

TRADE AND DEVELOPMENT REPORT, 2016

Structural transformation for
inclusive and sustained growth

Chapter II

GLOBALIZATION, CONVERGENCE AND STRUCTURAL TRANSFORMATION



UNITED NATIONS
New York and Geneva, 2016

GLOBALIZATION, CONVERGENCE AND STRUCTURAL TRANSFORMATION

A. Introduction

In the classical development literature, and its related policy advice, the relationship between economic growth and changes in the structure of production took centre stage. While there were differences across this literature, particularly on policy detail, there was general agreement that successful industrialization in a small group of “Northern” countries had created, and perpetuated, an international division of labour involving a high-income and technologically sophisticated “core” that exported mainly manufactured goods and a low-income and technologically weak “periphery” that was largely dependent on primary exports. Industrialization in the South was seen as the key to rebalancing the international division of labour, maximizing the gains from international trade and delivering “prosperity for all” (UNCTAD, 1964).

The case for making industrialization the key to sustained development in the South rested on its capacity to generate and combine a series of linkages, complementarities and externalities that together could trigger a virtuous circle of resource mobilization, rising productivity growth, increasing incomes and expanding market demand, both at home and abroad (Toner, 1999). Moreover, industrialization was linked with a demographic transition towards a more urban, more educated and more productive

workforce, which would further reinforce this virtuous circle. While there were differences in opinion over what was holding back structural transformation in developing countries, there was broad agreement that their potential for catching up would, under the right conditions, allow for a convergence in incomes, and the closing of other economic and social gaps between the North and the South.

This case for industrialization highlighted the limits of relying on market forces for advancing structural transformation and called on active State involvement. In particular, following a path well-trodden by almost all developed economies, domestic industries needed to be supported and protected in their early stages, until they developed their own capacities to compete. In addition, and more so than for earlier generations of late industrializers, additional targeted support would be needed to promote manufactured exports from the South, given productivity gaps with leading industrial economies, and the relative smallness of their domestic markets (UNCTAD, 1964: 14). This approach became conventional wisdom throughout the developing world in the 1950s and 1960s and helped draw attention to weaknesses in the governance of the international economy that could hinder efforts at catching up, with various measures proposed to ease the balance of

Table 2.1

INDUSTRIAL GROWTH RATES, SELECTED COUNTRIES AND REGIONS, 1870–2014

(Per cent)

Groups	1870– 1890	1890– 1913	1913– 1920	1920– 1938	1938– 1950	1950– 1973	1973– 1990	1990– 2007	2007– 2014
Germany, United Kingdom and United States,	3.1	3.4	1.4	1.9	0.9	5.2	1.1	2.1	0.2
Germany, Japan and United States	7.9	2.4	2.2	0.3
European periphery	4.7	5.0	-6.5	4.7	3.6	8.9	3.3	2.8	0.0
Asia	1.5	4.2	5.2	4.2	-1.7	8.5	5.8	4.2	4.1
Latin America and the Caribbean	6.4	4.4	3.4	2.8	5.3	5.7	2.7	2.2	1.0
Middle East and North Africa	1.7	1.7	-5.8	4.9	6.0	6.2	6.1	4.5	3.2
Sub-Saharan Africa	.	.	13.4	4.6	8.6	5.5	3.5	3.9	4.1

Source: Bénétrix et al., 2012, for the period 1870–2007; UNCTAD secretariat calculations, based on *UNCTADstat* for 2007–2014.

Note: The table reports unweighted average industrial (or manufacturing when available) growth rates by region. In this table, the country groups comprise the following: *European periphery*: Albania, Austria, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Czechoslovakia (for the period prior to 1993), Estonia, Finland, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Montenegro, Poland, Portugal, Republic of Moldova, Romania, the Russian Federation, Serbia, Slovakia, Slovenia, Spain, the former Yugoslav Republic of Macedonia, Ukraine and Yugoslavia (prior to 1995). *Asia* comprises the developing economies of East Asia, South-East Asia and South Asia, plus Georgia, Japan, Kazakhstan, Kiribati, Kyrgyzstan, Papua New Guinea, Samoa, Solomon Islands, Tajikistan, Tonga, Uzbekistan and Vanuatu. *Middle East and North Africa* comprises: Algeria, Bahrain, Egypt, Iraq, Islamic Republic of Iran, Israel, Jordan, Kuwait, Lebanon, Morocco, Oman, Saudi Arabia, Sudan, Syrian Arab Republic, Tunisia, Turkey, United Arab Emirates and Yemen.

payments constraint on faster growth and to mobilize more international resources to boost investment.

The pattern of structural transformation predicted (and prescribed) by development economists was followed by most developing countries in the post-war period, with economic and, particularly, industrial growth rates registering historical highs in most regions (see chapter III and table 2.1). However, catch-up did not follow in most cases, as developed countries enjoyed their own remarkable period of economic growth and technological progress, and income gaps widened further. Moreover, the early (and relatively easy) successes of import substitution industrialization in many developing countries brought their own “growing pains” (whether in the form of balance of payments problems, productivity slowdowns, inflationary pressures or rising inequality) that proved increasingly difficult to address (Hirschman, 1995).

Whilst some developing countries (notably the East Asian first-tier industrializers) did find ways to manage these growing pains and were able to build

on their initial transformation gains, in many other cases, changes from the late 1970s in the economic and ideological landscape encouraged a very different approach to structural transformation in developing countries. In particular, the debt crisis of the early 1980s provided an opportunity for a new policy consensus, often disseminated through the attachment of a reform agenda to multilateral lending programmes, in which the focus shifted from changing the structure of production and trade to redistributing tasks and responsibilities between the State and market (through privatization, liberalization and deregulation measures), and with a particular emphasis on reducing the costs of doing business (through tariff reductions, wage compression and tight macroeconomic policies). Not only did this approach deny the advantages of industry for driving development, it also rejected the role of public policies to support any specific sector: it was believed that this should be left to competitive pressures in deregulated markets on the grounds that globalized market forces should shape countries’ specialization according to their existing comparative advantages (World Bank, 1991).

On the basis of this logic, along with some new thinking about the determinants of growth and a plethora of econometric exercises, the new policy consensus promised stronger and more stable growth at the national and global levels. It also promised a rapid closing of income gaps between rich and poor countries, as international market forces were expected to naturally augment the specific economic advantages found in the developing world. The idea that self-regulating market forces would tame the business cycle and accelerate income convergence implied that the policy space deemed necessary to set priorities and manage the trade-offs that accompany

structural transformation could be foregone, leaving competitively determined prices to unlock the opportunities of a globalizing world.¹

The next section considers whether this strong convergence narrative accurately describes growth trends in the global economy over the last three and a half decades. Section C discusses how structural transformation fits into a convergence narrative and where advances have been made. Section D looks for possible sources of dissonance between the current global environment and the process of structural transformation. The final section draws some conclusions.

B. Globalization and convergence

For a brief period after the start of the new millennium, the combined influence of a “great moderation” in the macroeconomic environment (Bernanke, 2004) and a “great convergence” in global incomes (Wolf, 2011) seemed to support the idea of a new international economic order emerging around self-regulating international market forces. In particular, following the fast rebound from the bursting of the dot-com bubble in 2000, a combination of sophisticated capital market engineering by financial institutions and astute central bankers, freed from political oversight, had, it was believed, finally solved the challenge of what Federal Reserve Chairman Alan Greenspan (2005) called “risk transfer and financial stability”; the business cycles had been tamed.

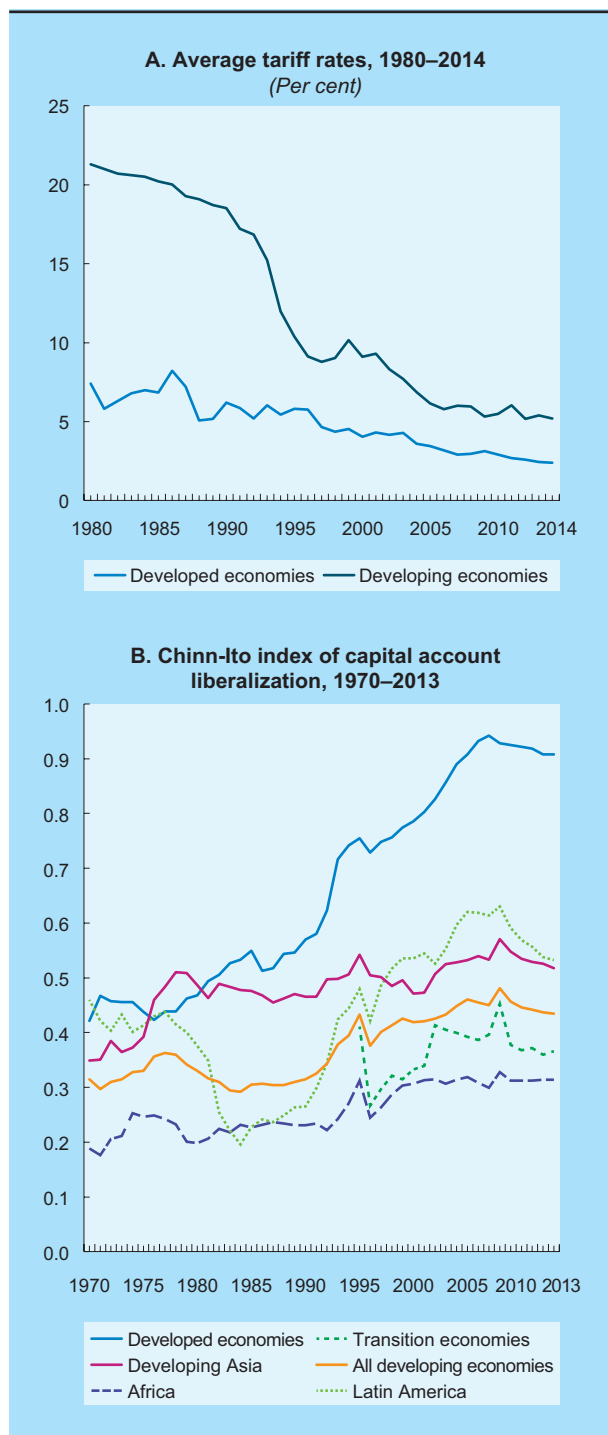
The financial crisis of 2008 exposed the limits of this reasoning in terms of macroeconomic stability, but it gave further momentum to the convergence story as developing countries bounced back unexpectedly strongly from the crisis,² raising the possibility that growth in the South, which had strongly outpaced that in the developed economies over the preceding decade, had become more self-sustaining and, on some counts had even “decoupled” from that in the North (Akin and Kose, 2007; Canuto, 2010). As

discussed in previous *TDRs*, this is not a plausible assessment, in part because the growth surge in developing countries from the start of the millennium was the outcome of strong export growth supported by mounting debt levels in developed economies, the rebound was closely linked to policy actions adopted by developed economies in response to the crisis and partly because the rebound has not recovered the growth momentum achieved prior to the crisis.

The World Bank (2016: 34) has suggested that the great convergence has stalled thanks to a combination of weakening growth, heightened risks and restricted policy space in developing economies. And it has warned that it could falter altogether with a drift towards protectionism and slowing globalization. As discussed in the previous chapter, rising protectionism cannot explain the slowdown in global trade, or the weakening of output growth. The idea of slowing globalization is more difficult to assess given that globalization tends to mean different things to different people, and economic historians, having roundly rejected the idea that it is a linear and autonomous process, continue to debate how and why its ebbing and flowing over time has had varying consequences for different regions, countries and communities.³

Chart 2.1

TRADE AND FINANCIAL OPENNESS, SELECTED COUNTRY GROUPS



Source: UNCTAD secretariat calculations, based on WTO, *Integrated Data Base*; GATT Tariff Study files; International Customs Tariff Bureau (BITD); UNCTAD, *TRAINS* database; and Chinn and Ito, 2006, update May 2015.

Note: Regions' Chinn-Ito index are compiled with a simple weighted average. 0 indicates fully closed, while 1 indicates a fully opened financial account.

In general terms, globalization exhibits three overlapping but distinct dimensions which are often treated synonymously: a *policy dimension*, referring to the reduction of barriers to goods, services, people, capital and information flowing across national borders; an *economic dimension* which refers to the increasing scale of these flows and the extent to which countries are thereby integrated into an international division of labour; and an *institutional dimension* which refers to the nature, reach and influence of rules, norms and structures designed to manage the expanding network of international activity and transactions.

A good deal of the contemporary debate about how these dimensions fit together is driven by a highly stylized picture of an ideal global economy in which the decisions of households, firms and financial institutions are not impeded by obstacles generated by national boundaries. In such a world, which claims strong technical backing from conventional economic theory, goods, factors of production and financial assets are almost perfect substitutes everywhere (barring cultural idiosyncrasies) and economic welfare depends on the response of households and firms to global market incentives, given inherited endowments, demographic pressures and technological progress. Differences in living standards across this world depend primarily upon the pace of adjustment to changes in these “exogenous” factors.

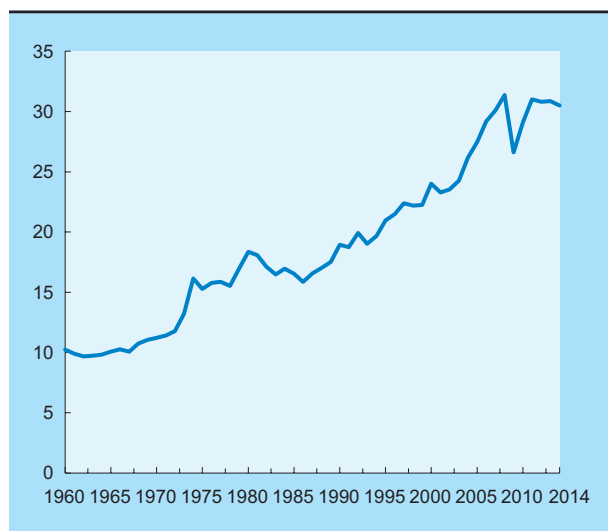
The world economy is still a long way from this flat supranational landscape. However, increased openness has certainly been a prominent feature of the past 30 years in both developing and developed economies (chart 2.1). Looking at the evolution of average tariffs as a measure of trade openness since the Tokyo Trade Round (which ended in 1979), these have been on a broadly downward trend, but with a particularly marked drop in developing countries in the first half of the 1990s. Financial openness measured, for example by the de jure Chinn-Ito index, has also been the general trend, led by the developed economies, albeit flattening out since the financial crisis of 2008.⁴

Charts 2.2, 2.3 and 2.4 provide a familiar depiction of the evolving pattern of economic integration over the past few decades using the ratios between global exports, net international capital flows (as measured by the sum of national current account surpluses or deficits) and foreign direct investment (FDI)

Chart 2.2

GLOBAL EXPORTS AS A SHARE OF WORLD OUTPUT, 1960–2014

(Per cent)

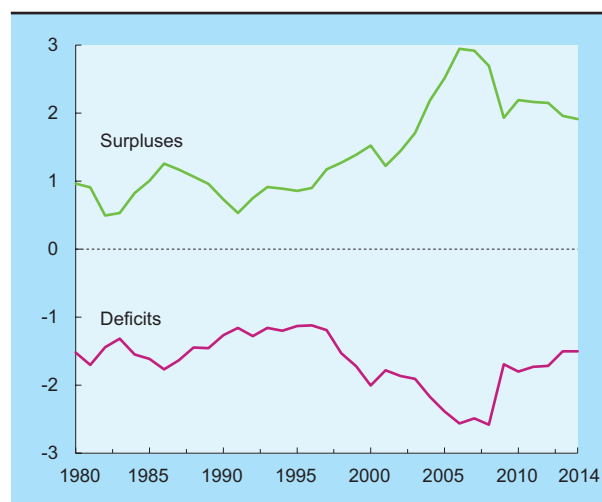


Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators* database (1960–1969); and *UNCTADstat* (1970–2014).

Chart 2.3

GLOBAL CURRENT ACCOUNT SURPLUSES AND DEFICITS AS A SHARE OF WORLD OUTPUT, 1980–2014

(Per cent)

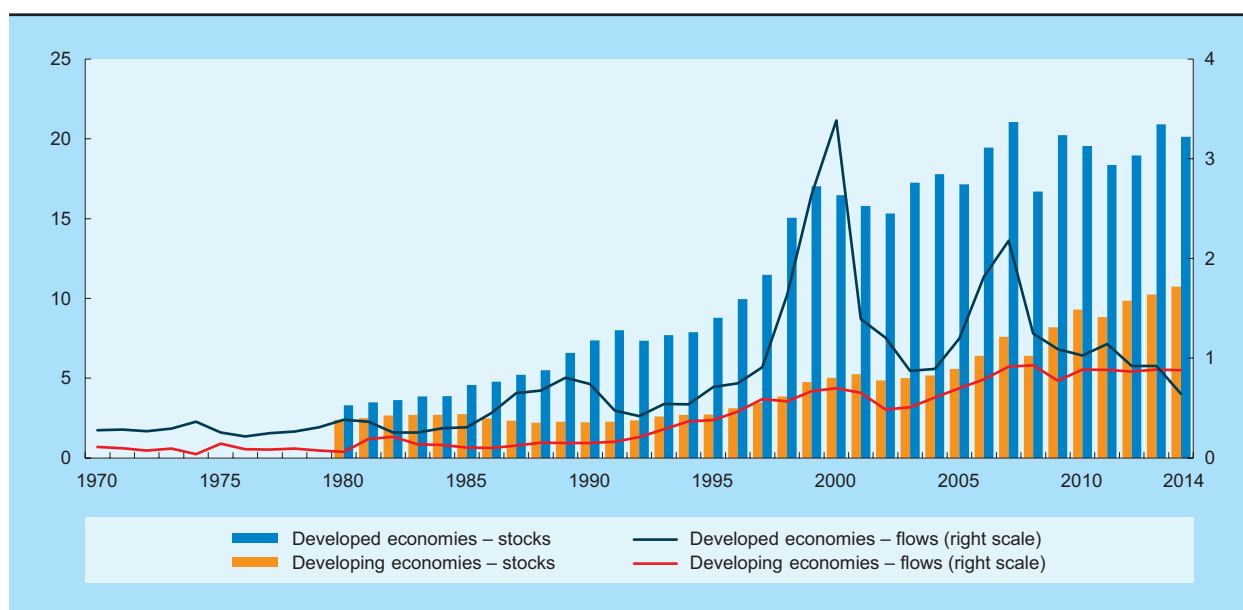


Source: UNCTAD secretariat calculations, based on IMF, *Balance of Payments Statistics*, and *International Financial Statistics*.

Chart 2.4

STOCKS AND FLOWS OF INWARD FOREIGN DIRECT INVESTMENT AS A SHARE OF GLOBAL OUTPUT BY COUNTRY GROUP, 1970–2014

(Per cent)



Source: UNCTAD secretariat calculations, based on *UNCTADstat*.

flows, to global GDP. A cursory examination of these charts suggests that there have been two distinct periods: the first exhibiting a measured recovery in integration from the low level that resulted from the economic and political dislocations of the 1930s, followed by a period in which international integration started to grow very quickly, and achieved historically high levels.

As a general characterization, while globalization during the first three decades after 1945 can be described as trade-led and organized around strong public institutions at the national and international levels, globalization after 1980 has been finance-led and organized around more open markets and corporate actors (UNCTAD, 2011a). In the earlier period of managed globalization, growth in both developed and developing countries accelerated sharply. To a significant extent, this reflected the policies of “welfare Keynesianism” implemented in many developed countries, as well as the State-led development strategies applied in many developing countries in the context of a relatively stable global economy. In both respects, sufficient policy space was a prerequisite for the success of both strategies (Helleiner, 2014; *TDR 2014*).

As discussed in previous *Reports* (see for example *TDR 2014*), the post-war multilateral arrangements were founded on the assumption that adverse influences emanating from the global economy should be countered with policy measures (at both the domestic and international levels) that preserve growth and development. The policy space this implied has been eroded by the spread of unregulated global market forces and various international agreements. Consequently, in the absence of global economic governance reform that would balance the increasing influence of global market forces, many countries, particularly but not only developing countries, find themselves having to adjust to international imbalances and shocks through domestic retrenchment. In fact, they have had to alter domestic policies, structures and regulations to reconcile with and conform to international market pressures (Lawrence, 1996).

Governments that ceded more and more influence over national economic prospects to international market forces, and cross-border financial flows in particular, generally expected to be rewarded with a trajectory of high and stable growth, with governments

in the South expecting a particularly strong growth dividend. The combination of increased capital formation (thanks to a more efficient allocation of global savings) and rapid technological catching up (thanks to the heightened influence of foreign firms as carriers of more advanced technologies) along with widespread efficiency gains (thanks to a reshaping of production and investment activities in developing countries in line with comparative advantage) would drive these outcomes.⁵

Conventional growth models, both in their closed and open variants, have provided analytical support for the idea that there is an inverse relationship between per capita income (or level of productivity) and its future growth, i.e. economic convergence. Testing this idea has generated two empirical findings, which have animated recent discussions about globalization. The first is the apparent uniformity of conditional convergence rates, namely controlling for other factors, convergence in per capita income was predicted at around 2 per cent a year (Barro, 2012). A second finding has suggested that among all the possible conditioning variables the most fundamental is how open an economy is to the world economy (Sachs and Warner, 1995).⁶

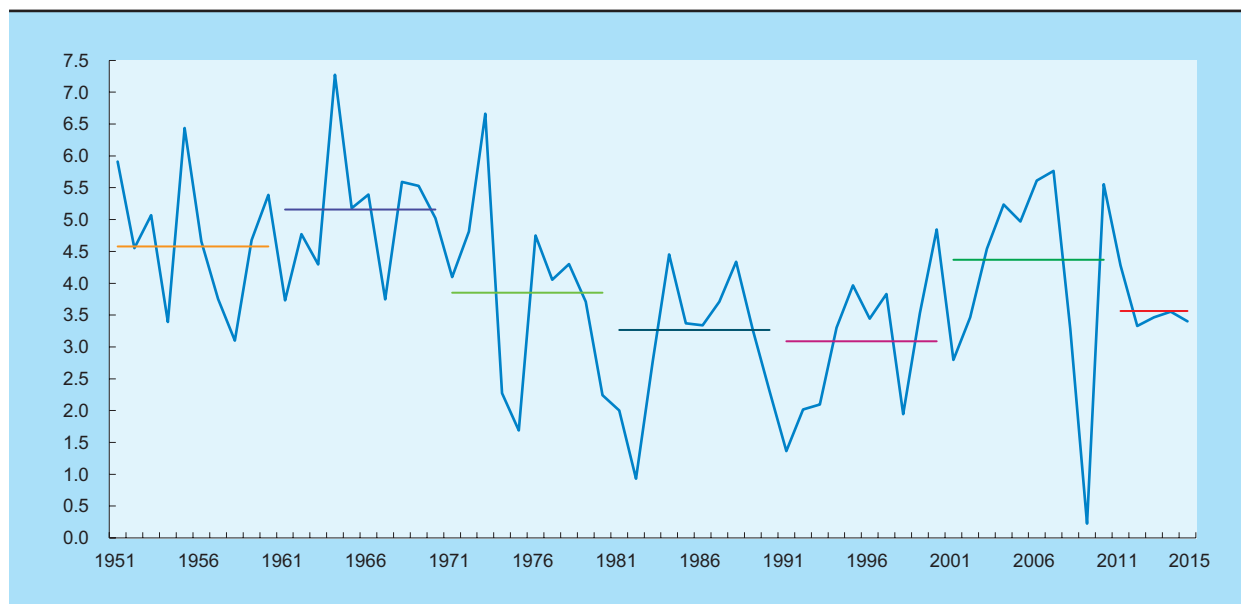
There are, however, serious methodological difficulties in trying to capture empirically the link between openness, growth and convergence.⁷ Moreover, even assuming that a positive link between openness, integration and growth can be established in some cases, this still leaves open the direction of causation, with plenty of reasons to suppose that this runs from domestic success in raising productivity to increased trade, and to further liberalization, rather than the other way round.

The evolution of the global economy has not followed the simpler predictions of a globalizing world. In the first place, global growth has been on a steadily downward trend since the 1960s (with the brief exception of the 2000s) (chart 2.5). There is no consensus on why this slowdown has happened but there is little doubt that it originates in trends in the developed economies. Their slowdown over the last three decades opened the door for a resumption of convergence if growth in developing countries simply maintained the pace achieved during the earlier period.⁸ Moreover, this period cannot be described in blanket terms as an era of catching up for developing countries.

Chart 2.5

WORLD OUTPUT GROWTH RATE, 1951–2015

(Per cent)



Source: UNCTAD secretariat calculations, based on The Conference Board, *Total Economy Database*, May 2015.

Since the 1980s and for the group as a whole, growth of GDP per capita did accelerate, and in the 2000s, every developing region grew more quickly than the developed-country average, in many cases by a considerable margin. So it is no surprise that in recent years talk of global income convergence has become more widespread. However, two features of the past three and a half decades stand out from table 2.2: first, the varying phases of convergence and divergence between developed and developing countries; and second, the growing disparities within the developing world, with some countries and regions growing much more rapidly than others.⁹

Average annual GDP per capita growth in the developing world during the 1980s and 1990s was actually lower than in the 1960s and 1970s, with convergence resulting from economic slowdown in the developed economies and accelerating growth in East Asia.¹⁰ The first decade of the 2000s stands out as a period of rapid and generalized growth in all developing regions. The first half of the current decade already indicates, however, that this may have been something of an anomaly, as average growth rates in

many countries in the developing world have settled back closer to the rates experienced in the 1960s and 1970s, and in some cases below those rates.

Moreover, taking the period 1980–2015 in its entirety, developing countries and regions have not shown similar trajectories, with only the Asian region showing a consistent pattern of convergence. The East Asian region has been able to maintain the momentum it built up during the previous era with South Asia joining in more strongly from the start of the millennium. However, in terms of per capita income, given their initial starting points and the pace of convergence, only the economies of East Asia have made noticeable strides in terms of closing the absolute income gap with those countries at the top of the development ladder (chart 2.6). Growing diversity among developing countries is a second striking feature of this entire period.

Taking a more granular perspective down to the country level can help add some further detail to these broad processes. Chart 2.7 depicts the correlation between the income gap with respect to the United

Table 2.2

**GROWTH OF REAL GDP PER CAPITA AT PURCHASING POWER PARITY,
SELECTED REGIONS AND ECONOMIES, 1951–2015**

(Average annual growth, per cent)

	1951– 1980	1981– 2015	1951– 1960	1961– 1970	1971– 1980	1981– 1990	1991– 2000	2001– 2010	2011– 2015
Developed economies	3.5	1.8	3.1	4.2	2.6	2.5	2.1	1.2	1.1
United States	2.3	1.8	1.3	3.4	2.2	2.6	2.4	0.9	1.4
Developing economies	2.7	3.8	2.7	2.6	3.0	2.1	3.2	5.8	4.0
Africa	1.8	1.2	1.5	1.9	1.2	-0.4	0.7	3.0	1.8
America	2.6	1.3	2.4	2.4	3.0	-0.4	1.6	2.4	1.1
Asia	2.8	5.0	2.8	2.7	3.3	3.6	4.2	7.0	4.9
East Asia	3.0	7.1	4.2	3.4	4.1	6.7	5.8	9.6	6.5
China	2.3	7.7	4.1	2.7	3.1	6.5	6.2	11.1	7.2
South-East Asia	2.6	3.5	2.3	1.6	4.0	2.6	3.0	4.2	4.0
South Asia	1.4	4.1	1.5	1.5	1.2	3.1	3.7	5.7	4.1
West Asia	4.4	1.4	3.2	4.9	3.4	-1.6	1.6	3.3	-0.1
Transition economies	3.2	0.5	3.7	3.7	2.0	0.5	-4.9	6.2	2.1
World	2.7	2.1	2.6	3.1	2.0	1.5	1.7	3.1	2.5
Memo items:									
Developing economies, excl. China	2.7	2.4	2.4	2.5	2.9	1.1	2.3	3.6	2.3
Developing economies, excl. East Asia	2.6	2.3	2.3	2.4	2.7	0.6	2.1	3.7	2.4
Developing economies, excl. East and South-East Asia	2.6	2.0	2.3	2.5	2.5	0.2	2.0	3.6	2.0
Developing economies, excl. East, South-East and South Asia	2.8	1.1	2.4	2.8	2.7	-0.8	1.2	2.5	0.6

Source: UNCTAD secretariat calculations, based on The Conference Board, *Total Economy Database*, May 2015.

Note: The Islamic Republic of Iran is included in West Asia. Real GDP corresponds to Geary-Khamis PPP.

States computed in 1990 and in 2014.¹¹ The existence of a clear positive correlation suggests that those economies that were more distant from the income frontier in 1990 tend to remain more distant in 2014. Most developing economies did not show any sign of strong convergence with the United States economy and some of them rather diverge, becoming relatively poorer in income per capita terms (i.e. those that lie above the 45-degree line). Between 1990 and 2014 the income gap increased in many low- and middle-income economies, and in 2014 the gap was 0.9 or higher (i.e. income per capita was at most 10 per cent that of the United States) in a significant number of countries. Therefore, although many countries have experienced persistent economic growth in the last 25 years, they have, to a significant extent, been unable to close their income gap with the United States.

The chances of moving from lower to middle- and from middle- to higher income groups during

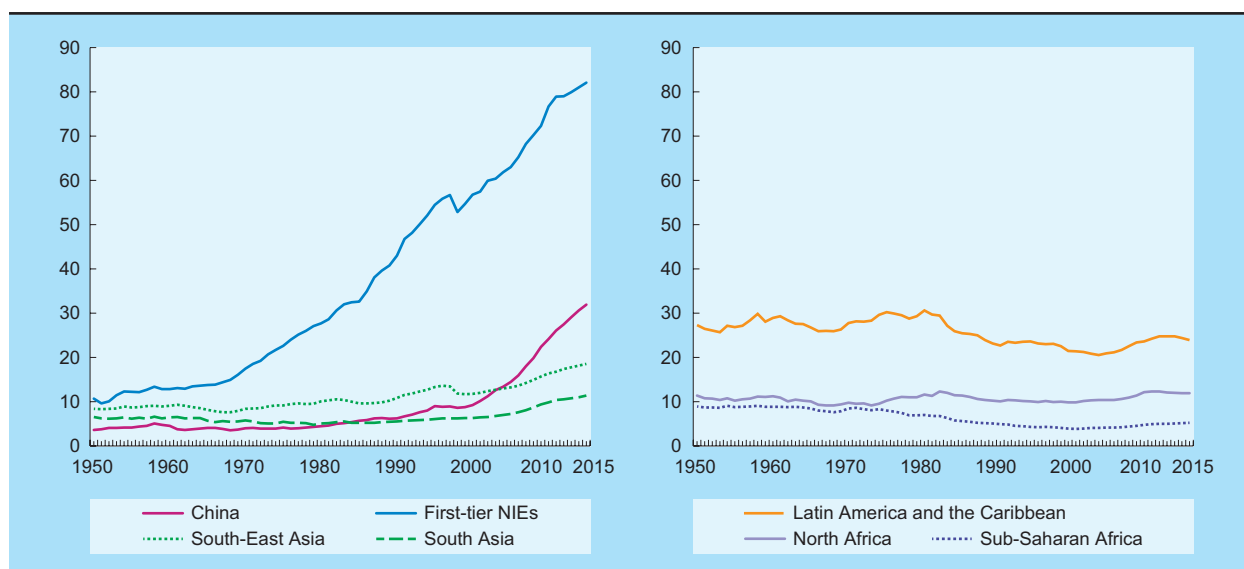
the recent period of globalization show no signs of improving and have, if anything, weakened. On some counts this has become a particular concern for middle-income economies (see box 2.1) but it is more widespread. Building on the recent work of Arias and Wen (2016), table 2.3 uses the Maddison Project Database (Bolt and van Zanden, 2014) to estimate chances of catching up over the periods 1950–1980 and 1981–2010.¹² The dataset uses real GDP per capita at chained purchasing power parity (PPP) rates. In both periods, the United States is identified as the target lead economy. Countries are divided along three relative income groups: low (between 0 and 15 per cent of the hegemon's income), middle (between 15 and 50 per cent) and high (above 50). The table reports transition probabilities for the two sub-periods and the three income levels.

Two observations from table 2.3 are noteworthy. First, convergence from the low- and the

Chart 2.6

RATIO OF GDP PER CAPITA OF SELECTED COUNTRIES AND COUNTRY GROUPS TO GDP PER CAPITA OF THE UNITED STATES, 1950–2015

(Per cent)



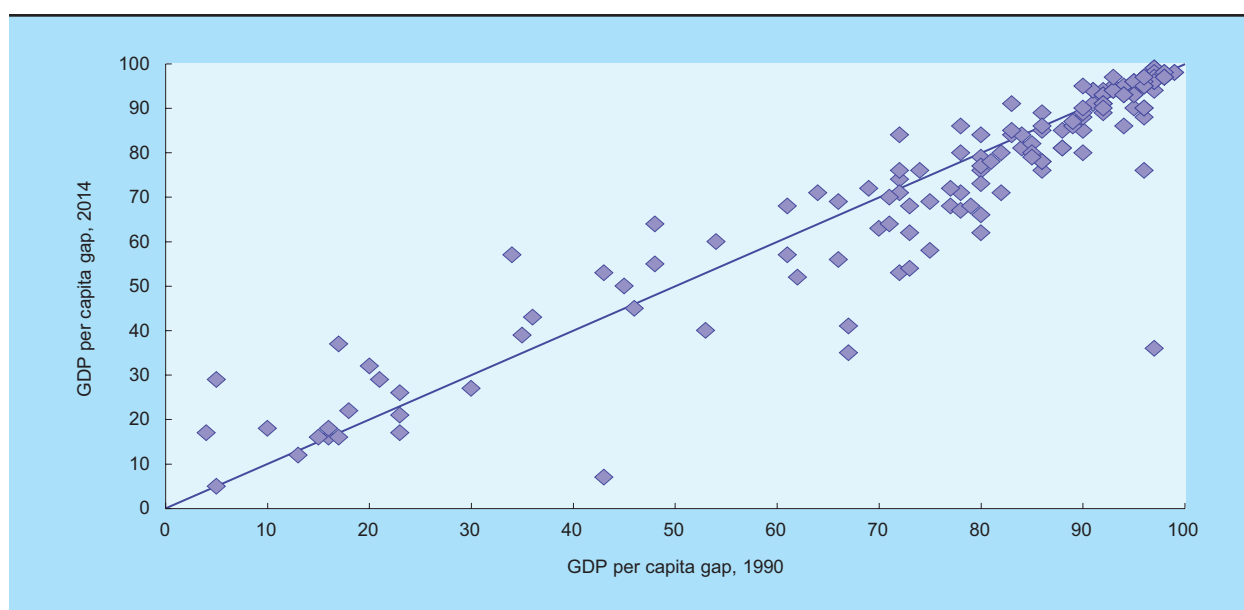
Source: UNCTAD secretariat calculations, based on The Conference Board, *Total Economy Database*, May 2015.

Note: First-tier newly industrializing economies (NIEs) are Hong Kong (China), the Republic of Korea, Singapore and Taiwan Province of China.

Chart 2.7

GDP PER CAPITA GAP BETWEEN DEVELOPING COUNTRIES AND THE UNITED STATES, 1990 AND 2014

(Per cent)



Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators* database.

Box 2.1**MIDDLE-INCOME TROUBLES**

The development literature is full of warnings about traps, gaps and curses, many of them linked to integration into the global economy. On closer inspection these often turn out to be less a matter of destiny and more of policy decisions and institutional design. However, in an increasingly interdependent world economy the link between the national and international division of labour is raising new policy challenges for many developing countries.

Attention has been devoted in recent years, in both academic and public debate, to what has been described as the middle-income trap (MIT). Although economic growth over the last half century has allowed many developing countries to reduce levels of absolute poverty, very few among them have been able to close the per capita income gap with the developed economies, let alone to catch up. Moreover, the frequency of growth slowdowns in the post-war period seems to be higher in middle-income than in low- or high-income countries (Aiyar et al., 2013). This evidence raises concerns about the validity of standard growth theory which predicts a relatively smooth growth path with fluctuations around a stable trend (see, for example, Barro and Sala-i-Martin, 1998) and implies an inverse relation between levels of income and subsequent growth rates allowing for strong income convergence between rich and poor economies (*TDR 1997: 72–73*).

In the real world, “hills, plateaus, mountains and plains” are much more the norm of global growth dynamics than the exception (Pritchett, 1998) and the cases in which low- or middle-income countries have successfully converged to the level of income of developed economies have been very few. The World Bank (2013) estimates that out of the 101 economies classified as middle income in 1960, only 13 had graduated to high income in the five decades that followed: Equatorial Guinea, Greece, Hong Kong (China), Ireland, Israel, Japan, Mauritius, Portugal, Puerto Rico, the Republic of Korea, Singapore, Spain and Taiwan Province of China. Most countries in Latin America, as well as in the Middle East and North Africa, reached middle-income status during the 1960s and 1970s, and have remained there. Even in East Asia, the second-tier of new industrializers, such as Malaysia and Thailand, has experienced growth slowdowns in recent years that could be conceived as an MIT. However, it should also be borne in mind that several countries have experienced growth slowdowns well before they have reached a threshold level of per capita income that could be seen as “middle income” even when using PPP based estimates; thus the explanations for such slowdowns must be sought in a wider context (see chapter III).

A clear and widely shared definition of the MIT is missing in the literature. This reflects both classification and conceptual issues. According to the World Bank, middle income covers a broad range of economies from some very poor sub-Saharan commodity exporters to relatively wealthy members of the European Union. The 13 countries noted above by the World Bank as escapees from the trap cover a remarkably diverse group of economies with little in common other than fast and sustained growth over a prolonged period. Spence (2011) refers to the middle-income transition as countries in the \$5,000–\$10,000 per capita income range that face the challenge of replacing labour-intensive sectors with a new set of industries of a more capital-, human capital- and knowledge-intensive nature. Felipe (2012a) distinguishes between lower and higher MITs; a country falls in the first category if it has been in the \$2,000–\$7,500 income range for over 28 years, and in the second if it has been within a range of \$7,500–\$11,500 for more than 14 years.^a

The stagnation of middle-income economies emerges even more strikingly once their performance is compared to that of high-income economies (Kozul-Wright and Fortunato, 2016). Arias and Wen (2015) and Athukorala and Woo (2011) refer to a “relative income trap” in which income levels measured against those of the world economic leaders remain constantly low and without a clear sign of convergence, based in terms of each country’s income per capita as a percentage of the United States level of income per capita. Arias and Wen (2015), using transition probability matrices for a sample of 107 countries between 1950 and 2011, suggest that the probability of remaining in an MIT (or a low-income trap) is persistent over time and across regions; the Asian tigers being the exception. However, as discussed in this chapter, breaking this period up between 1950 to 1980 and 1980 to 2010 actually indicates that it has become more difficult for developing economies to catch up but easier for them to fall behind during the latter period. Eichengreen et al. (2011), for example, construct and analyse sample cases where fast-growing economies begin to slow down. They find that the probability of slowdown is highest when per capita GDP reaches \$16,740 (2005 international PPP dollars) but also when the ratio of per capita income to the lead country (United States) is around 58 per cent. Moreover, the probability of slowdown is highest when the share of manufacturing employment reaches 23 per cent. An exceptionally low consumption share of GDP is positively associated with the probability of slowdown. Thus, the issue is broader, cannot be limited to brackets of income levels and needs to be discussed in the context of structural transformation.

Conceptually, the notion of an MIT implicitly (or explicitly) accepts the idea that low-income countries are, in general, prone to convergence through faster growth than the richer countries, and that this process continues until a certain ceiling is reached. Yet the absence of such a general convergence trend (barring an explosive but short period from the start of the new millennium, which was not exclusive to low-income countries) as opposed to episodic convergence stories has been a striking feature of economic history over the past century. Middle-income countries are those that did indeed show faster rates of growth over some periods, which is what

Box 2.1 (concluded)

enabled them to move out of low-income status in the first place, but the question of why they then slow down requires sharper analysis than association with a particular level of income.

One argument used to explain the MIT is the so-called “developmental turning point” described by Lewis (1954), when the pool of surplus labour from the traditional sector finally gets absorbed into the modern sector, so that further expansion generates rising wages. This has been interpreted as a problem in a more open global economy because of the threat posed by rising wages unless they are accompanied by at least commensurate productivity increases. Paus (2012: 116) therefore argues that “many middle-income countries find that they can no longer compete in the production of low-wage commodities but that they have not developed the capabilities to compete on a broad basis in higher productivity activities. Middle-income countries now run the risk of being trapped, of being pushed onto the low road to development, where declining wages form the basis for competitiveness and growth.”

However, while unchecked competitive pressures run the danger of a “race to the bottom” (see chapter IV), identifying this Lewisian turning point with the MIT is likely to be misleading. First, it is based on a notion of reaching full employment that causes rising wages and makes aggregate productivity indicators relevant, rather than productivity in trade-competing activities alone. Yet it is evident that countries can be “trapped” at low incomes or with decelerating growth rates well before they reach full employment. Second, it implicitly assumes that external demand is the main impetus for growth, whereas if internal demand is considered, then rising wages can offer new profit opportunities as markets expand domestically. In such a case, higher production costs may not be the defining constraint on export growth in middle-income countries (Kanchoochat, 2015). Other possible constraints that may be more binding arise from inadequate or inappropriate educational provision (particularly at higher levels) or weak technological support or an insufficiently sophisticated export basket that results in a tightening balance of payments constraint. In most of the successful catch-up economies identified in the World Bank study, higher productivity activities were sequentially developed in industries (e.g., iron, steel and electronics) using new skills and capabilities, some of which were transferred and adapted from existing industries, and others that were nurtured with more targeted government support. This strategic increase in high “connectivity” sectors allowed for a managed transition towards more sophisticated and higher value-added activities, especially those requiring similar technology and production techniques (Jankowska et al., 2012).

Yet the phenomenon of the MIT cannot be boiled down to merely an issue of reaching the limits of growth via capital accumulation such that technological upgrading must become the driver. In fact in most middle-income countries, the bulk of the labour force is low skilled. Technological upgrading of the modern sector, on the other hand, utilizes mostly high-skilled labour, and there is no guarantee that productivity gains will spill over into other sectors. Economies with surplus labour and sizeable informal sectors continue to face the challenge of ensuring aggregate economy-wide labour productivity increases, even when attempts to improve productivity in more sophisticated activities are successful. Thus, innovation on its own cannot be an easy solution to the complex phenomenon of growth deceleration.

From this perspective, economic diversification plays a key role in the process of development. Imbs and Wacziarg (2003) show that, until relatively late in the process of development, as income per capita rises sectoral production and employment become less concentrated and more diversified. It is only when the per capita income reaches a certain level (around \$9,500 for their data set) that the sectoral distribution of economic activity starts concentrating again. Felipe (2012b) finds that those countries that have attained high-income status were substantially more diversified at the time of their transition than countries that remained in the middle-income group.

The possibility of a link between lack of diversification and growth slowdown is confirmed by Aiyar et al. (2013) who find evidence that sectoral diversification is associated with a lower probability of growth slowdowns. Diversification can be seen as a form of insurance against idiosyncratic shocks to a particular sector: to the extent that sectoral shocks could lead to slowdown and stagnation in a concentrated economy, diversification reduces the probability of such an event.

Traps and landmines exist at all stages of development, and their impacts vary not just according to per capita income levels but the specific external and internal conditions facing each country. While the MIT may not capture the dynamics associated with growth slowdowns that appear to occur at very different levels of per capita income, it is also the case that the problems facing more diversified countries at broadly “middle” levels of per capita income are somewhat different from the concerns of less diversified countries with lower per capita income. The fact that many of them tend to be manufacturing exporting and importing countries that have become more closely integrated with global financial markets over the past two decades adds to the complexities. The problems of many such economies come about not because of their levels of per capita income and the associated relationship between wages and productivity, but because of the multidimensional effects of the external environment operating in conjunction with domestic political economy.

^a These thresholds represent the median number of years that the sample countries spent in their income categories.

Table 2.3

**PROBABILITY OF CATCH-UP WITH THE UNITED STATES, BY INCOME GROUP,
1950–1980 AND 1981–2010**

Ending position Starting position	1950–1980			1981–2010		
	Low income	Middle income	High income	Low income	Middle income	High income
Low income	0.85	0.15	0.00	0.91	0.07	0.01
Middle income	0.12	0.70	0.18	0.21	0.71	0.08
High income	0.00	0.06	0.94	0.00	0.19	0.81

Source: UNCTAD secretariat calculations, based on the *Maddison-Project* database. Available at: <http://www.ggdc.net/maddison/maddison-project/home.htm>, 2013 version.

Note: Countries are classified in three income groups: low income (with their per capita income below 15 per cent of that of the United States); middle income (15–50 per cent); and high income (more than 50 per cent). Probabilities (ranging between 0 and 1) present the observed relative frequency of a change between income groups within the two considered periods.

middle-income groups has become less likely over the last 30 years (1981–2010) relative to the previous period (1950–1980). As reported in the table, the probability of moving from middle- to the high-income status decreased from 18 per cent recorded between 1950 and 1980 to 8 per cent for the following 30 years. Analogously, the probability of catching up from the low- to the middle-income group was reduced approximately by the same factor, from 15 per cent to 7 per cent. Second, and perhaps more strikingly, the probability of falling behind has significantly increased during the last 30 years. Between 1950 and 1980 the chances of falling into a relatively lower income group amounted to 12 per cent for middle-income economies and only 6 per cent for high-income countries. These numbers climbed to 21 per cent and 19 per cent respectively in the subsequent period.

Further insight into these developments can be gained by focusing on the top 20 performers between 1980 and 2013 (Dullien, 2016). These countries have enjoyed an average per capita growth rate of at least 3.2 per cent over the period, almost twice the figure for the United States.¹³ This implies that these economies at least tripled their GDP per capita with the top performer, China, seeing a 16-fold increase. This is an extremely diverse group, ranging from small island economies to large former empires. There is considerable variation across these countries in terms of openness and trade integration, and some of the

most successful economies engaged in trade integration strategically rather than in a general manner. Just two members of the group (Oman and Sudan) are oil exporters – a surprisingly small number. Some others include a few tiny economies that found specific niches in the world market (such as Bhutan, the Lao People’s Democratic Republic and Saint Vincent and the Grenadines). The larger category includes economies (such as China, the Republic of Korea, Taiwan Province of China) that use deliberate development strategies, including industrial policy, typically alongside pursuing strategies that maintain competitive exchange rates (see chapter VI on the significance of exchange rates).

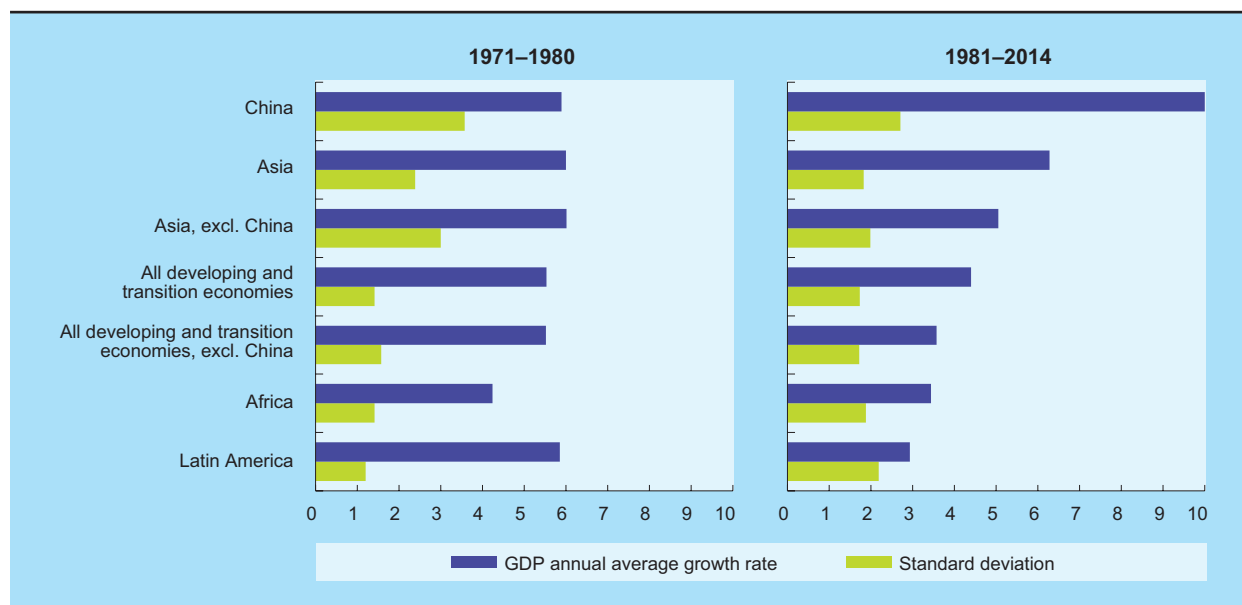
The other important point about the growth story of the last three decades or so is that building a stable growth path has also not become any easier compared with the past, again with Asia being the exception (chart 2.8). Rather, increased instability of growth across all regions appears to be a feature of the current era of globalization.

These longer term trends in per capita income have both determined and been affected by the evolving patterns of structural transformation across the developing world. These are considered in greater detail in chapter III, with reference to regional differences, but the next section outlines some of the general issues at stake.

Chart 2.8

REAL GDP GROWTH IN SELECTED COUNTRY GROUPS, 1971–2014

(Annual growth rate and standard deviation, per cent)



Source: UNCTAD secretariat calculations, based on United Nations Department of Economic and Social Affairs (UN DESA), *National Accounts Main Aggregates* database.

Note: Calculations are based on GDP in constant 2005 dollars.

C. Structural transformation: The missing link(s)

From 1950 to 1980, structural change in all developing regions more or less followed the pattern that development economists both predicted and prescribed. The share of agriculture in value added and employment fell, while that of manufacturing increased, along with that of other industries (utilities, construction and mining). There was, of course, considerable variation across countries reflecting differences in initial conditions and policy choices, but the classical pattern was most pronounced in East Asia (*TDR 2003: 93–94*). Perhaps not surprisingly, these structural changes coincided with a period of particularly fast industrial growth rates (see table 2.1) which, with one or two exceptions, has not

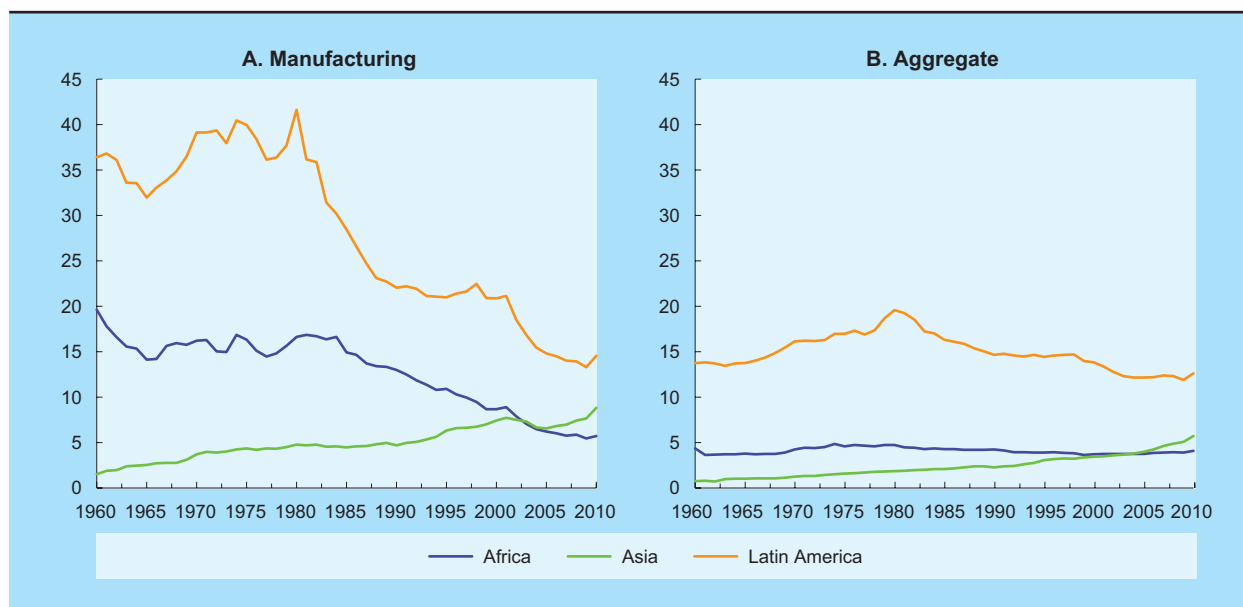
been replicated before or since. In the subsequent periods, manufacturing industry's shares increased only in Asian countries, both for value added and for employment. They both fell in Latin America. In Africa, while manufacturing's share in value added tumbled, the employment share barely moved (see chapter III).

Data on labour productivity provide more telling evidence of this pattern and of the break in the process of structural transformation for several regions after 1980. Chart 2.9 shows the productivity gap between manufacturing industry in the three developing regions and the United States. As expected,

Chart 2.9

LABOUR PRODUCTIVITY IN THE MANUFACTURING SECTOR AND IN THE OVERALL ECONOMY IN SELECTED DEVELOPING REGIONS, 1960–2010

(As a percentage of United States productivity)



Source: UNCTAD secretariat calculations, based on Timmer et al., 2014.

Note: Figures in 2005 constant prices in national currencies were converted using 2005 exchange rates. Weighted averages across regions.

Asia's productivity gap shrank continuously over the period, most sharply in the late 1960s. However, it is more surprising (given the criticisms directed at Latin America's and Africa's development policies in this period) to find that, in both regions, labour productivity increased, keeping pace with the United States in the 1960s and in the 1970s. Conversely, from the early 1980s, there appeared to be a trend towards increasing divergence in labour productivity. A similar picture describes the evolution of labour productivity in market services (Timmer et al., 2014: 13).

Trends in structural transformation in different regions and economies since 1970 indicate that these have been closely related to patterns of capital accumulation, as well as income, production and learning linkages. These are considered in greater detail in the next chapter which suggests that the process of diversification towards greater shares of higher value-added activities, especially in manufacturing industries, in both income and employment, is ultimately about the ability of specific economies to develop these various linkages and the degree to

which they are able to exploit them. Differences in the generation of such linkages largely explain the often sharply divergent patterns of structural transformation of different countries over the course of the past few decades.

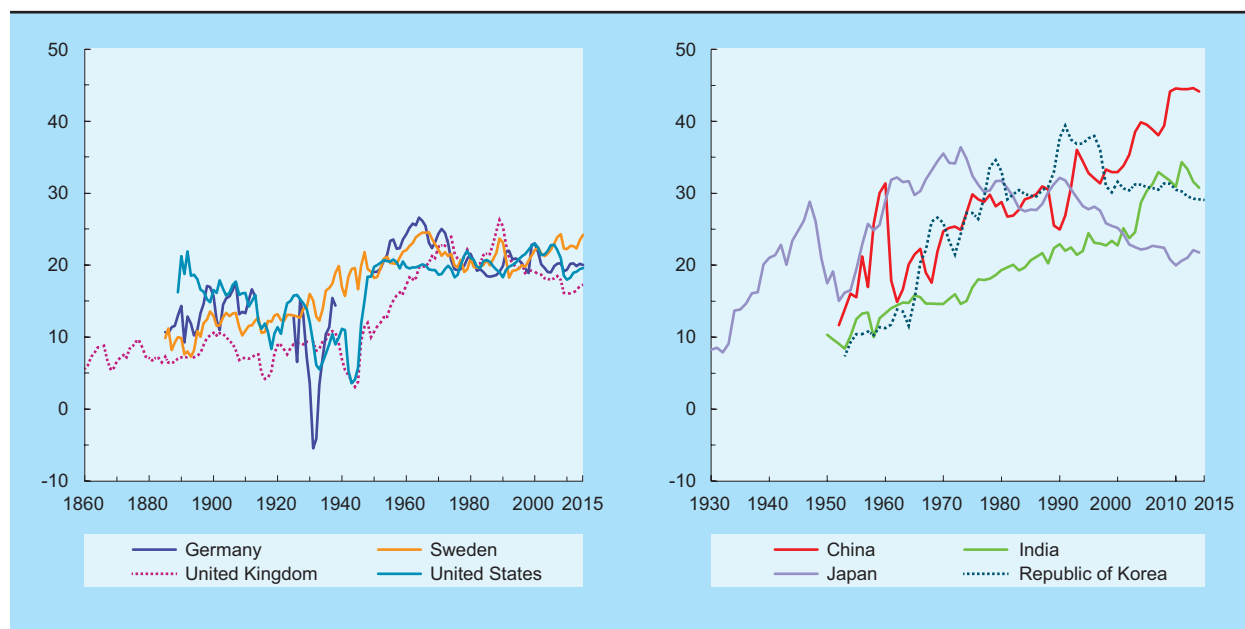
Looking at the broad sweep of history, it does appear that the later a successful catch-up process has begun the greater the investment push required to sustain that process (chart 2.10). In today's developed economies in the West, and Japan and the Asian tigers in the second half of the twentieth century, sustained and diversified industrialization based on a strong investment drive was also supported by a rapid increase in both exports and domestic demand (*TDRs 1996, 1997 and 2003*). To some extent, this virtuous pattern has also been exhibited in recent decades in China although, as noted earlier, China is still at a much lower level of income.

It also appears that the later the countries have embarked on a successful industrialization path, the greater has been the emphasis given to manufacturing

Chart 2.10

FIXED INVESTMENT IN SELECTED RAPIDLY GROWING COUNTRIES, 1860–2015

(As a percentage of GDP)



Source: UNCTAD secretariat calculations, based on Deane and Cole, 1962; Liesner, 1989; IMF, *International Financial Statistics*; and China National Bureau of Statistics.

Note: Investment figures for Germany between 1885 and 1938 refer to net fixed capital formation. Data for 1950–1990 are for the Federal Republic of Germany only. In the United States, investment figures up to 1947 refer to private gross fixed capital formation only.

exports. From the mid-twentieth century, the most successful cases of economic expansion have also been those that dramatically increased their shares of global merchandise exports, as indicated in chart 2.11.

In the immediate post-war period, the big story was the dramatic increase in the share of global exports of the then Federal Republic of Germany, a rise commensurate with rapid increases in that country's income. The export success of Japan, only somewhat more moderate, followed, becoming more significant in the 1970s. The 1980s can be seen as the period when the first-tier newly industrializing economies – Hong Kong (China), Republic of Korea, Singapore, Taiwan Province of China – achieved their export-oriented industrialization success, while the period after 2000 has been marked by the emergence of China. Yet these stories, remarkable as they have been, remain exceptions among the vast number of developing countries that have not shown the same capacity, or had the same opportunity, to improve

export shares or translate those into sustained increases in per capita incomes.

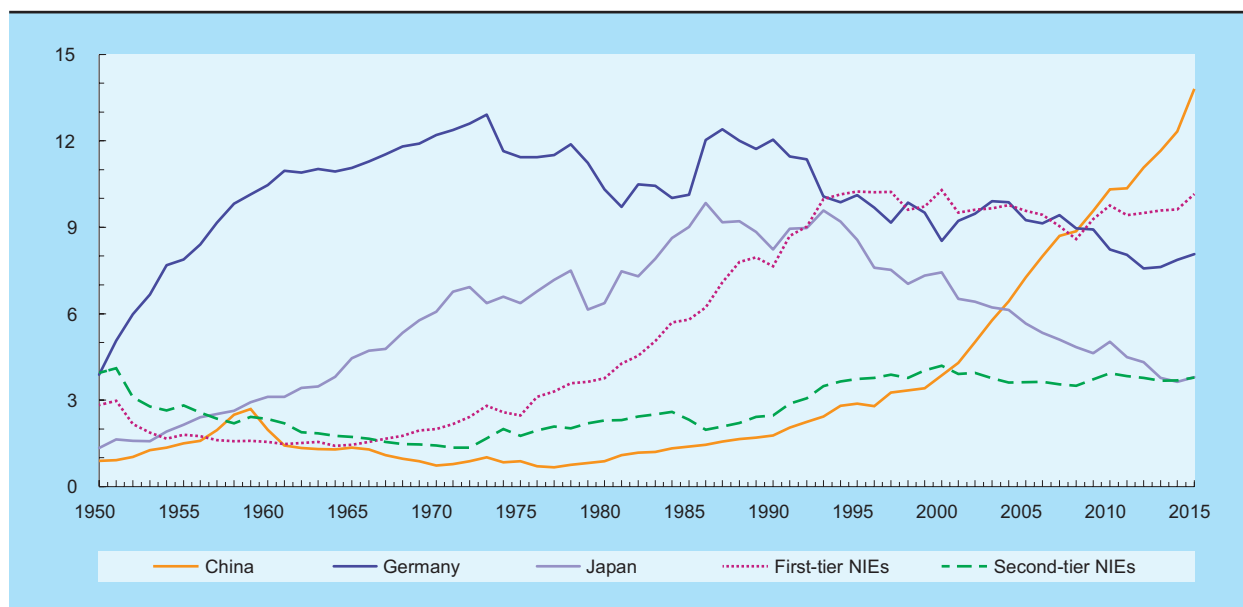
As global trade picked up pace from the early 1990s, the belief grew that it was becoming easier for more developing countries to follow a similar catch-up path to that of East Asia. As discussed in greater detail in chapter IV, this does not appear to have been the case. Moreover, and as considered in previous *TDRs*, this is, in part, because there is not an automatic link between exports and growth. Any efforts to strengthen that link are contingent on a variety of factors, of which two, in particular, stand out.

First, as was noted above, and is evident from charts 2.10 and 2.11, successful exporting countries have also experienced very substantial investment pushes, which were critical in enabling such expansion and providing the synergies that led to rising productivity and improved competitiveness. In most developing regions exports as a share of GDP have been rising steadily (or sharply) in the recent period

Chart 2.11

SHARE IN GLOBAL MERCHANDISE EXPORTS, SELECTED ECONOMIES, 1950–2015

(Per cent)



Source: UNCTAD secretariat calculations, based on *UNCTADstat*.

Note: First-tier NIEs are Hong Kong (China), the Republic of Korea, Singapore and Taiwan Province of China. Second-tier NIEs are Indonesia, Malaysia, the Philippines and Thailand. Germany comprises Federal and Democratic Republics prior to 1990.

(see chapter IV); however, the extent to which this did or did not pull up economic growth commensurately appears to have depended heavily on whether investment was strongly connected to this export drive. Indeed, it can be argued (Patnaik and Chandrasekhar, 1996) that the causation has typically run from investment to exports, with subsequent linkages creating positive synergies for growth. The second factor supporting industrial catch-up was the close link between export activities and the accumulation of the knowledge, skills and capabilities needed to sustain the non-price factors of competitiveness. This link was essential for sustaining the process of structural transformation as it enabled producers in targeted export industries to identify and exploit opportunities for change, and to invest in productive capacities and technologies with greater productivity potential (Abramovitz and David, 1996; Nübler, 2014).

A weakening of linkages between investment, exports and learning has produced the opposite

effects. For example, there appears to be a close relationship between the evolution of the structure of exports and the inter-industry pattern of investment in major Latin American economies, with no significant shift towards technology-intensive industrial activities (*TDR 2002*).¹⁴ Under these circumstances, the exposure of economies to international competition, whether through rapid trade liberalization or through efforts to attract FDI, may simply lead to the creation of enclaves of manufacturing exports with varying degrees of technological sophistication or to industrial rationalization whereby rising productivity through job cuts allows some sectors to maintain price competitiveness and market shares. In some cases, this may involve substituting domestic inputs with imported ones or reverting to a greater reliance on existing advantages from extraction and processing of primary commodities, even as employment falls in sectors with potential for strong productivity growth and greater technological dynamism (chapter III; see also *TDR 2003*).

D. A global enabling environment?

Understanding the evolution of different transformation paths at the country level requires considering specific local institutional conditions and histories as well as to policy choices. However, the global environment will also have a bearing on how local efforts to manage structural transformation processes evolve. In particular, the appropriate macroeconomic conditions are needed for governments and firms to build, expand and improve the linkages that underpin inclusive and sustainable industrialization and development.

The current global environment has certainly helped to enable increases in cross-border flows of goods, services and capital, including FDI. Trade flows in particular have played a major role in changing growth prospects for a small but significant set of countries. The mobility of labour across borders has increased to some extent since the mid-1980s, but has not matched capital movements to any significant degree. Moreover, while capital has definitely become much more mobile across borders, capital flows have been more volatile for most developing countries, and have not always been sustained over sufficiently long periods to enable for desired changes in accumulation and productive structures.

It is not entirely clear whether the global environment has enabled or hindered the kind of structural transformation that has been at the heart of success stories of development. Many of the successful catch-up economies established their paths in the previous era of globalization, under very different international arrangements than currently prevail, and which also allowed for more comprehensive State intervention in the form of trade and industrial policies and greater control over finance. China, which has been the outstanding growth story of this – indeed of any – era, has followed a path which is familiar from a previous generation of newly industrializing

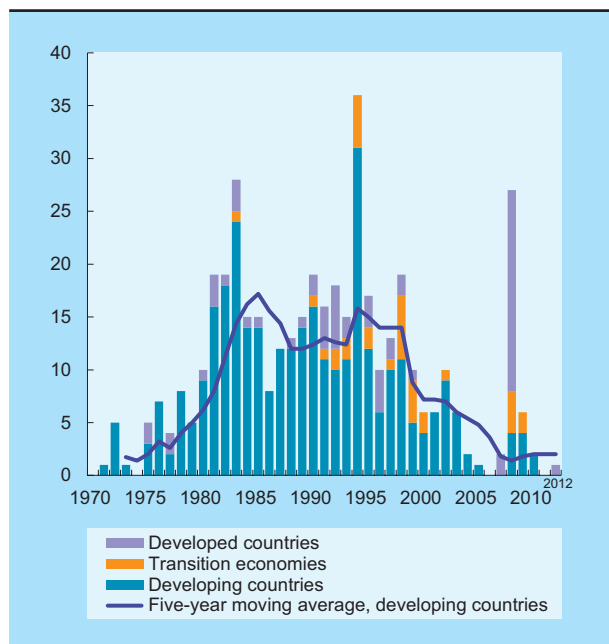
economies from East Asia. Its success reflects not simply a maximalist growth path but a continuous one which has, to date, avoided severe and lasting setbacks. That continuity has been underpinned by a successful transformation path which has seen a steady reduction of the weight of the rural economy and population, an industrialization push built around rising productivity in the manufacturing sector and tied to an expanding urban economy, and a strong link between exports and investment. There seems little doubt that changes in the global economy supported this process, but they did so in the context of a very strong developmental State and expansion of domestic markets. The record in other developing regions, and indeed in some other parts of the Asian region, is less positive, even for large economies such as Brazil, India, Indonesia, Mexico, Nigeria and South Africa (chapter III).

It is worthwhile, in this context, to identify some features of the global economy and of the international economic and financial architecture that have proved a good deal less enabling for a sustained process of structural transformation.

A first concern with today's global economic environment is the declining trend in growth, led by a persistent slowdown in the developed economies. It could appear that this has made catching up easier, but convergence under such conditions is obviously less desirable than in a broader context of overall dynamism. Further, this slowdown in developed economies has been associated with a series of macroeconomic imbalances and inequities that are likely to prove an obstacle to structural transformation in many developing countries. Most importantly, the lack of aggregate demand at a global level, resulting at least in part from wage restraint and attempts at fiscal austerity in most developed economies, has had cascading effects on the developing world. This

Chart 2.12

NUMBER OF SYSTEMIC BANKING CRISES BY COUNTRY GROUP, 1970–2012



Source: UNCTAD secretariat calculations, based on Laeven and Valencia, 2012.

has certainly become apparent with the recent slowdown of international trade discussed in the previous chapter. But the very rapid expansion of trade during the decade of convergence at the start of the millennium was itself heavily dependent on the massive accumulation of public and private debt in developed countries with deficits, which was never a sustainable process.¹⁵ It is true that an important factor behind higher and sustained growth in the East Asian economies was a relatively high level of domestic credit to GDP (Priewe, 2015). However, that was mostly achieved within a heavily regulated financial system and linked to a vibrant profit-investment nexus as a key feature of these economies (*TDR 2003*). More recent trends in many emerging economies display a greater reliance on credit-fuelled expansions in more deregulated financial contexts, which have already given rise to concerns in many countries, as discussed in chapter V. A more generalized pattern of debt dependent growth in the context of greater financial deregulation and the absence of a strong international financial safety net appears to be an unreliable basis for a sustainable path of structural transformation.

A second (and related) area of concern is the tendency of the current era to give rise to periodic shocks and crises. The initial perceptions of a “great moderation” relied heavily on trends in developed economies, whereas for much of this period, developing countries experienced heightened vulnerability to economic shocks of varying origin, at least compared with the previous period (chart 2.12). The period from 2002 to 2008 was an exception, but this ended with the largest global economic crisis since the 1930s, the continuing effects of which still hold back growth in the developed economies and have belatedly generated instability in developing countries. Such an environment is unlikely to support the kind of long-term strategy which can guide a successful structural transformation path.

A third feature is the slowdown of capital accumulation across most regions in the global economy. There are obvious and close links between a robust process of capital formation and structural transformation; indeed, a strong investment climate was a central promise of the policy changes which ushered in the new era of globalization. The expectation was that capital would flow from a global pool of savings to finance trade imbalances in fast-growing economies and provide more resources for capital formation, particularly in capital-scarce, poorer countries where potential returns would be highest, and add depth to domestic financial markets. This expectation has not been borne out (*TDR 2008*). As chart 2.13 shows, there has been little connection between the trajectory of global capital flows, which have been very volatile, and the relatively dismal performance of gross capital formation.¹⁶

Another component of the current global landscape that is likely to have a bearing on the pattern of structural transformation at the national level is the way in which markets are organized at the international level, and the processes of greater concentration in several areas of production and distribution.

In a world of increasing returns, fast-moving technological change and first-mover advantages, large firms emerge with the aim, in part, of increasing their control over market forces. The assumption that prices reflect underlying cost conditions is questionable where monopoly conditions are present or where there are significant externalities or incomplete markets. The emergence of global financial institutions with potentially considerable influence over the markets

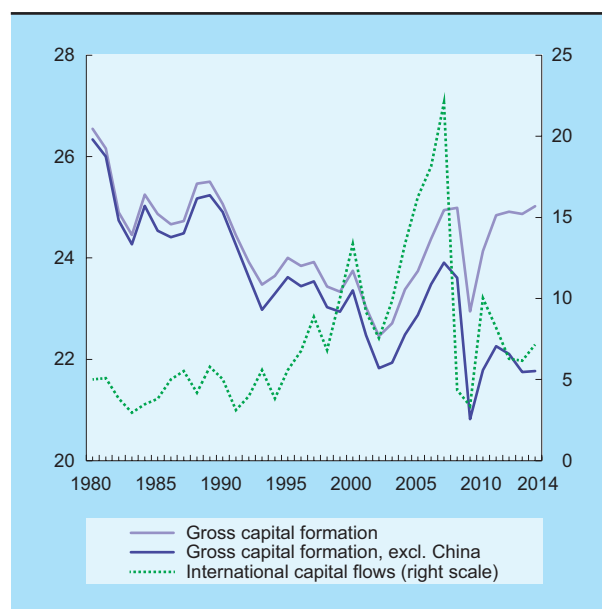
in which they operate has been a prominent, and much discussed, feature of the current globalization era. This is a well understood trend in the banking sector, where banks that were too big to fail became part of the environment leading to financial crisis, assisted partly by a wave of mergers and acquisitions in the 1990s (Santillán Salgado, 2011). But this trend was also true of other parts of the non-banking financial system. For example, a study by the Federal Reserve Bank of New York (Cetorelli et al., 2007), just before the financial crisis, found that in the period 1990–2004, there were significant increases in concentration in the United States markets for certain financial services such as securities underwriting and initial public offerings (IPOs) and mergers and acquisitions advisory services, as well as increased global concentration in equity-linked over-the-counter markets. At the same time, competition across financial institutions became more intense as the lines between market segments were eroded by deregulation. The relatively halting attempts at re-regulation of the financial systems in developed economies since the financial crisis have not made too much of a dent in the highly concentrated financial system globally: the countries with the highest degree of concentration in the financial sector – Japan, Switzerland, the United Kingdom and the United States – are all home to transnational banks and other financial institutions with very significant international presence.

It is more difficult to gather empirical evidence on patterns of market concentration in other parts of the global economy. Nevertheless, a significant increase in market concentration has been observed in the case of the United States using two different methodologies (Council of Economic Advisers, 2016; and The Economist, 2016). The Economist (2016), using the top four firm's share in total industry revenue, found a significant increase in market concentration from 1997 to 2012 following a decline in the 1980s. Indeed, it increased in two thirds of 893 industrial and services activities. Markets in which the top four firms account for at least two thirds of sales are considered to be “oligopolies”. Those in which such firms account for between a third and two thirds are “concentrated” and those in which this account for less than a third are “fragmented”. The share of the “oligopolistic corner” in the economy increased from 4 per cent in 1997 to about 10 per cent in 2012. The share of concentrated industries rose from 24 per cent to 33 per cent, implying a fall in the share of fragmented industries from 72 per cent to 58 per cent.

Chart 2.13

INTERNATIONAL CAPITAL FLOWS AND FIXED INVESTMENT AS A PROPORTION OF WORLD OUTPUT, 1980–2014

(Per cent)



Source: UNCTAD secretariat calculations, based on IMF, *Balance of Payment Statistics*; and UN DESA, United Nations Statistics Division.

It is probably no coincidence that, as the Council of Economic Advisers shows, the ratio between the returns on investment capital of the 90th percentile firm and of the median firm, which was stable at approximately two times from the 1960s to the mid-1980s, increased to more than five times in the 2000s. As sectors with “abnormal” profits have increased their shares, the share of post-tax profits in GDP has also soared since 1980, being now close to record levels. The counterpart of this is the declining share of wages in national income which has been discussed in previous *TDRs*. The impact of these trends on structural transformation will be examined in greater detail in chapter V.

The internationalization of production has also seen both heightened concentration and competition trends. Big firms dominate the world of trade and foreign direct investment. Moreover, liberalization and technological progress have made it easier for these firms to locate abroad and to further extend their global reach, including through non-equity modes

of operation, such as international outsourcing of production, licensing of knowledge to host-country companies, management contracts and franchising (UNCTAD, 2011b; 2016). Moreover, the waves of cross-border mergers and acquisitions since the early 1990s have certainly added to that reach. There is plenty of anecdotal evidence about the dominant global role of a handful of companies in particular products and services, from cars to brewing to mobile phones (Norfield, 2016: 121–123), and from just a few host countries.¹⁷

However, the links from increasing firm size at the national level to patterns of global ownership and the degrees of control such firms have over markets is far from a direct one, given that multinational enterprises (MNEs) are, in a more open global economy, bound to face the competitive challenge of foreign rivals both in their home and third markets. Still, the trend is discernable. One recent study, which constructed the networks of ownership and control around 43,000 MNEs, taken from the Orbis 2007 global company database, found that less than 150 core firms held nearly 40 per cent of the control over the economic value of MNEs in the world, via a complicated web of ownership relations (Vitali et al., 2011: 6). While such a pattern may have multiple causes ranging from reducing transaction costs, to risk sharing to increasing trust, the likelihood is that it will impact on market structure. Given that even small cross-shareholding structures at a national level can affect the operation of markets, the implications for competition (and competition policy) in key sectors in the global economy could be significant (Singh, 2002).

These factors have, most recently, come together around global value chains (GVCs), initially restricted to a few industries (such as semiconductors, cars and

garments), but becoming steadily more and more common. Nolan (2012: 18–19) found that in more than 20 industrial sectors in which GVCs are organized, a few “system integrator firms” tend to dominate the chains; developed countries’ corporations¹⁸ still held, in 2013, the biggest market share in 20 out of 25 broad sectors, including cars, business and personal services, chemicals, electronics, financial services, heavy machinery and media (Starrs, 2014).

The impact of these trends on structural transformation is examined in greater detail in chapter IV. However, a related feature has been the heightened competition closely linked to the emergence of a global pool of labour, to be freely tapped by foot-loose capital and by system integrator firms which can easily shift parts of their global value chains, arbitrating labour cost differentials across countries. The increased bargaining power of capital – further enhanced by institutional and technological changes (ILO, 2013) – lies at the root of the decline in the global wage share since 1980, both in developed and developing economies (see chart 1.7 in chapter I; see also *TDR 2012*; Karabarounis and Neiman, 2014). This tendency is often accentuated by various trade and economic partnership agreements that increase competition across countries in the production stage that involves more labour, even as they tighten intellectual property rights that increase monopoly control over the pre- and post-production stages (like design and distribution). Although still missing important details, multilateral initiatives such as the 2030 Agenda and the Addis Ababa Action Agenda (AAAA) point towards an alternative approach to building an international environment which would enable developing countries to reap the potential benefits of an increasingly integrated global economy.

E. Conclusions

A combination of greater openness, technological progress and increased capital mobility has increased the degree to which most economies are now integrated into the global economy, to the point where no policymaker or business can ignore the influence of events and policies in other parts of the world or the reaction of other actors – such as foreign governments and large internationalized firms – to their own actions.

The “universal interdependence of nations” is not, in itself, a new feature of the global economy. Nor is the spread of market forces, which have ebbed and flowed at the global level over past centuries. Rather, what makes today’s globalization something of a new departure is the way in which economic, social and political factors interact to shape the rules of the game by which incomes and jobs are generated. In particular, weakened State regulatory authority and diminished policy space have meant that those forces are increasingly managed through uncontested and increasingly unaccountable private institutions and market structures, often with a high concentration of economic control and financial leverage, and with the ability to impose penalties on countries that seek to circumvent or bend those structures. Rodrik (2011) has described this as a shift towards deeper integration at the expense of democratic representation or policy space, though it is probably a mixture of both. Recognizing this is an important correction to the view that globalization is an autonomous, irresistible and irreversible process driven by purely impersonal forces. Such forces are important, but they are instigated and directed by specific political choices and private interests.

The case for choosing globalization as the framework for designing policy is based on the argument that it will stimulate entrepreneurship, investment and economic growth, particularly in

developing countries, and enable them to rapidly catch up with the levels of income, productivity and welfare prevailing in the developed economies. That some countries have been able to do this is undoubtedly the case. However, the review of the evidence offered above suggests that successful countries have been very heavily concentrated in the East Asian region, that their growth paths have long roots back to the previous era of managed globalization, and that they have fostered a sustained process of structural transformation. Elsewhere the record is more chequered with episodes of both convergence and divergence and with fewer signs of the structural transformation needed to underpin sustained rises in productivity, even in periods when growth has picked up.

Closing gaps is made all the more challenging because policymakers are chasing a moving target with the graduation of a small number of successful newly industrializing economies and the evolution of richer countries. Even as growth has slowed in the developed economies, in several dimensions, such as years of schooling or urbanization levels, middle-income (and even some lower income) countries have already reached the point that today’s rich countries attained only once they had crossed the high-income threshold. But in the meantime, high-income countries have moved on. In consequence, catching up today requires even more capital, education, innovation, infrastructure, as well as closer cooperation between the public and private sector, than was the case in the past.

After three decades of pushing toward a more open global economy, a key question is whether the kind of international trade, financial and production relations that have emerged are able to support the structural transformation needed for inclusive and sustainable growth and catching up. In this respect, and as argued extensively in previous *Reports*, when

currency and financial markets are dominated by speculative transactions, herd behaviour and recurrent crises, and when there is virtually no coordination at all of macroeconomic policies in the systemically important developed economies, a stable global economy that supports a strong pace of capital formation is unlikely to emerge. Similarly, an international trading system that generates greater volumes of trade but without commensurate increases in income and employment, and which reinforces existing structures of production and first-mover advantages, leaves weaker countries increasingly anxious about their future economic prospects. As their resources are increasingly stretched at home, poorer countries find it difficult to bargain effectively in pursuit of their own efforts to catch up and they remain highly vulnerable to the vagaries of international finance,

the presence of footloose corporations, exogenous shocks and balance of payment difficulties.

Institutional developments in the international arena have further constrained developing countries with rules and restrictions that did not apply to late developers in the twentieth century (*TDR 2014*). Thus, as developing countries gear up to implement a new and more ambitious development agenda, they are facing not only a more complex and unstable global environment, but also one in which various instruments have been expunged from their policy toolkit. Many of these instruments have historically been critical for managing the process of structural transformation, and, in particular, industrialization. This is an issue taken up in the subsequent chapters of the *Report*. ■

Notes

- 1 This new policy consensus has been given various names – globalism, neo-liberalism, market fundamentalism, market triumphalism, Washington Consensus, etc. – none of which are entirely satisfactory. For accounts of its rise, see Kozul-Wright and Rayment, 2007, chap. 1; Mazower, 2012, chap. 12; and Toye, 2014, chap. V.
- 2 The IMF's *World Economic Outlook* 2009 predicted average growth for emerging and developing economies of 4 per cent, it turned out to be 7.4 per cent.
- 3 In his 2000 Prebisch Lecture in UNCTAD, the Canadian economist Gerald Helleiner argued “the very term globalization has become so slippery, so ambiguous, so subject to misunderstanding and political manipulation, that it should be banned from further use”. For historical accounts of the changing nature of globalization and its impact, see Bairoch, 1993; Bairoch and Kozul-Wright, 1996; Bayly, 2004; Hopkins, 2002; O'Rourke and Williamson, 2002; and Panic, 2011.
- 4 This measure of financial openness is a de jure and not a de facto measure, i.e. the Chinn-Ito index does not measure the actual financial openness but only financial openness according to the regulations in place in each country as reported in the IMF, *AREAER*. To this end, the Chinn-Ito index is based on the four binary dummy variables that codify the tabulation of restriction on cross-border financial transactions (see Chinn and Ito, 2006): (i) The presence of multiple exchange rates; (ii) Restrictions on current account transactions; (iii) Restrictions on capital account transactions; and (iv) Requirement of the surrender of export proceeds. Eventually the index is the first standardized component of the four above mentioned variables using a principal components analysis methodology. However, the source IMF data do not capture the extent of all financial regulations that could either strengthen or weaken the financial system. For instance, they do not account for macroprudential measures that could be taken to avoid bailing out domestic financial institutions (leverage ratio, core capital, etc.) and other microprudential regulations (consumer protection against over indebtedness, etc.). In this regard, the IMF offers only a partial overview of a country's financial regulation, addressing mostly the interaction between residents and non-residents.
- 5 While a vast academic literature has provided support to these ideas, the World Bank's 1987 *World Development Report* was amongst the first attempts to offer a synthetic vision.
- 6 Two types of convergence have been distinguished in this literature: absolute and conditional. Under absolute convergence, backward regions actually do

- grow faster on average than more advanced ones, so catching up is observed in reality. However, this result rests on a rather simplistic perception of the narrow determinants of growth. Theories of conditional convergence broaden the set of determinants of growth and recognize that economies may have different steady states. So backward regions still have the potential to grow faster than the more advanced ones, but this potential would be realized only if they satisfy certain conditions. If not, then the growth rate in backward regions may be as slow as, or even slower than, in advanced regions. Moreover, because economies converge on their own steady states there is no assumption about a final state where all income levels are identical. For an earlier assessment of this literature, see Rowthorn and Kozul-Wright, 1998.
- 7 See variously, Dullien, 2016; Levine and Renelt, 1992; Moral-Benito, 2012; Pritchett, 1996; Rodriguez and Rodrik, 1999.
 - 8 The 1970s was also a period of convergence largely because growth in the developed economies slowed sharply thanks to a series of shocks.
 - 9 While table 2.2 describes per capita incomes measured in terms of PPP conversion factors, it should be noted that there are both conceptual and empirical problems with the use of PPP-based comparisons of per capita income, including lack of comparability across different time periods and a tendency to overstate the incomes of the poor. This would obviously also affect conclusions with respect to convergence and divergence.
 - 10 However, if China is excluded, the average growth rates for developing countries during the 1980s and 1990s were lower than those of the United States.
 - 11 It is possible to compute the income gap as $GAP = 1 - (Y_i/Y_{US})$, where Y_i denotes the real income per capita of a country i , and Y_{US} the real income per capita of the United States (Felipe, 2012a).
 - 12 For an earlier discussion on the use of transition matrices in the convergence debate, see Kozul-Wright and Rowthorn, 2002.
 - 13 Bhutan, Botswana, Cabo Verde, China, Hong Kong (China), India, Indonesia, the Lao People's Democratic Republic, Malaysia, Maldives, Mauritius, Oman, the Republic of Korea, Saint Vincent and the Grenadines, Singapore, Sri Lanka, Sudan, Taiwan Province of China, Thailand and Viet Nam.
 - 14 Note that exported goods may be classified as intensive in skills and technology, and yet not result from technology-intensive activities within the country, when the export-oriented firms mostly assemble high-tech imported inputs (e.g. in the *maquila* industry).
 - 15 Even where some major deficit developed countries with internationally accepted currencies (such as the United States and the United Kingdom) had the space to finance external deficits, the corresponding internal disequilibria eventually led to the financial crisis.
 - 16 The average rate of investment attained in the 1970s has never been recovered in subsequent periods in several regions and countries (as in Africa, Europe, Latin America and Japan) – not even in the 2003–2007 global boom (2005 constant prices and exchange rates, United Nations Statistics Division data).
 - 17 UNCTAD, 2013, annex table 28, online only. Available at: unctad.org/Sections/dite_dir/docs/WIR2013/WIR13_webtab28.xls.
 - 18 Taken from the *Forbes Global* yearly ranking of the top 2000 publicly traded companies.

References

- Abramovitz M and David PA (1996). Convergence and deferred catch-up: Productivity leadership and the waning of American exceptionalism. In: Landau R, Taylor T and Wright G, eds. *The Mosaic of Economic Growth*. Stanford, Stanford University Press: 21–62.
- Aiyar S, Duval R, Puy D, Wu Y and Zhang L (2013). Growth slowdowns and the middle-income trap. Working Paper No. 13/71, International Monetary Fund, Washington, DC.
- Akin Ç and Kose MA (2007). Changing nature of North-South linkages: Stylized facts and explanations. Working Paper No. 07/280, International Monetary Fund, Washington, DC.
- Arias MA and Wen Y (2015). Trapped: Few developing countries can climb the economic ladder or stay there. *The Regional Economist*, October: 5–9.
- Arias MA and Wen Y (2016). Relative income traps. *Federal Reserve Bank of St Louis Review*, 98(1): 41–60.
- Athukorala P-M and Woo WT (2011). Malaysia in the Middle-Income Trap. Crawford School of Public Policy, Australian National University. Unpublished.

- Bairoch P (1993). *Economics and World History: Myths and Paradoxes*. London, Harvester.
- Bairoch P and Kozul-Wright R (1996). Globalisation myths: Some historical reflections on integration, industrialisation and growth in the world economy. In: Kozul-Wright R and Rowthorn R, eds. *Transnational Corporations and the Global Economy*. New York, NY. St Martin's Press: 37–68.
- Barro RJ (2012). Convergence and modernization revisited. Working Paper No. 18295. National Bureau of Economic Research, Cambridge, MA.
- Barro RJ and Sala-i-Martin X (1998). *Economic Growth*. Cambridge, MA, MIT Press.
- Bayly CA (2004). *The Birth of the Modern World, 1780–1914: Global Connections and Comparisons*. Oxford, Blackwell Publishing.
- Bénétrix AS, O'Rourke KH and Williamson JG (2012). The spread of manufacturing to the poor periphery 1870–2007. Working Paper No. 18221, National Bureau of Economic Research, Cambridge, MA.
- Bernanke BS (2004). The Great Moderation: Remarks by Governor Ben S Bernanke at the meetings of the Eastern Economic Association, Washington, DC, 20 February. Available at: <http://www.federalreserve.gov/BOARDDOCS/SPEECHES/2004/20040220/default.htm>.
- Bolt J and van Zanden JL (2014). The Maddison Project: Collaborative research on historical national accounts. *The Economic History Review*, 67(3): 627–651.
- Canuto O (2010). Recoupling or switchover: Developing countries in the global economy. World Bank, Washington, DC.
- Cetorelli N, Hirtle B, Morgan D, Peristiani S and Santos J (2007). Trends in financial market concentration and their implications for financial stability. *Economic Policy Review*, 13 (1): 33–51.
- Chinn MD and Ito H (2006). What matters for financial development? Capital controls, institutions, and interactions. *Journal of Development Economics*, 81(1): 163–192.
- Council of Economic Advisers (2016). Benefits of competition and indicators of market power. Issue Brief, April.
- Deane P and Cole WA (1962). *British Economic Growth, 1688–1959: Trends and Structure*. Cambridge, Cambridge University Press.
- Dullien S (2016). A question of strategy: What characterizes top growth performers? In: Calcagno A, Dullien S, Márquez-Velásquez A, Maystre N and Priewe J, eds. *Rethinking Development Strategies after the Financial Crisis – Volume II: Country Studies and International Comparisons*. United Nations, New York and Geneva.
- Eichengreen B, Park D and Shin K (2011). When fast growing economies slow down: International evidence and implications for the People's Republic of China. Economics Working Paper Series No. 262, Asian Development Bank, Manila.
- Felipe J (2012a). Tracking the middle-income trap: What is it, who is in it, and why? Part 1. Economics Working Paper Series No. 306, Asian Development Bank, Manila.
- Felipe J (2012b). Tracking the middle-income trap: What is it, who is in it, and why? Part 2. Economics Working Paper Series No. 307, Asian Development Bank, Manila.
- Greenspan A (2005). Risk Transfer and Financial Stability: Remarks to the Federal Reserve Bank of Chicago's Forty-first Annual Conference on Bank Structure, Chicago, IL, 5 May.
- Helleiner GK (2000). Markets, politics and globalization: Can the global economy be civilized? The 10th Raúl Prebisch Lecture. United Nations Conference on Trade and Development, Geneva.
- Helleiner E (2014). *Forgotten Foundations of Bretton Woods: International Development and the Making of the Postwar Order*. Ithaca, NY, Cornell University Press.
- Hirschman AO (1995). *A Propensity to Self-Subversion*. Cambridge, MA, Harvard University Press.
- Hopkins AG (2002). *Globalisation in World History*. London, Random House.
- Imbs J and Wacziarg R (2003). Stages of diversification. *The American Economic Review*, 93(1): 63–86.
- ILO (2013). *Global Wage Report 2012/13: Wages and Equitable Growth*. International Labour Organization, Geneva.
- Jankowska A, Nagengast AJ and Perea JR (2012). The product space and the middle-income trap: Comparing Asian and Latin American experiences. Working Paper No. 311, OECD Development Centre, Paris.
- Kanchoochat V (2015). The middle-income trap and East Asian miracle lessons. In: Calcagno A, Dullien S, Márquez-Velásquez A, Maystre N and Priewe J, eds. *Rethinking Development Strategies after the Global Financial Crisis. Volume I: Making the Case for Policy Space*. United Nations, New York and Geneva.
- Karabarbounis L and Neiman B (2014). The global decline of the labor share. *The Quarterly Journal of Economics*, 129(1): 61–103.
- Kozul-Wright R and Fortunato P (2016). Sustaining industrial development in the South. *Development Journal* (forthcoming).
- Kozul-Wright R and Rayment R (2007). *The Resistible Rise of Market Fundamentalism: Rethinking Development Policy in an Unbalanced World*. London, Zed Books.
- Kozul-Wright R and Rowthorn R (2002). Globalization and the myth of economic convergence. *Economie Appliquée*, 55 (2): 141–178.
- Laeven L and Valencia F (2012). Systemic banking crises database: An update. Working Paper 12/163, International Monetary Fund, Washington, DC.
- Lawrence RZ (1996). *Regionalism, Multilateralism and Deeper Integration*. Washington, DC, Brookings Institution Press.

- Levine R and Renelt D (1992). A sensitivity analysis of cross-country growth regressions. *The American Economic Review*, 82(4): 942–963.
- Lewis WA (1954). Economic development with unlimited supplies of labour. *The Manchester School*, 22(2): 139–191.
- Liesner T (1989). *One Hundred Years of Economic Statistics: United Kingdom, United States of America, Australia, Canada, France, Germany, Italy, Japan, Sweden*. London, Economist Publications.
- Mazower M (2012). *Governing the World: The History of an Idea, 1815 to the Present*. London, Penguin.
- Moral-Benito E (2012). Growth empirics in panel data under model uncertainty and weak exogeneity. Working Paper No. 1243, Banco de España, Madrid.
- Nolan P (2012). *Is China Buying the World?* Cambridge, UK Polity Press.
- Norfield T (2016). *The City: London and the Global Power of Finance*. London, Verso.
- Nübler I (2014). A theory of capabilities for productive transformation: Learning to catch up. In: Salazar-Xirinachs JM, Nübler I and Kozul-Wright R, eds. *Transforming Economies: Making Industrial Policy Work for Growth, Jobs and Development*. International Labour Organization, Geneva: 113–149.
- O'Rourke KH and Williamson JG (2002). When did globalisation begin? *European Review of Economic History*, 6(1): 23–50.
- Panic M (2011). *Globalization: A Threat to International Cooperation and Peace?* Basingstoke, Palgrave Macmillan.
- Patnaik P and Chandrasekhar CP (1996). Investment, exports and growth: A cross-country analysis. *Economic and Political Weekly*, 31(1): 31–36.
- Paus E (2012). Confronting the middle income trap: Insights from small latecomers. *Studies in Comparative International Development*, 47(2): 115–138.
- Priewe J (2015). Eight strategies for development in comparison. Working Paper No. 53/2015, Institute for International Political Economy, Berlin.
- Pritchett L (1996). Where has all the education gone? Policy Research Working Paper No. 1581, World Bank, Washington, DC.
- Pritchett L (1998). Patterns of economic growth: Hills, plateaus, mountains, and plains. Policy Research Working Paper Series No. 1947, World Bank, Washington, DC.
- Rodriguez F and Rodrik D (1999). Trade policy and economic growth: A skeptic's guide to cross-national evidence. Working Paper No. 7081, National Bureau of Economic Research, Cambridge, MA.
- Rodrik D (2011). *The Globalization Paradox: Democracy and the Future of the World Economy*. New York, NY. WW Norton & Company.
- Rowthorn R and Kozul-Wright R (1998). Globalization and economic convergence: An assessment. Discussion Paper No. 131, United Nations Conference on Trade and Development, Geneva.
- Sachs JD and Warner AM (1995). Economic reform and the process of global integration. *Brookings Papers on Economic Activity*, 1995(1): 1–118.
- Santillán Salgado RJ (2011). Banking concentration in the European Union during the last fifteen years. *Panoeconomicus*, 58(2): 245–266.
- Singh A (2002). Competition and competition policy in emerging markets: International and developmental dimensions. G-24 Discussion Paper Series No. 18, United Nations, New York and Geneva.
- Spence M (2011). *The Next Convergence: The Future of Economic Growth in a Multispeed World*. New York, Farrar, Straus and Giroux.
- Starrs S (2014). The chimera of global convergence. *New Left Review*, 87: 81–96.
- The Conference Board (2015). The Conference Board Total Economy Database™, May 2015. Available at: <http://www.conference-board.org/data/economydatabase/> (accessed 11 July 2016).
- The Economist* (2016). Business in America: Too much of a good thing, 26 March.
- Timmer MP, de Vries G and de Vries K (2014). Patterns of structural change in developing countries. Research Memorandum No. 149, Groningen Growth and Development Centre (GGDC), Groningen.
- Toner P (1999). *Main Currents in Cumulative Causation: The Dynamics of Growth and Development*. London, Macmillan Press.
- Toye J (2014). *UNCTAD at 50: A Short History*. United Nations Conference on Trade and Development, Geneva.
- UNCTAD (1964). Proceedings of the United Nations Conference on Trade and Development, Geneva 23 March–16 June – Vol. I: Final Act and Report. E/CONF.46/141, Vol. I. United Nations publication. Sales No. 64.II.B.11. New York.
- UNCTAD (2011a). Report of the Secretary-General of UNCTAD to UNCTAD XIII – Development-led globalization: Towards sustainable and inclusive development paths. United Nations, New York and Geneva.
- UNCTAD (2011b). *World Investment Report, 2011: Non-Equity Modes of International Production and Development*. United Nations publication. Sales No. E.11.II.D.2. New York and Geneva.
- UNCTAD (2013). *World Investment Report, 2013 – Global Value Chains: Investment and Trade for Development*. United Nations publication. Sales No. E.13.II.D.5. New York and Geneva.
- UNCTAD (2016). *World Investment Report, 2016 – Inventor Nationality: Policy Challenges*. United Nations publication. Sales No. E.16.II.D.4. New York and Geneva.
- UNCTAD (TDR 1996). *Trade and Development Report, 1996*. United Nations publication. Sales No. E.96.II.D.6. New York and Geneva.
- UNCTAD (TDR 1997). *Trade and Development Report, 1997: Globalization, Distribution and Growth*.

- United Nations publication. Sales No. E.97.II.D.8. New York and Geneva.
- UNCTAD (TDR 2002). *Trade and Development Report, 2002: Global Trends and Prospects, Developing Countries in World Trade*. United Nations publication. Sales No. E.02.II.D.2, New York and Geneva.
- UNCTAD (TDR 2003). *Trade and Development Report, 2003: Capital Accumulation, Growth and Structural Change*. United Nations publication. Sales No. E.03.II.D.7. New York and Geneva.
- UNCTAD (TDR 2008). *Trade and Development Report, 2008: Commodity Prices, Capital Flows and the Financing of Investment*. United Nations publication. Sales No. E.08.II.D.21, New York and Geneva.
- UNCTAD (TDR 2012). *Trade and Development Report, 2012: Policies for Inclusive and Balanced Growth*. United Nations publication. Sales No. No. E.12.II.D.8. New York and Geneva.
- UNCTAD (TDR 2014). *Trade and Development Report, 2014: Global Governance and Policy Space for Development*. United Nations publication. Sales No. E.14.II.D.4. New York and Geneva.
- Vitali S, Glattfelder JB, Battiston S (2011). The network of global corporate control. *PLoS ONE*, 6(10): e25995.
- Wolf M (2011). In the grip of a great convergence. *Financial Times*, 4 January.
- World Bank (1987). *World Development Report 1987*. New York, NY, Oxford University Press.
- World Bank (1991). *World Development Report 1991: The Challenge of Development*. World Bank, Washington, DC.
- World Bank (2013). *China 2030: Building a Modern, Harmonious, and Creative Society*. World Bank, Washington, DC.
- World Bank (2016). *Global Economic Prospects: Divergence and Risks*. World Bank, Washington, DC.