being terms because investments in health care and education were the engine of China's economic growth. India was also lagging behind other countries in the region in this respect. Indonesia, for example, has now overtaken India in terms of educational attainment. It was already ahead of India in the 1950s in terms of life expectancy.

Evidence from the well-being measures in this section supports Sen's argument. First, Figure 3.8 shows that China's progress in life expectancy began in earnest in the 1960s, and even earlier for other measures. Only later did strong GDP growth begin; as a result, Figure 3.8 shows that actual well-being was higher than what would be predicted by per capita GDP alone through most of the period.[19] Only in the last decade has this gap diminished, as well-being gains slowed while GDP growth continued. Second, well-being measures in India are consistently lower than those in China, except for democracy, and the gap has been widening since 1950. Furthermore, the last decades have experienced higher GDP growth combined with comparatively sluggish progress in well-being measures. This means that India's well-being predicted from per capita GDP is now higher than its actual score. Such slowing down of well-being gains compared to per capita GDP growth can also be observed in several Asian countries. This includes both countries where predicted well-being is now higher than actual well-being (India, Indonesia) and those where GDP growth is catching up to earlier progress in well-being (China, Viet Nam, Bangladesh).

Eastern Europe and the former Soviet Union experienced high GDP and well-being performance until the 1980s, followed by collapse and recovery

The final group of countries discussed are those from Eastern Europe or belonging to the former Soviet Union. This section presents evidence for Russia, Bulgaria, Estonia, Hungary, Poland and Romania.

Between 1820 and 1930, GDP growth in Eastern Europe and the former Soviet Union closely followed the global average. GDP per capita doubled between 1820 and 1910, with most of this increase realised after 1870. The First World War and the Russian Revolution of 1917 resulted in a sharp decline in GDP. However, Russia recovered dramatically in the 1930s due to central planning and forced industrialisation (at the expense of agriculture).

As an instrument to modernise the economy and increase GDP per capita, central planning proved successful. In the 1930s, the Soviet Union was the only region that grew rapidly (from USD 575 in 1920 to USD 1 448 in 1930 and USD 2 144 in 1940). During the 1950s and 1960s, the model still seemed to work well in generating GDP growth: USD 3 945 in 1960 and USD 5 575 in 1970 (van Zanden et al., 2014[2]). GDP per capita in the Soviet Union had been below the global average until 1930. From the 1960s onwards, it exceeded the global average by a sizable margin (by 37% in 1950 and by 55% in 1970). GDP growth in Eastern European economies accelerated as the same central planning model was introduced in these countries in the late 1940s. It is, however, less clear if this acceleration can be attributed to the forced industrialisation that central

planning induced, or to the generally favourable conditions in the world economy in the post-war economic boom.

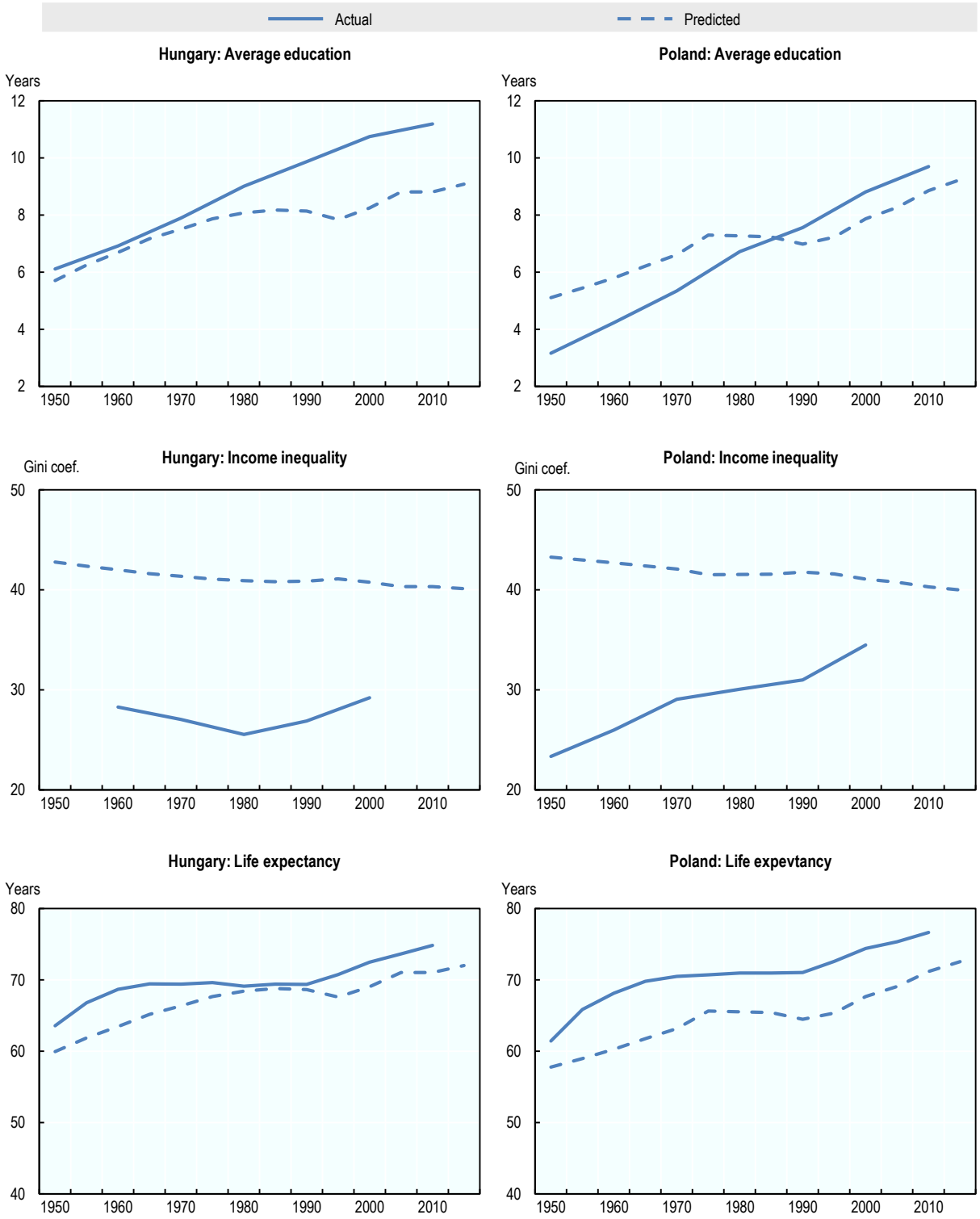
The well-being consequences of central planning and forced industrialisation can only be sketched here. The core idea was to transfer surplus production from agriculture and consumption to large-scale investment in capital-intensive industry. A sharp reduction of living standards was therefore inevitable. This is confirmed by the massive famine of 1931-32, which was especially severe in Ukraine. Data on population height also show declines in the 1920s and 1930s. However, there were also countervailing forces (Allen, 2003[33]). Large numbers of farmers migrated to cities, where incomes were much higher than in the countryside. Levels of education rose rapidly (from 2.5 years of education on average in 1930 to 5 years in 1950) and income inequality fell to extremely low levels. Life expectancy rose sharply (after a severe dip in 1931-32), as the quality of public health services improved. Still, political rights were at an extremely low level during the Stalin years.

The assessment of the long-term consequences of these policies is even more complicated. The development of life expectancy in the former Soviet Union is at odds with developments in other countries. After a strong increase between the 1920s (when it was 32.6 years) and the 1960s (when it was 69 years), life expectancy began to stagnate at around that same level (Annex Figure 3.A.22, available online only). Infant mortality may even have increased in the 1970s. These developments led to some debate amongst Western specialists about a possible crisis in the Soviet health care system in the 1970s and 1980s (Kingkade and Arriaga, 1997[34]). Estimates of population height, however, contradict this pessimistic picture. From the 1950s onwards, Russians continued to become taller (from 169 cm in the 1940s to 177 cm in the 1990s). Conversely, after the disintegration of the Soviet Union in the early 1990s, there are clear signs of an acute health crisis. Life expectancy fell to 66 years in the 2000s. This was one of the largest reductions of life expectancy on record that cannot be attributed to war or infectious disease. Life expectancy also declined in other countries belonging to the former Soviet Union (OECD, 2008[35]). Higher mortality rates have been linked to acute psychosocial stress and excessive alcohol consumption during this period of political instability and social upheaval (Cornia, 2016[36]). Homicides also increased sharply after the fall of communism, further contributing to the decline of well-being in these years (Annex Figure 3.A.21, available online only).

Stagnation in life expectancy also occurred in other Eastern European countries during the 1970s and 1980s (see Figure 3.9 and Annex Figure 3.A.22). However, other dimensions of well-being increased rapidly during the years of central planning. Human capital was higher than predicted based on GDP per capita. Income inequality was low – until the 1990s, when it started to increase rapidly – while political rights were extremely low during communist rule. In many dimensions (except for democracy), Eastern Europe remained throughout the 20th century the region with the third highest level of well-being, on average, following Western Europe and Western offshoots (Australia, Canada and the United States) (van Zanden et al., 2014[2]).

Figure 3.9. The Soviet Union and its satellites have had a mix of well-being progress since the 1950s

Changes in actual and predicted well-being in selected countries in Eastern Europe and former Soviet Union, 1950-2010



Source: Clio-Infra (2017[10]), *Clio Infra*, http://www.clio-infra.eu (accessed in July 2018), based on authors' calculations.

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The development experience of the "old world"

Well-being lagged behind GDP growth among the early industrialisers

The *How Was Life?* report analysed the long-term trends of GDP growth and many well-being dimensions in the world economy since the start of industrialisation in the early 19th century. It is therefore possible to compare economic growth and well-being in the early stages of industrialisation for a large sample of industrialised countries. These include the United Kingdom, the United States, Belgium, Sweden, Italy, France, Germany, the Netherlands and Japan. In Western Europe, the break with the pre-industrial period occurred around 1820. In that period, economic growth was either slow, as in the United Kingdom and the Netherlands, or absent, as in the other countries.

During the first 50 years of industrialisation, between the 1820s and 1870s, the rate of GDP growth was still relatively low for these industrialised countries (Western Europe and Western offshoots in the classification of (Maddison, 2001[9])). This is certainly the case compared to the high growth rates today in China. GDP per capita in Western Europe increased by about 1% annually between 1820 and 1910. The Western offshoots did somewhat better, with an average growth rate of 1.5%. This implied that real GDP increased by 160% over this period of 90 years. When compared with the near stagnation prior to 1820, it was a remarkable achievement.

Although relatively slow, GDP growth was underway, but initially had almost no positive impact on well-being. This is especially evident from data on real wages and body height, which closely reflect the income position and consumption patterns of the population. The average height in the United States declined by more than 4 cm between the 1830s (174 cm) and the 1890s (169 cm). Western Europeans, at the start of the century already much shorter than Americans, also shrank from 166 cm to 165 cm between the 1820s and 1850s. The inhabitants of Great Britain in the 1890s were still shorter than those living in the 1820s.

Similarly, real wages in Western Europe in the 1870s were at the same level as in the 1820s – and in the years between they were often below these levels. Health data – life expectancy, infant mortality – tell a similar story. Life expectancy in England was 41 in the 1820s and 41.1 in the 1860s. French and Swedish data show a more positive trend. The real break in the trend occurred in 1870, when life expectancy started to rise. Until 1870, the process of democratisation stagnated in large parts of Europe. The average measure for democracy (polity2 score) in Western Europe is -4.2 in the 1820s and -3.3 in the 1860s before reaching to -0.4 in the 1870s. Given the growth of GDP and the stagnation of the standard of living of the population, income inequality likely also increased rapidly. However, the data are too fragmentary to be confident about this trend.

Educational attainment, which increased in almost all early industrialising countries between the 1820s and 1870s, is perhaps the most important exception to this pattern of stagnant well-being. Great Britain, however, did relatively poorly. Educational attainment was relatively high at the start of industrialisation, and increased slowly (from 1.8 years in 1820 to 3.6 years in 1870). Early industrialisation in England was not based on large-scale demand for skilled labour; large-scale women's and children's labour may have crowded out schooling. As a result, the Dutch (5.1 years), Germans (5.4 years), French (4.1 years) and Swedes (4.2 years) had a higher level of educational attainment in 1870 than the British (3.6 years). Continental countries (except possibly for Belgium) followed a development path that was more based on skilled labour than in the birthplace of the industrial revolution.

The early growth paradox describes growth without improvements in well-being

These findings confirm the idea in the literature of an "early growth paradox". Economic growth did occur during this period, but did not translate into improvements in well-being. This paradox is related to several developments (Komlos, 1998[37]).[20] First, it was probably the price that early industrialisers paid for rapid urbanisation and proletarisation. For the working class in England, life in the rapidly growing cities was harsh, the cost of living was much higher than in the countryside and the commodification of labour increased uncertainty of work and income (Engels, 1845[38]). The supply of social services by the state and by the urban communities also lagged behind. The rise of liberal economic ideas also led to cuts in social expenditure, reform of poor laws and probably a reduction in social transfers (Lindert (2004[39]); van Bavel and Rijpma (2015[40])). The period lasting from 1840 to 1870 also saw a general liberalisation in economic matters, including internationally. In 1846, the Corn Laws, a series of tariffs and trade restrictions on imported food and grain to England, were abolished and free trade became the dominant ideology. The very strong growth of international trade, capital markets and migration flows generated the first wave of globalisation. Different social classes profited differently from these changes (O'Rourke and Williamson, 1999[41]), a notable parallel with globalisation since the 1980s.

Levels of education were low in the industrialising districts, and child labour was the norm, strongly competing with education. Health care services also did not keep up with the growth of urban populations. This resulted in poor living conditions, bad sanitation, high health risks and stagnant life expectancy (Szreter (1988[42]); Szreter and Mooney (1998[43])). The wealth of the new class of industrial and commercial entrepreneurs provoked growing tension with the expanding proletariat. This, in turn, gave rise to new ideologies (socialism, anarchism) and new social movements (trade unions, workers and consumer co-operatives, movements for the extension of voting rights). It is no coincidence that the Communist Manifesto was published in the middle of this period (Marx and Engels, 1848[44]). It helped put the social question high on the political agenda. In the long run, it contributed to the rise of social spending and social transfers that would alleviate the most urgent social problems.

The growing divergence between GDP and various dimensions of well-being reversed after 1870. The growing efficiency of transport and trade combined with lower tariffs resulted in the rapid growth of exports of American foodstuffs to Europe. Dubbed an agricultural invasion, it resulted in a dramatic decline in food prices that helped to raise real wages and consumption levels in Europe (O'Rourke, 1997[45]). Breakthroughs in medical knowledge also created conditions for much more effective health care, often in combination with growing attention to health issues by public authorities. Life expectancy started to rise after 1870, and child mortality declined equally dramatically. At the same time, the first policy measures to address social questions were taken and the first experiments with social transfers and social insurance – such as Otto von Bismarck's legislation of the 1880s – began. Whereas in the mid-19th century there was no correlation between GDP per capita and life expectancy or human height on a global scale, these changes and policy reforms led to the emergence of such a link around 1870 (Figure 3.4 and Figure 3.5).

Annex Figures 3.A.25-32 (available on line only) plot levels of the various indicators of well-being for nine early industrialisers. These are more or less representative of the various patterns in Western Europe and Western offshoots. Figure 3.10 below presents a sample of the complete annex figures. As in previous figures, the data show the actual

value of these well-being dimensions, and the expected value based on the level of GDP per capita of the country involved.

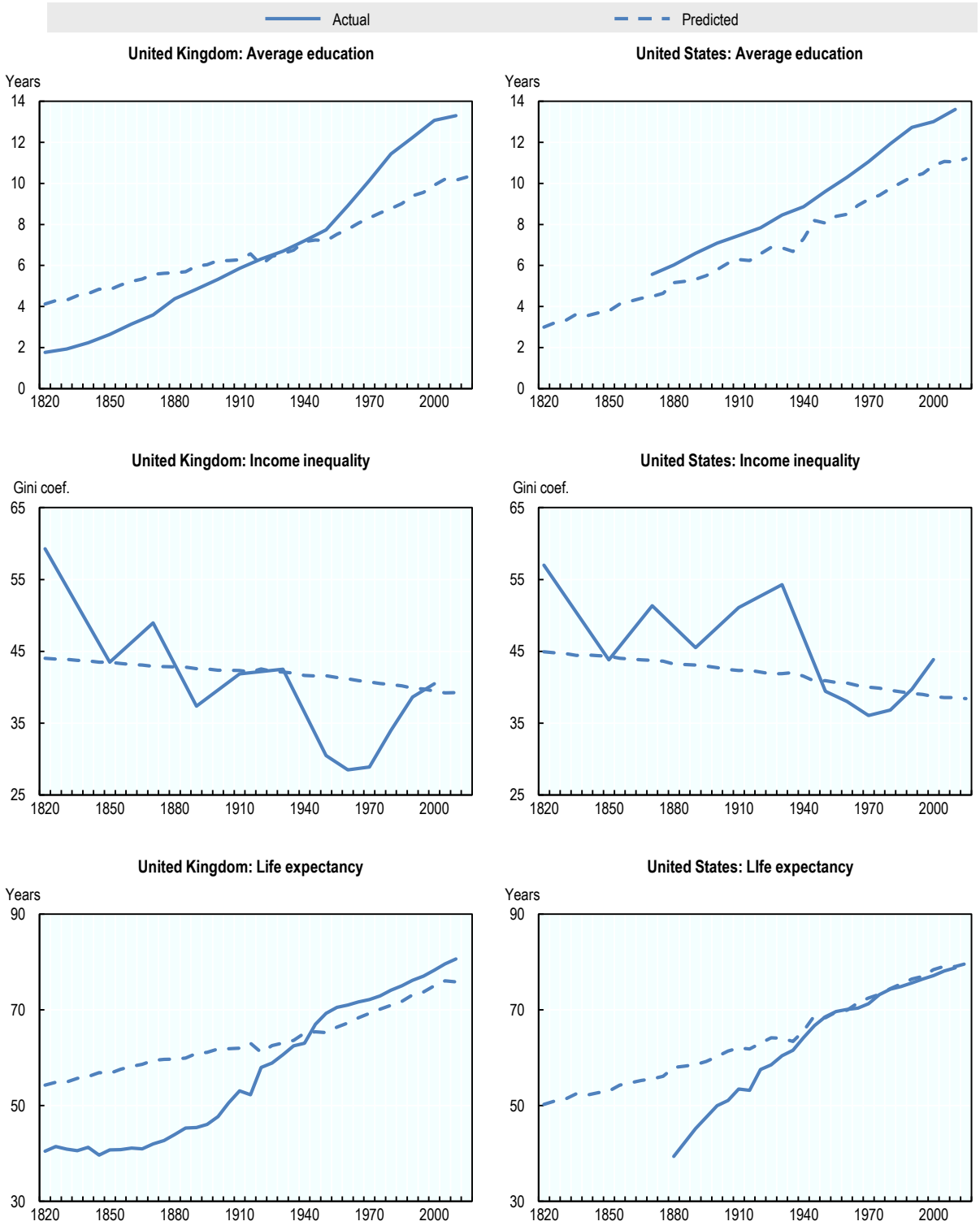
Differences within this group are large. The figure shows that economic take-off in the 19th century, especially in Great Britain and Italy, was linked to much lower levels of educational attainment than GDP levels would predict. Sweden and the United States, however, were different, and exhibited a relatively high level of human capital from the start. Similarly, income inequality was extremely high in the first 50 years or so of early industrialisation. Gini coefficients were sometimes 10-15 points higher than what could be expected based on GDP per capita alone.

Most early industrialised countries show a trend towards lower income inequality over 1820-2000. However, there are upswings as well, notably in the second half of the 19th century and the late 20th century. Homicide rates were low compared to what GDP would predict in Western Europe – but not in Italy, and certainly not in the United States, where they remained high during the entire period. The differences between the values predicted by per capita GDP and actual homicides are large. This suggests a relatively secure environment in Germany, France and Britain given their GDP per capita levels (eight per 100 000 inhabitants, as much as one standard deviation in the entire dataset).

The panel for life expectancy in Figure 3.10 and Annex Figure 3.A.28 shows stagnation during the first half-century, and sharp increases after about 1870. The shortfall of life expectancy compared to values predicted from GDP levels is especially large, as much as 20 years. By the second half of the 20th century, and especially since the 1970s, the situation reversed. Most industrialised countries performed better on life expectancy than predicted by their GDP level. The United States was the exception, where the increase in life expectancy stagnated relative to per capita GDP levels from 1965 to 2010. High income inequality and high homicides rates also contributed to convergence of well-being between both sides of the Atlantic observed since the 1960s, as measured by a composite indicator of well-being outcomes (van Zanden et al., 2014[2]).

Figure 3.10. Well-being outcomes took off around 1870 in the early industrialising countries

Actual and predicted well-being in selected "early industrialisers", 1820-2010



Source: Van Zanden et al. (2014[2]), *How Was Life?: Global Well-being since 1820*, http://dx.doi.org/10.1787/9789264214262-en; and Clio-Infra (2017[10]), *Clio Infra*, http://www.clio-infra.eu (accessed in July 2018), based on authors' calculations.

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Historical trends in well-being

What lessons can be deduced from the well-being experience of early industrialising countries? A comparison between GDP growth and a range of well-being indicators between the early industrialisers in the 19th century and emerging economies in recent decades provides several insights.[21]

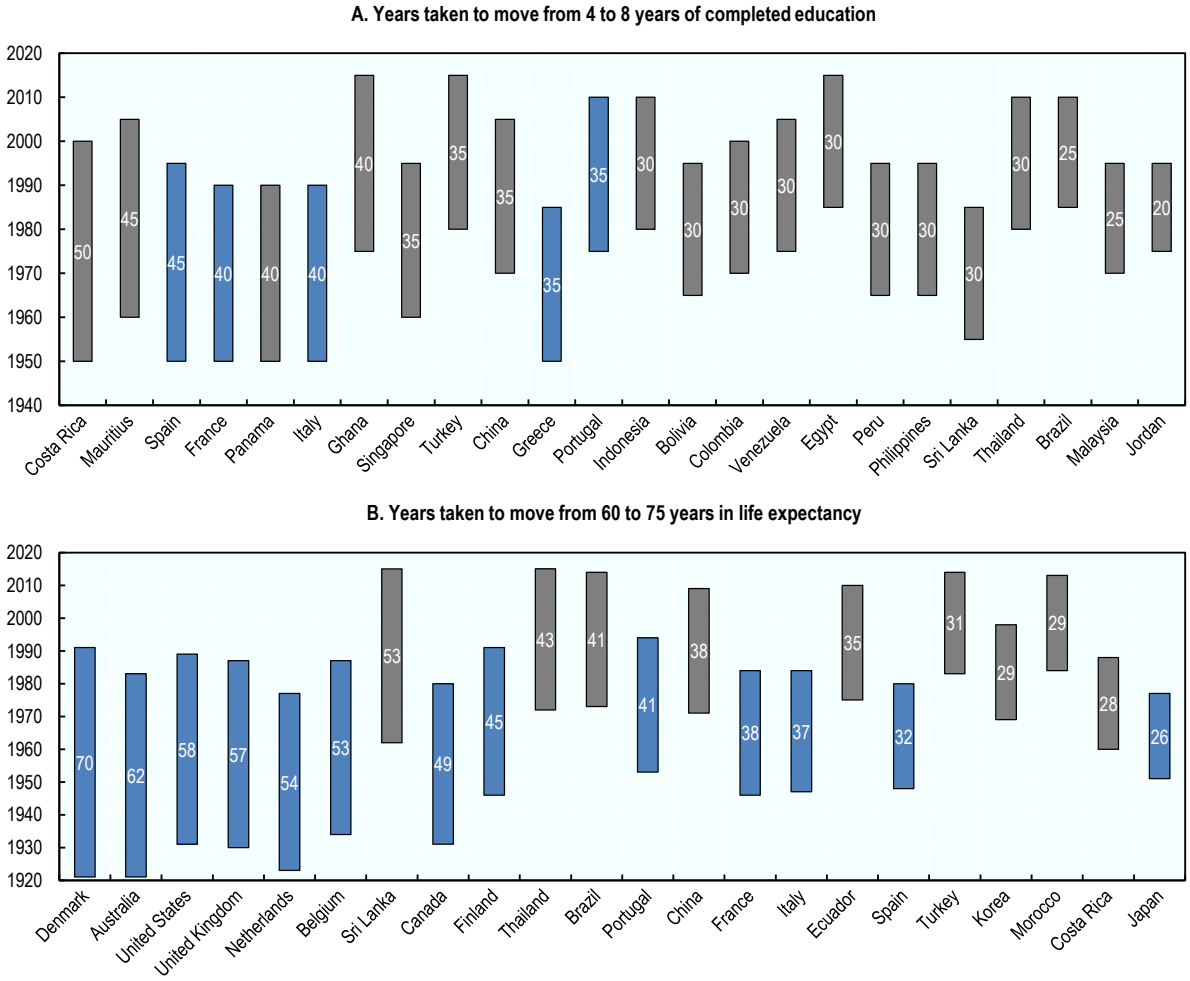
First, economic growth amongst the early industrialisers was much slower than that achieved by many emerging economies in recent years. Per capita GDP of Western European countries grew on average by 1% annually in the 19th century. The Western offshoots increased their GDP per capita somewhat faster. However, the gap with the rate of economic growth of China and India in recent years, and of emerging economies in general, remains large. As one important reason for that difference, emerging economies are much further away from the productivity frontier. Therefore, they can profit from catching up. Conversely, the early industrialisers were at or close to the productivity frontier and could not profit to the same extent from the advantages of backwardness.

Second, such differences in the development process had important consequences for the effect that "early growth" and "catch-up" growth had on well-being. During the first 50 years of early industrialisation, the increase in income inequality meant that the mass of the population did not profit much from higher GDP per capita. The welfare backlash – "dark satanic mills"[22], extremely polluted cities, high food costs – of early industrialisation cancelled out the potential effects of higher GDP per capita in raising well-being. High income inequality led to growing socio-political tensions and to the emergence of socialist ideologies and movements. In contemporary emerging economies, income inequality has also increased rapidly. This was often driven by the process of globalisation, although endogenous forces (such as increased scarcities of certain skills) may have played a role as well. But GDP growth in emerging economies is so strong, and autonomous changes in the health system, for example, so effective, that – despite growing income inequality – the well-being of the population has nonetheless increased across the board. In another important difference, urbanisation in the 19th century had negative welfare effects (lower stature, lower life expectancy). Today, despite worse air quality, its overall effects are probably positive due to better nutrition and living conditions in urban centres. In fact, it has taken emerging economies much less time to reach a given level of life expectancy and education than was the case for developed economies (Figure 3.11).

Third, the relationship at the global level between GDP growth and well-being shows signs of change over the years. The correlation of various well-being measures with per capita GDP were low in the first decades of the 19th century. However, they increased considerably during the second half of the 19th century and the first half of the 20th century. In this period, increases in per capita GDP translated into higher well-being. In the second half of the 20th century, per capita GDP could not account for a large part of the gains in well-being. Relatively high well-being outcomes in countries with low GDP per capita in this period are one of the reasons for this pattern, and they partly reflect autonomous changes in the health system – the shift of the Preston curve. Latin America illustrates these changes most clearly: whereas after 1950 growth in GDP per capita was below the global average, the rise of most dimensions of well-being was clearly faster than the global average. Since about 2000, these positive developments were further enhanced by lower income inequality and poverty, higher education attainment and life expectancy. Latin America's record in improving well-being is therefore positive, in spite of its sometimes erratic GDP performance. At the same time,

the experience of Chile demonstrates there is no necessary trade-off between the two. It grew fastest since the 1980s, and also increased well-being most strongly. The polar case is Venezuela, which recently experienced an economic collapse due to lower oil prices and misguided policies, resulting in a dramatic decline in well-being. Dramatic declines in well-being can be largely independent of economic growth. This could be seen in the effects of the uncontrolled HIV/AIDS epidemic on life expectancy of men and especially women in parts of Africa, which inappropriate policies potentially worsened.

Figure 3.11. It has taken less time for new emerging economies to reach the same levels of well-being as developed economies



Note: Early industrialisers highlighted in blue, emerging economies in grey.
Source: Authors' calculations based on Clio-Infra (2017[10]), *Clio Infra*, Average years of education, life expectancy at birth (total), http://www.clio-infra.eu (accessed in July 2018).

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Last, parallels and differences exist between GDP growth and well-being experiences of early industrialisers and today's emerging economies. In both cases, GDP growth was accompanied by rising income inequality and rapid globalisation. The first wave in 1840-70 and the second wave in 1980-2010 both increased income inequality. In an

important difference, the middle decades of the 19th century were not accompanied by higher political rights in the early industrialisers, while a shift towards democracy started after 1870. Conversely, such a change has occurred in emerging economies in Latin America, sub-Saharan Africa and in parts of Asia (Indonesia, Korea, Thailand and, most recently, Myanmar) since the 1980s.

The evidence shows that development, when defined more broadly to encompass well-being and environmental sustainability, does not always follow economic growth. This raises questions on how we think about development and what type of strategy countries should follow to reach better and sustainable levels of economic, social and environmental well-being – questions which are examined in Chapters 4 and 5 of this report.

Notes

[1] The chapter presents an analysis of historical well-being for four key regions: Latin America, sub-Saharan Africa, Asia and Eastern Europe and the former Soviet Union. Regional averages are always taken from the *How was life?* report. Within each of these regions, the chapter takes a closer look at a sub-set of countries chosen either because they are large in terms of population or characterised by contrasting developments within the region: Argentina, Brazil, Chile, Mexico, Peru and Venezuela in Latin America; Burkina Faso, Ghana, Kenya, Nigeria, Uganda and South Africa in sub-Saharan Africa; China, Indonesia, India, the Philippines, Thailand and Viet Nam in Asia; and Bulgaria, Estonia, Hungary, Poland, Romania and Russia in Eastern Europe and the former Soviet Union.

[2] Unless stated otherwise, "GDP growth" refers to growth in GDP per capita, based on 1990 US dollars.

[3] *How's Life* is the bi-annual report released by the OECD Statistics and Data Directorate since 2011 to monitor, benchmark and analyse well-being in OECD members and selected partner countries. The report relies on headline indicators of current well-being, resources for the future (since 2013) and inequalities (since 2017) selected in consultation with statistical offices of OECD member countries.

[4] Argentina, Chile, Brazil, Venezuela, Peru, China, Indonesia, India, Viet Nam, the Philippines, Thailand, South Africa, Kenya, Nigeria, Ghana, Uganda, Burkina Faso, Russia, Poland, Hungary, Romania, Bulgaria and Estonia.

[5] The United Kingdom, the United States, France, Germany, Belgium, Sweden, Japan, Italy and the Netherlands.

[6] For example, in the education dimension, measures focus on the skills and competencies achieved, rather than on the money spent on schools or the number of teachers trained.

[7] For instance, Boarini, Kolev and McGregor (2014[7]) recommended to refer to "consumption possibilities", rather than "income and wealth", to recognise the prevalence of consumption as a metric of economic well-being in developing countries. They also argued for broadening the concept of "personal security" to "vulnerability", to reflect the broader range of risks faced by people in developing countries; and for referring to "empowerment and participation", rather than "civic engagement and governance", to stress the importance of giving political voice and means of expression to individuals, local communities and indigenous populations. Similarly, on the indicators side, they suggested including measures of vulnerable employment (in addition to the standard unemployment rate used in OECD countries) to account for high labour market informality in these countries.

[8] *How Was Life?* omitted some of the dimensions included in the *How's Life?* framework because certain dimensions of well-being (such as subjective well-being) cannot be measured in the distant past, while for other dimensions (such as work-life balance) no sufficient historical data are available.

[9] Self-reporting on life satisfaction and of day-to-day experience did not exist back in time, for instance.

[10] GDP per capita is expressed in purchasing power parity based on 1990 US dollars.

[11] Life expectancy and homicide data are only available from 1850.

[12] This is done by regressing the well-being measures (standardised to have zero mean and unit standard deviation for comparability) on the logarithm of per capita GDP and a set of time dummies. Time dummies capture the additional well-being compared to 1820 (or the earliest year of observation) that is not explained by the level of per capita GDP in that period.

[13] The polity2 variable is expressed on a 21-point scale, scoring countries between autocracy (low) and democracy (high). This means there is a ceiling beyond which, according to this indicator, political institutions cannot be improved anymore. Further developments in countries already categorised as full democracies or full autocracies can only compensate for developments elsewhere in the world to a limited extent.

[14] The approach is similar in spirit to that used in Figure 3.5, although without separate time dummies. The model is $wb = b0 + b1*\log gdppc$, where *wb* is again one of the well-being measures. The relationship is estimated using the full global sample of countries from 1820–2010 (or the earliest/latest date for which data is available). This provides us with predicted values for the well-being measures that can be used to evaluate the actual developments in well-being relative to the volume of economic production of a country.

[15] If less than 40% of the regional population is covered by the data, it was set to missing.

[16] The growth spurt in the 2000s did not go unnoticed. Sub-Saharan Africa was identified as one of the rising stars of the world economy in 2010 by the McKinsey Global Institute, which described the potential and progress of African economies as "lions on the move"; see www.mckinsey.com/featured-insights/middle-east-and-africa/lions-on-the-move.

[17] According to Moatsos (2017[30]), however, the decline was less steep, from 65% in 1983 to 22% in 2014, which is more similar to the experience of India.

[18] As noted by Sen (2011[32]), "Life expectancy at birth in China is 73.5 years; in India it is 64.4 years. The infant mortality rate is 50 per thousand in India, compared with just 17 in China; the mortality rate for children under five is 66 per thousand for Indians and 19 per thousand for the Chinese; and the maternal mortality rate is 230 per 100 000 live births in India and 38 in China. The mean years of schooling in India were estimated to be 4.4 years, compared with 7.5 years in China. China's adult literacy rate is 94%, compared with India's 74% according to the preliminary tables of the 2011 census".

[19] The governance indicator is the one exception to this pattern.

[20] In the 1960s and 1970s, the "standard of living debate" focused mainly on the development of real wages during industrialisation in England (cf. Feinstein (1998[46]); since then, this debate has broadened via the systematic analysis of new data made available by the study of population height (see van Zanden et al., (2014[2]), Ch. 7).

[21] Two limits in analysis included in this chapter should be mentioned. First, the evidence presented is limited to data on the average level of education, life expectancy, security and political rights of the countries studied. The chapter assumes that distribution of these dimensions

of well-being among the population has not changed dramatically over time. It also assumes it is possible to assess, for example, the level of education of the population based on average measures alone.

Second, interpreting the link between GDP and well-being outcomes needs to recognise the limits of the analysis. A positive relationship between GDP per capita and well-being outcomes does not necessarily mean that GDP growth drives improvement in well-being, or that it is the only important driver at work. Good health, long life expectancy, a high level of education, secure political rights, and high personal security, besides implying higher well-being *per se*, also contribute to economic growth. In other words, the causality runs in both directions. This implies that investments in education or health, as well as in other well-being dimensions, may be a better way to further GDP growth and well-being than stimulating GDP growth through other means.

[22] "Dark satanic mills" alludes to William Blake's poem "And did those feet in ancient time", which in turn refers to the industrial revolution and its destruction of nature and human relationships.

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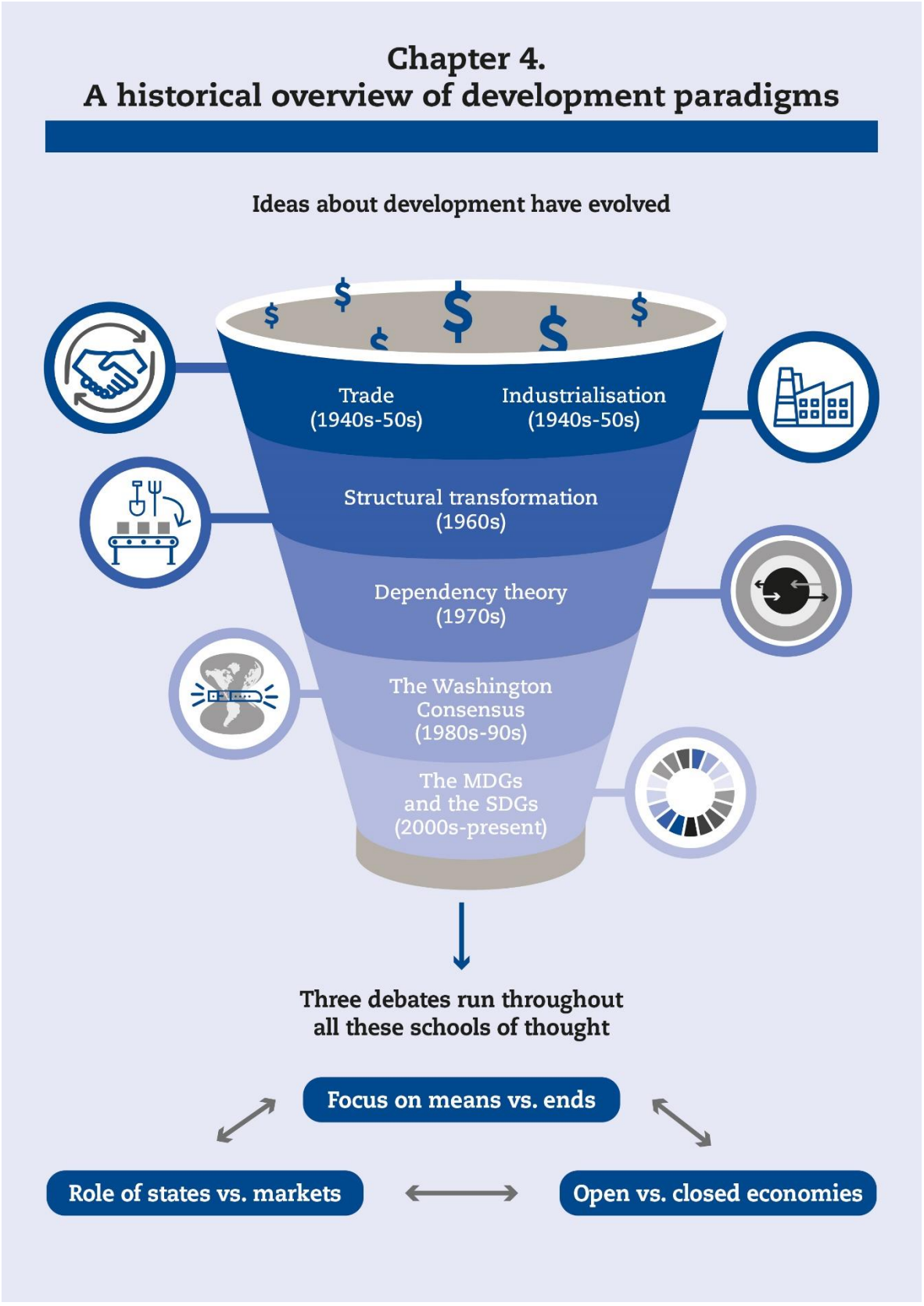
Annex 3.A. Additional figures

This annex is available on line at http://dx.doi.org/10.1787/persp_glob_dev-2019-10-en

Chapter 4. A historical overview of development paradigms

Development economics, and more generally development thinking, has changed significantly since it was conceived as a sub-discipline of economics at the outset of the Second World War. Since that time, one element of the debate has remained contentious: could the policies that led to successful and sustainable development in the early industrialising countries be repurposed as gold standards to follow in developing countries, or are the paths of developing countries sufficiently different to warrant alternative approaches? This chapter attempts to answer this question by reviewing how economic development has changed since 1945 and the subsequent creation of influential global economic institutions. It looks at changing approaches to development, critically reviews various periods and describes a long and complex learning process. To that end, it examines mainstream development thinking from the industrialised world, as well as "alternative" approaches that came out of regional experience in developing countries.

Chapter 4.
A historical overview of development paradigms



Ideas about economic development have evolved since the post-war period and the birth of the Organisation for European Economic Co-operation (OEEC) in 1948 (later the OECD). In the words of Innis (1951[1]), when mismatches between ideologies and accumulated experience become too large, econo-political paradigms, the values and systems of thought in a society that are most standard and widely held at a given time, tend to shift. This chapter looks at the changing approaches to development over this period of 70 years, and critically reviews their outcomes. It gives equal weight to the views of theorists in developed and developing countries, while also providing historical context.

The transformation of economic geography is redefining international co-operation on development

The nature of development, and the strategies to achieve economic growth, well-being and environmental sustainability simultaneously, are in question. The rise of major economies, such as the People's Republic of China (hereafter "China"), has shifted economic geography. In so doing, it has redefined the flows, patterns and co-operation associated with economic growth in the developing world.

More developing countries than ever are on a converging path to economic development with the richest countries of the world. However, evidence suggests that development, defined more broadly, including aspects associated with well-being, human development and environmental sustainability, do not always follow economic growth in tandem. Nor have they done so in longer historical perspective. Furthermore, economic wealth is not always necessary to make substantial advancements in such outcomes.

The paths of such newly industrialising countries as Chile, China and Morocco have not necessarily followed the mainstream paradigms of earlier eras. Indeed, such reflection raises questions on what is understood by development and what type of strategy countries should pursue to reach better and sustainable levels of economic, social and environmental well-being.

Development has often been associated with gross domestic product (GDP). The idea that one could measure a country's development using GDP is relatively recent. Although Simon Kuznets had defined GDP in 1934, it only became the main tool for measuring a country's economy at the Bretton Woods conference ten years later.

Using GDP as a measure of development made sense, but it had limitations as a measure of human welfare. If the goal of economic development, in its simplest form, is to provide the means to improve living standards, then GDP could adequately reflect it. And until the 1970s, GDP growth was viewed as a good proxy for more general development in a country. But even Kuznets, at the time of his report on GDP, had warned against using GDP as a measure of welfare (Costanza et al., 2009[2]). In the years following the SecondWorld War, material wealth would not unquestionably translate into better health care, education and housing for a country's residents. In short, GDP did not capture individual well-being.

In the light of the transformation of economic geography and new institutions and challenges, this chapter reflects on how the thinking of the development community has evolved over time. Subsequently, it presents regional experiences that illustrate "alternative" views to orthodox thinking on development.

Its main messages are:

- Development thinking has significantly broadened its discourse since the Second World War, increasingly including social and environmental factors of development.
- Despite the broadening approach to development, the starting point for development thinking and co-operation continues to be based on economic principles and financial capital flows.
- The plurality of developments taken by countries since the Second World War implies that seeking a single development paradigm should not be an objective.

There are multiple paths to development

Over time, broad strokes on development thinking can be deciphered. Theories, thinking and strategies applied broad assumptions and simplifications to harness resources, scale interventions and streamline policy.

This has had two major implications.

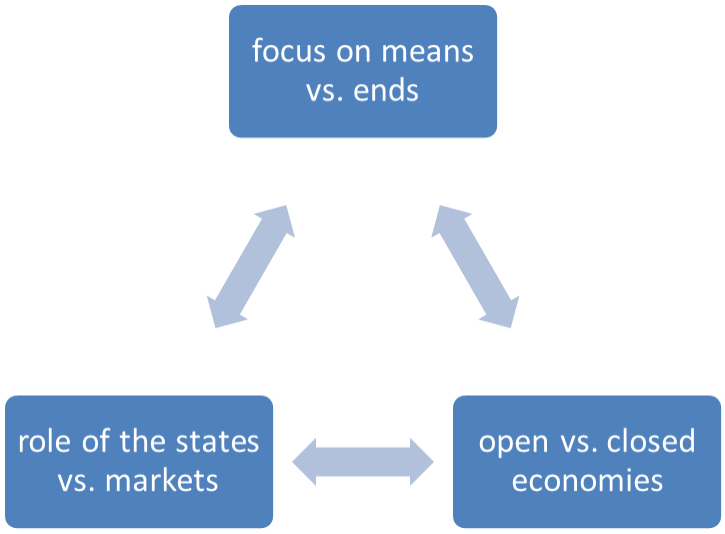
First, it has often implied a one-size-fits-all approach, and the understanding that the paths of others could be replicated elsewhere as development strategies. Counter thinking on this is evident from the alternative schools that emerged from Latin America and Southeast Asia, as well as the development path carved out by China; their success pushed development practitioners to think differently.

Second, it fostered a silo approach to policy and sectors in developing countries and created a dichotomous view of donors versus recipients in international co-operation. Mainstream development thinking has typically focused on individual sectors and on the divide between urban and rural regions. Development is much more complex and implies a much smoother continuum: it crosses sectors, involves a wide array of actors and evolves differently in various parts of a country's territory.

Three broader overarching discourses have influenced development thinking during these decades. The first discourse involves both the term and objectives of development. The second involves the role of states and markets, and the extent to which both contribute to development. And the third involves the importance of the international as opposed to the domestic environment – in short: the importance of "the degree of openness" – for national development (Figure 4.1). These three elements of the general development debate have oscillated and weaved back and forth over time, influenced by external (e.g. events) and internal (lessons) validity.

The ends are important for development paradigms, but so are the means. In fact, treatises on the means, and more specifically the value of the real economy and how to achieve economic development, go back at least to the 14th century (Box 4.1). Indeed, the ideological battle over whether aid should facilitate growth or provide programmes that directly meet basic needs has been ongoing for decades.

Figure 4.1. Main element of the overarching discourse in development thinking over time



Box 4.1. Development thinking in a longer-term perspective

Thinking on economic development, the different paths taken by countries, and the principle of the real economy, go back far in time. But the understanding of both somewhat halted with a publication by David Ricardo in 1817. Principles of Economics effectively removed two key distinctions from the science of economics, both elevating the theory to a level of abstraction where classifications – that had previously been considered as extremely important – disappeared (Ricardo, 1817[3]). The first element was the difference between the financial economy and the real economy. This differentiated unproductive hoarding from productive investment. The second element was the view that trade was the barter of qualitatively identical hours of labour. This meant differences between economic activities subject to increasing and diminishing returns were left out.

However, prior to Ricardo, the discourse had been long, preceding the industrial revolution, on the means for development and the real economy. Nicola Oresme in De moneta in 1355 claimed that "it was a crime to leave hidden among the dead, and useless, what would keep the living alive", in response to gold and silver deposited in tombs according to pagan customs (Schefold and Avril, 1995[4]). Later, the Spanish Minister of Finance Luiz Ortiz, admitted in 1558 that adding value in manufacturing was more important than the inflow of gold and silver (Ortiz, 1957[5]).

Giovanni Botero (1544-1617) offered the first theories as to why the Tudor Regents policy from Henry VII to Elizabeth I had been correct. Botero's work, Reason of State – today virtually unknown – dominated the European economic discourse for more than a century (Botero, 1956[6]). Throughout his work, Botero argued for the superiority of industry in terms of synergies (linkages, clusters) from a diversity of economic activities. This would manifest itself in the greater possibility of innovation in urban activities, as well as of their ability to yield a larger profit than rural activities. Botero failed, however, to provide a convincing theoretical argument for why this was so.

Antonio Serra followed Botero's lead in differentiating work in the agricultural and manufacturing sectors. He grounded the work in the theories of increasing and diminishing returns to scale – whether unit production costs would rise or fall if a nation specialised in a particular activity. In so doing, he produced the first coherent statement of this important economic law (De Luca, 1968[7]). Manufacturing is unique because the costs of labour proportionally go down with increasing volumes of production. Increasing and diminishing returns – more often separately than together – have played an important role in the history of economic thought.

A consensus is emerging on the importance of human development

There is no standard definition of development and no single paradigm can sum up how best to juggle these three elements. Different actors have continuously argued about societally preferred development objectives, such as economic growth, social welfare, political participation and freedom, national independence and environmental integrity. While theorists have favoured some objectives over others, and at different periods, development strategies have increasingly come to embrace all of them (De Janvry and Sadoulet, 2014[8]).

A consensus is emerging that development has to do with tangible improvements in people's quality of life, and how satisfied they are with it. Over 70 years, economic and societal objectives have come and gone. Most have now been summarised in the 17 Sustainable Development Goals (SDGs) to end poverty, protect the planet, and ensure peace and prosperity for all.

The shift towards more focus on social aspects can be seen by observing the topics of discussion in the World Bank's flagship World Development Report (WDR), which was first issued in 1978. In the 1980s for instance, the WDR focused on international capital (1985), trade (1987), public finance (1988) and financial systems (1989). More recently, the WDR has focused on gender (2012), jobs (2013), culture (2015) and education (2018). This evolution testifies to the change over time of what is deemed relevant for development.

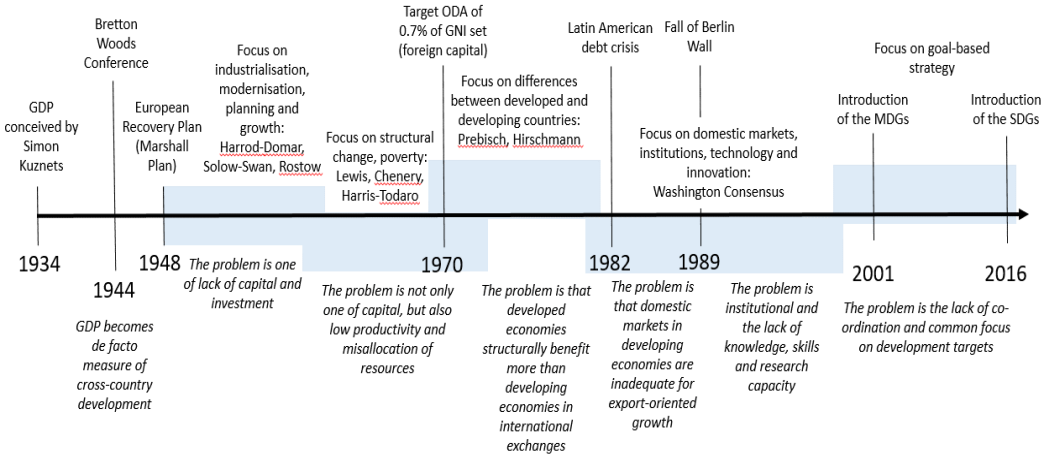
Trade-offs are therefore necessary among some of the mentioned development objectives. Development thinking today is also about identifying trade-offs in country-specific contexts, and ensuring they become part of the overall policy dialogue in a given country. Once trade-offs are clear, experts should be able to better target their actions towards achieving the "best possible" outcomes for their defined goals and beneficiaries.

Development paradigms today are the result of external factors and accumulated knowledge. External factors have indeed played a major role in shifting paradigms. The era of the planning school in the 1960s, where economic development was treated as a precise science, demonstrated that development was more than just about the economy. Already in the 1970s, elements beyond GDP were brought to the fore of development thinking and practice (Seers, 1969[9]). In 1972, the Stockholm Conference on the Human Environment, for instance, signaled an important milestone in environmental policy making at the global level, which continued with the 1987 Brundtland Report and the 1992 Earth Summit.

Economic structure and its transformation matter. It was commonly thought that developing countries would have to take a different path from previous industrialising ones, as advocated by the dependency school, for example. But the oil crisis in 1973 and the debt crises in Latin America a few years later put an end to this thinking and placed macro-stability at the front and centre for the next two decades. The end of the Cold War would also usher another shift, as the environmental track was perhaps more prominent in the 1970s and 1980s, whereas the 1990s and 2000s saw a resurgence of the poverty eradication track.

Development thinkers have, however, not reinvented the wheel each time they have faced a misstep. During the past seven decades, development thinking has been more than just a lively exchange of *ideas* about development and how it can be achieved. It has also been more than a preferred *set of ideas* at any given time, only to be replaced by another set of ideas a couple of years later. Beyond constructivist interpretations, development thinking appears to have been a long learning process. Key stakeholders in interactions with real-world events and their challenges have come to define some consensus areas on what development is and what it should entail, and on how it can be achieved, i.e. what has worked better in terms of defined development outcomes and in what context (Figure 4.2).

Figure 4.2. Development thinking, viewed by source of the problem



Today's theorists, for good reasons have the advantage of building on a vast array of earlier development thinking. They can come up with more holistic approaches, including addressing environmental and climate issues, adapting them to local conditions and needs, thereby rendering them more realistic.

What works best in development – state-led versus market-led, and inward versus outward-orientation – is better known today. The capability to *switch* between possible strategies seems to be a key feature of developed market economies. It allows for swift action, and co-ordination among governments, particularly when an economic crisis looms. Moreover, some of the ultra-liberal arguments in favour of free markets and free trade have lost their traction. In a borderless world, regulatory frameworks and rule of

law do not operate uniformly. The latter was a key factor in Adam Smith's ideas about the workings of national economies (Herzog, 2016[10]).

Nevertheless, each shift of development thinking brought lessons learned on what works and what does not. Aid and capital are important, but not enough, since there needs to be sequencing and strategy on how best to deploy them. Unbalanced growth can work, but too much emphasis on one sector can backfire if the linkages between sectors are poor. Macro-stability is fundamental, but again it is not enough in itself: incentives for the private sector, ensuring better end outcomes for the poorest and enhanced roles in global value chains (GVCs) are also essential. Most importantly is that a country's path must reflect its own endowments, institutions and culture.

Seven decades of development thinking and practice in developed countries

Development thinking and practice spans a turbulent 70 years of geo-political developments. It began with the influence of the Cold War's struggle among superpowers, followed by decolonisation movements in Asia and Africa, the breakdown of the Soviet Union, and transformations in Central and Eastern Europe. In addition, there were famine and forced migration in several parts of the world, several financial crises, military conflicts and civil wars. But it has also been influenced by the spectacular rise of China and India as new superpowers, and the massive reduction in world poverty.

The Cold War framed much of modern development thinking. In a bipolar world, confronted with a massive nuclear arms race, both superpowers – the Soviet Union and the United States – closely watched each other's foreign policy agenda (Rostow, (1960[11]); Katz, (1986[12]); Trofimenko, (1981[13]); Westad, (2005[14])).[1] In fact, it was common to frame developing countries as "Third World" countries, designating them thereby as neither aligned with the United States nor the Soviet Union.

When decolonisation in Africa and Asia gained momentum in the 1960s, both sides reached out to the newly independent countries. Although the superpowers provided development aid during the Cold War for both political and strategic reasons, aid was not just a means to lure governments into alliances. Postcolonial elites and governments had also promised swift economic and social progress to their citizens, and their legitimacy depended on action. There was a need for strategies to attain economic and social development that would accompany political independence.

The following subsections provide a more detailed account of development thinking, primarily from the point of view of developed countries. They outline five general shifts on what was perceived to be the fundamental factor in kick-starting development:

- Industrialisation, growth and modernisation (1940s-1950s)
- Structural transformation (1960s)
- More independence in developing economies (1970s)
- Macroeconomic stability: The Washington Consensus (1980s-2000s)
- Goal-based development (2000s-present).

Industrialisation, growth and modernisation (1940s-1950s)

Early thinking on development was characterised by optimism and experimentation (2013[15]). In the wake of creating international institutions to support development after

the Second World War, two main "schools" emerged: one focused on industrialisation, the other on trade.

Early years of optimism, experimentation and multilateral approaches

At the outset of the Second World War, there was enthusiasm around the question of development and reconstruction and a desire to incorporate the lessons following the First World War. The divide between the extreme views of Manchester Liberalism and Soviet Communism also meant a wide policy space; experimentation on the role of the public and private sectors, as well as capital, was encouraged.

These early years saw many international institutions established to support development. The Bretton Woods Conference in 1944 created the International Bank for Reconstruction and Development (IBRD) – later the World Bank – to help with the reconstruction of Europe. Also discussed in Bretton Woods was the International Monetary Fund (IMF) as well as an organisation to deal with trade issues, to help restore rules-based international trade relations and support development policies. The conference agreed on the creation of the IBRD and IMF, while discussions on trade gave rise to the Havana Charter, which was not ratified. Two years later, with trade viewed as an important vector for development, the General Agreement on Tariffs and Trade (GATT) was established. Lots of development thinking, at this time, occurred within newly created UN organisations focused on a single sector, but not necessarily on development as a whole: for instance, the Food and Agriculture Organization (FAO, 1945), the United Nations Educational, Scientific and Cultural Organization (UNESCO, 1946) and the World Health Organization (WHO, 1948).

Development was viewed as a process of economic activity in which countries move from "traditional civilisations", through a transition of industrialisation towards "tertiary civilisations" in which service sectors dominate (Fisher, (1939[16]); Clark, (1940[17]); Fourastié (1949[18])).

Two main schools of thought on development emerged, one focusing on industrialisation, the other on trade. There were conflicts about the mechanisms of development from the start, and an inherent dissonance between the two schools. Inspired by Keynes, the first school saw underdevelopment resulting from a series of market failures and lack of market reaction to incentives. It also took inspiration from Max Weber and Talcott Parsons on modernisation theory, viewing developing countries as simply needing to modernise their practices. The second school, inspired by neoclassical economics, saw the problem of development related mainly to lack of capital and believed that markets would ensure that capital would efficiently trickle down and alleviate poverty. This school also saw trade, through the lens of David Ricardo, as a fundamental driver of national wealth.

The industrialist school seeks to transform agrarian economies

The industrialist school, which enjoyed a short-lived prominence, sought to help "backwards" countries catch up to the developed world. Different countries had varying strategies on how to accomplish this goal.

German economist Friedrich List inspired the industrialist school in both the capitalist West and communist East. The evidence in List's National System of Political Economy (1841[19]) inspired Continental Europe and Russia to follow Britain's strategy – based on

heavy protectionism already since the late 1400s – to economic wealth. List fell into a line of thought in which mainstream European policy posed an affront to Ricardo's trade theory based on comparative advantage.

The logical starting point for both modern development theory and policy is Paul Rosenstein-Rodan's 1943 article "Problems of Industrialisation of Eastern and South-Eastern Europe". This questioned how to turn the newly created Balkan states – formerly part of an Empire – into independent economic entities. Buoyed by the ideas of List, the theoretical success of Keynesian economics and eventually the Marshall Plan (see Box 4.2), the first theories on development economics were focused on a strong single investment push for industrialisation.

In this school, the unequivocal answer to the question of development was industrialisation of primarily agrarian countries accompanied by surplus agricultural labour and, in general, export of raw materials. Most development theorists agreed with the principle, but differed somewhat in the form industrialisation should take. Some development economists – like Ragnar Nurkse – insisted that all important capital accumulation was domestic (Nurkse, 1953[20]).

The key idea during these years was simple: help "backward" countries catch up to the rich world. For this to happen, according to Rosenstein-Rodan (1943[21]) and Nurkse (1953[20]) for example, poor countries needed an initial "big push" in investment to gain from scale economies, as well as "balanced growth", targeting the development of all sectors simultaneously. Both Rosenstein-Rodan and Nurske were "export-pessimistic" in the post Second World War economy and thus favoured domestic market development. The major concern was long-term economic growth. This was to be fostered through industrialisation (Chenery, 1955[22]) and broad-based societal modernisation (Ekbladh, (2010[23]); Lerner, (1958[24]), which would also have a "disciplinary effect" (Hirschman, (1977[25]); (1982[26])).

The vision of industrialisation was virtually everywhere in the 1940s and 1950s, but it was carried out differently in different countries. In China, the industrialising tradition had started with Sun Yat-Sen (Yat-Sen, 1920[27]). After the 1949 Revolution, China again embarked on a new strategy of industrialisation, initiating its first Five-Year Plan, 1953-57. India embarked on the same industrialisation strategy after independence in 1947. Indeed, the so-called Bombay Plan two years before sought nothing less than "a re-making of India". It aimed at doubling the per capita income of India over three five-year plans through industrialisation (Thakurdas, 1944[28]). Puerto Rico, for example, also embarked on a successful industrialisation plan in the 1940s called Operation Bootstrap (Maldonado, 1997[29]).

In 1946, the United Nations created the Sub-Commission on Economic Development to study and advise members on development policy, focusing on industrialisation policy. The Keynesian approach was building on the experience of the New Deal, the large set of reforms enacted in the United States to help get the country out of the Great Depression in the mid-1930s. By creating jobs in the manufacturing sector and reducing disguised unemployment, labour productivity was expected to improve.

Box 4.2.The Marshall Plan and the push for industrialisation

In the aftermath of the Second World War, the Morgenthau Plan and the Marshall Plan presented two starkly different visions of rebuilding war-torn Germany. The Marshall Plan – sparked by the need to produce welfare in Europe and to contain Soviet influence – came to overshadow other considerations.

According to the Morgenthau Plan, Germany was to be deindustrialised and made into an agricultural and pastoral nation (Morgenthau, 1945[30]). The Morgenthau Plan was abruptly stopped when George Marshall made his announcement at Harvard in 1947.

Marshall's plan represented a complete turn-around in US foreign policy. It became a key element in the 30 "glorious years" of economic development that were to follow. Furthermore, it would influence development thinking at its core, despite being perceived as a plan for reconstruction rather than outright development.

There were both economic, humanitarian and political considerations behind adoption of the Marshall Plan. Unlike the Morgenthau Plan, the Marshall Plan recognised that an agricultural nation could not feed as many people as an industrialised one. Furthermore, the de-industrialising Morgenthau Plan was only to be carried out in the British, French and US zones of occupied West Germany, not in the Russian zone of the East. The Allies observed, in this case, a potentially and politically dangerous extreme poverty in West Germany. In countries benefiting from the Marshall Plan, free trade was put on hold. This was to last until industrialisation and productivity allowed them to compete not only in agriculture and raw materials, but also in industrial products on the world markets. The global dominating forces after the Second World War – at the birth of the OEEC (eventually the OECD) – unanimously saw industrialisation as the key to wealth.

The legacy of the Marshall Plan, and its perceived success, on development thinking was threefold:

- First, it confirmed the idea of symmetrical trading – the notion that trade was best and should be encouraged between countries of similar development levels – as many European countries stood at similar levels of development.
- Second, as the United States insisted that Europe move forward as a block, in effect protecting infant industries from trade, such industries were allowed to mature. In fact, the Havana Charter, the predecessor to GATT and the World Trade Organization (WTO), made the Marshall Plan operational. It allowed for protectionism if a country had an industrialisation plan and a certain level of unemployment.
- Third, the large sums of capital transferred to Europe made it clear that capital would need to be part of the equation in development. This final legacy would dominate development thinking and deeply shift it back to neoclassical notions.

Belief in the benefits of trade prevails over the industrialist school

The industrialist school of thought was short-lived due to the success of the Marshall Plan, the prevalence of neoclassical economic theory and the fact that developing countries were capital-constrained (Box 4.1). Instead, the prevailing view centred on capital as the primary fundamental missing variable for development to take off.

Trade was considered the key instrument that could help that to happen. Joseph Schumpeter likened it to "the pedestrian view that it is capital per se that propels the capitalist engine" (Schumpeter, 1954, p. 468[31]). By the end of the 1950s, European reconstruction was complete and viewed as successful. As the OEEC's role as an administrator of capital came to an end, those who argued for a new organisation with a new mandate prevailed.

Seen through a neoclassical lens, the main problem of development was mainly one of capital accumulation. Poor countries with little capital needed to borrow savings from developed countries or generate an external account surplus through foreign trade. The push against communism, of which the Marshall Plan also played a fundamental role, was a key ingredient.

The Cowles Foundation, a think tank created in the 1930s, initially ushered the move towards a more scientific approach to neoclassical economics. It eventually influenced the focus towards general equilibrium in development thinking. Economics was viewed as a perfect science, in which equations could be solved and countries allowed to grow. In the mid-1950s, for example, Arrow and Debreu (1954[32]) identified several conditions that must be satisfied if markets are to yield efficient outcomes, and their work became the backbone for the economics discipline in general.

Varying development strategies were produced with this thinking in mind, focusing on attracting capital to achieve rapid growth. Rostow, a contemporary of Rosenstein-Rodan and Nurkse, introduced five stages for economic growth. They had capital accumulation in mind, built on the perceived experience of previous industrialising countries.

The five stages were a traditional society; gaining preconditions for take-off; take-off; a drive to maturity; and high mass consumption (Rostow, 1960[11]). Gerschenkron (1962[33]) would argue for a more active role for governments and large banks in providing the needed capital and entrepreneurship. In line with these views, the neoclassical Harrod-Domar model advocated an optimal savings rate to be targeted for the highest growth performance. This way of thinking nevertheless kept the state front and centre, as the planning school saw its role as accompanying the flow of resources and finance.

Financial capital was front and centre. Little thought was placed on how the system could change in light of new factors, for instance social or environmental, or even the role of technology (Ranis, 2004[34]). Indeed, the influential Swan-Solow model of growth brought the important role of technology to the forefront. However, it was viewed as exogenous, with the ability to adapt anywhere, regardless of institutions, cultures, capacity or location.

The dominant role of capital led to the emergence of development assistance and regional development banks. Foreign capital, it was believed, could make up for any lack of domestic capital, a view that eventually triggered the emergence of development aid. Aid donors were viewed as purveyors of much-needed capital, and many national aid organisations opted to work through multilateral organisations.

Regional development banks were created, starting with the Inter-American Development Bank (IADB) in 1959; the African Development Bank (AfDB) and the Asian Development Bank (ADB) would follow in 1964 and 1966, respectively. Moreover, the International Development Association (IDA) was created in 1960 within the World Bank Group to provide concessional loans and grants to the world's poorest countries, in addition to the IBRD's loans.

In 1961, in light of the success of the Marshall Plan, and in the aftermath of the Cuban Revolution, the United States launched a major aid programme for Latin America called "Alliance for Progress". It offered loans of more than USD 20 million, often accompanied by technical assistance. In fact, the United Nations established the Special Fund in 1958 to enlarge the scope of the UN programme of technical assistance.

From the OEEC to the OECD

Once post-war Europe was set on a growth path, the OEEC's role had ended. In 1960, the organisation was repurposed with policy discussion in mind into the more global OECD. A year later, the OECD Development Centre was created as an independent platform for knowledge sharing and policy dialogue between OECD member and non-member countries. In so doing, it allowed these countries to interact on an equal footing. Finally, and in line with the creation of the development banks and the rise of development aid and co-operation, the OECD expanded and provided a firm mandate to the OEEC's Development Assistance Group (DAG), a forum for the largest aid donors, renaming it the Development Assistance Committee (DAC) in 1961. A primary motive for the creation of the DAG/DAC was to achieve accurate and comparable data reporting on aid flows to developing countries.

The search for economic growth induced policy makers and academic thinkers to pursue strategies and policies that could increase the country's GDP as quickly as possible. This came at the expense of the environment, inequality and deteriorating social outcomes. The social and environmental trials of countries were missing from the equation.

The models were not necessarily wrong in that all societies need capital as means for growth. However, the models assumed a trickle-down to the rest of the economy, focusing on its supply-side. Furthermore, they simplified the mechanism as one where all countries work in the same way, with common histories, social ties, endowments and needs. They also assumed that such development, in that manner, would be sustainable. It became increasingly apparent that economic outcomes were but one dimension of development.

Western thinking

High expectations, predominantly market-led, but with strong elements of (Keynesian) state interventionism; the state becomes a development agent within a broader process of industrialisation and modernisation; financial flows to developing countries and openness to trade were regarded beneficial (however, de-facto protectionism in many developing countries prevailed).

Structural transformation (1960s)

Throughout the 1960s and early 1970s, the development community increasingly believed the state needed a bigger role than simply the source of capital. As a result, development economics shifted again.

Enthusiasm returned to development thinking as the UN declared the 1960s as the decade of development, noting that progress on development so far had been far from adequate. Industrialisation returned to be the means of providing employment for disguised unemployment in agriculture. The source of increasing output per head due to economies of scale in manufacturing was viewed as inducing higher incomes that produced increasing demand for domestic manufacturing: a virtuous circle.

The 1960s was also a period of significant growth in funding to the UN development system. In 1964, the UN created the United Nations Conference for Trade and Development (UNCTAD). Industrialisation and the concept of "value added" to locally produced raw materials was central to UNCTAD's development programmes. The problem originally posed by Rosenstein-Rodan on the industrialisation of the Balkan States through balanced growth was also repeated as former European colonies became independent states, from French Indochina and Ghana's independence in the 1950s to that of Mozambique and Angola in 1975. In accordance with the larger role for the state, the UN created specialised agencies focused specifically on development, as the Special Fund became the United Nations Development Programme (UNDP) in 1965, and on industrialisation – UNIDO – in 1966.

Most developing countries had neither ensured longer periods of economic growth nor broad-based social development. Moreover, the transition towards modern forms of production, societies and statehood proved to be risky and lengthy, and replete with political protests and military interventions (Eisenstadt, (1967[35]); Huntington, (1965[36]), (1968[37]); Myrdal, (1968[38])). Poverty levels continued to stay high. Albert Hirschman argued that capital scarcity was less a problem than unfinished development plans that blocked entrepreneurship and ingenuity (Hirschman, 1963[39]).

Development policy increasingly focused on economic structural transformation, specifically on the shift of labour and resources from low productive or traditional sectors (e.g. agriculture) to more advanced sectors (e.g. industrial ones). Policy emphasised modernising developing countries with the state as the central enabler.

Lewis (1954[40]), Chenery (1960[41]) and Harris and Todaro (1970[42]) made significant contributions to development theory and practice. In the Lewis model, for instance, workers shifted from a low productive sector to a higher productive one. Wages stayed at subsistence levels until the "reserve army of workers" was depleted in the lower productive sector and reservation wages increased. The reallocation of labour and capital from agriculture to industry was considered the engine of growth, and the state could help accelerate such a shift.

The role of technology in development was also shifting. Until the 1960s, development thinking viewed technology as something to be adopted, embodied in fixed capital and merely moved from its point of invention to its point of use in the global South (Evenson and Westphal, 1995[43]). Technological change was conceived as a prerequisite for growth rather than a part of growth itself, ideas that were theoretically underpinned by the exogenous growth models of Solow and Harrod-Domar. The context, skills levels and institutional capacity would adapt to technology afterwards. In the late 1960s and early 1970s, attention shifted to the process itself of technological transfer. It changed the view

of technology from a physical artifact to a system of artifacts of "people, procedures and organisational arrangements" (Bell and Albu, 1999[44]).

Trade and comparative advantage continued to be central in this era, but producers in industrialised economies resisted the strategy of shifting focus back on industrialisation and comparative advantage in developing economies. They feared competition from low wage manufactured goods production in developing countries. They were also concerned about the pressure of external deficits on their exchange rates, which would result from a negative trade balance.

The emphasis on structural transformation and industrial development came at the expense of other sectors. Policy makers began investing solely in the industrial sector, and neglecting agriculture, whose linkages, up to that point, had not seemed important for economic growth. Neither large capital transfers nor state-led structural transformation had worked satisfactorily nor would be enough to kick-start development.

Western thinking

After initial development success, policy makers fail to accelerate development, enthusiasm returns to development thinking in the form of multilateral initiatives. Trade continues to be viewed as a vector of development, but with strong undertones of a state-led push for structural transformation.

More independence in developing economies (1970s)

In the late 1960s, development thinking further diversified. With the disappointment of the "Decade of Development", many critics favoured more South-South strategies to combat what they saw as unfair terms of trade for developing countries. At the same time, mainstream development thinking began to address mass poverty and focus on basic needs.

Critics propose protectionist measures to combat unfavourable terms of trade

Critics from Latin America (United Nations Economic Commission for Latin America, ECLA) – later the "dependency school"– stressed that international trade constantly disadvantaged the developing world (Bracarense, 2012[45]). They also emphasised this trade maintained and even caused underdevelopment (Frank, 1966[46]). This school of thought saw developing countries as dependent on advanced economies for market and capital. It was particularly visible in international trade where terms of trade seemed to favour rich countries. Thus, began a period of closed relations for developing countries and protectionist measures.

Consequently, critics favoured more inward-looking development strategies, South-South trade, a New International Economic Order, restrictions on multinational companies' range of action and significantly more redistribution from North to South, some with strong anti-capitalist undertones (Laszlo et al., (1978[47]); Green and Singer (1975[48]); Cox (1979[49]); Amin (1977[50]). The Latin American version of these theories tends to be referred to as structuralism.

Conventional development thinkers focus on poverty and basic needs

Development thinking also began looking more closely at poverty. In 1971, the United Nations' Committee on Development Planning established and approved a list of least developed countries (LDCs). These were based on a combination of per capita GDP, share of manufacturing in total GDP and adult literacy rate. Countries on the list would benefit from specific programmes of action determined by the United Nations.

Official development assistance (ODA) reacted to a "frustrated development decade" and shifted more resources to tackle the problem of mass poverty. During the early 1970s, World Bank President Robert McNamara highlighted the need to address poverty alleviation, and the first World Development Report addressed this topic as well (McNamara (1973[51]); World Bank (1978[52]); Kapur, Lewis and Webb (1997[53])). This had a profound influence on aid programmes, which began funding more micro-programmes to meet people's basic needs in health, education, water and sanitation.

Although the background for this shift was partly shaped by security concerns, support to small farmers and enterprises attempted to enhance a new pattern of growth, namely "growth with equity" (Chenery (1974[54]); Ahluwalia, Carter and Chenery, (1979[55]); Feder (1976[56]). Although industrialisation and modernisation efforts were not fully abandoned, critics suggested a stronger social policy orientation towards fulfilment of basic needs (ILO, 1976[57]). It was in the 1970s that Amartya Sen began advocating for greater focus on human development in national development strategies.

State involvement in development strategies continued in the 1970s, and more definite commitments on aid emerged. In 1970, the UN General Assembly adopted a resolution, fixing a target of 0.7% GDP for international aid.[2] With this goal in place, the tendency turned to treating the symptoms of development – poverty – while industrialisation shifted into the background.

Throughout the decade, the IDA and UNDP received new funding. Similar to the previous phase, there were discussions on the proper role of state intervention and market-led development, as well as inward-looking and outward-oriented development strategies (Krueger (1985[58]), (1990[59]); Bhagwati, (1987[60]); World Bank, (1987[61]); Chenery et al. (1986[62])).

The increase in government involvement carried with it two important trends in development thinking. The first was a gradual focus shift from employment creation via industrialisation financed by domestic resources to development assistance based on foreign finance. The second was a shift towards ends rather than means, and consumption rather than production (Figure 4.3).

A crisis leads to demands for better terms of trade for developing countries

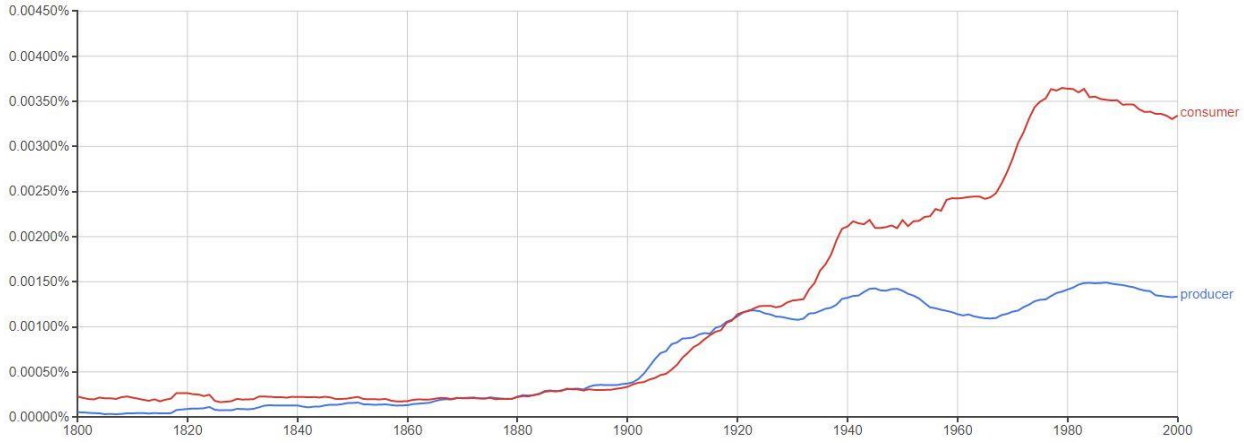
The 1973 oil crisis and the rise of the dependency school led to the proposal of a New International Economic Order. This was a set of proposals to improve the terms of trade for developing countries, based on the assumption of rising commodity prices and the weak negotiating position of developing countries.

In 1976, the International Labour Organization published "Employment, Growth and Basic Needs. A One-World Problem". This report proposed national economic development strategies (NEDS) formulated at the country level with the goal of meeting the basic needs of a country's entire population. NEDS were defined as ensuring enough income to buy food, shelter, clothing and other essential requirements together with the

provision of essential services to ensure basic education, health, safe drinking water and sanitation. This marked another step down the road from development economics (addressing the causes of poverty) to palliative economics (alleviating the symptoms of poverty)

Figure 4.3. The focus on the consumer rather than the producer spiked in the 1960s

N-gram showing references to "producer" and "consumer" (1800-2000)



Note: Graph shows how listed words (grams) have occurred in a corpus of books, written in English, over time. Results are normalised for number of books published each year. Smoothing is set to +/- 3 years.
Source: Google Research (2013[63]), *Google Books Ngram Viewer (database),* Consumer, Producer, http://books.google.com/ngrams (accessed in May 2018).

Fiscal and debt crises lead to the first rumblings of structural adjustment

A new round of development thinking was triggered by both fiscal crises in OECD member countries and debt crises in Latin America. By the late 1970s, many governments in the developing world had accumulated both domestic and international debt and were at the brink of financial collapse (IMF, (1980[64]). Hyperinflation in some countries – e.g. Argentina, Bolivia and Brazil – made matters worse.

With international private lenders moving out, international financial institutions stepped in with new instruments for "stabilisation and adjustment" and provided new development finance. Governments were asked in turn to reduce domestic debt creation and secure fiscal consolidation, largely through spending and government employment cuts and by dealing with debt-ridden state-owned enterprises (SOEs), either through "restructuration", full privatisation or both.

Paradoxically, adjustment programmes, intended to downsize the state, also needed a competent public administration to manage fiscal and other public policy reforms (World Bank, 1983[65]). There are numerous debates on the effects of adjustment programmes on poverty. The effects on the ground seem to crucially depend on specific country conditions, in particular public sector performance, and broader governance issues (Morrisson, 1992[66]); (Collier and Gunning, 1999[67]); (Easterly,(n.d.)[68]); (Pastor, 1987[69]). Learning from practice, the United Nations International Children's Emergency Fund (UNICEF) stressed the need for an "adjustment with a human face" (Cornia, Jolly

and Stewart, 1987[70]). Both the IMF and the World Bank designed specific programmes to mitigate the social costs of adjustment through safety nets and social funds (Gayi (1991[71]); Boughton (2012[72])).

Western thinking

Frustrated expectations, criticism and diversification; although market-friendly development remained unquestioned, poverty reduction and basic needs satisfaction became more prominent; in many developing countries public debt increases rapidly; although openness was regarded advantageous, ECLA and dependency critics rejected global integration as risky and favoured inward-looking development; demands for a New International Economic Order.

Macroeconomic stability: The Washington Consensus (1980s-2000s)

The second UN Development Decade over the 1970s was dominated by the oil crisis. Petrodollars were recycled and debt accumulated, followed by financial fragility and a financial crisis. In response, goods markets opened, potentially destroying domestic manufacturing in many poor countries (Palma and Stiglitz, 2016[73]). Coined as the Washington Consensus, a radical move in the development community had begun (Williamson, 1990[74]). Mainstream development strategy shifted back to being neoclassically grounded, co-ordinated by policy prescriptions from the Washington-based development institutions.

The so-called Washington Consensus of less government and more macroeconomic stability moved development away from its focus on basic needs. This view would hold at least until the Millennium Development Goals (MDGs) in the 2000s.

The Washington Consensus period has many shifting currents, and the beginning of the era was different from the end. In the 1980s, there was a radical move to markets and excessive market optimism. Around the fall of the Berlin Wall, a more balanced view of state and markets emerged. The role of the Washington-based institutions on development and their reliance on markets was predominant throughout, however, and held sway until the global financial crisis of 2008. In the 1990s, technology also came back as a main catalyst for development.

Basic needs fall off the agenda in the 1980s

The 1980s saw recession and inflation in developed countries, and the Reagan and Thatcher governments reacted with liberal economic policies. Such policies were also applied to developing countries, yet often premature and with a quick-fix approach. Theories of economic development virtually disappeared, replaced by neoclassical economics.

The view that aid should target basic needs disappeared from the agenda. Critics regarded Keynesian macroeconomic management as having utterly failed. They recommended strengthening competitive markets, getting the prices right and fostering private sector development (Dorn et al. (1998[75]); Toye (1987[76])). Provided with the proper economic incentives, it was thought, people in the developing world would also act rationally, increase investment and production.[3] Government was often regarded as more of a

problem than a solution for economic and social progress, and state-led development came to an end (Adelman, 1999[77]).

With the same arguments, critics did away with the worries of the dependency school. Government-led, inward-looking development and self-reliance – all inefficient and costly (Bates (1981[78]); World Bank (1995[79]); Edwards (2009[80])) – were no longer in favour. Instead, critics recommended strong export-orientation by private enterprises to mobilise local resources and close the gap in foreign trade. Pointing to the success of several Southeast Asian economies, their recommendations received considerable traction in the development community. This was now, however, without a stream of counterarguments. Summarising a large set of country experiences, Chenery et al. (1986, p. 358[62]) suggested "there may be a necessary sequence from growth dominated by import substitution to a shift to manufacturing exports as the major engine. It appears that an economy must develop a certain industrial base and set of technical skills before it can pursue manufactured exports".

Poverty reduction and social policy concerns were not abandoned during these years. However, critics warned these objectives could not be achieved unless key macro- and micro-economic imbalances were corrected properly. Addressing poverty and equity, as well as public management, also became issues in structural adjustment lending (Morrisson (1992[66]); Dornbusch (1982[81]); Diebold, Feinberg and Kallab (1984[82]); Pastor (1987[69])).

Outside the OECD, China and the Soviet Union took distinct paths. China's government started to experiment in the late 1970s with market mechanisms for land and in the agricultural sector (Lardy (1986[83]); Lin (1992[84]). Deng Xiaoping, a major political figure in China's growth story, asserted that China was "crossing the river by feeling the stones". In other words, the country would feel its way forward slowly amid uncertainty. The 1980s ended with the collapse of state-led development and central planning in the Soviet Union and Eastern Europe.

In the wake of public management reforms in OECD member countries, bilateral and multilateral development co-operation came under scrutiny. Agencies were asked to review and (above all) document their activities more intensively. Measuring agency performance and development effectiveness became standard operating procedures in aid management (Knack and Rahman (2007[85]); Roodman (2008[86]); Easterly and Pfutze (2008[87]).

The fall of the Berlin Wall gave more credit to the Washington Consensus

With hindsight, the contrasts between the 1980s and 1990s were marked. The fall of communism came to be seen as the final triumph of "the market", and 1989 as "the end of history" (Fukuyama, 1992[88]) and "the end of the nation state" (Ohmae, 1995[89]).

Market liberalism continued to triumph in development thinking for a long time. In fact, since the beginning of the 1990s, most developing countries experimented with "dual liberalisation", namely from state-led to market-led development, and from authoritarian to democratic development. Moreover, the management of structural adjustment programmes (SAPs), transitions in Central and Eastern Europe, and the continued success of development in Southeast Asia indicated that government and its institutions played an important role in fostering markets.

Renewed discussions on the role that states and markets play evolved, now with an emphasis on their complementary roles (Israel (1990[90]); World Bank (1997[91]); Kuczynski and Williamson (2003[92])). "Getting the institutions right", improving government management and the quality of "governance" became important ingredients for development thinking, and the New Institutional Economics school became increasingly important in development research (World Bank (1991[93]), (1997[91])).

The role of information and communications technology (ICT) expanded enormously in the 1990s. Many countries began thinking more about the benefits of better technology and knowledge for development. Technology continued to be viewed as the driving force for growth but endogenous to the local economy, with increasing returns to scale through externalities. Policy, and by extension aid programmes, also began paying more attention to encouraging and supporting research and development, introducing new capital goods and reducing the cost of manufactured goods. In addition, the importance of competencies to adopt and adapt new technologies became important (Romer (1986[94]); Lucas (1988[95]); Ranis (2004[34])).

Development slowly shows a human face again

Development was perceived to have taken a step back in the 1990s. The Havana Charter had been watered down to GATT, and eventually became the WTO in 1995. Initially positive developments in the world periphery slowly gave way to often premature free trade and deindustrialisation. Consequently, the UN Development Decades – especially in Latin America – gradually came to be perceived as lost decades.

The 1990s also saw the resurgence of the debate on the nature of the relationship between population growth and economic development. Issues of reproductive health, fertility, education, child and maternal mortality and family planning drew the considerable attention of the international policy community at the 1994 International Conference on Population and Development in Cairo.

In addition, the UNDP launched the Human Development Report (HDR) in 1990. It put people at the centre of development, highlighting the errors of the Washington Consensus SAPs. Importantly, these programmes were not criticised because they were inappropriate for development. Rather, they were critiqued because they produced socially unacceptable results and lacked attention to environmental issues and income redistribution as a basis for growth.

Western thinking

During a first phase, solving the debt crises dominates development thinking, basic needs fall off the agenda and the focus shifts to macroeconomic stability and market fundamentals. During a second phase, better institutions and trade openness viewed as necessary starting points. Eventually, a more human focused approach to development is integrated.

Goal-based development (2000s)

By the late 1990s, economists such as Rodrik (1997[96]) and Stiglitz ((1998[97]); (2002[98])) led mounting criticism about the type of globalisation the world was experiencing. Against this backdrop, the perceived problems of the last decades prompted the United Nations to adopt the Millennium Development Goals (MDGs) in 2000. This shift continued with the more inclusive Sustainable Development Goals (SDGs) in 2015.

Human progress, environmental sustainability and security gain in importance

Near the turn of the millennium, new issues were added to the debate on more (or less) state intervention. These focused on the role of human development, entitlements and "freedoms", and concerns about "human security" (O'Neill (1997[99]); Sen (1999[100]); Thomas and Wilkin (1999[101])).

Measuring human progress and not just economic development – for example via the UNDP's Human Development Index (HDI) or the MDGs – became ever more important. Discussions also reemphasised the objectives of development, namely expanding the range of human freedoms (Sen, 1999[100]) and improving quality of life. Although contested as a Western concept, this included political freedoms and citizens' participation and voice (Blunt (1995[102]); OECD (1995[103])).

Environmental and sustainability concerns came on to the development agenda (World Bank (1992[104]); (2002[105])). With the signing of the Kyoto Protocol in 1997, climate change issues rapidly gained importance. In addition, the 11 September 2001 attacks on the United States triggered a new focus on state fragility, violence and civil wars, ushering in new approaches to state-building.

The MDGs usher in more holistic thinking

The early 2000s marked the beginning of more holistic development thinking. This more holistic approach used multidisciplinary and multidimensional inputs from a broad range of stakeholders to look beyond growth and GDP.

The MDGs, set in 2000, called for countries to achieve certain rates of progress in key areas by 2015. These areas included reduction of extreme poverty, hunger, child and maternal mortality and disease transmission, and an increase in school enrolment and access to water and sanitation. These were addressed to the needs of the poorest people in the world, in the poorest countries in the world.

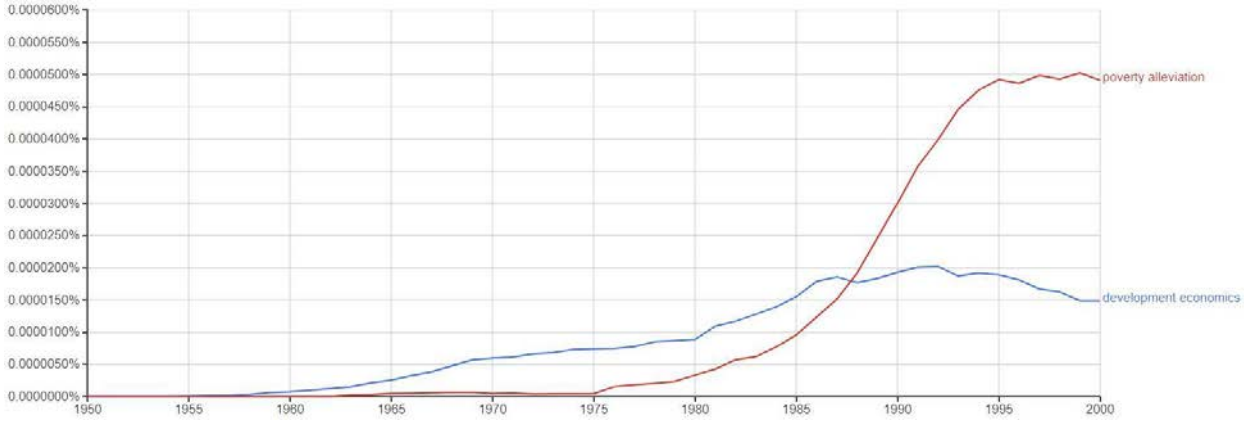
With the MDGs, the focus shifted from economic development to "poverty alleviation".[4] In other words, it moved attention from increasing the personal income of individuals towards alleviating the symptoms of poverty. The google n-gram in Figure 4.4 illustrates the shift in emphasis away from development towards poverty alleviation from 1950 to 2000.

Backcasting helps create plans to reach targets over time

The shift towards poverty alleviation was practical as well as ideological, as the goals were tied to quantified and time-bound objectives. This meant that policy makers could plan how to finance and implement them over an *ex-ante* agreed upon period. The main philosophy behind the MDGs was anchored on the concept of backcasting: identifying targets in the future, and making a plan on how to reach them over time (Sachs, 2015[106]).

Figure 4.4. Reference to poverty alleviation has grown quickly since the 1970s

N-gram for "development economics" and "poverty alleviation" (1950-2000)



Note: Graph shows how listed words (grams) have occurred in a corpus of books, written in English, over time. Results are normalised for number of books published each year. Smoothing is set to +/- 3 years.
Source: Google Research (2013[63]), *Google Books Ngram Viewer (database),* Poverty alleviation, development economics; http://books.google.com/ngrams (accessed in May 2018).

Backcasting made it clearer for all levels of government, cultures, disciplines and countries to latch on to the shift in development thinking. It allowed plans to mobilise resources to reach such goals, and it inspired a fresh global focus on fighting extreme poverty. Viewed in this way alone, the MDGs were indeed a success. In addition, the biggest success in reaching the targets came in health-related objectives, and it was argued that large funds were mobilised to get there, such as the Global Fund to Fight AIDS, TB and Malaria.

The economic crisis of 2007-08 ends optimism

The period of the MDGs was marked by the economic and financial crisis of 2007-08. Although the origins of the crisis were in OECD member countries, it had severe repercussions in the developing world (IMF (2009[107]); World Bank (2009[108]); Spence and Leipziger (2010[109])). It ended two decades of optimism and broad-based trust in the benefits of globalisation, multilateralism and global governance.

International co-operation and development were no exceptions. Despite heavy criticism from anti-globalisation movements, and post-colonial and post-development schools of thought, domestic development had worked quite well until 2008. Above all, and in line with the MDGs, poverty reduction – at least at the global level – seemed to be running on a good track.

The years that followed were marked by crisis management in OECD member countries. A public discourse emerged regarding the disadvantages of "unfettered markets", particularly in international finance. There was renewed emphasis on national and international regulatory arrangements and the role of government.

However, there were surprisingly few spillovers into the development debate, at least initially. Market-led economic growth, social development, political participation and environmental integrity largely remained as cornerstones of development thinking and "good development practice". Fiscal policy and fiscal consolidation, which remained contested in the development community, were the exception.

The MDGs ended in 2015 with mixed views on their success; many goals were not achieved. Critics argued the MDGs were viewed too much within silos, and not enough in a multisectoral, holistic way, as originally planned. They were too general, with the question too focused on how to achieve the MDGs overall, and not enough on what can and should be done so that country *x* can achieve goal *y* (Sachs, 2015[106]).

The SDGs offer a more holistic approach to development for everyone

In response to the shortcomings of the MDGs, the Sustainable Development Goals (SDGs) brought a broader holistic approach to goal-based development. The 193 countries of the UN General Assembly adopted the 2030 Development Agenda titled "Transforming our World: the 2030 Agenda for Sustainable Development" in September 2015. It outlined 17 SDGs and their associated 169 targets.

While the MDGs focused on reducing extreme poverty, the SDGs focus on sustainable development. This means they promote the holistic achievement of economic development, social inclusion and environmental sustainability. The SDGs also affirmed that all countries are developing and moved away from the bipolar donor-recipient discourse.

Unlike the MDGs, the SDGs apply to all countries; they are not only for the poor countries.[5] Their multisectoral nature implies interdependencies between goals and targets. The SDGs are also more complex than the MDGs; they are broader than the challenge of poverty reduction, as they also promote social inclusion and environmental sustainability.

The idea of the sustainable development agenda can be traced back to the 1987 report "Our Common Future", also known as the Brundtland Report, from the United Nations World Commission on Environment and Development. The report introduced environmental concerns to the formal political development sphere. "Our Common Future" placed environmental issues firmly on the political agenda; it aimed to discuss the environment and development as one single issue. Public engagement (and communication) became central to development thinking.

In the spirit of the Brundtland Report, the United Nations supported an independent campaign to communicate the new SDGs to a wider audience beginning in 2015. This campaign was called "Project Everyone", and a team of communications specialists developed icons for every goal. They also shortened the title "The 17 Sustainable Development Goals" to "Global Goals", then ran workshops and conferences to communicate the Global Goals to a global audience.

Western thinking

Development becomes more holistic and multisectoral, human development becomes central. Production side of economy takes a backseat. Sustainability and environment take on a bigger role. Emphasis shifts on attaining specific goals rather than convergence to the richest economies.

Mainstream development thinking has shifted many times, based on accumulated global experience and influence from major events. However, at a more regional level, ideas often diverged from the mainstream, stemming from more localised experience. In

addition, developing countries began accumulating their own experience in relation to development and to richer countries. The following section provides details about shifts in development strategies, with specific attention to Latin America, Africa and Asia.

Regional experience as a catalyst for alternative development strategies

This section looks at development thinking across regions in a historical view from the outset of the Second World War or independence, up until the dawn of the broader overarching MDGs in the late 1990s.

In its earliest forms, development economics was borne out of experience in more developed and industrialised economies. While paradigms may have looked and seemed similar, they were often interpreted in a variety of ways. China, India, the Soviet Union and the West in general all shared the same development paradigm in 1950. They fared differently because different countries carried out the same vision of industrialisation and modernisation under different economic systems.

Remarkably, early ideas on industrialisation looked similar both in the West and in the East. Both superpowers opted for a state-induced process. While one favoured strengthening modern enterprises and markets, the other favoured state planning and a setting up of state-owned enterprises. Both models expected a swift modernisation of traditional agriculture, to promote modern industrial enterprises and to export raw materials. However, the aid community and economics departments in the West held different views on how best to combine state and market-led development (Adelman, 1999[77]), with a clear dominance of post-war Keynesian concepts.

India provided political and economic power to central planners, assured industrialists had monopolies and delivered cheap fertiliser to farmers. In the Soviet Union, an economy subject to detailed planning, planners could keep an eye on the output as long as products were relatively few. An important contribution to the collapse of the Soviet economic system was the diversity and complexity that was introduced with the digital, ICT revolution (Perez, (2004[110]), (1985[111])). A centralised system could not handle the flexible production systems that became state of the art with ICT.

For most of the 20th century, the two irrational twins – Western capitalism and Eastern communism – provided a broad policy space between them and shared a common view of industrialisation as the solution for economic development. Both West Germany and communist East Germany issued stamps with portraits of Friedrich List, the economist who became the main ideologist for the industrialisation of continental Europe.

As experience in developing countries accumulated, additional ideas began originating from various regions of the world, and especially from the United Nations' regional offices.

Development thinking in Latin America

Latin America produced several new ideas on development over its tumultuous years following the Second World War. The regional UN commission, particularly the Economic Commission for Latin America and the Caribbean (ECLAC), played a large role in experimenting with alternative strategies for development. From this emerged the Latin American structuralist school of thought and what was labelled the "years of high theory" in economic development in the late 1940s and 1950s. Its foundational "manifesto", written at ECLAC by Raúl Prebisch in 1949, set forth the basis of the

centre-periphery theory. This is the backbone of structuralist thought, influencing much of the development strategies that followed in the region (Rodríguez, 2007[112]).

Momentum gained by the dependency school was lost, due to mounting debt issues in the region in the late 1970s and early 1980s. Eventually, structural adjustments, macroeconomic stability and the Washington Consensus dominated mainstream thinking. A counter stream of thinking emerged in the region, resisting the neoliberal economic agenda and questioning "First World bias" in development theory (Kay, 1991[113]). Since the 2000s, there has been an even stronger general shift in this direction in the region, in which individual country development pathways are reconsidered, and dependency theory back in mainstream (Munck and Delgado Wise, 2018[114]).

Technology gaps condemn the region to low-tech, unskilled activities

Prebisch's central-periphery argument described the diffusion of technology at the international level as slow and irregular. Technological gaps between central (advanced) and peripheral (developing) economies gave rise to the emergence of different production structures. The centre's production structure was viewed as typically diversified. Conversely, the "periphery" was specialised in only a few low-tech activities, mostly intensive in unskilled labour and/or natural resources. As innovation and increasing returns were strongly associated with the manufacturing sector (Kaldor, 1967[115]), Latin American focus generally turned to industrialisation.

Technological asymmetries were also viewed as related to growth and income distribution.

On economic growth, the typical low-tech sectors prominent in "the periphery" exhibited a low income-elasticity of exports, while its poorly integrated production mix entailed a high income-elasticity of imports, in effect reducing the equilibrium long-run rate of economic growth in the periphery as defined by the balance-of-payments constraint on growth (Thirlwall, 2000[116]).[6]

On income distribution, only a small share of the total labour force in the periphery was engaged in activities in which learning and productivity growth sustained rising real wages and strengthened their bargaining power. Technology in the production structure of the periphery was highly localised and partially diffused. This implied allocation of a large share of labour to lower productivity sectors, often in the form of subsistence employment or underemployment.

The "dual" nature of the labour market was defined as "structural heterogeneity". This had a strong effect on income distribution, both in terms of functional and personal distribution. In addition, the reserve army of workers in the subsistence sector made it more difficult to organise workers, further compromising their bargaining power. As a result, the overall bargaining power of workers in the periphery was limited. Inequality was worsened only by the asymmetrical power between labour and capital, as reflected in low wage shares in national income. It was also made worse by a similar division between skilled and unskilled workers.

Labour fails to gain from productivity growth

The weakness of labour implied that workers could not benefit from technological change and productivity growth through higher real wages in the periphery. This was the case as well in the richer economies of the centre, at least until the mid-1970s. At that point, unions were able to capture at least part of the gains in productivity growth. Other forces

contributed to creating an unequal relationship between the centre and the periphery. These included exports of undifferentiated commodities in competitive markets where there were no barriers to entry.

Productivity growth tended to translate into lower prices in these cases, instead of higher profit rates. There were differences in the income elasticity of demand between the goods produced by the centre and the periphery, the characteristics of the labour market in the periphery and the differences in the market structure in the goods markets (competitive versus oligopolistic). These are viewed as long-run factors in the deterioration of the terms of trade of the periphery (Ocampo and Parra-Lancourt, 2010[117]).

Latin America seeks to break out of the gridlock

Development strategy in Latin America was therefore dominated on unhinging the centre-periphery gridlock. It asserted the periphery must upgrade its technological capacity and diversify its productive structure. In this way, it could absorb low-productivity employment in new emerging industries with increasing technological content.

The view on how this can occur has itself shifted over time. In the 1950s, it was equated with industrialisation. In more recent years, the engine has been viewed as the ability to absorb new information technologies. More generally, the structuralist school stressed the importance of industrial and technological policies aimed at technological catching up and building capacity, in which the nature of the sectors and technology co-evolve (Katz (1987[118]); Cimoli and Katz (2003[119])).

In the early 1960s, Latin American structuralism began to consider institutional and political factors among the barriers to structural transformation and development. Among other things, this new phase of development thinking had concerns about agrarian reform, a more equal distribution of income and the need to curb protectionism by promoting manufacturing exports and advancing the process of regional economic integration.

In parallel, social and political forces were highlighted as barriers to development. The works of Medina Echavarría, Celso Furtado and Osvaldo Sunkel (Sunkel and Paz, 1970[120]); (Cardoso and Faletto, 1977[121]), among others, introduced political, sociological and historical variables more systematically into the analysis.

This "historic-structural" approach to development had little influence in actual policy. A stream of change of regimes in the 1960s and 1970s led to a decline of the structuralist clout in policy making in Latin America. However, the industrialisation drive of the 1950s was kept in place, at least in the largest economies of the region (Argentina, Brazil and Mexico) until the mid to late 1970s.[7]

Two new streams of thought expand the structuralist tradition

In parallel to the historic-structural approach, two complementary streams of thought emerged within the structuralist tradition. The first concerns the destabilising financial effects of open capital accounts, exchange rate appreciation and the need to preserve international competitiveness and external equilibrium (Ocampo, 2016[122]). The second relates to a more sophisticated understanding of the micro-dynamics of technical change, in which Fernando Fajnzyler (1983[123]) played a leading role.

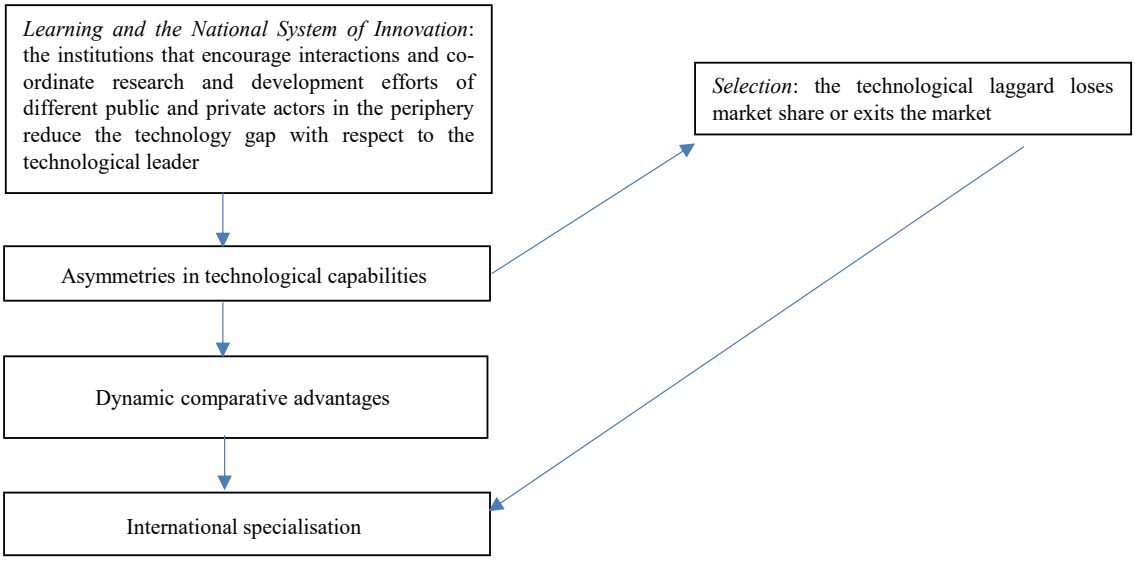
In the second half of the 1980s, some structuralist economists began to rely increasingly on the evolutionary theory of technical change. In this way, they sought to understand the microeconomic reasons behind divergence in GDP and productivity with richer countries

(Nelson and Winter, 1982[124]). Increasing returns, path dependency, hysteresis in structural change and technological learning were seen as reasons specialisation was so difficult to change, as well as why technologies persisted over time.

The "neostructuralist" school of the late 1980s in Latin America emerged from the combination of newfound macroeconomic concern with regards to international capital flows and the real exchange rate, along with a more open attitude to technological change. These were complemented by new views on the interaction between institutions and the production structure in technological policy.

These shifts led to the "National Systems of Innovation" concept, which focused on the role institutions play in fostering co-ordination between private and public actors. It was believed that firms should be able to learn and approach best practices faster than the velocity at which the international technological frontier moves. This was perceived as a race between leading firms at the frontier and followers attempting to catch up. Figure 4.5 represents this interplay between learning, capabilities, the technology gap and international specialisation.

Figure 4.5. Neostructuralism: The interplay between technological innovation, diffusion and selection in the global markets



The Washington Consensus prevails over neostructuralism

Neostructuralism's influence in Latin America was limited, as pessimism was growing about the ability of the government to frame the development agenda. It faded as an influential intellectual paradigm in the 1990s. Neoliberal market reforms and the Washington Consensus emerged as the triumphant agenda.

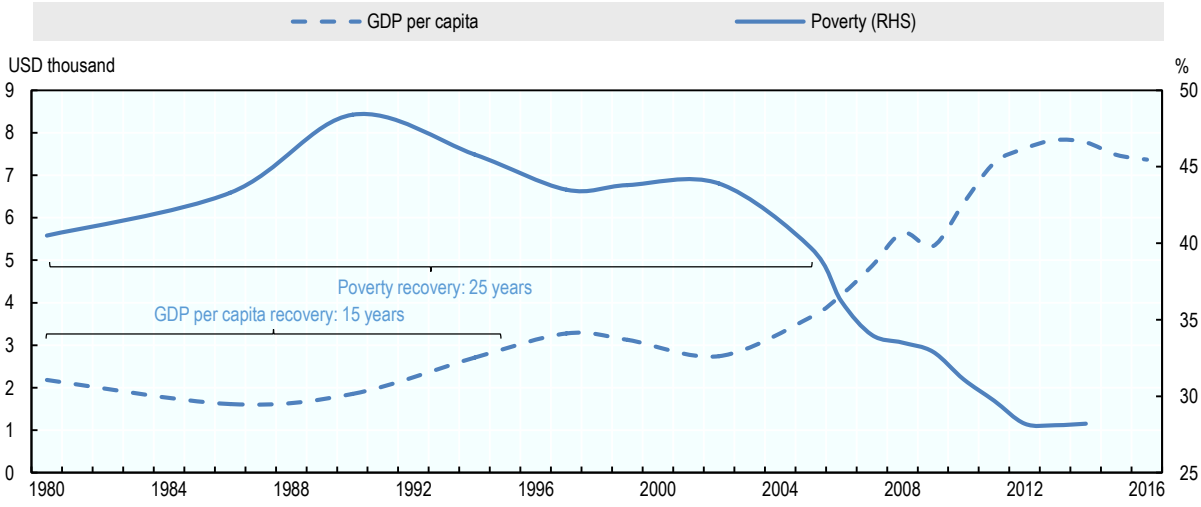
The ideological gales from the fall of the Soviet Union did play a role in weakening the legitimacy of government intervention in the economy. However, other factors further depressed confidence in the possibility of launching a new phase of development and industrial policy. Many Latin American countries had contracted large external debts in the 1970s, which became impossible to service after the rise in US interest rates in 1979.[8]

In several Latin American countries, the debt problem drastically shifted the focus of economic policy from discussion of development towards the problems of financial stability, taming inflation and managing fiscal issues.

The economic costs of the "lost decade" of the 1980s were massive, particularly in light of the collapse of investments and its negative implications for technological change and productivity growth. However, the social costs were also significant. It took twice as much time to re-establish pre-debt crisis poverty rates than to return to the 1970s pre-crisis GDP per capita figures (Figure 4.6).

Figure 4.6. Poverty rates took twice as long to recover from the 1980s crisis compared to GDP

GDP per capita and poverty in Latin America and the Caribbean (1980 2016)



Note: The graph includes data for 19 countries: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Venezuela, Dominican Republic and Uruguay.
Source: ECLAC staff calculations based on ECLAC (2018[125]), *CEPALSTAT (database)*, http://estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/estadisticasIndicadores.asp?idioma=i; and IMF (2018[126]), *World Economic Outlook 2018 (database)*, GDP per capita, constant prices (PPP, 2011 international dollars), https://www.imf.org/external/pubs/ft/weo/2018/01/weodata/weoselgr.aspx.

StatLink https://doi.org/10.1787/888933857822

The debate on growth and income distribution in Latin America nearly stopped completely in the 1980s. In its place, the challenge of short-term macroeconomic stability monopolised the agenda. When the region eventually overcame the debt problem in the 1990s, neither fiscal nor political space was available for re-launching the development agenda.

Development thinking in Africa

African post-independence development strategies can generally be broken down into three distinct phases: the reliance on import substitution and protectionism (1960s-80s),

SAPs and the influence from the Washington Consensus (1980s-2000), and liberalisation and a return to planning (2000-present).

Early post-colonial development thinking in Africa largely relied on the inherited relationship between economic growth and material wealth as a *means* for development. For many African thinkers, the post-war development experience, however, diverged remarkably from this ideal of material prosperity through growth and despite objectives of deep socio-economic change, development did not yield discernible benefits to most Africans. Across the continent, African development thinkers such as Adebayo Adedeji, Julius Neyerere, Kwame Francis Nkrumah and Samir Amin embarked on increasingly "nationalistic" development paths, often aiming to unite African developing thinking with modern political thinking, and later on pan-African development trajectories.

Increased role of government after independence

African independence came in the 1950s and 1960s, following the creation of the Organisation of African Unity (OAU, and later the Africa Union, AU). Initially, the OAU focused on Africa's decolonisation, the struggle against apartheid and attainment of its political independence (AUC, 2015[127]). At this time, mainstream development strategy in Africa placed the state as the key player in kick-starting economic activity.

The first phase of the post-independence period was therefore characterised by an increase in the role of government in development, with planning at the centre of its policy agenda. Such thinking paralleled some of the mainstream and global thinking in development economics on the push for industrialisation. It implied more state activity than the colonial governments had undertaken previously. In agriculture, for instance, governments often relied on state marketing boards that allowed subsidies for industry (Bates, 1981[78]).

Countries, in many cases, had inherited basic revenue collection and public expenditure management systems, with extremely fragile public finance and narrow tax bases. Most countries depended heavily on customs duties. To a lesser extent, they also relied on export taxes for government revenue, as well as other indirect taxes such as excise and sales taxes (Siebrits and Calitz, 2007[128]). Governments initially emphasised building economic infrastructure. Eventually, an alternative consensus emerged that improvements in education and health services needed to complement economic growth.

Substitution and protectionist measures attempt to accelerate development

During this period, many African countries adopted import substitution and protectionist measures to accelerate development. They achieved relatively higher growth rates. Despite considerable volatility, the continent grew at an average rate of 4.2% over the period (World Bank, 2018[129]).

Sub-Saharan Africa's manufacturing value added grew at an average of about 7% between 1960 and 1980 (Mendes, Bertella and Teixeira, 2014[130]). However, productivity lagged significantly behind. Growth in output per worker averaged 0.02% between 1960 and 1980 across the continent and was even negative in subsequent periods (UNECA , 2014[131]).

Furthermore, per capita income grew at an average growth rate of 2% per year. In many countries, high taxes on exports and overvalued exchange rates lowered export growth and diminished diversification efforts into new areas. They also reduced incentives to invest in new technologies (Romer, 1986[132]).

Most governments, concerned with the political power of urban workers to organise anti-government protests, maintained high minimum wages for workers in the formal sector, while exercising price controls on basic foodstuffs. They also controlled interest rates to reduce the cost of investment. Finally, they maintained overvalued exchange rates reducing export revenues in local currency compared to what exporters could earn in an open market.

The combined effect of high wages, low interest rates and overvalued exchange rates encouraged intensive investment in capital rather than labour. This reduced employment opportunities, in effect confining the benefits of industrialisation to a small group of urban workers, middle-class traders and capitalists.

Furthermore, the emphasis on urban and industrialising parts of the economy came at the expense of rural and agricultural sectors. Specifically, controlled and low food prices reduced both farm production and farmers' earnings. At the same time, overvalued exchange rates, combined with high export taxes, discouraged exports. Also, low interest rates discouraged savings and led to inefficient investment. This, in turn, jeopardised growth on both counts and further undermined industrialisation efforts in Africa.

On the social development front, education and health systems of the vast majority of African countries were severely underdeveloped. However, at least part of the population experienced progress in health and education outcomes. Life expectancy increased from about 39 to 47 years, and net primary school enrolment grew by 75% from 1960 to 1980. Moreover, despite remaining relatively high, the ratio of individuals per physician decreased over the period (Ferguson, 1999[133]).

African development thinking became increasingly focused on creating an African economic identity. Adededji (Adedeji, 1977[134]) became disillusioned with economic progress and advocated economic decolonialisation involving the "indigenisation" of Africa, putting economic development on an increasingly self-sustained footing. For Nkrumah (1963[135]), removing the yoke of colonialism consisted first in reinstating what he believed to be the *African personality*, humanist principles enshrined in traditional African societies, and once political independence had been won, Africa and its leaders would embark on the task of continental unity. Neyerere (1966[136]) centred his strategy on the African traditional family, yet despite being also a traditionalist, he quickly understood the limitations of this concept and considered gender inequality and poverty prevalence as the limiting factors – the latter arising from the lack of scale in operations of the family units. In contrast to his traditional views, modern knowledge and technology would bring economic development.

Because the essence and purpose of capitalism were thought to be alien to African societies, their *worldview* theories rooted in socialism became the answer in which the task of social and industrial reconstruction were left to the national state. In Ghana under Nkrumah and in Tanzania under Nyerere, who was deeply impressed by China after meetings with Deng Xiaoping, development states were formed around centralised governments, which invested heavily in both human and physical capital, constructing schools and universities, highways and harbours. In order to retain control, political monopoly of the ruling party was key to the strategy. For Amin (1974[137]), the answer to dependence on the world capitalist system and underdevelopment in African economies, relying on the assumption of a centre-periphery structure, was delinking from the capitalist centre which dominated economically, socially and culturally. In contrast to Nyerere or Nkrumah, who favoured some kind of economic withdrawal, Amin rather subjected mutual relations across the world to varying constraints of internal development.

African countries struggle with urbanisation and rising debt in the 1970s

The heavy role by the state was losing fervour by the early 1970s, however. Africa's development was negatively affected by rising oil prices and lower growth in its main trading partners. Internal factors also exacerbated the decline in growth in Africa. These included high and rising population growth rates – at 2.7% per year compared to 2.2% across all low-income countries.

Another factor in declining growth was urbanisation, with urban population in sub-Saharan Africa rising from 11% to 21% over 1960-80 (Romer, 1986[132]). Protectionist measures were also not delivering promised results. As argued by United Nations Economic Commission for Africa's former executive secretary, Adebayo Adedeji, African industrialisation consisted of importing capital goods and professional labour. Manufacturing plants had therefore become merely places for assembly and for that matter, highly vulnerable to external factors (Mutume, 2002[138]).

Due to the monetary and financial challenges experienced in the 1970s, governments resorted to deficit financing. This, in turn, led to monetary expansion, inflationary pressures, and in an era of controlled prices, increasing distortions, particularly in foreign exchange markets. Overvalued currencies reduced the incentives to export.

At the same time, the newly acquired debt increased servicing due to a sudden increase in global interest rates, draining foreign-exchange reserves. African countries therefore had to strengthen their import and exchange controls. This led to further distortions, primarily for the imported raw material and capital desperately needed to continue industrialising their economies (Wolgin, 1997[139]). The manufacturing sector, as it was highly import-dependent for its intermediate inputs and certain skills, suffered as foreign-exchange rationing became increasingly severe (Addison and Baliamoune-Lutz, 2017[140]).

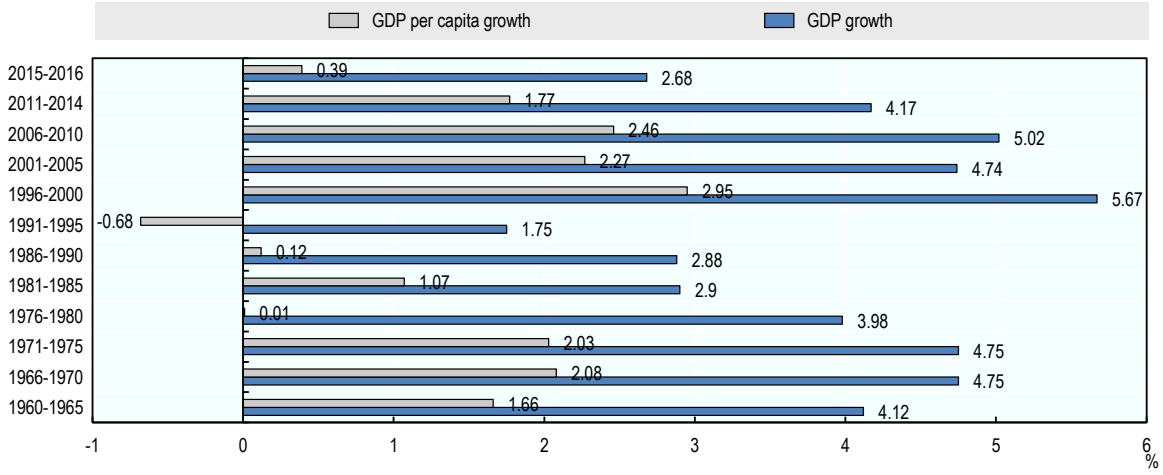
Structural adjustment shifts economies towards market-based growth in the 1980s

By the early 1980s, the global paradigm shift towards the Washington Consensus had reached African development policy. As growth performance started severely declining, countries deemed it necessary rather than optional to turn to the Washington-based institutions for help through adoption of SAPs (Figure 4.7).

These policies focused on reducing government spending and increasing greater fiscal discipline to control inflation and crowd in private-sector investment. They also targeted removing import controls and restrictions on foreign investment; privatising state-owned enterprises; devaluing and removing controls on currencies, interest rates and price of commodities; and making labour more flexible by reducing legal protection, food subsidies and minimum wages. Underlying such a market-oriented shift was the aim of refocusing African economies towards export- and private-sector led growth.

Figure 4.7. GDP per capita began declining in the 1980s in Africa

GDP per capita growth compared to GDP growth (1960-2016)



Source: World Bank (2018[129]), *World Development Indicators (database)*, http://databank.worldbank.org/data/source/world-development-indicators (accessed in August 2018).

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Market-based approaches fail to reignite economic growth

Contrary to the intended objectives of the SAPs, economic growth declined during the 1980s. It fell to an average rate of 2.7%, down from an average growth rate of 4.7% over the previous period from 1961 to 1979. Per capita income growth also declined to an average rate of 0.6% over 1981-90 from an average of 2% over 1961-79. The situation was exacerbated by capital flight.

Deregulation and the opening of economies to the global market did not ignite the manufacturing sector's growth as intended. In Zimbabwe, for instance, premature financial liberalisation led to increased interest rates that contributed to a surge in the cost of servicing public debt. This compounded the problem of restoring fiscal sustainability and crowded out development spending. Rising interest rates combined with rapid import liberalisation led to the closure of the country's clothing and textile industries (Addison and Baliamoune-Lutz, 2017[140]).

African economies experienced a partial recovery starting in the mid-1990s. They grew at an average rate of 3.7% between 1995 and 1999. This was mainly due to improved terms of trade.

Weakened states cannot protect people from rising poverty

The effects of the economic downturn in the 1980s had a human face, as poverty soared and the devastating effect of HIV/AIDS exacerbated the issues. Real wages and household incomes fell, while food production declined relative to the population. At the same time, the quality and quantity of health and education services deteriorated (Olamosu and Wynne, 2015[141]).

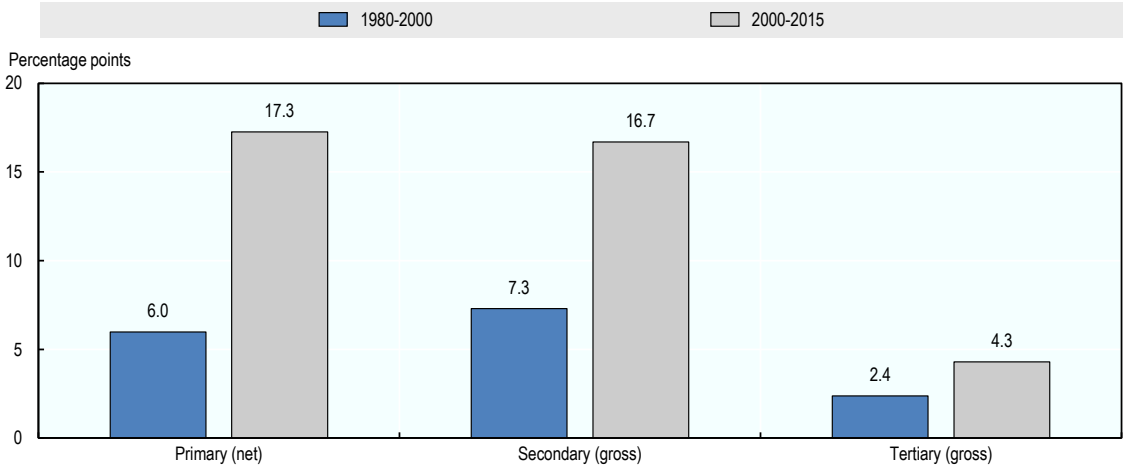
Weakening state capacity was deemed the main culprit, as the public sector and public bureaucracy became major targets for budget cuts. The state was expected to lead the

process of economic reforms, stabilisation and transformation prescribed by the SAPs and the Washington Consensus. However, its capacity to do so effectively was weakened. This held back economic growth and social progress, negating construction of the developmental states in Africa (Mkandawire and Olukoshi (1995[142]); Mkandawire (2001[143])).

Between 1980 and 2000, primary (net), secondary (gross) and tertiary (gross) school enrolment rates increased at rates of 6.0%, 7.3% and 2.4%, respectively (Figure 4.8). Those rates were lower than their counterparts in other regions, as the enforcement of SAP strategies restrained overall spending, including for education. Per capita spending on education increased between 1980 and 1992, but not as much as it did in developing countries worldwide (UNESCO, 1995[144]). In the 1990s, life expectancy declined by 0.1 years among women, while rising by 0.8 years among men.

Figure 4.8. Africa experienced improvements in enrolment rates at all levels in the 2000s

Enrolment rates across education levels (1980-2015)



Source: World Bank (2018[129]), *World Development Indicators (database)*, http://databank.worldbank.org/data/source/world-development-indicators (accessed in March 2018).

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Development thinking in Asia

Trade and export-led growth have been at the centre of the strategy of Asian and Pacific economies since the end of the Second World War. The region has been successful in leveraging the post-War globalisation hype to achieve economic development. Driven by rapid growth after the war, Asian countries focused their economic strategies on exports.

Asia builds growth through exports and integration into global value chains

Asian countries benefited from the gradual opening of advanced economies in the West to "the Third World" in two ways. First, buoyed and influenced by the early paradigms pushing for industrialisation, the region rapidly expanded and diversified its exports in labour-intensive manufacturing products. Second, multinational companies (MNCs) from Japan, the United States and European countries gradually unbundled their production

processes. In so doing, they relocated selected production stages to lower-cost countries around the world. Selected countries within the region were able to integrate early into global value chains (GVCs) and develop regional production networks in manufacturing industries of consumer goods.

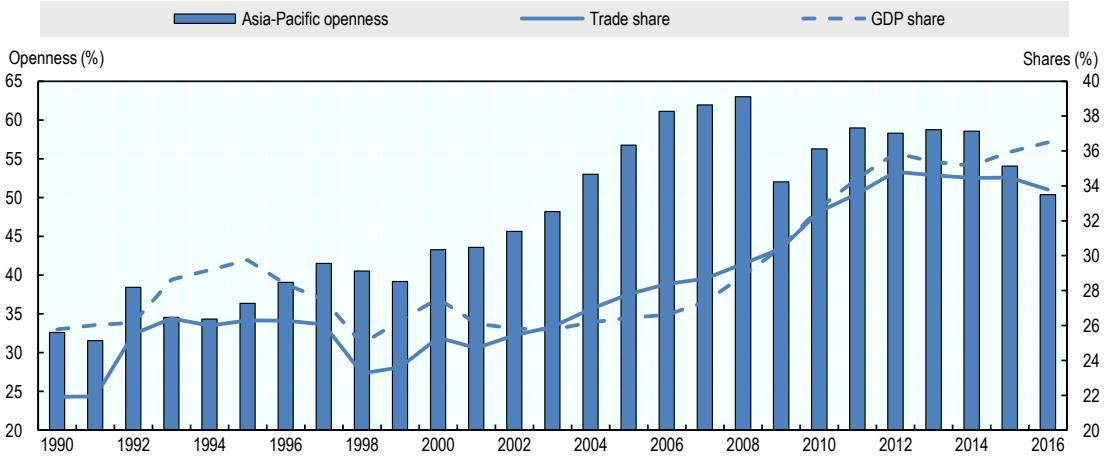
The expansion of trade and investment in the region directly contributed to the substantial gains witnessed in the catching up between developing Asia-Pacific and the richer countries of the world. From the 1960s to 1980s, there was a clear divide between the rich regions, dominated by economies in Europe and North America, and the poor regions covering most of the Asia-Pacific region and Africa. The rising incomes of developing Asia-Pacific populations over the following three decades caused a convergence in the income distributions of world regions from a two-humped to one-humped distribution.

Regardless of shifts in paradigms, the region has rarely wavered from trade-led growth. As the region increasingly integrated into the global market through participation in GVC-trade and production networks, trade became a major driver of growth. The region's ratio between trade and GDP grew consistently until the global financial crisis in 2008-09. Trade increased from 33% of regional GDP in 1990 to more than 50% in 2016 (Figure 4.9).[9]

Asia-Pacific economies have collectively grown from contributing a mere 7-8% of global trade in the 1970s to becoming the largest trading region. In 2016, they accounted for 38% of global exports and 34% of global imports. Expanding trade has sustained growth for the region and especially for the poorest economies in the region for nearly three decades. On average, GDP and exports grew annually at almost 6% and 13%, respectively, from 1990 to 2008.[10]

Figure 4.9. Exports have grown quickly in Asia-Pacific

Openness and share of global trade and GDP, Asia-Pacific (1990-2016)



Note: The indicator for openness is a trade-to-GDP ratio
Source: ESCAP's calculation based on World Bank (2018[129]), *World Development Indicators (database)*, http://databank.worldbank.org/data/source/world-development-indicators (accessed in March 2018).

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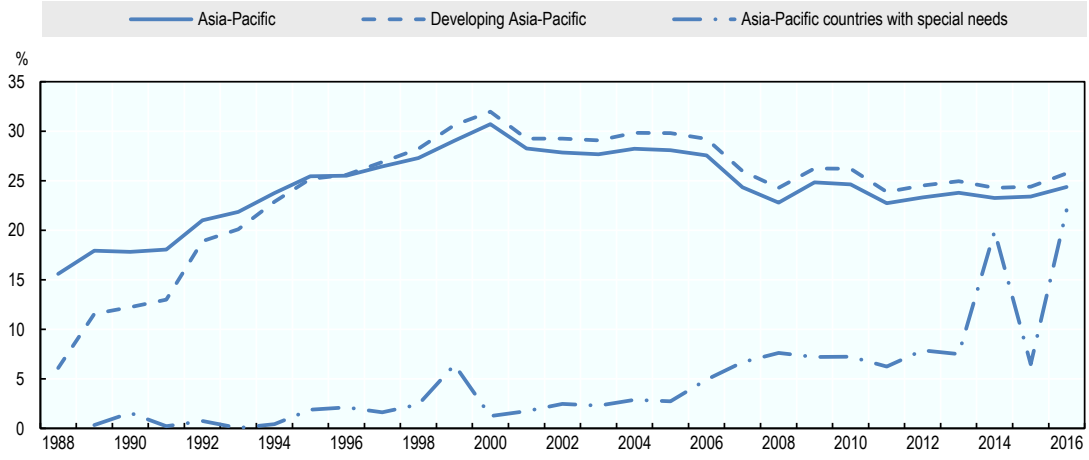
The region dominates exports of information technologies

Once trade had the desired effect of fuelling growth, the strategy moved towards the expansion and diversification of trade and transitioned into more complex GVCs. Indeed, trade liberalisation and integration into GVCs of technologically-intensive products further stimulated the process of the region's structural transformation.

Manufacturing, which comprises 60% of merchandise exports of developing Asia-Pacific economies, has generally increased its technological complexity over time. The shares of high-tech exports rose from 6% in 1988 to 32% in 2000 (Figure 4.10). Driven by the 1996 WTO Information Technologies Agreement, trade began to open. As a result, Asia-Pacific became a dominant exporter of information technologies products, raising its global export share from 10% in 1996 to 61% in 2015.

Figure 4.10. The share of high-tech exports has increased in Asia

High-technology exports as a share in manufactured exports



Note: High-technology exports are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments and electrical machinery. The group of 36 economies with special needs in Asia and the Pacific is comprised of least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing states (SIDS).
Source: World Bank (2018[129]), *World Development Indicators (database)*, http://databank.worldbank.org/data/source/world-development-indicators (accessed in March 2018).

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A trade-oriented focus helps the region flourish into the 1990s

The success of its trade-oriented strategy and its positive impact on reducing poverty reinforced the need for the region to continue rethinking development through a trade lens, especially into the 1990s. Amid rising participation in global trade and production, the region saw rising national income, shrinking absolute poverty, flourishing innovation, improved well-being and life expectancy, and better education outcomes. Falling barriers to trade, transport and communication across borders contributed to the integration and the development of the region, especially in East Asia and Southeast Asia.

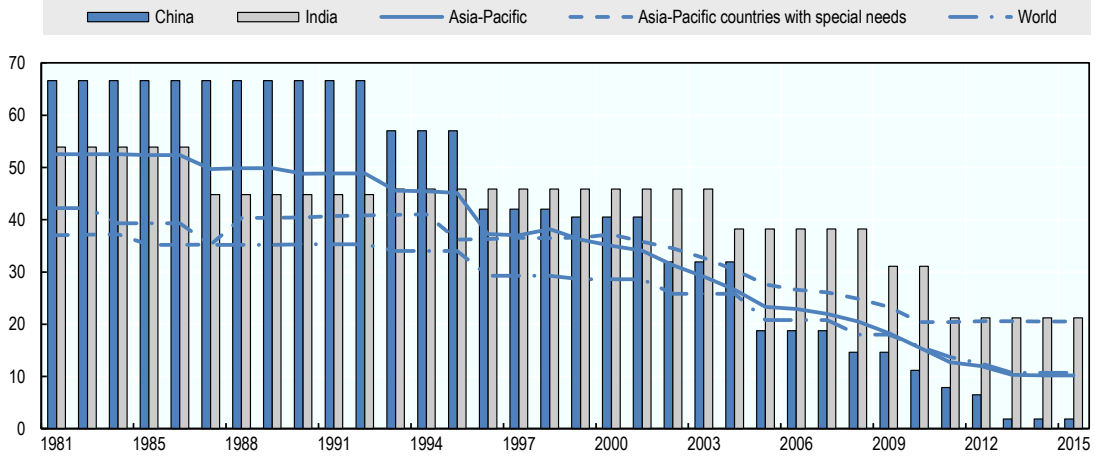
The proportion of people living in extreme poverty decreased drastically. Nearly half of the Asia-Pacific population was living under extreme poverty (USD 1.90 a day) in 1990. By 2015, poverty had decreased to less than 12% (Figure 4.11).

In addition, aggregate living standards improved. Life expectancy increased from 69 years to 75 years during the same period, and the mortality rate from all major causes of death decreased by 15%. More than 70% of Asia-Pacific countries have higher literacy rates compared to the world average. Hence, the human development index has increased steadily for the entire region over recent decades. For East Asia and the Pacific, it surpassed the global average in 2014.

The rapid economic growth of eight East Asian economies in particular[11] has been dubbed an "East Asian miracle". Their success deeply informed and influenced export-led development as a viable strategy. Often bucking the trend of increasing or decreasing state intervention, government began promoting economic growth (Stiglitz, 1996[145]).

Figure 4.11. The share of the people living in extreme poverty in Asia has decreased

Poverty headcount ratio at USD 1.90 a day (1981-2015) (2011 PPP, percentage of population)



Note: Aggregates weighted using respective year population data from the World Bank.
Source: World Bank (2018[129]), *World Development Indicators (database)*, http://databank.worldbank.org/data/source/world-development-indicators (accessed in March 2018).

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Fast growth, dependent on foreign capital, ends in 1997

The question of whether government plays a role in economic growth and development was never really asked – the question was rather what role should it take? Governments did not necessarily ask whether they should plan the economy in detail. However, in practice, they ensured macroeconomic stability, regulated financial markets, created markets, helped direct investments and generated a business-friendly climate.

As underlined by Stiglitz (1996[145]), rather than replace markets, governments promoted and used them. To that end, they developed technological capabilities, promoted exports and built domestic capacity to manufacture a range of intermediate goods. They encouraged industries that could most successfully compete in world markets to grow (Glick and Moreno, 1997[146]). Fast growth came to an end in 1997, however, and with

that a major lesson. Such a fast-growth strategy depended highly on foreign capital, which increased external vulnerability.

Trade strategy, focused on manufacturing rather than services, lacks diversity

Despite successful entry into GVCs, most developing Asia-Pacific economies face challenges in diversifying out of low-value segments of GVCs. The region's GVC participation has remained in the manufacturing sector, dominated by MNCs based in advanced economies. Apart from the dynamos of Singapore and Hong Kong, China, service sectors have typically yielded lower productivity than manufacturing sectors (OECD, 2016[147]).

Even success stories in the development of service sectors in India and the Philippines, especially in the business process outsourcing sector, have caveats. Much of their focus is on low value-added tasks, such as call centres. The focus of services exports by Asia-Pacific economies remains generally in traditional areas, including tourism and transport.

For the biggest part of the region, the pace of structural transformation from secondary to high-value tertiary sectors remains slow. This has pushed most of the previously fast-growing developing Asia-Pacific economies to experience challenges related to economic convergence and inequality. These have been lumped into the catch-all term of the middle-income trap.

Inequality spreads between and within countries

Fast growth has also come with increasing inequality – between and within countries. Openness to trade and foreign direct investment have been important enablers for the region's rapid economic development. However, not all countries and economic groups benefited equally from globalisation.

In fact, countries in the region have experienced unequal opportunities to participate in GVCs. For example, countries that play a part in relatively high-tech GVCs are mostly high- and middle-income countries. Low-income economies have generally been left out.

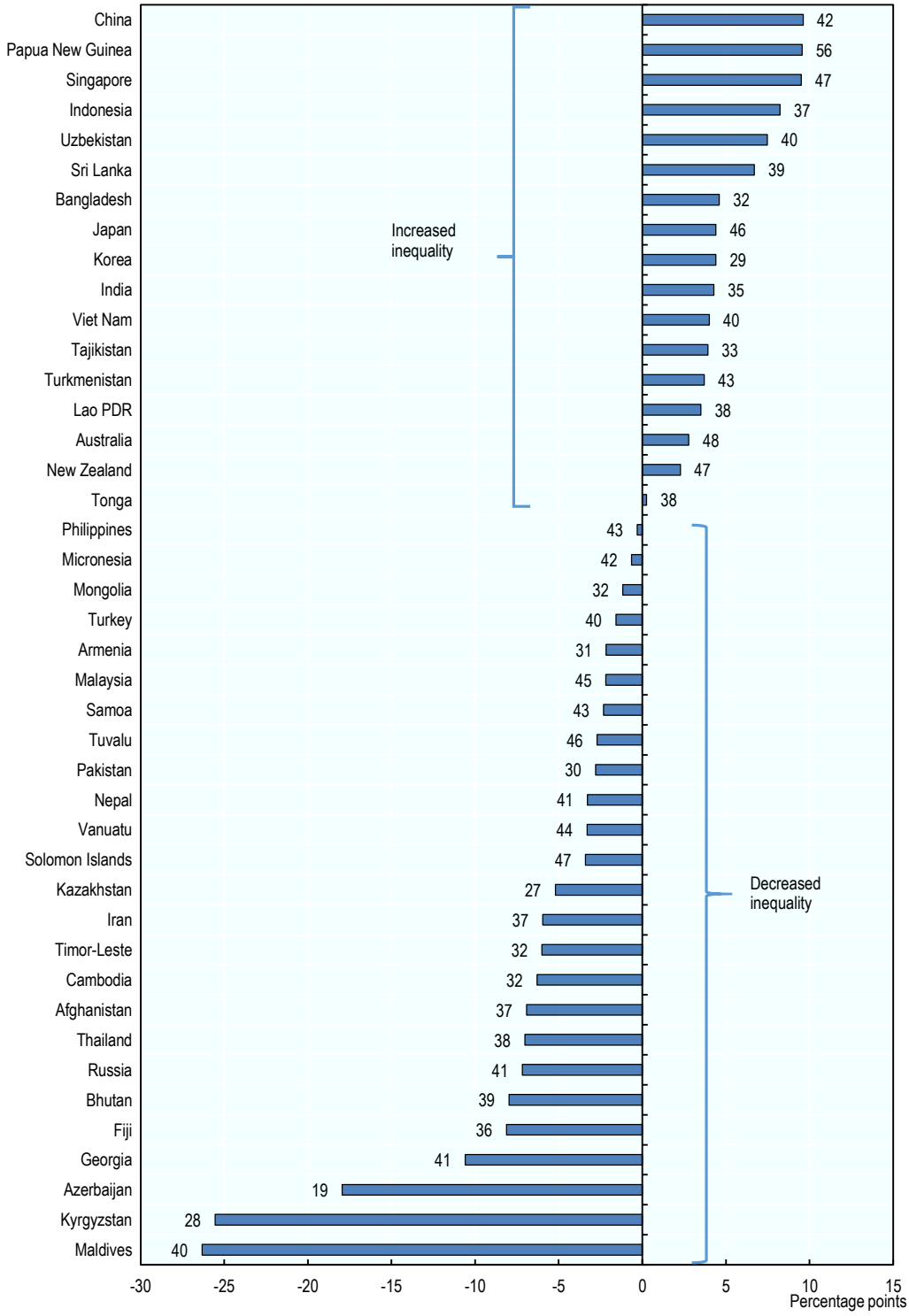
As a result, least developed countries (LDCs), small-island developing states (SIDS)[12] and the countries in the South, Southwest, North and Central Asian sub-regions have reduced extreme poverty at a slower pace than the rest of the region. As a percentage of their total populations, poverty has been stagnant for these countries since 2010.

In addition, in the region's most populous and rapidly growing economies, such as Bangladesh, China, India and Indonesia, within-country income inequality has significantly increased since 1990 (Figure 4.12). This is partly due to unequal opportunities for producers to integrate into global markets.

In general, the proliferation of GVCs tended to favour large firms over small firms. For example, small and medium-sized enterprises (SMEs) participate in GVCs more through an indirect contribution to exports than direct exports (OECD/The World Bank, 2017[148]). In developing countries, SME participation in GVCs is particularly concentrated in low value-added sectors. In low-income developing economies, SMEs have hardly taken part in GVCs because they predominantly operate in the informal economy (OECD/The World Bank, 2017[148]). The proliferation of GVCs in relatively technologically-intensive industries has tended to favour skilled over unskilled labour, helping to widen wage inequalities in a country.

Figure 4.12. In some Asian economies, income inequality has increased

Changes in income inequality by country (1990 and 2014)



Note: Labels next to each bar show the average market income Gini coefficient for the 2010-14 period, for each country. The blue bars show the change in the average of available Gini coefficients over the two five-year periods of 1990-94 and 2010-14, for each country.

Source: UNESCAP (2018[149]), https://www.unescap.org/sites/default/files/publications/ThemeStudyOnInequality.pdf.

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Development thinking towards the 2020s

After 70 years of development theories, practices and discourses about how to reduce poverty, achieve broader societal development and improve well-being, the international development community appears to have reached a broader consensus. First, the 17 SDGs have been largely accepted as overarching global and national development goals that should be accomplished by all countries, irrespective of their income levels. The SDGs will be regularly monitored with the objective of holding governments around the world accountable. Second, policy makers need flexibility when it comes to designing country strategies and choosing specific arrangements regarding the role of states and markets, as well as the role of international trade and co-operation for their national development. Third, such policy choices – and their acceptance – can strongly benefit from local participatory processes and consultation. They can also benefit from tapping international experience and "translating" and adjusting practices to local contexts. In other words, there is no single best developmental path. However, countries can make use of lessons learned by other policy makers around the world, with multilateral organisations helping to facilitate such exchange.

The transformation of economic geography, populism and climate change provoke new thinking

Apart from the crisis, three additional factors gradually pushed development thinking in new directions:

- sustained economic growth and development in China and other developing countries and its global implications, particularly for developing countries
- the emerging crisis on climate change and environmental degradation
- rising anti-globalist tendencies and populism in OECD countries.

In retrospect, few development experts could have imagined that mass poverty would decrease significantly. Nor could they have predicted that income (and productivity) conversion between OECD and non-OECD countries would happen any time soon. But both occurred in a surprising number of developing countries, particularly in Asia and Latin America, and most significantly in China and India (see Rodrik (2011[150]); Spence (2011[151])).

Many experts agree that successful catch-up development did not result from one single development recipe, but a combination of several development approaches. The latter led by a country-specific, market-oriented, heterodox mix of economic policy reforms. These included deeper integration into the global economy, investing in human capital, and improving government management and public services, as well as some trial and error, and good luck (Rodrik (2007[152]); Fosu (2013[153])).

China's state-led model and economic success continues to challenge traditional Western thinking about the role of free markets, political participation, human rights and press freedom (Kurlantzick, 2016[154]).

The transformation of economic geography and rising emissions lead to focus on the green economy

Increasing wealth in the non-OECD world also came at a high cost. Energy-intensive growth caused global carbon emissions to rise significantly. Two-thirds of global CO_2 emissions now originate in non-OECD countries, largely in India and China.[13]

It appears unlikely that the 2015 Paris Agreement can be maintained and global warming kept below 2°C without massive emission cuts in the developing world. For obvious reasons, reaching the SDGs and improving well-being around the world requires another dedicated shift in our thinking: from high-carbon to low-carbon ("green") development (UNEP (2011[155]); World Bank (2012[156]); OECD (2013[157])).

The promise of globalisation falls short

Since about 2015, development thinking has lost some of the lustre of its most promising storyline: liberal globalisation. Promoted by most development experts for the last 25 years, globalisation is being attacked from different corners, including from developing countries (Deudney and Ikenberry, 2018[158]).

Since the 2008 financial crisis, citizen dissatisfaction, nationalism and populism have been rising, particularly in OECD member countries. This mounting dissatisfaction is related not only to the global liberal trade regime, Europeanisation and multilateralism, but also to large-scale migration and increasing income inequality.[14] It has put OECD governments under enormous pressures. Paradoxically, de-legitimation of the liberal welfare state and re-legitimation of state-led development seem to go hand in hand.

Development thinking must also be matched by effective implementation

Since the 1950s, development thinking has been intricately linked to both a continuous flow of ideas about improving human welfare and real-world events. This included economic and financial crises, wars and conflicts, and societal transformations, in particular. It has also received inputs from development practice (Chenery, 1983[159]) from a perspective of both failures and successes.

Development thinking is not about technocratic fixes. Once it becomes thinking about development practice, it gets closer to, and becomes part of, an eminently *political* process. Local conditions must be thoroughly analysed and developmental objectives defined in a participatory process. But even then, the shift to development practice enters a contested territory of politics and power. What will come out of real development policy is likely to remain uncertain, despite a policy maker's best intentions – or because of a policy maker's own hidden agenda. In addition, some of the policy descriptions are of a higher order and not operational as stated (Rodrik, 2007[152]). They need to be translated into local realities, and operationalised in practical steps. There is an older debate on the political economy of development policy making and rent-seeking by policy makers on the difficulties of management of policy reforms and "reform-mongering" (Bhagwati (1986[160]); Hirschman (1963[39])).

Careful experimentation with different development strategies and guided improvisation have been key in today's emerging economies (Ang (2016[161]); Lee (2018[162])). Development policy and projects are essentially policy experiments in which governments have bounded knowledge and difficulties anticipating the outcomes of their actions (Hirschman (1967[163]); Rondinelli (1993[164])). Problem-driven iterative adaptation (PDIA) in policy reforms has been a major recent contribution to this stream

of research (Andrews, Prtichett and Woolcock, 2017[165]); Kirsch, Siehl and Stockmayer (2017[166]); Ang (2016[161]); Chung (2017[167]).

Instead, government officials need to zigzag to reach desirable outputs and outcomes via a series of reviewing, learning and adjustment cycles. Occasionally, as Hirschman (1967[163]) pointed out, a "hiding hand" helps to "beneficially hide difficulties" from them. In addition, the policymaking process needs to be more participatory, to overcome such bounded knowledge.

Notes

[1] Rostow's 1960 study on the "Stages of Economic Growth" is subtitled "A Non-Communist Manifesto".

[2] The target of 0.7% of GNP was based on earlier work by economist Jan Tinbergen estimating the inflows required for developing economies to achieve desirable growth rates, and later proposed by the Pearson Commission's Partners in Development Report in 1969.

[3] See, for example, the World Bank's World Development Report (1982[171]) "All farmers – small, medium, and large – respond to economic incentives. Far from being tradition-bound peasants, "farmers have shown that they share a rationality that far outweighs differences in their social and ecological conditions".

[4] Poverty reduction is meant in a very broad sense here, including health and education outcomes, in relation to poverty.

[5] It should be noted that the MDGs included a goal for coherent policies in the form of MDG8 (on a global partnership for development), which implied a role for richer countries.

[6] The income elasticity of exports measures the change in the growth of exports to the rest of the world when growth in the international economy increases in one percentage point; the income elasticity of imports measures the increase in the rate of growth of imports when the domestic economy increases its rate of growth in one percentage point.

[7] The influence of structuralist reformist ideas drastically declined in several countries with the rise of military dictatorships, such as in Argentina (coups deposed Presidents Frondizi in 1962 and Illia in 1966), Brazil (1964), Uruguay (1973) and Chile (1973).

[8] Many Latin American countries were heavily indebted by the end of the 1970s, in spite of the different economic policies they had adopted in the second half of the 1970s, one of rapid trade and financial liberalisation in Argentina, Chile and Uruguay, or one aimed at furthering industrialisation in Mexico and, particularly, in Brazil. The debt in Latin America was triggered by the Mexican default in 1982 and would heavily burden growth and investment in the region until the late 1980s–early 1990s.

[9] Before the 2008 global financial and economic crisis, trade accounted for more than 60% of the region's GDP. However, dependence on trade has declined to about 52% of GDP as a result of the slowdown in global demand and repositioning of the growth strategy for many countries towards domestic consumption.

[10] During 2000-08, this growth was even more impressive with GDP accelerating at 7.5% and exports by 16% per year.

[11] Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Singapore; Chinese Taipei and Thailand.

[12] Poverty data for Pacific economies (SIDS) are not fully available. Therefore, the data are an estimation, which may deviate from the real situation.

[13] In 2014, global carbon dioxide (CO_2) emissions totaled 36 Gigatonnes (Gt) out of which 24 Gt were emitted by non-OECD countries and 12 Mt CO_2 by OECD countries (World Bank, 2018[129]). With some 10.3 Gt CO_2, China emitted more than the United States (5.3 Gt CO_2) and the European Union (EU) (3.4 Gt CO_2) together. While production-based CO_2 emissions in OECD countries have oscillated between 11-12 Gt since 1990, emissions in non-OECD member countries have tripled from 8 Gt to 24 Gt CO_2. In 2012, some 70% of *total greenhouse gas emissions* (including e.g. emissions from land-use changes and deforestation) have originated in non-OECD countries. There is a difference between *production-based* and *consumption-based* CO_2 emissions (i.e. emissions incorporated in international trade). In the case of China, CO_2 consumption-based emissions are some 15% lower than the production-based figures; US and EU consumption figures are some 10-15% higher than the production-based figures (Peters et al. (2011[172])).

[14] See, for example, the case of the United Kingdom: Hopkin (2017[170]); also Kriesi (Kriesi, 2014[169]) and Inglehart and Norris (2016[168]).

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Chapter 5. Facing new challenges for development

The transformation of the global economic geography has fundamentally changed the world and gradually flipped many previously assumed development paradigms on their head. No unique path to development has ever existed. However, mainstream development thinking assumes that policy makers can put their economies on a convergent economic path with the most developed countries in the world by integrating a common set of previously successful policies that structurally favour growth. Countries need to adapt strategies that reflect their own endowments, cultures and institutions. They also need to navigate many new challenges that previously industrialising countries did not face. This chapter discusses such challenges in the context of economic, social and environmental pathways.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Chapter 5.
Facing new challenges for development

Developing countries face major challenges to their development paths...

Disrupting technologies

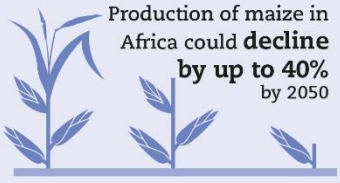
% of global GDP stored on Blockchain

Social and demographic challenges

World urbanisation rates

Environment challenges

Climate change threatens global food security



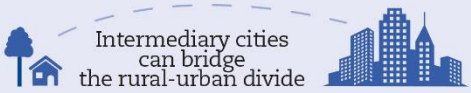
... and will need to adapt their development strategies accordingly

Harness the potential of new technologies

Commit to high-tech education

China and India have turned into R&D hubs due to strong IT skills among their populations

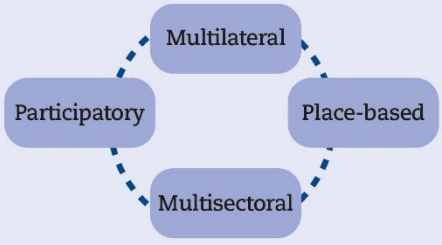
Consider that geography is a continuum



Respond to climate change by planning a low-carbon future

By pricing carbon emissions and greening the economy

A single global development paradigm cannot be generalised, but core elements of a development strategy can be detected



No unique path to development has ever existed. Yet development theory has suggested throughout history that policy makers can put their economies on a convergent economic path with the most developed countries in the world by integrating a set of common policies that structurally favour growth. The global transformation of economic geography has gradually flipped many previously assumed development paradigms on their head. On the one hand, the growth of the People's Republic of China (hereafter "China") and other major economies since the 1990s has indeed helped pull many countries onto a convergent economic path with the richest countries of the world, and it will likely continue to do so. On the other hand, the development paths such countries are taking are increasingly unlike one another.

There is a growing realisation that the policies needed to continue growing and ensure better social outcomes also require an approach more reflective of local contexts, endowments and institutions. Much of the positive strides experienced by early industrialising countries (or countries that have more recently made a significant jump) cannot necessarily be attributed to a common development strategy with a pre-mixed recipe.

No one development paradigm has sufficiently reflected the complexity of development paths that countries have actually taken. Historical economic and social development paths have varied significantly across countries and regions of the world. Economic growth itself has not necessarily led to improved well-being or environmental sustainability. Moreover, early industrialisers were able to gain significant increases in well-being outcomes at relatively lower levels of gross domestic product (GDP) growth compared to today's developing countries.

This chapter looks at the future. It first defines how development pathways are typically influenced by external factors and challenges, and why development strategies are therefore needed. It then explores new global challenges, and how they are redefining the way countries tailor their strategies. It ends by arguing that the ever-changing tide of a transforming economic geography has shaped and continues to shape and provide stimulus for novel development strategies to emerge, highlighting the additional challenge of their implementation.

Development is a state of continuous transition

Development is multifaceted, becoming increasingly complex as countries move up the development scale; differences in speed and type of transition become more pronounced, and countries take increasingly diverse paths. Countries have varied timespans for development for many reasons. First, development involves many moving parts, measured by more than economic growth. Chapter 3 showed how development is also about social outcomes and environmental sustainability, and the fact that countries face a variety of pathways related to these aspects. Second, countries benefit from a diverse set of endowments, culture and institutions, and therefore face and adapt to challenges differently.

Economic, social and environmental pathways evolve at different rates

Country transitions are not automatic. This is most evident from the large number of countries that have gained in income over the past 30 years, but which continue to experience low levels of social and environmental outcomes. As Chapter 3 already

emphasised, the developing world is neither a homogeneous group of countries nor linear in its development path.

Middle-income countries exhibit the widest divergence across a variety of characteristics. In 2016, for example, average years spent in education ranged from about six in the Dominican Republic to above nine in Malaysia. Employment in agriculture varies between 0.6% in Argentina and 33% in Thailand. While almost nine out of ten Brazilians live in an urban area, only half of Chinese citizens do so. While South Africa faces an HIV prevalence of 19%, Peru and Mexico have rates below 0.5% each (World Bank, 2018[1]).

This divergence extends to environmental factors. Between 2002 and 2012, for instance, tropical forests suffered ten-fold higher losses through deforestation in Malaysia and Brazil than in Thailand and Peru (Carrasco et al., 2017[2]).

Economic pathways are often used to measure development, and are arguably the most straightforward way of doing so. The World Bank has been classifying countries into four income groups since 1979. It does this based on gross national income (GNI) per capita:[1] low-income country, lower middle-income country, upper middle-income country and high-income country. Since 1990, 54 developing countries climbed into a higher World Bank income classification for the first time.

A broader measure of economic development is least developed country (LDC) status. LDCs are a group of highly vulnerable and structurally constrained economies. To graduate from LDC status, a country must reach a certain level of GNI per capita, a certain level of human resources (based on an indicator on health and education) and score below a certain level on the economic vulnerability index. 47 countries were listed as LDCs in 2018. Remarkably, only five countries have graduated since LDC status was created in 1971: Botswana, Cabo Verde, Samoa, Equatorial Guinea and Maldives. At the same time, the number of countries on the list has doubled since its creation. Such an outcome indicates that development is much more complex than GNI or GDP measures alone would suggest. Several economic outcomes may not be as linear as economic pathways. For example, Kuznets (1955[3]) depicted the link between income per capita and inequality as one where inequality first increases with development and then reduces, after a certain threshold is crossed.

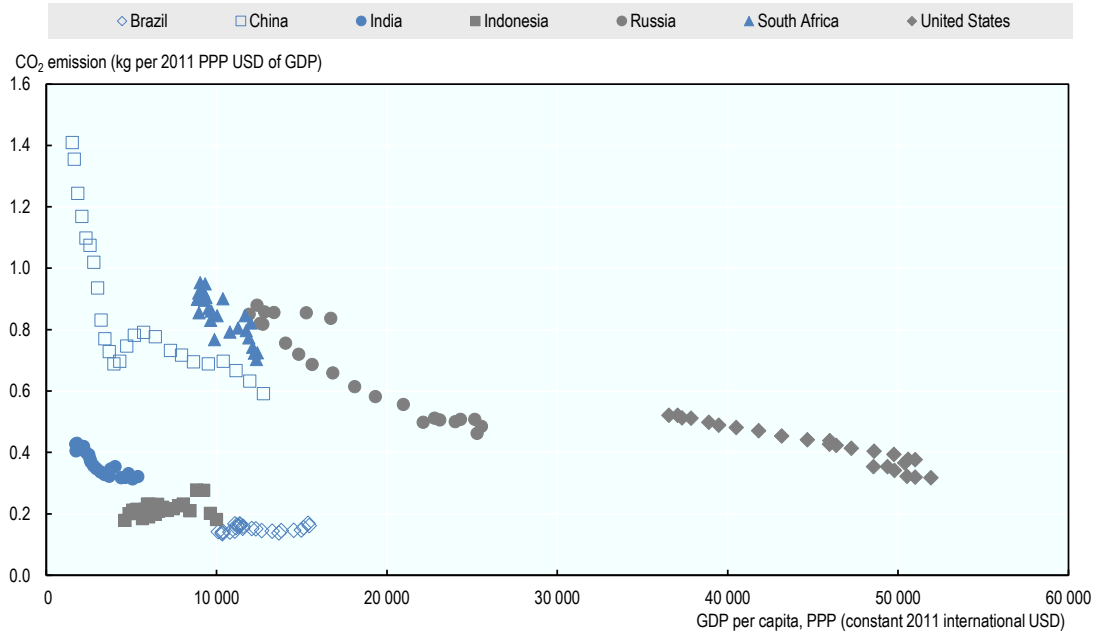
Social and environmental pathways are much less straightforward to define. As Chapter 3 argues, development paths take on a variety of shapes. In fact, as far back as 1934, Simon Kuznets, the architect of the US national accounting system, cautioned against equating GDP growth to economic or social well-being (Costanza et al., 2009[4]). In 2008, the Stiglitz-Sen-Fitoussi Commission, assembled by then French president Nicolas Sarkozy, reassessed the limits of a GDP-centred indicator of development. It eventually called for an internationally comparable and multidimensional measure (Stiglitz, Sen and Fitoussi, 2008[5]). The OECD's Better Life Index (BLI) attempts to define a social pathway by measuring well-being across countries. This process reflects the need to collect both subjective and objective statistics for shaping policy that impact quality of life.

Development is also about environmental sustainability and the ability to use, manage and preserve resources for today and tomorrow. Early industrialisers emitted few carbon dioxide (CO_2) emissions in their industrial infancy, but as production was scaled up, emissions rose. It has become clear that future development must turn to lower carbon production to avoid catastrophic climate change, but it is not clear how new development paths must navigate environmental constraints. Environmental concerns have become a

global issue, involving all parts of the planet, rather than only national concerns or localised areas. In fact, the pattern of emissions in emerging economies has not necessarily been as expected. Indeed, one could expect an inverted U-shape relationship evolving between GDP per capita and CO_2 emissions: as countries get richer, they emit more, up until a certain point when they may begin to invest in lower carbon-emitting activities. This has been likened to an *environmental Kuznets curve*, reflecting Kuznets' original depiction of the relationship between income per capita and inequality. But we know little about such a relationship in reality. Figure 5.1 depicts the relationship between GDP per capita and CO_2 emissions and suggests that for Brazil, the Russian Federation (henceforth "Russia"), India, Indonesia, China and South Africa (BRIICS) as well as the United States emission intensity has been constantly decreasing since 1990.

Figure 5.1. The carbon intensity of economic output has been decreasing with GDP per capita

Relationship between CO_2 emissions and GDP per capita (1990-2014)



Note: The trails are the evolution over time of the CO_2 emission positions for the BRIICS (Brazil, the Russian Federation (henceforth "Russia"), India, Indonesia, China, South Africa) and the United States.
Source: World Development Indicators Database (GDP per capita, PPP (constant 2011 international USD); CO2 emission (kg per 2011 PPP USD of GDP)), World Bank (2018[6]) (accessed in August 2018).

StatLink https://doi.org/10.1787/888933857955

Nevertheless, the complexity of and interaction between economic, social and environmental pathways implies multiple ways for countries to develop. Such diversity is accentuated in light of the way countries face global challenges.

Countries face similar challenges along their development pathways

While the global development context has changed in light of a shifting economic geography and the rapid availability of new technologies, many of the general risks early industrialising countries faced remain today. A review of several sources detailing the

most important global challenges for the future suggests that such challenges can be summarised along two main axes: global economic risks and the preservation of social cohesion (Table 5.1) (McKinsey (2016[7]); National Intelligence Council (2017[8]); the OECD's New Approaches to Economic Challenges (NAEC) Initiative, 2013-2018; The Economist Intelligence Unit (2018[9]); World Economic Forum (2018[10])). While there is no easy or standard solution for facing and minimising such risks, today's emerging economies continue to need to account for such challenges.

Table 5.1. Countries must navigate age-old economic and social challenges

Economic challenges
slowdown in global GDP growth, risk of new financial crisis
mounting protectionism, reduction in international trade, exposure through global value chains
fractioning of global governance system that enables economic exchange and growth
Social challenges
rise in inequality, loss of social cohesion
rapid population growth, urbanisation, international migration
extreme poverty, lack of social protection, health access
localised pollution, living accommodations, air quality

Economic challenges

Early industrialising countries grew on the backs of new technological advancements and societal change. However, it was not without economic risks, jeopardising macroeconomic and political stability. For example, the long depression in the United States and Europe from 1873 to 1896 and later the crash of 1929 dampened previous periods of relatively exceptional growth. This led to developments, for instance, in macroeconomic and trade management. Lessons were learned regarding trade protectionism and global risk management.

Today, the transformation of economic geography, the demand and supply of natural resources, the push for globalisation and the importance allocated to the multilateral system have all played roles in shaping and modulating the global geopolitical structure since the Second World War. The global governance system has come under strain as it did in the past. It took several decades for the world to regain global trade and migration rates reached in the 1920s, for instance.

Today's emerging economies continue to deal with economic risks, amid current fears of a new financial crisis. In fact, the recent era of fastest growth and convergence during the 2000s ended with a major recession in 2008-09. Despite the slowdown in GDP growth and international trade in the last few years, there is some reason for optimism, buoyed by new manufacturing growth poles and South-South linkages (IMF (2018[11]); OECD (2018[12])).

Economic risks will nevertheless continue posing challenges for countries in the future. Concerns linger about the stability of the global financial architecture and the risk of another major financial crisis. Recovery from the 2008-09 crisis was facilitated by a significant drop in global interest rates, which now raises concern and uncertainty about the recovery's sustainability once global interest rates rise back to historically normal levels. In addition, the risk of mounting trade protectionism has weakened global trade, making countries with ties and interests in global value chains vulnerable.

Importantly, the major economies (G20) devised a co-ordinated response to the crisis back in 2008 and 2009 (G20 (2008[13]), (2009[14])). Developing countries used their

reserves and fiscal space to weather the crisis. Today, in the context of current narratives on protectionism and multilateralism, it is much less certain that countries will deliver a co-ordinated and co-operative response to a new crisis.

Social challenges

Growth in early industrialising countries was also met with rising inequality, stresses on social cohesion and demographic pressure, led by a relatively faster growing number of youth than older cohorts searching for jobs, fast and unmitigated urbanisation, and international migration as a response to the search for a better life. Each challenge was met with new policies and resilience. Tax systems were redesigned, cities were rebuilt and expanded to accommodate larger populations, health and education systems were reformed and security was prioritised.

Today's emerging economies face similar challenges. In many countries, inequality is rising amidst fast growth (Alvaredo et al., 2017[15]). Many countries are quickly urbanising. Population pressures will be strongly felt in South Asia, Southeast Asia and sub-Saharan Africa over the next 30 years, where a youth bulge will bring pressure to cities, labour markets and international migration. Since the mid-2000s, most of the world's population lives in an urban area, but this is not the case everywhere. While Latin America urbanised quickly in the 1980s and 1990s, most of the population in Asia and Africa remains in rural areas. Moreover, while international emigrant stocks relative to home country populations are comparatively high in Latin America and the Caribbean (5.8%), they remain the lowest worldwide in sub-Saharan Africa (2.5%) and South Asia (2.1%), meaning population growth in those regions could set in motion dramatic demographic shifts (UNDESA (2017[16]), (2017[17])).

Emerging countries will also need to increasingly deal with eroding trust in government. This has recently included rising scepticism of globalisation, particularly amongst the middle class. While technological change is a likely factor in this sentiment, as it was in the early industrial age, a general negative feeling against trade imports and foreign direct investments, as primary reasons for job insecurity and inequality, often prevails.

Technological change and reinforced multilateralism are enablers for development

In addition, the risks outlined above are not isolated nor mutually exclusive. They can intersect, compound the effect and even generate new risks. For example, protectionism and the weakening of global governance may fragment the global system and lead to a slowdown in GDP growth. Social and demographic pressures have fuelled governments to enact protectionist measures, further isolating countries and fracturing global economic growth (WTO (2018[18]); Evenett and Fritz (2018[19])). Such a global slowdown can then lead to fewer jobs, which then fuels more social ills.

The way and time taken by countries to navigate economic, social and environmental development pathways have changed. Part of this is due to changes in global development paradigms, which have influenced policy makers and the flow of development finance over time. However, challenges have also become more complex, with increasingly more constraints in play on national governments. Pathways were not the same for early industrialisers, nor countries like Korea and China that industrialised after the Second World War.

In comparing the experience of early industrialisers with that of today's emerging economies, the issue of global governance becomes paramount. In the midst of the current wave of eroding multilateralism, it is striking to think of the importance multilateral co-operation has played in early industrialising development – either through trade, peace, security, migration or investment. The same can be said of technological change, which was viewed as a source of social stress, but in the end enabled beneficial development. That is not to say that global governance and new technologies will automatically render the best development outcomes for new emerging economies. In fact, the global, environmental and technological contexts have so drastically changed that emerging economies are facing challenges that many of the early industrialisers did not, and the lessons learned from the past do not necessarily offer a clear lesson forward.

Development is being challenged like never before

Today's developing countries must face previously unseen challenges, several of which were not part of the development equation for many of the early or recent industrialisers. Such challenges can be broadly summarised as technological, social, environmental and economic in nature (Table 5.2).

Table 5.2. New global challenges

New technological challenges
• digitalisation and automation
• new materials revolution
• biotech revolution
• risk of cyber-hacking.
New social challenges
• continued rapid population growth for many developing countries vs. rapid ageing for others
• increased risk of pandemics because of more and faster international travel
• increased mobility, risk of "brain drain".
New environmental challenges
• climate change
• pollution and air quality
• natural resource depletion, water in particular
• increased extreme weather-related disasters.
New economic challenges
• international economic environment more constrained by global rules
• faster economic changes because of deeper globalisation and greater interdependence between countries.

Sources: Authors' compilation based on various sources including: McKinsey (2016[7]), *Urban world: Meeting the demographic challenge*, https://www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Urbanization/Urban%20world%20Meeting%20the%20demographic%20challenge%20in%20cities/Urban-World-Demographic-Challenge_Full-report.ashx; National Intelligence Council (2017[8]), *Global trends. Paradox of progress,* https://www.dni.gov/files/documents/nic/GT-Full-Report.pdf; OECD New Approaches to Economic Challenges Initiative (2013-2018); EIU (2018[9]), *Cause for concern? The top 10 risks to the global economy*, http://pages.eiu.com/rs/753-RIQ-438/images/Top_10_risks_to_the_global_economy.pdf; WEF (2018[10]), *The Global risks report 2018, 13th edition*, http://www3.weforum.org/docs/WEF_GRR18_Report.pdf.

Technology is disrupting development paths

Advances in technology have underpinned many other trends such as economic growth and globalisation, as well as environmental stress. They have also been behind increases in productivity, reductions in transportation and communication costs, diversification in

products and services, new energy sources, and improvement in health and life expectancy. Disruptive advances in digital technology, bio-technology and nano-technology are permitting the capture and use of information on virtually anything. They also create new materials, with profound implications for economic and social interaction (Rothkopf, 2017[20])

The confluence of these technologies has been called the "Fourth Industrial Revolution" by the World Economic Forum (Schwab, 2015[21]). Some key trends are leading to advances in automation, artificial intelligence (AI), big data analytics, blockchain technology, the Internet of Things (IoT) and 3D printing. These have implications for developing countries, ranging from the future of work (e.g. greater pressure on incomes from low-skilled jobs, higher skill requirements), competitiveness of countries and the location of economic activity to privacy and security (OECD, 2017[22]).

Big data technology

Although no agreed definition of big data currently exists, its characteristics are often described along three "V"s – "volume", "velocity" (the real-time speed at which data is created, processed and stored) and "variety" (the complexity of data types) (Laney, 2001[23]). Recently, two additional Vs, namely "veracity" and "volatility", have been added to the list. These latter terms refer respectively to the noise in the data as the biggest challenge to extracting value and validity and to the challenge of ever-changing technology and business environments. Unlike statistical data that are compiled for specific purposes, big data is a by-product of administrative systems, social networks or Internet of Things devices. Big data refers to the growing ability to generate, manage, analyse and synthesise data to create and destroy different forms of value. For example, big data can increase a company's ability to understand and target its customers by providing a detailed view of their preferences, values and behaviour.

The dimensionality of big data on all fronts, as well as the educational skills and technological capabilities required to bring big data to use, pose great challenges to many countries. Specifically in a developing country context, however, a lack of connectivity, storage and processing capacity means that even relatively small volumes of data cannot be managed effectively and efficiently (Taylor, 2013[24]). The lack of technical capacity in developing countries creates barriers to fully reap the opportunities of big data which are continuously unfolding and range from failure prediction of oil pipelines to improving disaster mitigation and preparedness. The latter has, however, so far proven to be the most impactful application. In the aftermath of the 2015 Nepal earthquake, for example, relief workers collected data from deployed drones relying on 3D-printed maps to get supplies to affected survivors and map reconstruction efforts (Sharma, 2016[25]).

Internet of Things

The term "Internet of Things" has evolved from an initial supply chain management meaning to a keyword covering a wide array of applications like intelligent transport, smart health care and smart utilities, all interconnected. This promises a plethora of opportunities for developing countries, ranging from road accident mitigation due to smart vehicular systems amid increasing traffic numbers to better social security management for underprivileged parts of society (Miazi et al., 2016[26]).

However, with more devices becoming "smart" and interconnected, challenges in terms of security and privacy arise. These devices become vulnerable to cyber-attacks and hackers from around the world. Water pumps, power plants and electricity grids can be

hijacked or shut down by outside parties, crippling vital processes important for societies and economies alike. This may further be exacerbated by a lack of knowledgeable personnel or unreliable power supplies for rising IoT demands.

Blockchain technology

Blockchain technology, a use of records protected by cryptography (techniques used for secure communication) and stored on a decentralised network, is another potentially significant disruptor to the global economy. By 2027, 10% of global GDP will be stored on blockchain compared to 0.025% in 2015 (WEF, 2015[27]). For developing countries, this secure technology may provide many benefits. For example, corruption and fraud can be reduced by providing development finance for services without intermediaries. The World Food Programme, for instance, is trialling blockchain-based cash transfer systems in refugee camps in Pakistan and Jordan. As of October 2018, more than 100 000 people residing in camps have redeemed their financial assistance through the system, thereby keeping secure in-house records of transactions and achieving both greater privacy for refugees and a significant reduction in transaction fees (WFP, 2018[28]).

Blockchain also enables higher efficiency in trade and supply chain finance and generally better contract or property rights enforcement. However, challenges for developing countries to fully exploit these benefits remain. Weak digital infrastructure, high energy consumption from servers or conflicting to non-existing regulatory requirements, for example, are obstacles (Kshetri, 2017[29]).

Unprecedented population growth and increased risk of pandemics raise new social challenges

Changing patterns of population growth have posed new social challenges. Rapid declines in death rates with advances in preventive medicine and the spread of health and sanitation practices led to rapid population growth after the Second World War. The labour force also grew rapidly. While population growth in developed countries slowed, populations continued to grow in most developing regions.

Today, declining population and labour force growth are asymmetrical in most developed regions and in some large developing countries such as Brazil, China, Russia and Viet Nam, while population and labour forces are still rapidly growing in developing countries. This is particularly the case in Africa where economic growth has slowed considerably in the last decade, but its population growth is expected to remain much above the world average through 2100. By 2030, its share of the world population is expected to be around 19% compared to 16% in 2015 (UN, 2017[30]).

These asymmetries in population growth put new challenges on countries with rapidly ageing populations such as Japan, most of Europe, but also China. They also pressure countries with labour forces that are growing much faster than the availability of productive jobs, like most countries in South Asia and Africa. This asymmetry also raises pressure for migration from countries with growing populations and limited employment opportunities to countries with declining populations and better living conditions.

Another new social challenge is the greater risk of pandemics due to greater population movements across countries. For instance, the scope of the 2014-16 Ebola virus outbreak in West Africa and beyond was attributed to an unprecedented mobility of people across borders (UNDP, 2014[31]). Pandemics have been a constant of history. However, with greater globalisation and faster travel as well as larger urban agglomerations, they can

propagate faster. This increases the threat to developed and developing countries alike (Campbell, 2017[32]).

High environmental stress on the planet implies higher standards for all countries

The most important environmental challenge is climate change, which is generally accepted across the world and was agreed to by governments in the December 2015 Paris Agreement. However, countries' commitments to nationally determined contributions are not enough to reduce greenhouse gas (GHG) emissions sufficiently to keep the rise of global temperatures below the agreed 2°C goal. In addition, the United States withdrew from the accord in 2017, further limiting its potential achievements.

While climate change is a long-term threat, it requires action now. The shorter-term effects of climate change include extreme weather events such as hurricanes, floods and droughts. The frequency of extreme weather events has increased markedly over the last four decades (EASAC (2013[33]); Swiss Re (2018[34])). These put populations and economies at risk due to high volatility in harvests and unpredictable swings in crop prices. Poorer countries particularly have a more limited capacity to cope.

Other key environmental challenges relate to pollution and depletion of natural resources. Air, water and soil pollution tend to increase with industrialisation until countries enact policies to address them. Deforestation and fresh water depletion are major challenges for developing countries that rely heavily on natural resource extraction for their growth.

The global economic environment is different

Early industrialising countries, as well as those that developed in the wake of the Second World War, faced a different global context regarding the use of industrial policies and rules and standards. In fact, advanced countries practised many types of industrial and trade policies that are now forbidden by the World Trade Organization (WTO), as well as provisions in regional and bilateral trade and investment agreements. These include infant industry protection through tariffs on imports, large state subsidies, local content rules, market reservation for national firms and preference for domestic firms in government contracts (Chang, 2002[35]). Today's developed Western European countries and the United States, for instance, levied high tariffs on manufactured products in their early stages of development. They even continued to do so when they were ahead of their competitors in technological terms (Bairoch, 1993[36]).

The rapid and massive insertion of China into the global economy and the rise of new technologies are also transforming the economic environment. China has occupied most of the traditional space for labour-intensive manufacturing exports that were so critical for the development of Japan; Hong Kong, China; Korea; Singapore and Chinese Taipei. At the same time, the rapid development and spread of automation technologies is undermining the low-labour cost advantage of developing countries. Developing countries therefore need to find new drivers of economic growth.

In addition, with the increased globalisation of trade, finance, travel, transportation, communications and digital technologies, everything is happening faster in real time. This has increased the speed at which everything occurs and how events in one part of the world affect other parts. It puts greater pressure on economies to respond to rapidly changing events such as financial or economic crises or increased competition from other parts of the world.

Challenges are interconnected

All these challenges, if not addressed properly, threaten the ability of developing countries to further progress on their sustainable development path and may derail envisaged national development strategies. On the one hand, all challenges demand independent consideration to fully understand their individual characteristics and to prepare contingency plans for efficiently containing negative effects. For instance, despite relatively precise projections of temperature increases and precipitation until the end of the 21st century, large levels of uncertainty remain regarding temporal and spatial variability of events. Countries with a large agricultural sector need to adapt crop cultivation to more extreme weather conditions.

On the other hand, all challenges are intricately linked, reinforce or alleviate each other, and thus require a holistic and systemic approach to find appropriate answers. In spite of all its risks, factoring in the potential mitigating effect of technology will be part of the solution.

In 2018, one billion people still live off the electric grid and lack access to reliable power in developing countries. Additionally, nearly three billion depend on wood and biomass for cooking and heating (World Bank, 2018[37]). The resulting indoor and outdoor air pollution exacerbate climate change and cost the life of millions each year. AI through mobile payment systems such as M-Pesa can provide loans to buy solar panels for heating, thereby helping to improve health levels and mitigate climate change.

Developing economies particularly in parts of Asia, the Middle East and Africa will be confronted with water scarcity and water shortages that will impact agricultural, industrial and energy production. Higher temperatures due to climate change will also increase the aridity of land and reduce the productivity of labour and add tension to social challenges. New technologies may ease the constraints imposed by climate change and water shortages through smart irrigation systems.

Such solutions, however, demand a clear development strategy, involving concerted efforts of national governments and civil society with support from both international partners and the private sector to overcome technical and institutional barriers.

What do future challenges mean for development strategies?

The trends outlined above imply the need to adapt development strategies to achieve real improvements in the quality of people's lives. This section looks at technological, environmental, demographic and global governance challenges that development strategies need to address, before presenting an assessment of how well current national development strategies incorporate such challenges.

Disruptive technologies are undermining tried and tested growth strategies, but also providing new opportunities

The development and dissemination of new production technologies raise many issues (Dahlman, 2017[38]). The disruptive nature of these technologies will depend on several factors. These include the speed of their development, as well as how fast they disseminate and impact the production and use of goods and services. A study of the dissemination of 15 technologies in 166 countries over the last 200 years, for instance, found that on average countries adopted technologies after 45 years (Comin and Hobijn, 2010[39]). This varied across technologies and countries. However, newer technologies

such as cell phones diffused more quickly and were adopted more broadly than earlier technologies such as steam or reciprocating engines to power ships, railways and cars.

The factors influencing new technologies present both challenges and opportunities. Automation and new production technologies, for instance, mean labour represents a smaller share of total costs. This makes it harder for developing countries to compete based on low-cost labour. Developing countries may remain competitive only in sectors where low-cost labour is still important. One such case is production for domestic and regional markets that is not yet exposed to international competition.

At the same time, the ecosystem required to use new technologies, such as the Internet of Things and Industry 4.0, is becoming more demanding. Required elements of future technological ecosystems may include advanced logistics, high-speed Internet connectivity, sophisticated infrastructure, and specialised skills and standards that require capacity that is currently lacking in many developing countries. Even technologies common in developed countries for many years are uncommon in developing countries (e.g. access to fixed broadband). More generally, developing countries have weak innovation systems.

Services, many of which are facilitated by the digital economy, are becoming a more important part of production and consumption. Thus, developing countries need to improve the breadth and competitiveness of their service sectors. However, most important service sectors depend on high-level skills and sophisticated infrastructure that developing countries often lack so far.

Human capital remains weak in developing countries. Overall attainment and quality of education are lacking. Similarly, specialised skills needed to adopt, adapt or develop new technologies are often missing (World Bank, 2018[40]). Developing countries lack resources to support workers displaced by new technologies. Many developing economies are also making a labour transition from agriculture to manufacturing and services. In addition, many have large labour force growth, for which it will be difficult to find productive employment.

The traditional growth paradigm in developing countries of labour-intensive manufactured exports seems to have reached its limits (Hallward-Driemeier and Nayyar, 2017[41]). This is exacerbated by globalisation and the strong performance of China in manufacturing and exports. In 2015, China accounted for more than 50% of world manufacturing employment, 25% of world manufacturing and 13% of all world merchandise exports. In addition, China is rapidly adopting robotics and is expected to have the largest number of robots installed in any country by 2020 (Hallward-Driemeier and Nayyar, 2017[41])

The shares of manufacturing value added (in GDP) and of manufacturing employment (in total employment) are now peaking at lower levels of per capita income (Rodrik, 2015[42]). Furthermore, the commodity super-cycle that spurred the growth of natural resource-exporting developing countries is over. Therefore, new drivers of growth and development need to be found.

Automation and its impact on the future of work are concerns in developed and developing countries alike. McKinsey (2017[43]) analysed the potential impact of automation technologies, including artificial intelligence and robotics on jobs. It concluded that while half of all work activities globally have the technical potential to be automated by adapting currently demonstrated technologies, the proportion of work

actually displaced by 2030 will likely be lower because of technical, economic and social factors that affect adoption (McKinsey, 2017[43]).

The proportion of automation varies by country. Advanced countries are more affected than developing ones because they have higher wages and therefore greater incentives to automate.

The dominance of robot use in sectors higher up on the skills ladder implies greater difficulty for latecomers in attaining sectoral upgrading. This may limit their scope for industrialisation to low-wage and less dynamic (in terms of productivity growth) manufacturing sectors such as textiles and apparel. Furthermore, it could seriously stifle these countries' economic catch-up and leave them with stagnant productivity and per capita income growth (UNCTAD, 2017[44]). On the other hand, the Central European countries are cause for optimism; as the most robotised countries (Figure 5.2), they managed to beat the middle-income trap and have recently reached high-income status.

Developing countries have distinct experiences with automation. India has more modest potential for automation because of its relatively low wages. However, it also has a great challenge to find productive jobs for its labour force, which is expected to grow by 138 million by 2030 (McKinsey, 2017[45]).

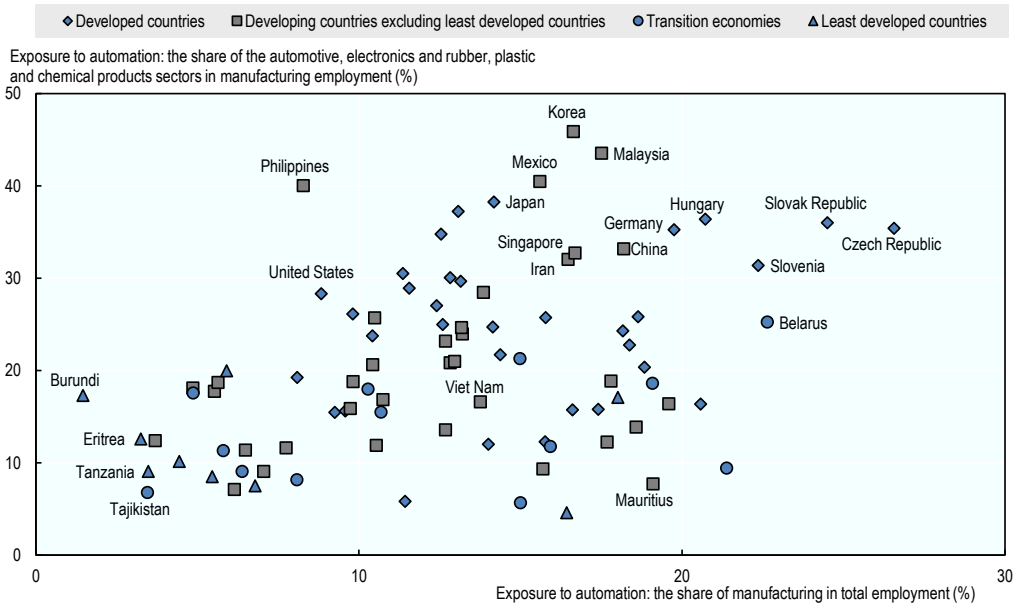
China is more likely to benefit from automation because wages have been rising faster than in other countries and have reduced its competitiveness in manufacturing. China is rapidly replacing workers with robots and already has the largest installed robot base in the world (Hallward-Driemeier and Nayyar, 2017[41]).

Development and deployment of automation technologies would displace an estimated 118 million jobs in China. However, trend line growth and the changing structure of the economy in China would create 231 million jobs (McKinsey, 2017[45]). While the number of workers employed in manufacturing would increase slightly, the bulk of the increase would be in services. This is particularly true of accommodation and food services, health care, and retail and wholesale trade.

The labour force is projected to fall by 90 million in China by 2040 because of an ageing population (World Bank, 2015[46]). As a result, unlike for most other developing countries, automation would be positive due to projected overall labour shortages. However, China would have the largest number of workers needing to switch occupations, up to 12% of the labour force under a rapid switch to automation scenario. Therefore, a key challenge would be scaling and reimagining job retraining and workforce skills development, and providing income and transition support for workers. More generally, China needs to maintain robust economic growth to support job creation, and improve business and labour market dynamism and mobility.

Figure 5.2. Advanced and middle-income countries are more exposed to automation than developing economies

Relationship between share of exposed sectors to automation in employment and share of manufacturing in total employment, by country (average 2010-14)



Note: The horizontal axis reflects the share of manufacturing in total employment in 2014. The vertical axis reflects the share of the automotive sector, of the electronics sector and of the rubber, plastic and chemical products sector in manufacturing employment as an average for the period 2010–14 over the years for which data are available. The sample includes all 91 economies for which data are available.
Source: UNCTAD (2017[44]), *Trade and development report 2017. Beyond austerity: Towards a global new deal*, https://unctad.org/en/PublicationsLibrary/tdr2017_en.pdf.

StatLink https://doi.org/10.1787/888933857974

Some new technologies offer opportunities for developing countries to improve competitiveness and to address critical social needs. Yet, taking advantage of such new technologies may be difficult for some developing economies. Many lack the necessary supporting elements of the broader industrial ecosystem. Therefore, it may be difficult for developing countries to adopt full-fledged Industry 4.0 factory automation.

Developing countries can often adopt many discrete elements of new technologies and adapt them for critical needs across different sectors of the economy. Examples in manufacturing include using 3D printing to overcome the constraints of scale as well as the lack of well-developed component supplier industries and logistics. This would move these countries closer to world supply chains (Ishigoma and Mtaho, 2014[47]). Developing countries also can use robots for part of their production even if they do not adopt fully automated Industry 4.0 factories.

New technologies such as artificial intelligence and the Internet of Things can overcome knowledge constraints in key sectors

Artificial intelligence (AI) systems and the Internet of Things can overcome some knowledge constraints in manufacturing, agriculture and services.

In agriculture, electronic sensors and trackers can improve drip irrigation, harvesting, and distribution of agricultural products, among other applications (Cornell University, INSEAD and WIPO (2018[48]); Lee and Choudhary (2017[49])).

In services, new technologies can help overcome constraints in the financial, energy and social sectors. Within the financial sector, the Internet has helped develop mobile money systems such as M-Pesa in Kenya and Tanzania to reach people without access to the formal banking system. Internet-enabled systems have also expanded lending to under-banked populations in Bangladesh. Internet-enabled platforms and the sharing economy, such as Uber for transportation, AirBnB for accommodations and Taskrabbit for freelance labour, can also increase use of scarce capital or mismatched labour.

Within the energy sector, the Internet of Things can extend electricity to off-grid communities through solar energy hubs in India and various African countries.

AI is being used to extend Internet access to African countries through equipment in helium balloons in stratospheric orbits (Simonite, 2015[50]).

Within social sectors, the Internet and electronic devices can extend education and training to millions of users in low-income countries. New, simple, low-cost diagnostic techniques and medical AI systems can also extend services to isolated rural communities in sub-Saharan Africa and South Asia.

Harnessing knowledge can enhance productivity

Many opportunities to access and harness existing knowledge exist to enhance productivity.

Cirera and Maloney (2017[51]) argue that developing countries have tremendous potential to increase productivity by adopting technology, but are limited because of poor management capability at the firm level. Labour productivity in developing countries is generally less than 10% of that in developed countries. With few exceptions (most notably China), the productivity gap has been increasing over the last decades (OECD, 2014; Hallward-Driemeier and Nayyar (2017[41])).

There are many ways to access global knowledge on productivity. Attracting foreign investment can bring more advanced technologies, management and business organisations. Developing countries can import capital goods and services that embody the new technologies or buy foreign technology and management assistance. For instance, China has raced ahead in AI start-up funding and patents. In 2017 alone, China's global equity funding share for AI accounted for 48%, leaving the United States as the second largest market with 38% (CB Insights, 2018[52]). They can also access the knowledge, management skills and finance of diaspora populations in more advanced countries. Other examples include studying and working abroad; copying and reverse engineering; and using electronic and other means to access technical and management knowledge (OECD, 2014[53]).

Some countries have been more successful than others in accessing global knowledge. China's efforts to access knowledge have achieved impressive results. However, China's path is not easily replicable, given its special type of government and the advantage of its large market size.

Other countries have developed effective strategies for accessing global knowledge and to address local needs. These include Korea and Singapore in Asia, Chile in Latin America,

and Ethiopia and Rwanda in Africa. In addition, many new technologies can address local needs, including in many low-income countries in Africa and elsewhere.

Commitment to high-tech education is critical

Quality higher education in science and technology is critical for embracing innovation-based development. Developing science and technology capabilities needs good support for research-based education, and participation of researchers in the world's science and technology community. Research-based universities also need the ability to diffuse technology to firms, especially small and medium-sized enterprises.

Global linkages are essential, but firms need some capacity to absorb new technologies to reap the full benefits from technology transfer and technology diffusion from foreign direct investment, licensing and imported capital. Firms also need high-quality managers and employees to master technologies and improve them. Therefore, a well-educated population is fundamental to all spheres of development. Prominent examples are China and India. Their high abundance of IT and software skills has been key to transforming their countries into research hubs for US multinational companies (MNCs) and attracting disproportionately high patent and research and development (R&D) investments. During 2004-14, R&D expenditures of US MNCs' foreign affiliates grew by a factor of four in China and 25-fold in India (Branstetter, Glennon and Jensen, 2018[54]).

Addressing the digital divide is an important tactic to reduce inequality and promote inclusive sustainable development. The application and adaptation of technologies in the 21st century rely largely on the availability of information and communication technology (ICT) infrastructure and access to it. However, this infrastructure must be affordable, resilient and reliable, and complemented by efficient services.

Efficient transportation, financial, information, computer and telecommunication services are also critical for firms to compete in the global market. Hence, services trade policy must balance efficiency and job creation.

Climate change is creating an imperative to transition to low carbon, climate-resilient economies

Development strategies can be an essential tool in the global effort to reduce greenhouse gas emissions and address other environmental challenges.

Responding to climate change requires immediate action on both mitigation and adaptation. Planning decisions taken now can either open up pathways to low-carbon, resilient futures or lock countries into high-emissions trajectories. Development strategies based on copying old ways of modernising economies through carbon-intensive energy systems and industrial processes will guarantee that the goals of the Paris Agreement will not be met.

Transitioning to a low-carbon economy will require new infrastructure to support decarbonised electricity systems, energy efficient processes and low-emission and clean transport systems (OECD, UN and World Bank, 2018[55]). This in turn will require a supportive policy environment that creates the right incentives. Putting a price on carbon and reforming fossil fuel subsidies, for example, can help change behaviour and reorient investment decisions. Notably, the cost of renewable energy is declining, and an increasing number of countries are integrating renewable energy sources into their energy mix (IEA, 2018[56]).

In addition to the positive environmental impacts, the greening of the economy in itself can be an effective strategy for economic growth and job creation (OECD, 2017[57]). China, for example, has recognised the enormous potential of the renewable energy market and aims to be a leader in the field. Importantly however, renewable energy is mostly focused on electricity, which constitutes a small (less than 20%) share of global energy consumption. There is large room for growth in renewable energy in the heat and transport sectors (IEA, 2018[56]).

Development strategies also need to include measures to prepare countries for the effects of a changing climate. The effects will be wide-ranging, touching on water security and water hazards (e.g. flood protection), infrastructure (e.g. risks to coastal infrastructure), public health (e.g. changing patterns of infectious diseases), agriculture (e.g. impacts on crop yields), and energy security, amongst others.

Given the inherent uncertainty around climate impacts, adaptation planning needs to be flexible and follow an iterative risk management approach (OECD, 2015[58]). Development strategies need to plan for a range of possible outcomes rather than one most likely projection. They also need to draw on knowledge about the risks from climate change based on national assessments.

Demographic challenges differ across regions

Generally, Europe and some developing countries such as Brazil, China, Russia and Viet Nam are projected to have decreasing populations. Conversely, most countries in Africa, particularly sub-Saharan Africa, will face rapid population increases. Asia's annual population growth has been growing below the world average since 2000, stands at 1.0% in 2015 and is projected to be negative by 2060. By contrast, Africa's population growth is expected to grow much above the world average through 2100.

Population growth and decline both bring challenges. Countries with shrinking populations will face fiscal pressures from an increasing old age dependency burden, healthcare costs and slowing growth. Increased labour force participation of women, higher retirement ages and greater use of automation may ease them. Those with growing populations could receive a dividend of lower dependency burdens and higher growth.

Countries with a growing population will face special challenges, including how to leverage the demographic potential, and deal with rapid urbanisation and migration.

Countries will not benefit from the demographic dividend unless they can provide education and productive employment for growing labour forces. Some countries with rapidly growing populations may reduce population growth significantly. They may even achieve a demographic transition, with growth falling to less than the replacement rate by 2030. However, the number of persons already born will still swell labour force growth. This would put strong pressure on the labour market and social stability.

Rapid urbanisation also poses multiple challenges and opportunities, including:

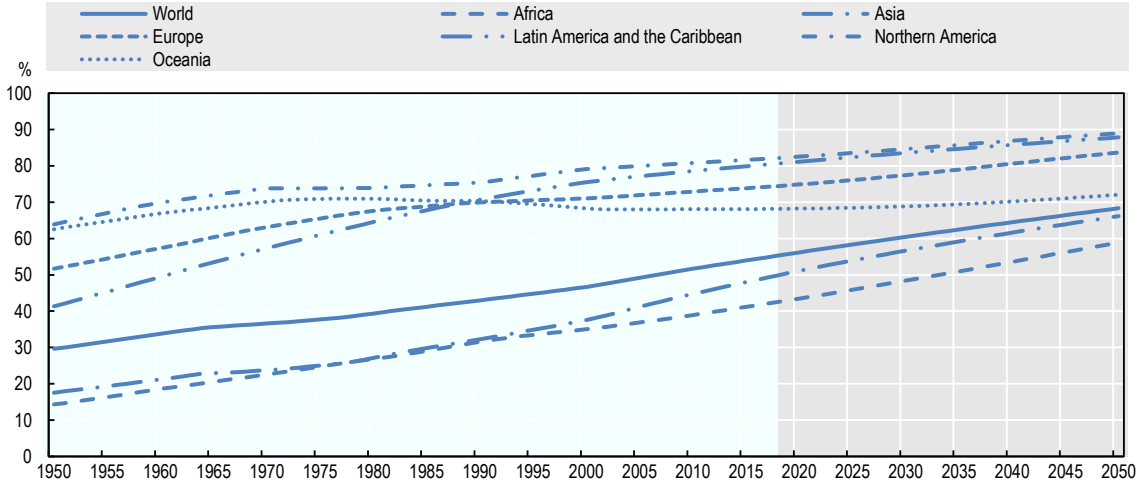
- incorporating and providing services to millions of new entrants
- planning urbanisation with climate change adaptation
- increasing attention to energy efficiency in terms of location of residential and work areas, mass transportation and green buildings
- developing viable intermediate cities to absorb labour leaving agriculture

- addressing challenges of social cohesion and migration.

World urbanisation rates vary widely across regions (Figure 5.3). These rates increased from 30% to 50% over 1930-2008. They are projected to reach 60% by 2050. However, the projected rate of increase will be lower for North America, Oceania and Europe, which have been mostly urban since 1950. Asia and Africa, which were less than 20% urban in 1950, are expected to urbanise rapidly through 2050.

Figure 5.3. Urbanisation will constantly increase across regions

Share of population living in urban areas, by region (1950-2050)



Note: Projections start in 2018.
Sources: World Urbanization Prospects 2018 Database, UN (2017[30]), *World population prospects: The 2017 revision, key findings and advance tables*, https://population.un.org/wpp/Publications/Files/WPP2017_KeyFindings.pdf (accessed in July 2018).

StatLink https://doi.org/10.1787/888933857993

The population growth challenge is most acute in Africa. Like some Asian and Latin American countries, Africa could tap into its demographic dividend to support and accelerate economic growth and development. The population in Africa is expected to more than double between 2015 and 2063. Creating enough productive employment for new entrants to the labour market is one of the biggest challenges for the continent. While many countries and regions have experienced rapid population growth as they pass through the demographic transition, the scale of population increase in absolute numbers in Africa is unprecedented.

Global governance is becoming more complex and fragmented

Since the end of the Second World War, a global architecture has been set up to govern relationships amongst countries. This has included the UN system and its specialised agencies to deal with security and many global issues. The International Monetary Fund was created to address the balance of payments crisis. The WTO was formed to deal with trade issues. And the World Bank and various regional development banks were established to provide development finance and advice. Despite the Cold War that lasted until the fragmentation of the Soviet Union in 1991 and various wars involving specific countries, a major global war has not occurred since

1945. In addition, the global architecture for trade and investment has been generally open. It has supported the rapid growth of trade that benefited the world economy and helped many developing countries reduce their poverty.

More recently there have been signs of growing dissatisfaction with multilateralism (OECD, 2018[59]). Complaints have included the slow pace of response to emerging issues (e.g. the refugee crises), a lack of effectiveness in ensuring that all parties play by the rules, a mismatch between countries' weight in the global economy and their voice in multilateral processes, and more broadly a perception that the benefits of globalisation have not been widely shared.

In parallel, China and other large emerging economies have created multilateral institutions that supplement existing global governance arrangements. For example, on the economic and aid front, China founded the New Development Bank with the BRICS (Brazil, Russia, India, China and South Africa), as well as the Asian Infrastructure Investment Bank.

These dynamics pose challenges and opportunities for countries when designing development strategies. On the one hand, strategies must astutely position countries in an increasingly complex and fragmented global governance architecture. On the other hand, the greater diversity of development finance institutions, for example, increases access countries have to international finance and options for development co-operation.

Table 5.3 summarises the implications of all these different changes on development strategies. Strategies must be crafted to the specifics of country characteristics, institutions and capabilities.

Table 5.3. Implications of changes for development strategies

Change	Implication for development strategies
Acceleration of change in technology, economy, society.	Build capacity to respond more quickly. This implies need for greater capability in government and business, which includes more education and training, and institutions supporting flexibility.
Increase in uncertainty.	Build more flexibility into strategies, which implies more global scanning, monitoring, assessment and adjustment.
Different context for growth of developing countries - pre-emption of labour-intensive manufactured export strategies because of dominance of China and of labour-saving technological change - stronger rules of the global trading system	Find new growth strategies, taking advantage of new technologies: • improve productivity of agriculture, including subsistence agricultures since many people will continue to be rural • develop agro industry • develop rural industry • develop rural services • continue to develop manufacturing in products that can be competitive • develop service sector, including by using digital technologies. • Develop non-traded sector, including water, sanitation, health, education, physical and digital infrastructure, housing, business and government sector.
Rapid development and dissemination of new disruptive technologies.	Pay more attention to technology and develop greater capacity to take advantage of existing and new technologies. This requires more investment in technical skills through both formal education and lifelong learning. It also requires a more effective national innovation systems, as well as greater support for entrepreneurship and for the start-up of new technology-based companies.
Pervasiveness of digital.	Invest more in digital infrastructure, skills and digital capabilities in government and business.
Fall in social cohesion, increasing inequality.	Incorporate explicit focus on increasing cohesion, reducing inequality and increasing social protection.

More pronounced population asymmetries, declining vs. growing populations.	Address explicitly the implications of population dynamics Declining: increase labour force participation, especially women; increase retirement age, increase immigration and automation. Growing: provide health, education and skills; provide productive jobs to youth bulge.
Rapid urbanisation without productive jobs.	Improve urban planning to make it more energy efficient, develop intermediary cities, provide more productive jobs; improve the efficient delivery of services such as water, sanitation, sewage, etc.
Risk of significant negative effect of climate change if more is not done globally to reduce greenhouse gases.	Include explicit environmental goals into strategy in terms of environmental conservation and green growth. In addition, given insufficient mitigation of climate change, developing countries need to adapt more and take defensive action. This could include moving populations away from low-lying areas near the sea or prone to flooding or droughts; or developing more weather-resistant agriculture, infrastructure, etc.
Shifting global governance arrangements	Pay attention to changing geopolitics and think how to position country for changing global alliances and implications for trade strategies, energy, commodity prices, international finance, etc.

Current national development strategies may not be future proof

This section presents an analysis of a nearly 40 development plans from developing countries (see Annex Table 5.A.1). While the sample is not exhaustive, it includes countries from across the developing world that show interesting regional differences.

Plans for economic growth focus on diversification, but few have comprehensive strategies for technological upgrading

While nearly all plans emphasise the aim of economic growth, 75% mention the importance of diversifying their economies and almost 60% focus on the need to move up the value chain. Strategies to achieve these goals include expanding physical infrastructure (80%), but only slightly more than half include the expansion of and access to digital infrastructure.

Attracting foreign direct investment for technology is on the agenda of 66% of the plans. Yet planned interaction with the private sector remains weak in under 40% of plans. Only 40% seek to increase domestic savings, and less than 25% mention improving government finances.

Nearly all mention the importance of improving innovation, but only 60% plan to increase R&D. Roughly 66% of plans emphasise the upgrading of higher education and the improvement of vocational training. However, less than 50% mention promoting lifelong learning, strengthening the curriculum or concentrating more on science, technology, engineering and mathematics.

Most plans recognise the need to look beyond economic growth

Encouragingly, most plans focus on inclusiveness and environmental sustainability in addition to economic growth, although few develop how they will achieve these specific goals. Social and environmental issues rank high in roughly three-quarters of development plans. Social issues targeted fostering inclusive growth and reducing inequality, with less emphasis on strengthening social protection.

The focus on the environment is mostly on environmental protection, disaster management and the energy transition. Less than half of plans have explicit objectives for reducing greenhouse gas emissions. A major exception is China, which does focus on green growth and has detailed plans for reducing CO_2 and developing non-carbon energy resources.

The historical analysis in Chapter 3 shows that inclusiveness and environmental sustainability are important elements for development strategies. It argues that economic growth alone does not necessarily lead to good performance on key dimensions of well-being. Scope exists for policy to improve performance on social and environmental outcomes, even delinked from economic growth.

Short time frames and a lack of strategic foresight may hamper resilience

Few plans seem aware of mega trends and the associated challenges and opportunities for development, or consider the uncertainty of how these trends may evolve. Yet, countries should take this uncertainty into account in developing their plans. Their economies need greater flexibility and resilience to adjust to rapidly changing conditions.

On average, plans are expected to be implemented within seven years. The planning horizon tends to be longer in East Asia and sub-Saharan Africa than in Latin America.

In addition to a short timeframe, the plans tend to lack contingencies for significant changes. These changes could range from global economic conditions (such as a financial crisis), changing geopolitical conditions (such as trade wars) or disruptive technology. Only 15% show awareness of the need to prepare their economies for significant changes on technology or digitalisation, as well as the geopolitical environment. The major exception is China. It has ambitious plans to lead in ten major new disruptive technology areas, as well as to improve the whole performance of the economy through innovation.

Many plans seek to improve governance

Nearly 60% of the plans mention the need to improve government capability. This also includes addressing corruption, lack of government accountability and overall transparency. This contrasts with targets to improve the rule of law or reduce bureaucracy and red tape in less than 50% of plans.

Finally, the gap is large between planning and implementation. Only five of the plans assessed discuss any explicit implementation strategy and only two discuss the budget necessary to execute such strategies.

Turning challenges into opportunity

The future tailwinds of a shifting economic geography will likely keep the process gradually moving forward. In so doing, it will positively support implementation of development plans through favourable demography, continued urbanisation, lower commodity prices, rising wages in China and the passing of the torch to India, as argued in Chapter 2.

India has taken the lead over China in terms of GDP growth (but not per capita). In the future, the transformation of economic geographymay well benefit from a twin-turbo, China and India. This would be good news for convergence and the world economy. India is forecast to contribute almost 10% to global growth, which would exceed the European Union (EU) contribution. The twin-turbo support to the world economy,

however, remains subject to the continuing existence of an open trade system and multilateral co-operation.

Three factors will contribute to higher savings and investment in Asia: a favourable demography outside China, lower dependency ratios and a rising labour force that is employed, even informally. Longer schooling and better education, particularly for girls, will reinforce these favourable trends. Rising urbanisation in dual economies will help raise productivity because of people and talent moving from low-productive occupations to higher productivity ones, as has happened in China.

Lower commodity prices have been providing significant headwinds to commodity exporters in Africa and Latin America in the 2010s. The rebalancing of China also provides tailwinds, albeit gradually, to net commodity importers. The effect of China's rebalancing on low-income countries should be positive: countries best placed to export consumer goods to China, including agricultural products, will benefit most from China's more balanced growth.

To the extent that rising wages in China will lead to higher unit labour costs, China's external competitiveness in low-end manufactures will be eroded. The relocation of low-end manufacturing from China should reinforce positive income effects of lower commodity prices in oil-importing countries. This suggests a shift away from a traditional focus on securing natural resources towards opportunities for a manufacturing hub, and ultimately more democracy and better governance.

Few of the development plans reviewed provide details about implementation

Countries have all sorts of plans, even long-term ones (see Annex Table 5.A.1). However, most plans are not implemented anywhere near what is outlined in them. In fact, the term implementation was observed by Albert Hirschman as understating the complexity of the task, which is highly susceptible to initial ignorance and uncertainty, and embodies in reality a steep learning curve across varied domains (Hirschman, 1967[60]).

Four key reasons explain the implementation gap: a lack of capacity, a lack of financial means, weak capacity for political economy reform and a lack of contingency planning.

Governments often lack the capacity to implement their plans

First, and perhaps the most common reason for the implementation gap, is governments' lack of capacity. Too often much effort is allocated to developing and announcing the plans, and not enough to implementing them. Key questions need to be addressed when designing development plans. What will government do? What will the private sector do? What is to entice the private sector to do what is wanted (e.g. create jobs, upgrade technology, etc.). Where are the resources coming from? What policies and regulations need to be changed or improved? What special programmes are needed? Who will carry them out?

These obstacles suggest that countries must increase the capacity of their governments through training, better transparency and accountability of their civil servants. One way to do this is through formal study locally or at institutions abroad. In addition, many kinds of mid-career specialised training exist, including through blended programmes of face-to-face interaction and Internet-based education. Furthermore, countries can draw on twinning arrangements with specialists from other countries and also hire experts to help implement programmes.

Governments often lack the financial means to implement their plans

Financial considerations are often a major constraint, but one that can be overcome. Key questions related to financial capacity include what is available from the government budget, whether government revenues are to be increased through tax collection and whether the government will be able to issue sufficient domestic foreign debt.

What are the adequate and available sources of financing? Can the government obtain additional foreign exchange by expanding exports, by attracting more remittances or increased foreign direct investment or portfolio investment, by getting international loans or by issuing foreign bonds? For low-income countries, can they get increased overseas development assistance?

The issue of governmental capacity, noted above, is related to the issue of financing, as training public servants needs to be financed. Some of the training can be financed through bilateral assistance or through technical assistance programmes from multilateral development banks, as well as from other development institutions. Large private firms with an interest in helping develop local expertise could also provide some financing. In China, for example, Motorola invested millions to help train managers for 1 000 state-owned enterprises. Avon also invested millions for key Chinese officials from the central and state governments and companies to take extensive study tours in the United States.

Governments do not experiment enough to overcome the political economy of reform

The political economy of reform is largely driven by the institutional nature of the country (North (1994[61]); Acemoglu and Robinson (2012[62])). However, there is little guidance on what determines institutional change to induce more favourable development outcomes. According to North (1994[61]), history matters. If a country does not have the right history, it will not become a developed country. This view is not helpful for policy makers or foreign aid agencies trying to stimulate development.

Pritchett, Sen and Werker (2017[63]) also acknowledge that institutions matter. Their political economy framework analyses what leads to growth booms and busts in developing countries as opposed to the steadier but slow growth of developed countries. Essentially, they argue that growth and structural transformation result from the interaction between "the balance and distribution of power between contending social groups and social classes on which any state is based" and the structure of economic opportunities in the economy. Such a framework posits that several factors affect development. These include the nature of the political bargain made between the ruling elites and the extent to which the ruling elite seeks legitimacy through economic progress. Equally important is how progress affects economic and political interests and how these interests, in turn, shape the political bargain. This gets at the essence of state power.

Addressing these challenges requires more explicit attention to the power of different stakeholders and how to create enough support to implement new policies and reforms. Andrews, Pritchett and Woolcock (2017[63]) outline a strategy they call problem-driven iterative adaptation (PDIA). It consists of "proposing strategies that begin with generating locally nominated and prioritised problems, and working iteratively to identify customised 'best fit' responses. Ang (2016[64]) goes even further based on her analysis of how China escaped the poverty trap. She argues the debate of whether good institutions lead to economic growth or vice versa is misconceived. She argues that "neither

economic growth nor good governance come first in development." She contends it is unreasonable to expect that poor countries can build modern effective institutions as argued by the proponents of the good governance approach to development. Instead, state and markets co-evolve. "States and markets interact and adapt to each other, changing mutually over time". The key is to craft "environments that facilitate improvisation among the relevant players"

Shocks and disruptions can derail implementation plans without contingency plans

Successful implementation also requires contingency planning for shocks and disruptions, such as natural disasters as well as internal and external conflicts. Other factors include changing international circumstances such as a rise in global interest rates; a global financial crisis (or contagion from a crisis with neighbours); trade conditions (such as changes in commodity prices, increased efficiency of competitors or increased protectionism in key export markets); geopolitics; or disruptive technology. Dealing with shocks and disruptions requires building more resilience and flexibility in the economy at both macro and structural levels.

At the macro level, this means creating buffers in terms of fiscal space for increasing government spending, managing foreign exchange reserves and access to emergency lines of credit. This can offset any short-term changes in balance of trade or spikes in servicing international debt obligation.

At the structural level, it means increasing the flexibility of the economy to react quickly by improving the institutional regime, by increasing financial market development, by improving labour market efficiency, by investing in education and skills, by strengthening social protection, and by promoting innovation and infrastructure.

Development strategies are already adapting to a new global context

The review of development plans plus the insights from the preceding three chapters suggests that countries are indeed increasingly crafting new national development strategies.

Social protection coverage is no longer limited to the urban middle-class

While the transformation of economic geography has improved the economic prospects in developing countries, the number of people living with inadequate access to social protection and health services keeps rising. Less than half the world's population has access to any social protection (ILO, 2017[65]), with coverage particularly low in Africa and Asia. At least half of the world's population also do not have access to essential health services, and each year, large numbers of households are being pushed into poverty because they must pay for health care out of their own pockets (WHO, World Bank, 2017[66]). Much of these facts are coming to light as countries grow richer, and citizens demand more from their governments, which has pushed governments to explore novel ways of reaching hard to reach segments of the population, and roll out programmes while facing severe budgetary constraints.

The number of developing countries implementing social protection programmes in recent decades has significantly increased. This expansion has been driven by a realisation that economic growth alone is not sufficient to eliminate poverty and that a high proportion of individuals who emerge from poverty remain highly vulnerable to

falling back. Spending on social protection can also mitigate increases in inequality associated with the structure of a country's economic development.

Moreover, the evidence is strong that the impact of social protection extends beyond poverty alleviation; investment in social protection can generate improvements in beneficiaries' human capital that might enhance countries' long-term growth potential. Innovations in social assistance by countries such as Mexico and Brazil have made a robust case for the broader effectiveness of cash transfers, especially those targeting children; similar programmes are now being implemented throughout Africa and Asia. Often these schemes operate at large scale: India's Mahatma Ghandi Rural Employment Guarantee Scheme provides support to more than 50 million households while approximately one third of South Africans receive a social grant.

However, gaps are enormous in coverage globally, while expenditure varies significantly between countries. Resource constraints combine with administrative challenges to prevent social assistance programmes from reaching all those in poverty, while pervasive informality in many developing countries means most workers are excluded from social insurance arrangements. Nonetheless, China has shown remarkable progress in expanding coverage of its contributory pension programme by providing low-cost and subsidised contributions for rural workers. Meanwhile, Indonesia is on track to achieve universal health coverage by subsidising the health insurance contributions of the poor population.

Migration is viewed as part of a development strategy

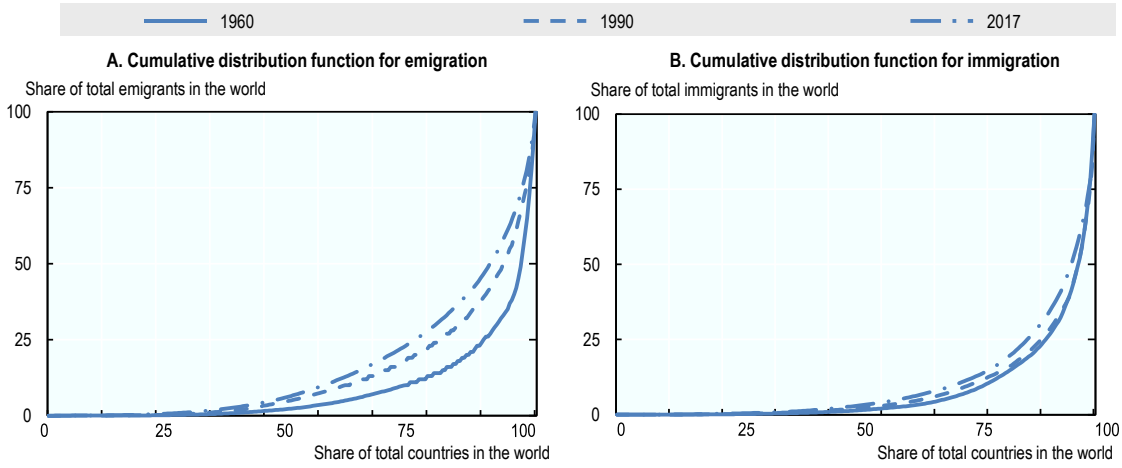
The international development community has, for the first time, included migration into the international development agenda, through the 2015 Addis Ababa Action Agenda, the 2030 Agenda for Sustainable Development and two Global Compacts for Migration and Refugees in 2018. These policy instruments acknowledge the positive contribution of migrants to economic growth and sustainable development, both in countries of origin and destination.

The number of migrants worldwide has increased nearly 70% between 1990 and 2017 from an estimated 153 million to 258 million (UN, 2017[30]). However, such numbers hide that the transformation of economic geography has increased the number of countries participating in global mobility. In the context of this development, the share of countries participating in emigration and immigration has increased for both metrics. However, this has been more the case for emigration than for immigration (Figure 5.4). This is because the gap between OECD and non-OECD countries, particularly on well-being outcomes remains large.

Immigration continues to be dominated by a select few richer countries. Migration to the OECD, in particular, is increasing faster than between any other group of countries (OECD, 2016[67]). Nevertheless, several developing countries have become local magnets for immigration by providing jobs in the wake of their economic growth and better living standards. These include Argentina, Costa Rica, Côte d'Ivoire, Ghana, South Africa and Thailand. A recent report confirms that immigrants generally have a positive, yet limited, impact on several developing countries (OECD/ILO, 2018[68]). However, demographic trends, unequal development patterns, ease of travel, hard-line migration policies in the North and rising incomes in the South will play an increasingly important role. As a result, immigration will become a phenomenon in several more developing countries. However, migrant integration continues to be overlooked in migration and development strategies (Gagnon and Khoudour-Castéras (2011[69]); OECD (2016[67])).

Figure 5.4. Economic growth has led to an increasing share of countries participating as countries of emigration, and less as countries of immigration

Cumulative distribution functions for emigration (left, Panel A) and immigration (right, Panel B)



Sources: Authors' calculations based on the Bilateral Migration Matrix 2018, World Bank (2018[70]), *Bilateral Migration Matrix 2018 (database)*, http://www.knomad.org/sites/default/files/2018-04/bilateralmigrationmatrix20170_Apr2018.xlsx; and World Bank (2018[71]), *Global Bilateral Migration Database*, http://databank.worldbank.org/data/reports.aspx?source=global-bilateral-migration (accessed in June 2018).

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A rise in the importance of global mobility should not be surprising in the context of a transforming economic geography. Migration requires a minimum level of income to cover the costs of moving. Higher income levels thus help relieve the financial constraints associated with migration and therefore, when GDP per capita increases in a poor country, the impact on emigration tends to be positive – for a certain time. When income levels reach a higher level, migrating abroad becomes less attractive and the emigration rate tends to decrease progressively.

A remarkable strategic shift has occurred however over the last 20 years with migration. Migration was definitely part of the early industrialisers' development, both as senders and receivers. However, policy specifically leveraging remittances, return migration and diasporic involvement were scarce, and never part of an overarching national strategy.

Never in history have countries turned to migration for development objectives with the same breadth and ingenuity as today. In countries of origin, emigration relieves pressures on the labour market. Meanwhile, remittances, return migration and diasporic engagement spur investment in financial and human capital.

Public policies play an important role, and several countries have begun linking specific development targets using migration. However, non-migration policies in both countries of origin and destination, such as those for education, the labour market, agriculture and social protection, also matter (OECD, 2017[72]).

Linking migration with development is thus an issue of policy coherence, co-ordination and strategy. In the past two years alone, countries such as Albania (National Strategy on Diaspora and Migration, 2018), Armenia (Migration Concept Action Plan, 2017), Belize (National Migration and Development Policy, in discussion), Burkina Faso (National

Migration Strategy, 2017), Georgia (Migration Strategy, 2016), Mauritius (Migration and Development Policy, 2018) and South Africa (White Paper on International Migration, 2017) have all drafted and/or begun putting into action strategies that link migration and national development in a variety of ways. In the Philippines, the government is considering creating a ministry of migration and development.

Territorial management is no longer just about rural and urban regions

Development strategies of the past tended to focus on the rural or urban nature of a region. However, emerging strategies reflect the reality that geography is a continuum, with a variety of endowments and challenges faced across a country's territory. Intermediary cities for instance, those with less than one million people, play a key role in the urbanisation dynamics of low-income countries. They account for the highest share of urban population worldwide.

For instance, Asian intermediary cities with less than 500 000 accounted for 47 % of total urban population in 2015. They are also the fastest growing agglomerations, especially in regions like Africa, where intermediary cities with less than 300 000 in population accounted for 58% of urban population growth between 2000 and 2010. This growth process does not follow the classic rural-urban transition; instead in regions like Latin America, intermediary cities are hosting an increasing number of people and firms moving from capital and large cities. Intermediary cities are expected to continue growing, and it is estimated that between 2010 and 2030, intermediary cities will account for almost 40% of global urban populations (AfDB, OECD and UNDP (2017[73]); UN-Habitat and UNESCAP (2015[74])).

Intermediary cities are key in providing markets for rural products, as well as functioning as transit hubs to larger metropolitan areas. Further, they facilitate access to non-agricultural employment through seasonal work, therefore enhancing circular rural-urban migration; they process and distribute agricultural goods provided by rural areas, and absorb their skilled and unskilled labour (Berdegué and Proctor, 2014[75]). However, and despite their key roles, there is still a considerable knowledge gap concerning the mechanisms through which they contribute to development. This is one the main reasons why they are usually not considered as part of national development strategies. Further, there is a considerable gap in data availability when it comes to intermediary cities.

The underlying reasons for these knowledge and data gaps are numerous. First, there is a strong bias towards capital and large cities following their political power and the fact that they are equipped with better data and resources. Second, the common approach of national governments – as well as international organisations – is treating rural and urban areas in silos. Therefore, intermediary cities fall between the cracks of the rural and urban divide. This approach overlooks the central position of intermediary cities in the socioeconomic interaction between rural and urban areas, and on their potential for national economic transformation.

Intermediate cities are further challenged by a considerable financial gap. Local governments tend to have limited authority and capacity to mobilise resources and generate the revenues necessary for adequate public service delivery; this makes them highly dependent on financial transfers from central governments. For example, the size of local tax revenues as a proportion of total revenues across Asia, Latin America and Africa stand at 46%, 28% and 20% respectively (OECD/UCLG, 2016[76]). Across many African local governments, taxation rates are approximately estimated at 0.7% of

household revenues (AfDB, OECD and UNDP (2017[73]); UN-Habitat and UNESCAP (2015[74])).

Effective development and planning of intermediary cities is imperative for ensuring long-term and sustainable development of low-income countries. This means establishing effective financing mechanisms for investing in public services and for ensuring that intermediary cities are well integrated into the wider urban system. Development plans should tap into the large potential of intermediary cities to function as locations for the development of agricultural value chains, through the establishment of agricultural goods processing systems, and to provide backward linkages for small-scale manufacturing industries. In parallel, intermediary cities are located in strategic locations for providing goods, services and infrastructure for surrounding rural populations.

The informal economy is now being relied upon as a productive part of society

The prevalence and persistence of the informal economy has always been a major development challenge. Informal firms do not contribute to the public purse and do not conform to rules and regulations, which limits the reach of the State. Moreover, informal workers do not receive social protection and remain vulnerable to violations of their labour rights. While policies should ultimately aim to reduce the level of informal employment in an economy, there is a growing recognition that informality consists of several tiers of productive workers and firms, many of which are more productive than those in the formal sector.

According to the latest comparable data produced by the ILO (2018[77]), 61% of global employment is informal employment, equating to more than two billion people worldwide. The share of employment that is informal is very high amongst low-income economies, where it concerns more than three quarters of the population. It is much lower amongst high-income economies, where it averages 18% according to the ILO. Informality stands between the two extremes amongst middle-income economies, with very large differences even for similar levels of income. Almost half of Panamanian workers is informally employed, while the corresponding share in Croatia (which has a similar level of GDP per capita) is with 13% considerably lower (OECD, 2018[78]).

The informal economy offers livelihoods to many. While the informal sector was once envisioned as a nuisance to an economy, countries today are finding ways to ensure that informal workers have some form of social protection and that firms have access to domestic productive value chains and more adequate incentives to register and declare to the State (Jütting and de Laiglesia, 2009[79]).

Novel forms of development finance will be key to solving future challenges

During the last decade, development thinking in a much broader context has transcended the circles of Western aid agencies as well as international or academic institutions. International co-operation has become a more global effort, embracing private philanthropy, governments and other stakeholders. While there has been much progress on development, efforts have focused on the “easier things”. Large-scale famines, pestilence and plagues, long the scourge of human existence, have mostly been consigned to history (Andrews, Pritchett and Woolcock, 2017[80]). Even interstate wars have become scarcer.

Many countries remain poor with limited financial capacity. As a result, designing and implementing successful strategies will be even more challenging given the magnitude of

the tasks ahead. More international development assistance will be required, but what kind will be most effective? Some circles think while much effort has been spent on poverty alleviation, not enough has been spent on other critical issues for development: jobs, inclusiveness and the environment, for instance (OECD (2016[81]); Kharas and Rogerson (2017[82])). They argue that more official development assistance (ODA) should be directed to long-term development projects, such as infrastructure, utilities, agriculture, industry, and health and education services, rather than focusing mostly on short-term emergency responses, such as food assistance and reconstruction (OECD, 2016[81]). However, humanitarian relief is likely to grow as poverty and its associated ills are concentrated in failed states (Kharas and Rogerson (2017[82]); OECD (2016[81])).

Moreover, three additional trends emerge from the current development finance agenda (Kharas and Rogerson (2017[82])). First, there is the "populist road" towards "my country first" and against international institutions, trade and migration. Second, the greater engagement taken by the business community in development is an encouraging sign for developing economies. Third, a rising, more active and wealthy China is engaged in international development, and operating with different rules of engagement.

China's growing footprint in global, trade, finance, direct investment, lending and development assistance does not have the same conditionality or link to governance issues as that typically of Western countries. This means that traditional OECD Development Assistance Committee (DAC) development assistance is facing strong competition. It needs to decide where to collaborate and where to compete with China. In fact, an OECD DAC high level Panel report recommended that the DAC should be more inclusive of and intensify dialogue with other development partners (OECD, 2017[83]).

The size, scope and reach of China's Belt and Road Initiative (BRI) is a sign of the rise of Chinese international financial engagement. Using conservative estimates, the BRI's total investment of USD 1 000 000 million surmounts every other comparable development programme in recent history in size, including the Marshall Plan. The Marshall Plan, in comparison, amounted to about USD 14 000 million between 1948 and 1951, which equates to about USD 142 000 million in 2018 (Table 5.4). The Marshall Plan was largely (90%) a handout by the US government (The Economist, 2018[84]). The BRI, in contrast, is financed by a combination of direct infrastructure investments from the Chinese government as well as by loans from predominantly big Chinese commercial and policy banks (Deloitte, 2018[85]).

By leveraging investments, trade and regional integration, the Marshall Plan was able to support Europe's post-war recovery. Once its mission was filled, the Marshall Plan dropped its financial objective, and became a hub for international co-operation and knowledge-sharing, eventually under the umbrella of the OECD. Similarly, the significance of the BRI may go beyond its financial firepower. Ultimately, its greatest impact may rest in the transformative capability offered to developing countries through better infrastructure and productivity gains. An example is through technology transfer. China, for instance, has rolled out trials on 5G network technology, the fifth generation of cellular mobile communications, by partnering with telecom operators around the world. Since 2015, it has spent USD 57 billion more than the United States, the next highest spending country, in wireless infrastructure and has pledged to invest another USD 400 billion in 5G technology until 2020 (Deloitte, 2018[86]). Indeed, China is expected to become the largest 5G market globally by 2022, and many of its partners are located in developing countries such as Bangladesh and Pakistan.

Table 5.4. The value of BRI investments are larger than any other comparable programme in recent history

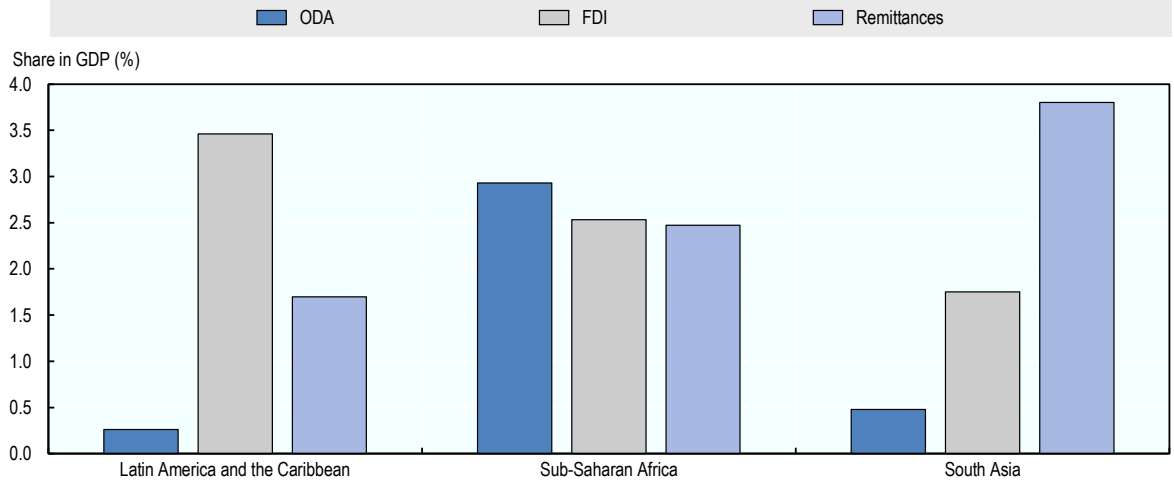
Programmes	2018 value in USD million
Belt and Road Initiative (conservative estimates) (2013-2049)	1 000 000
U.S. Recovery and Reinvestment Act of 2009 (2009-2019)	986 640
New Deal (1933-1938)	808 303
Alliance for Progress (1962-1967)	168 244
Marshall Plan (1948-1952)	142 201
World Bank Group lending (in 2017)	59 000
The Global Fund to Fight AIDS, TBC and Malaria (2002-17)	33 800
Afghanistan Reconstruction Fund (in 2017)	10 173
UN Expanded Programme for Technical Assistance (1949-1970)	4 764
Compact for Africa (in 2017)	3 786

Note: All 2018 values are calculated based on the average US consumer price indices per calendar year as provided by the US Bureau of Labor Statistics.

The relative size of different sources of development finance varies by region (Figure 5.5). For instance, in Latin America and the Caribbean, foreign direct investment (FDI) was the major external financial source to the region in 2016; relative to GDP, it consisted of nearly 3.5%, while ODA consisted of around 0.25%. This is in sharp contrast to sub-Saharan Africa, where ODA was equivalent to nearly 3% of GDP, and FDI and remittances, nearly 2.5%. In South Asia, remittances are the largest relative source, where migrants sent back amounts equivalent to nearly 4% of GDP, while ODA was less than 1% and FDI less than 2%. Such realities must reflect the strategies and development responses for each region. For instance, policies leveraging remittances can play a relatively larger role in South Asia.

Figure 5.5. The relative share of different forms of external finance varies by region

Share of financial inflows as a share of GDP, by type of flow and region (2016)



Sources: Authors' calculations based on the World Development Indicators Database (Net official development assistance received (current USD); Foreign direct investment, net inflows (BoP, current USD); Personal remittances, received (curr. USD); GDP (curr. USD)), World Bank (2018[6]) (accessed in May 2018).

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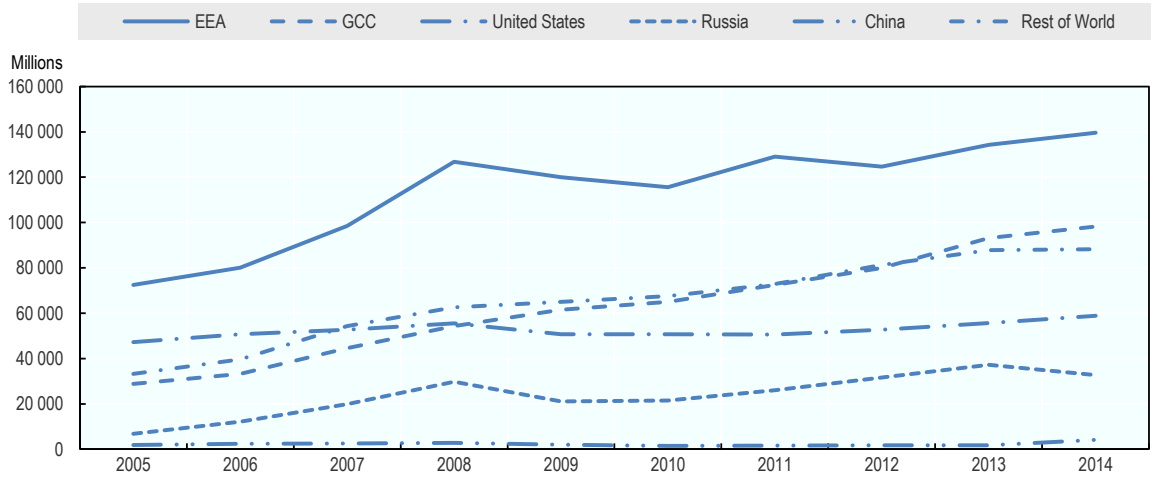
Remittances particularly have been highlighted as promising sources for new forms of development finance. As seen earlier, migration is on the rise and remittances, as personal income transfers, are an effective means to reduce poverty. China, however, is unlikely to play a major role in remittances. Data on remittances from China are only available up until 2014. However, given the wide gap between the biggest sources of remittance flows and China, such gaps may have remained in 2018. In fact, the numbers suggest that the major source of remittances has been the European Economic Area and the Gulf Cooperation Council (Figure 5.6).

Figure 5.6. China is unlikely to play a major role as a source of remittances in the short to medium term

Migrant remittance flows over time, by source region (in millions, 2005-14)



Note: EEA stands for the countries of the European Economic Area, GCC for countries of the Gulf Cooperation Council (Saudi Arabia, Kuwait, United Arab Emirates, Qatar, Bahrain, Oman).
Source: Migration and Remittances Data (Annual remittances data, outflows), World Bank (2018[87]); *Annual remittances data (database)*, http://www.knomad.org/sites/default/files/2018-04/Remittancedataoutflows%20%28Apr.2018%29.xls (accessed in August 2018).

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China's outside-of-the-box past, present and future development strategies

The essence of China's past development strategy has been slow and pragmatic reform in moving from a planned communist economy to a socialist economy with Chinese characteristics (Ang (2016[64]); Naughton (2007[88])). This strategy was aptly summarised in the famous phrase coined by Deng Xiaoping, the architect of China's transition after Mao Zedong's chaotic 27-year rule, "crossing the river by feeling the stones." This strategy stands in sharp contrast to the advice of Western economists who urged Russia to move to the market with a big bang by reforming the whole economic system simultaneously. Key elements of China's pragmatic approach have been extensive experimentation, acquisition of foreign technology and an implicit social contract with its citizens.

However, as China successfully focused on rapid economic growth, inequality has increased and the environment has suffered. Therefore, starting with its 12th Five-Year

Plan (2011-15), China shifted visibly from high growth to the quality, balance and sustainability of that growth. Some key targets of this plan included shifting an emphasis from investment to consumption, and from exports to the domestic market, developing poorer rural and inland areas, reducing income inequality, a continuing emphasis on environment sustainability as well its reform to an open economy.

This plan successfully began rebalancing the Chinese economy towards more sustainable and inclusive growth. However, China is reaching the technological frontier in many areas. In response, the 13th Five-Year Plan (2016-20) has added new objectives, including an emphasis on innovation, greening the economy, moving from a one-child to a two-child policy and greater participation in international development.

Thus, China is becoming an increasingly important player in the international economy as well as an alternative development model, working alongside traditional DAC donors.

Protecting global public goods is becoming increasingly important for all countries

What happens at the global level significantly affects development prospects for developing countries. Low-lying island nations, for example, run the risk of being submerged by water, due to insufficient global action on climate change. Similarly, trade protectionism could have significant repercussions on third-party countries, affecting their own exports and imports. In fact, the slowdown of trade liberalisation and the rise of protectionism are already impacting trade flows and international co-operation (Evenett and Fritz, 2015[89]). Support for globalisation has dropped considerably in some advanced countries and resulted in political backlash (Rodrik, 2018[90]).

A number of global public goods benefit the world and are worth preserving for greater overall global welfare, including trade of goods and services, global financial infrastructure, foreign direct investment, international migration and the flow of knowledge and ideas. It is also worth expanding global governance into other domains, including on security, the environment (and climate change) and public health (avoiding pandemics).

Preserving and even expanding global public goods requires investment, co-operation and a willingness to cede on narrow national objectives, however. Without such concessions, global outcomes will be worse for all nations, rich and poor. Without a more concerted effort to counterbalance certain negative trends, the global system could be further fragmented. Thus, an active embrace of globalisation and multilateralism not only fosters a developing nation's economic prosperity, but also can have a multiplying effect for societal well-being – an objective worth pursuing. Globalisation and enhanced trading opportunities through global demand spur economic wealth through income and employment in developing countries.

Changing the negative trend around the value of global governance requires a major public communications campaign. This is particularly true in some of the advanced developed countries where the leadership and substantial public opinion are turning against such global efforts.

Development strategies should be context specific, but based on a set of common principles

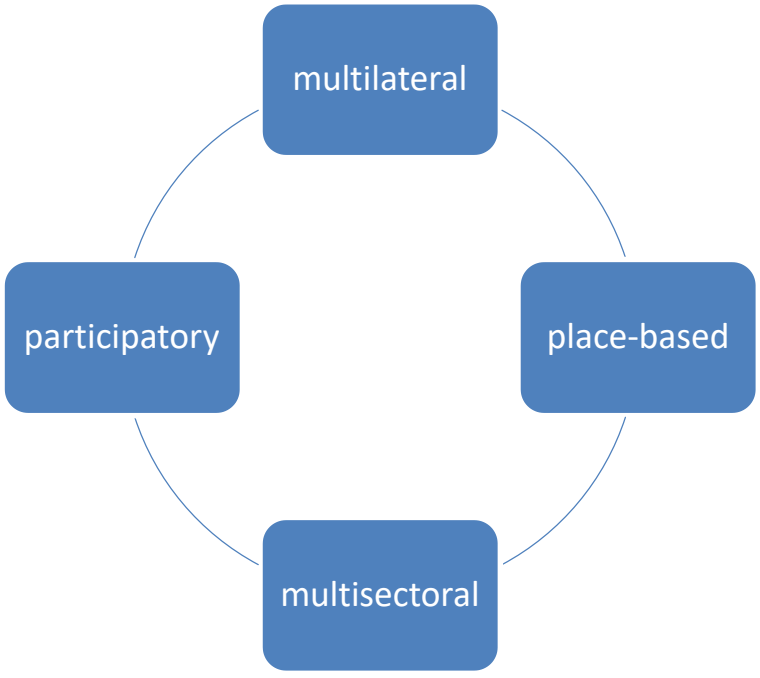
The rules of the game have changed. Development thinking today takes place in a much broader and institutional context. What was once an exclusive circle of Western aid

agencies, think tanks, academic institutions and international organisations, has now become a more global effort. It includes state and non-state actors and experts from the developing world. This expanded group has made available an increased amount of development data and information. It has made the discourse surrounding development topics not only more complex, but also more contested. Consensualisation of generated development knowledge has therefore assumed even greater importance (Turner (2001[91]); Berger and Esguerra, (2018[92])).

Today's global context also includes institutions like the WTO and the United Nations Climate Change Conference (and the Conference of the Parties). These provide new benefits and constraints within which countries need to find their path. It also occurs within new challenges with respect to, for example, automation, digitalisation and climate change. Whatever worked 100 years ago will at the very least need to be adapted towards new strategies and new forms of co-operation.

Perhaps a single global development paradigm cannot be generalised, but principles on which to create a positive path for countries can be deciphered. Good practice suggests that strategies should be multisectoral, participatory, location-specific and within the context of multilateralism (Figure 5.7).

Figure 5.7. Core elements of a development strategy



Strategies should be multisectoral

National development strategies need to be multisectoral to successfully respond to the multifaceted and cross-cutting challenges that countries face. In isolation, policies addressing sector-specific issues rarely bring expected benefits. Furthermore, rather than being a compilation of sectoral plans each developed in a silo, truly multi-sectoral strategies take into account the complementarities and interactions across policies, identify the sequencing of policies needed to remove constraints to development, and catalyse co-ordinated actions across different ministries and actors (Rodrik, 2009[93]).

For example, reducing informality may be one objective of a national development strategy. As informality is a cross-cutting phenomenon, the possible causes and implications of informality touch upon many different areas of economic and social policy. Recent policy experiences suggest that acting upon informality through one lever alone, be it tax policy, labour regulation, social protection or business regulation, can only achieve limited results. For this reason, a multi-sectoral approach to the challenge of informality offers promise of more effective public action.

International co-operation can support countries to take a multi-sectoral approach when designing their national development strategies. The OECD's Multi-dimensional Country Reviews are one such tool. The review's holistic approach asks whether the issues that cause constraints to progress in one sector are also issues elsewhere and whether those issues are manifestations of the underlying sources of weaknesses. The methodology is also designed to support co-ordination across several parts of government, as in practice different ministries and agencies may have little experience of working together to reach common goals, and co-ordination mechanisms may be lacking.

Strategies should be participatory

Strategies should be participatory to engage people from all levels of society in defining their own development paths. In a developing country context, the interest in participation re-emerged as a consequence of the highly centralised development strategies in the 1970s and 1980s, which created a widespread awareness among activists and non-governmental organisations (NGOs) that development imposed on countries and societies was disconnected from the needs of their populations (Mansuri and Rao, 2012[94]). Granting the population a greater say in decisions affecting their lives, a "bottom-up" instead of a "top-down" approach, resulted in a closer connection between policy makers and beneficiaries.

Participatory development (PD) in early industrialising economies resulted in better public services and greater accountability of local governments. In the United States, participation has encompassed national civil rights movements that aimed to transform the political process. In Germany and France, membership-based organisations such as trade unions have targeted the improvement of working conditions in certain industry sectors – reminiscent of craft guilds in the city states of medieval Europe (Wahl, 2018[95]).

There are examples of PD leading to better outcomes in developing countries as well. Following the Asian Financial Crisis, Thailand included community development into its Constitution in 1997. Emphasis has been put on the lowest community level, where close inter-personal ties exist and supporting networks can be tapped (Nuttavuthisit, Jindahra and Prasarnphanich, 2014[96]). In China, participatory approaches have also taken place at lower community levels since 1978, primarily in a consultative role through civil society organisations on policies implemented by regional governments (Caizhen, 2009[97]).

PD has also been adopted as a key policy tool for major donor agencies providing local communities with elements of direct control of their development. Community-driven development in China, which has been increasingly supported by the World Bank, has followed a 'learning-by-doing' approach and has made local communities collectively decide on how funds are used and what needs to be done to improve living standards (World Bank, 2012[98])

Strategies should be place-specific

Development strategies need to be place-specific, encompassing factors that go beyond the rural-urban divide in living environments. The complex development of regions, municipalities and even districts within cities is driven by a wide set of forces, affecting both the growth and gaps of well-being and income of their populations. These place-variant forces demand place-specific answers tailored to a location's context, its historically grown economic and social structures as well as cultural specificities that condition the choices and behaviour of individuals.

National and regional discrepancies across development determinants are often mirrored at lower levels. For instance, as there is not a single Mexico and a single region Chiapas, there has not been a single Ethiopia. Chiapas in Mexico is poorer than the rest of the country, yet its capital Tuxtla Gutierrez is about eight-times richer than its poorest municipalities. Accessibility to markets by farm households in Ethiopia varies within regions as much as within the entire country (Koo et al., 2016[99]).

Examples that highlight the importance of place-based policies thus come at different geographical levels and at various points in time. They all have in common, however, that each place is characterised by different know-how, productive capabilities, educational skills or infrastructure and institutional constraints. The varying factors make up the ecosystem in which individuals can deploy their social and physical capital in productive ways, absorb new knowledge and thereby improve their overall well-being (Hausmann, Pietrobelli and Santos, 2018[100]). Policy making needs to support the process of constructing fertile ecosystems by abolishing place-specific obstacles to development.

Strategies should result from multilateral co-operation

Development strategies need to be multilateral to allow countries to play an active role in global governance. Developing countries keep their voices heard when engaging on a multilateral basis, transforming the formation of individual country agendas into a proactive shaping of global policies. Embedding national development strategies within a multilateral framework also broadens the scope of domestic policies, helping them to keep abreast of developments beyond national borders and profit from policy arrangements set at supranational levels.

A multilateral perspective in national development strategies allows for international consensus and collective action that is required to provide global public goods and create a level playing field among countries. For instance, effectively combating illicit financial flows and tax evasion, a key component of domestic resource mobilisation in developing countries, can only be achieved by relying on international agreements of information exchange such as the OECD's Base Erosion and Profit Shifting (BEPS) initiative (OECD, 2013[101]). More direct levers to domestic development consist in the access to development finance through context-oriented funds or technical expertise from multilateral institutions.

Besides, harnessing the potential of international trade and finance to the benefit of developing countries is only feasible based on the multilateral establishment of a commonly agreed-upon system based on rules and transparency. Eventually, multilateral development strategies facilitate the co-ordination of policies to rein in major challenges or, in the worst case, to mitigate spillovers and fallout for individual countries.

Towards new forms of international co-operation

In retrospect, the Marshall Plan provided an important lesson, only appreciated well after its time: development occurs in a context of international co-operation. Indeed, the OECD was created to preserve lessons from international co-operation and the Marshall Plan after the Organisation for European Economic Co-operation (OEEC) was dissolved.

While international co-operation remains one of the best solutions for addressing the most complex development-related challenges, it needs to adapt to the evolving context if it is to be effective. If all countries are to achieve the goals set out in the 2030 Agenda for Sustainable Development, new forms of co-operation, and a new and better set of tools to assess challenges and implement solutions, are needed. New forms of co-operation can include South-South and triangular co-operation, improved knowledge sharing, technology transfers, and peer-to-peer policy dialogues. Importantly, access to international co-operation should not be dependent on a country's income level. As this report has demonstrated, income-related measures like GDP per capita are too narrow to capture the complexities of a country's development. Instead, a more inclusive system of international co-operation on sustainable development would help ensure better well-being and prosperity for all.

Notes

[1] GNI measures the total domestic and foreign value added claimed by residents, and comprises GDP plus net receipts of primary income (compensation of employees and property income) from non-resident sources.

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Annex 5.A. National development plans

Annex Table 5.A.1. Developing country plans assessed for this chapter

Sub-Saharan Africa	Burkina Faso	PNDES 2016-2020
	Uganda	Vision 2040
	Botswana	Vision 2036
	Ethiopia	Growth and Transformation Plan II 2015/16-2019/20
	Côte d'Ivoire	Plan National de Développement 2016-2020
	Namibia	Vision 2030
	South Africa	NPD 2030
	Senegal	Plan Sénégal Émergent 2035, Plan d'actions prioritaires 2014-2018
Middle-East and North Africa	Egypt	Vision 2030
	Jordan	Jordan 2025
	Morocco	Plan d'Accélération Industrielle 2014-2020
East and Southeast Asia	Cambodia	NSDP 2014-2018
	China	China 2030, 13th Five-Year Plan 2016-2020
	Indonesia	Acceleration and Expansion of Indonesia Economic Development 2011-2025
	Lao PDR	NSEDP 2016-2020
	Malaysia	Vision 2020
	Thailand	Twelfth National Economic and Social Development Plan 2017-2021
	Viet Nam	Green-Growth Strategy 2011-2020
	Myanmar	National Comprehensive Development Plan 2011-2031
Central Asia	Armenia	Strategy 2014-2015
	Azerbaijan	Azerbaijan 2020
	Turkey	Medium-Term Program 2018-2020, Tenth Development Plan 2014-2018
	Russia	National Economic Security Strategy until 2030
	Kazakhstan	Strategy 2050
South Asia	Bangladesh	Seventh Five-Year Plan 2016-2020
	Nepal	SDG Roadmap 2016-2030
	Sri Lanka	Vision 2025
	India	12th Five-Year Plan 2012-2017
Latin America	Argentina	PAI 2020
	Chile	Productividad para un Crecimiento Inclusivo 2014-2018, Plan de Accion Nacion de Cambio Climatico 2017-2022
	Colombia	Plan Nacional de Desarrollo 2014-2018
	Ecuador	Plan Nacional de Desarrollo 2017-2021
	Mexico	Plan Nacional de Desarrollo 2013-2018
	Peru	Plan bicentenario hasta 2021
	El Salvador	Plan Quinquenal de Desarrollo 2014-2019
	Uruguay	Plan Uruguay 2015 – 2020
	Bolivia	Agenda Patriotica 2025
	Panama	Vision 2030
	Brazil	Plano Plurianual 2016-2019

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