CHAPTER I

# GLOBAL INVESTMENT TRENDS AND PROSPECTS

# A. CURRENT FDI TRENDS

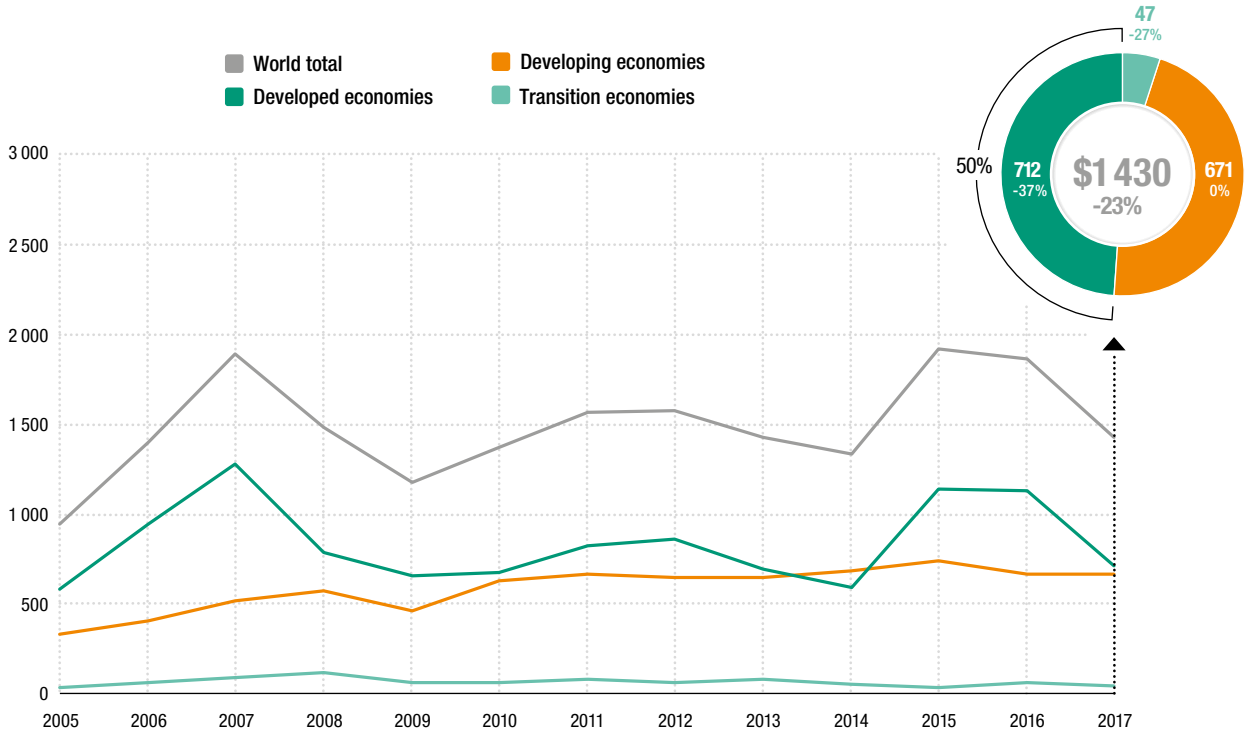
## 1. Global trends

Global foreign direct investment (FDI) flows fell by 23 per cent in 2017, to $1.43 trillion from a revised $1.87 trillion in 2016 (figure I.1).[1] The decline is in stark contrast to other macroeconomic variables, such as GDP and trade, which saw substantial improvement in 2017. A decrease in the value of net cross-border mergers and acquisitions (M&As) to $694 billion, from $887 billion in 2016, contributed to the decline.[2] The value of announced greenfield investment – an indicator of future trends – also fell by 14 per cent, to $720 billion. FDI flows fell sharply in developed economies and economies in transition while those to developing economies remained stable. As a result, developing economies accounted for a growing share of global FDI inflows in 2017, absorbing 47 per cent of the total, compared with 36 per cent in 2016.

Even discounting the volatile financial flows, large one-off transactions and corporate restructurings that inflated FDI numbers in 2015 and 2016, the 2017 decline was still sizeable and part of a longer-term negative cycle.

This negative cycle is caused by several factors. One factor is asset-light forms of overseas operations, which are causing a structural shift in FDI patterns (see *WIR17*[3]). Another major factor is a significant decline in rates of return on FDI over the past five years. In 2017, the global rate of return on inward FDI was down to 6.7 per cent (table I.1), extending the steady decline recorded over the preceding five years. Rates of return in developed economies have trended downwards over this period but stabilized. Although rates of return remain higher on average in developing and transition economies, most regions

**Figure I.1. FDI inflows, global and by group of economies, 2005–2017** (Billions of dollars and per cent)




*Source*: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

**Table I.1. Inward FDI rates of return, 2012–2017** (Per cent)

| Region | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|
| **World** | **8.1** | **7.8** | **7.9** | **6.8** | **7.0** | **6.7** |
| **Developed economies** | **6.7** | **6.3** | **6.6** | **5.7** | **6.2** | **5.7** |
| **Developing economies** | **10.0** | **9.8** | **9.5** | **8.5** | **8.1** | **8.0** |
| Africa | 12.3 | 12.4 | 10.6 | 7.1 | 5.4 | 6.3 |
| Asia | 10.5 | 10.8 | 10.6 | 9.9 | 9.5 | 9.1 |
| East and South-East Asia | 11.5 | 11.8 | 11.7 | 11.0 | 10.3 | 10.1 |
| South Asia | 7.2 | 6.7 | 6.1 | 5.5 | 6.4 | 5.7 |
| West Asia | 5.5 | 5.4 | 4.9 | 4.6 | 4.6 | 3.4 |
| Latin America and the Caribbean | 7.9 | 6.7 | 6.6 | 5.2 | 5.3 | 5.6 |
| **Transition economies** | **14.4** | **13.9** | **14.6** | **10.2** | **11.1** | **11.8** |

*Source*: UNCTAD based on data from IMF Balance of Payments database.
*Note*: Annual rates of return are measured as annual FDI income for year *t* divided by the average of the end-of-year FDI positions for years *t* and *t* – 1 at book values.

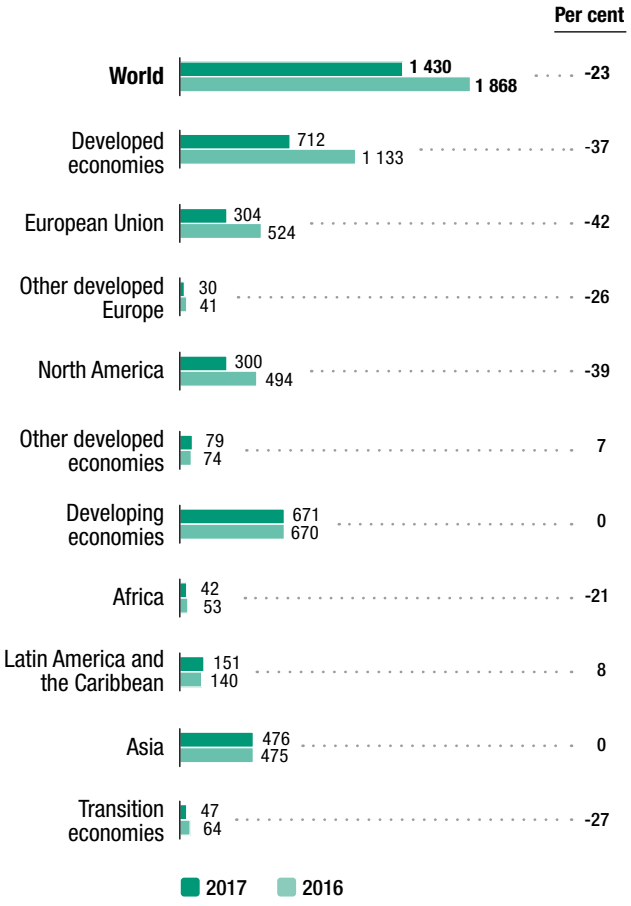
have not escaped this erosion. In Africa, for instance, return on investment dropped from 12.3 per cent in 2012 to 6.3 per cent in 2017. This can be partly explained by the fall in commodity prices during the period. Yet the decline persisted in 2016 when prices stabilized, and rates of return on FDI to oil-rich West Asia did not weaken as much as in Africa. This suggests that structural factors, mainly reduced fiscal and labour cost arbitrage opportunities in international operations, may also be at work.

## 2. Trends by geography

### a. FDI inflows

**FDI flows to developed economies fell by one-third to $712 billion** (figure I.2). The fall can be explained in part by a decline from relatively high inflows in the preceding year. Inflows to developed economies in 2015–2016 exceeded $1 trillion, mainly due to a surge in cross-border M&As and corporate reconfigurations (i.e. changes in legal or ownership structures of multinational enterprises (MNEs), including tax inversions) (*WIR16*, *WIR17*). A significant reduction in the value of such transactions resulted in a decline of 40 per cent in flows in the United States (from $466 billion in 2015 and $457 billion in 2016 to $275 billion in 2017). Similarly, the absence of the large megadeals that caused the anomalous peak in 2016 in FDI inflows in the United Kingdom caused a sharp fall of FDI in the country, to only $15 billion. In developed economies, while equity investment flows and intracompany loans recorded a fall, reinvested earnings rose by 26 per cent, accounting for half of FDI inflows. Reinvested earnings were buoyed by United States MNEs, in anticipation of a tax relief on repatriation of funds. FDI flows increased in other developed economies (7 per cent).

**Figure I.2. FDI inflows, by region, 2016–2017**
(Billions of dollars and per cent)



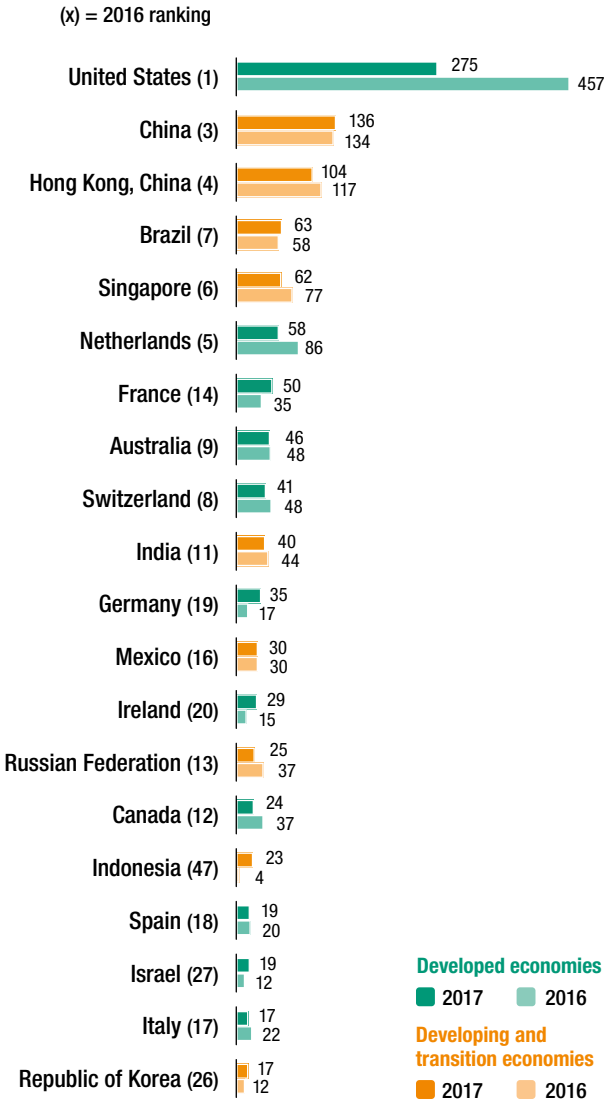

*Source:* UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

**FDI inflows to developing economies remained close to their 2016 level, at $671 billion.** FDI flows to developing Asia were stable at $476 billion. The modest increase in Latin America and the Caribbean (+8 per cent to $151 billion) compensated for the decline in Africa (–21 per cent to $42 billion).

The slump in FDI flows to Africa was due largely to weak oil prices and lingering effects from the commodity bust, as flows contracted in commodity-exporting economies such as Egypt, Mozambique, the Congo, Nigeria and Angola. Foreign investment to South Africa also contracted, by 41 per cent. FDI inflows to diversified exporters, led by Ethiopia and Morocco, were relatively more resilient.

Developing Asia regained its position as the largest FDI recipient region. Against the backdrop of a decline in worldwide FDI, its share in global inflows rose from 25 per cent in 2016 to 33 per cent in 2017. The largest three recipients were China, Hong Kong (China) and Singapore. With reported inflows reaching an all-time high, China continued to be the largest FDI recipient among developing countries and the second largest in the world, behind the United States.

**Figure I.3. FDI inflows, top 20 host economies, 2016 and 2017** (Billions of dollars)




*Source*: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

The increase in FDI flows to Latin America and the Caribbean (excluding financial centres) constituted the first rise in six years. Inflows are still well below the peak reached in 2011 during the commodity boom. Although commodities continued to underpin investment in the region, there is now a shift towards infrastructure (utilities and energy, in particular), finance, business services, ICT and some manufacturing.

FDI flows to transition economies in South-East Europe and the Commonwealth of Independent States (CIS) declined by 27 per cent in 2017, to $47 billion, following the global trend. This constituted the second lowest level since 2005. Most of the decline was due to sluggish FDI flows to four major CIS economies: the Russian Federation, Kazakhstan, Azerbaijan and Ukraine.

As a result of these regional variations, the share of developed economies in world FDI flows as a whole decreased to 50 per cent of the total. Half of the top 10 host economies continue to be developing economies (figure I.3). The United States remained the largest recipient of FDI, attracting $275 billion in inflows, followed by China, with record inflows of $136 billion despite an apparent slowdown in the first half of 2017.

The FDI environment in some regional and interregional groups (figure I.4) could be significantly affected by ongoing policy developments (chapter III).

**Figure I.4. FDI in selected groups, 2016 and 2017** (Billions of dollars and per cent)

| Selected groups | FDI inflows | | Share in world FDI inflows | | Inward FDI stock | | Share in world inward FDI stock | | Share of world GDP | |
|---|---|---|---|---|---|---|---|---|---|---|
| G20 | 833 | 1 169 | 58% | 63% | **18 245** | **15 875** | 58% | 57% | 78% | 78% |
| APEC | 815 | 1 028 | 57% | 55% | **17 035** | **14 706** | 54% | 53% | 60% | 60% |
| NAFTA | 329 | 524 | 23% | 28% | **9 381** | **8 003** | 30% | 29% | 28% | 28% |
| BRICS | 266 | 276 | 19% | 15% | **3 243** | **2 906** | 10% | 11% | 23% | 22% |
| Commonwealth | 237 | 451 | 17% | 24% | **6 181** | **5 558** | 20% | 20% | 14% | 14% |
| ACP | 37 | 46 | 3% | 2% | **735** | **684** | 2% | 2% | 2% | 2% |

2017 2016

*Source:* UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

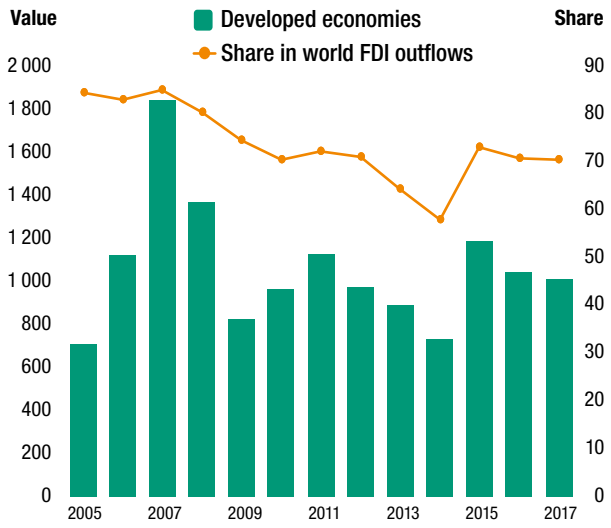
## b. FDI outflows

**MNEs from developed economies reduced their overseas investment activity only marginally.** The flow of outward investment from developed economies declined by 3 per cent to $1 trillion in 2017. Their share of global outward FDI flows was unchanged at 71 per cent (figure I.5). Flows from developing economies fell 6 per cent to $381 billion, while those from transition economies rose 59 per cent to $40 billion.

Outward investment by *European* MNEs fell by 21 per cent to $418 billion in 2017. This was driven by sharp reductions in outflows from the Netherlands and Switzerland. Outflows from the Netherlands – the largest source country in Europe in 2016 – dropped by $149 billion to just $23 billion, owing to the absence of the large megadeals that characterized Dutch outward investment in 2016. As a result, the country's equity outflows fell from $132 billion to a net divestment of –$5.2 billion. In Switzerland, outflows declined by $87 billon to –$15 billion. Equity flows fell by $47 billion and intracompany loans fell by $42 billion.

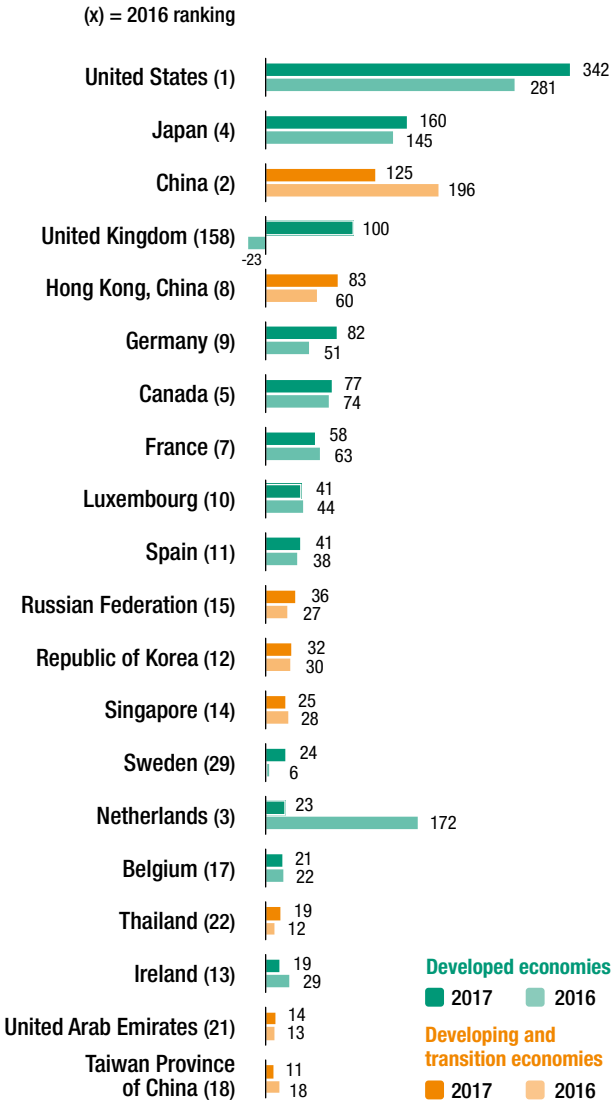
In contrast, outflows from the United Kingdom rose from –$23 billion in 2016 to $100 billion in 2017,

**Figure I.5. Developed economies: FDI outflows and their share in total world outflows, 2005–2017** (Billions of dollars and per cent)




*Source*: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

**Figure I.6. FDI outflows, top 20 home economies, 2016 and 2017** (Billions of dollars)




*Source*: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

as a result of large purchases by MNEs based in the United Kingdom. For instance, British American Tobacco purchased the remaining shares in Reynolds American (United States) for $49 billion, and Reckitt Benckiser acquired Mead Johnson Nutrition (United States) for $17 billion. Reinvested earnings, which had been low over 2014–2016, recovered to $29 billion. Outflows from Germany rose by 60 per cent to $82 billion, mainly owing to rises in reinvested earnings and intracompany loans.

Investment by MNEs in *North America* rose by 18 per cent to $419 billion in 2017. Most outward FDI from the United States – the largest investing country (figure I.6) – is in the form of retained earnings. Reinvested earnings in the fourth quarter of 2017 were 78 per cent higher than during the same period in 2016, in anticipation of tax reforms (see section B, Prospects).

**Investment activity abroad by MNEs from developing economies declined by 6 per cent, reaching $381 billion.** Outflows from *developing Asia* were down 9 per cent to $350 billion as outflows from China reversed for the first time since 2003 (down 36 per cent to $125 billion). The decline of investment from Chinese MNEs was the result of policies clamping down on outward FDI, in reaction to significant capital outflows during 2015–2016, mainly in industries such as real estate, hotels, cinemas, entertainment and sport clubs. The decline in China and Taiwan Province of China (down 36 per cent to $11 billion) offset gains in India (up 123 per cent to $11 billion) and Hong Kong, China (up 39 per cent to $83 billion).

Outward FDI from *Latin America and the Caribbean* (excluding financial centres) rose by 86 per cent to $17.3 billion, as Latin American MNEs resumed their international investment activity. Yet outflows remained significantly lower than before the commodity price slump. Outflows from Chile and Colombia – the region's largest outward investors in 2016 – declined by 18 per cent in 2017, at $5.1 billion and $3.7 billion respectively, as equity outflows dried up. Investment from Brazil remained negative at about –$1.4 billion.

FDI outflows from *Africa* increased by 8 per cent to $12.1 billion. This largely reflected increased outward FDI by South African firms (up 64 per cent to $7.4 billion) and Moroccan firms (up 66 per cent to $960 million). South African retailers continued to expand into Namibia, and Standard Bank opened several new branches there.

**In 2017, FDI outflows from economies in transition recovered by 59 per cent, to $40 billion, after being dragged down by the recession in 2014–2016.** This level, however, remains 47 per cent below the high recorded in 2013 ($76 billion). As in previous years, the bulk of investment from transition economies is by Russian MNEs. In 2017 their investment activity rose by 34 per cent, mainly due to two large transactions – Rosneft

acquired a 49 per cent share in Essar Oil (India) for close to $13 billion and a 30 per cent stake in the offshore Zohr gas field in Egypt from the Italian firm Eni for $1.1 billion.

## 3. Trends by sector and mode of entry

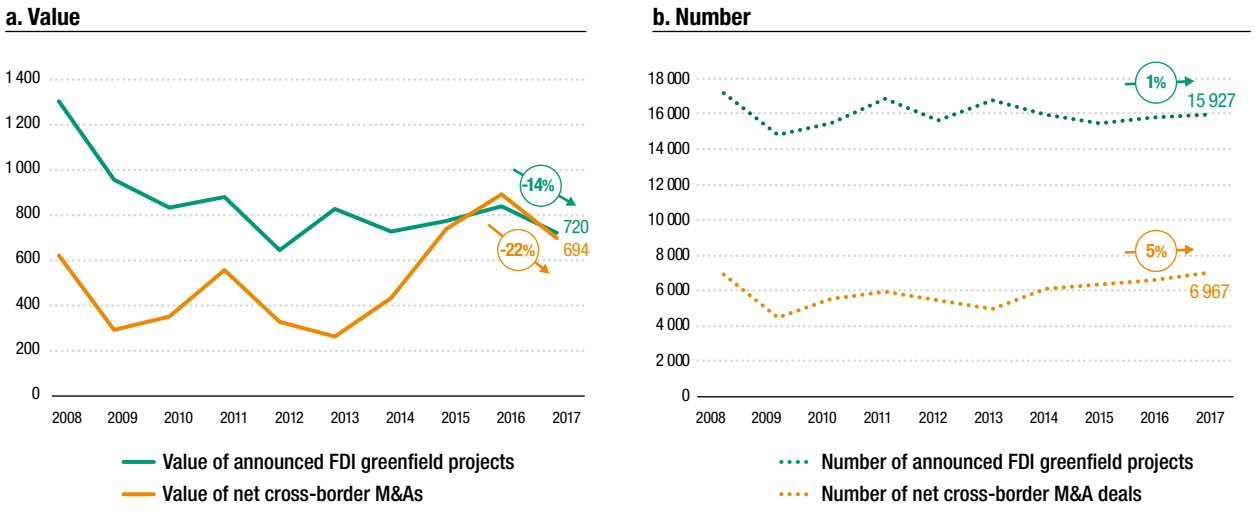
In 2017, both the value of announced FDI greenfield projects and the value of net cross-border M&As declined significantly (figure I.7). The former dropped by 14 per cent to $720 billion. The latter decreased by 22 per cent to $694 billion. Although total global M&A activity (including domestic deals) has been robust over the past few years, the aggregate value of net cross-border M&As, which had been on the rise since 2013, contracted in 2017. The number of M&A transactions, however, sustained its upward trend to almost 7,000.

The value of net cross-border M&As decreased in all three sectors (table I.2). The drop in the primary sector was sharp – by 70 per cent – to only $24 billion in 2017. The number of deals in extractive industries trebled but lacked large-scale transactions such as those concluded in previous years. At the industry level, extractive industries, food and beverages, and electronics registered the largest declines in value terms. In contrast, the value of net transactions in machinery and equipment, business services, as well as information and communication increased considerably.

The value of announced FDI greenfield projects, an indicator of future FDI flows, declined by 25 per cent in services and 61 per cent in the primary sector. In contrast, manufacturing announcements increased by 14 per cent. As a result, the values of greenfield projects in manufacturing and services were nearly the same, at about $350 billion in 2017. Greenfield project values decreased in several key services industries – construction, utilities (electricity, gas and water), business services, and transport, storage and communications (table I.3). Small projects in business services accounted for half of the number of greenfield announcements in services and more than a quarter of the total.

Although activity in some manufacturing industries, such as chemical products and electronics, picked up in 2017, overall greenfield announcements in the sector remained

**Figure I.7.** **Value and number of net cross-border M&As and announced greenfield FDI projects, 2008–2017** (Billions of dollars and numbers)




*Source*: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics) and information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com) for announced greenfield FDI projects.

## Table I.2. Value and number of net cross-border M&As, by sector and selected industries, 2016–2017

| | Value (billions of dollars) | | | Number | | |
|---|---|---|---|---|---|---|
| | 2016 | 2017 | % | 2016 | 2017 | % |
| **Total** | **887** | **694** | **-22** | **6 607** | **6 967** | **5** |
| **Primary** | 83 | 24 | -70 | 206 | 550 | 167 |
| **Manufacturing** | 406 | 327 | -19 | 1 745 | 1 690 | -3 |
| **Services** | 398 | 343 | -14 | 4 656 | 4 727 | 2 |
| *Top 10 industries in value terms:* | | | | | | |
| Chemicals and chemical products | 130 | 137 | 5 | 345 | 322 | -7 |
| Business services | 75 | 107 | 43 | 1 716 | 1 817 | 6 |
| Food, beverages and tobacco | 138 | 88 | -36 | 200 | 227 | 14 |
| Finance | 97 | 59 | -39 | 585 | 617 | 5 |
| Electricity, gas and water | 66 | 54 | -18 | 209 | 171 | -18 |
| Machinery and equipment | 32 | 52 | 63 | 195 | 183 | -6 |
| Information and communication | 24 | 39 | 66 | 618 | 611 | -1 |
| Electrical and electronic equipment | 75 | 26 | -66 | 349 | 307 | -12 |
| Transportation and storage | 46 | 23 | -51 | 293 | 306 | 4 |
| Mining, quarrying and petroleum | 79 | 23 | -71 | 138 | 466 | 238 |

*Source*: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

## Table I.3. Value and number of announced FDI greenfield projects, by sector and selected industries, 2016–2017

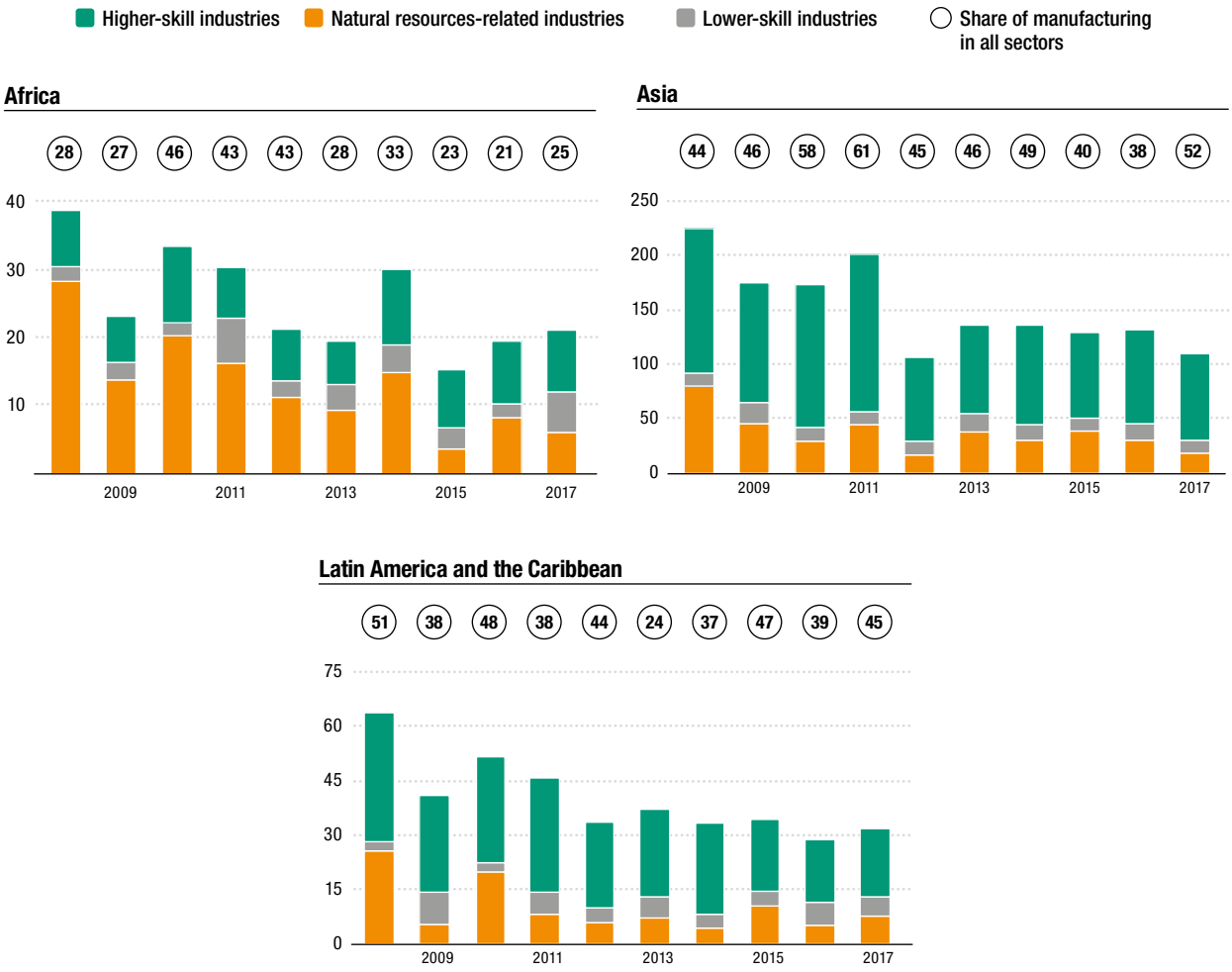
| | Value (billions of dollars) | | | Number | | |
|---|---|---|---|---|---|---|
| | 2016 | 2017 | % | 2016 | 2017 | % |
| **Total** | **833** | **720** | **-14** | **15 766** | **15 927** | **1** |
| **Primary** | 54 | 21 | -61 | 52 | 63 | 21 |
| **Manufacturing** | 295 | 338 | 14 | 7 703 | 7 678 | 0 |
| **Services** | 484 | 362 | -25 | 8 011 | 8 186 | 2 |
| *Top 10 industries in value terms:* | | | | | | |
| Electricity, gas and water | 129 | 95 | -26 | 404 | 296 | -27 |
| Business services | 96 | 80 | -16 | 4 125 | 4 278 | 4 |
| Motor vehicles and other transport equipment | 56 | 62 | 12 | 1 077 | 1 103 | 2 |
| Construction | 126 | 62 | -51 | 322 | 276 | -14 |
| Chemicals and chemical products | 43 | 61 | 42 | 804 | 856 | 6 |
| Electrical and electronic equipment | 44 | 52 | 20 | 1 005 | 958 | -5 |
| Transport, storage and communications | 56 | 41 | -26 | 935 | 903 | -3 |
| Trade | 27 | 32 | 21 | 902 | 1 001 | 11 |
| Food, beverages and tobacco | 24 | 29 | 17 | 596 | 664 | 11 |
| Textiles, clothing and leather | 28 | 28 | 1 | 1 558 | 1 476 | -5 |

*Source*: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com).

relatively depressed across all developing regions from a longer-term perspective. In Africa, Asia and Latin America and the Caribbean alike, the average annual value of greenfield project announcements in manufacturing was significantly lower during 2013–2017 than during the previous five-year period (figure I.8).

Greenfield investment in manufacturing – important for industrial development (see chapter IV) – shows different patterns across developing regions. Asia attracts relatively higher-skill manufacturing than other regions. In Africa, the share of manufacturing related to natural resources in greenfield projects (important for moving up the commodity value chains) is still relatively high, even though, as in Latin America and the Caribbean, that share has been declining. These industries used to account for nearly three-quarters of total greenfield investment in manufacturing in Africa. In recent years, owing to lower mineral prices,

**Figure I.8.** **Value of announced FDI greenfield projects in manufacturing and share of manufacturing in all sectors, 2008–2017** (Billions of dollars and per cent)




*Source*: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com).

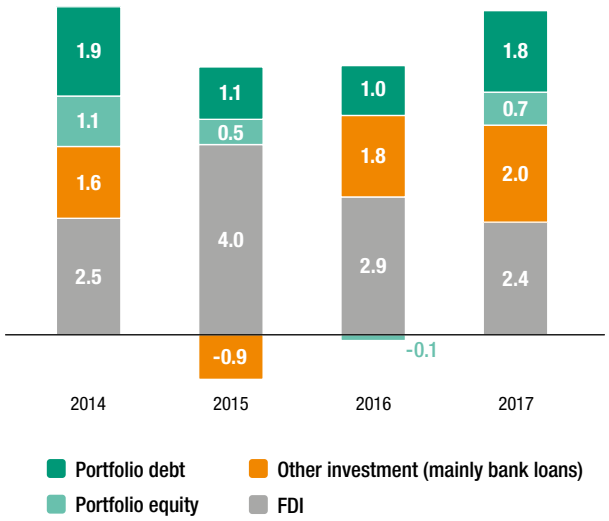
*Note*: Natural resources-related industries include 1) coke, petroleum products and nuclear fuel, 2) metals and metal products, 3) non-metallic mineral products and 4) wood and wood products; lower-skill industries include 1) food, beverages and tobacco and 2) textiles, clothing and leather; higher-skill industries include all other manufacturing industries.

foreign investment in these manufacturing industries has been relatively low – in Africa, the total amount in 2017 was $6 billion. However, there was little growth in other manufacturing industries to compensate, in particular in Latin America and the Caribbean.

The negative longer-term trend in manufacturing greenfield projects is potentially of greater consequence for industrial development in Asia and Latin America, where higher-skill manufacturing greenfield projects are in decline, because value added in these sectors tends to be higher. In Africa, the decline in natural resource related manufacturing is at least partly compensated by growth in other manufacturing sectors.

Lower-skill manufacturing can be an important starting point for industrial development. In Africa, greenfield FDI in textiles, clothing and leather has been relatively strong over the past few years, reaching $4 billion in 2017 – twice the level recorded in 2014 and 20 times the 2008 amount. South–South investment in this industry, particularly from Asian investors into Africa, is significant; however, the largest projects are highly concentrated in a few countries, e.g. Ethiopia.

**Figure I.9.** **Global cross-border capital flows, 2014–2017** (Per cent of GDP)




*Source*: UNCTAD, based on IMF World Economic Outlook (WEO) Database.

*Note*: To ensure comparability with other variables, FDI data are consistent with the IMF WEO database and are not directly comparable with UNCTAD's FDI data as presented elsewhere in this report. For more information, refer to the Methodological Note to the WIR. The data presented here covers only the 115 countries for which the breakdown of portfolio flows into debt and equity is available.

## 4. FDI and other cross-border capital flows

The decline in worldwide FDI contrasted with other cross-border capital flows. Total global capital flows – including FDI, portfolio (equity and debt) flows and other private sector capital flows (mostly bank lending) – continued to recover in 2017. Capital flows reached 6.9 percent of global GDP in 2017, up from the post-crisis low of 4.7 per cent of GDP in 2015 (figure I.9). An overall improvement in global financial and liquidity conditions was buttressed by better short-term economic growth prospects and expectations of a smooth monetary transition in the United States. Signs of recovery in international bank lending, rising risk appetite among portfolio investors, a pickup in global trade and lower financial volatility in major asset classes all contributed to improved conditions for cross-border capital flows. Global capital flows nevertheless remain well below pre-crisis levels (box I.1).

This recent recovery has been predominantly driven by capital flows other than FDI. The sell-off of foreign portfolio equity seen in 2016 was reversed in 2017, when cross-border portfolio equity flows became positive. Global portfolio debt flows rose from 1.0 per cent to 1.8 per cent of GDP between 2016 and 2017. International banking lending flows remained strongly positive, in contrast to the retrenchment seen in 2015.

Consistent with the trend observed at the global level, cross-border capital flows to developing economies also gained momentum in 2017, after falling to a multi-decade low in 2015. Total inflows to developing economies, equivalent to 2.4 per cent of GDP in 2015, rose to 4.8 per cent of GDP in 2017. The increase was driven not by FDI but primarily by debt-related flows: cross-border banking and portfolio debt. The collapse in cross-border bank lending, due to the deleveraging of European banks, had been a major contributor to the post-crisis slump in capital flows to developing economies. Cross-border bank flows to developing economies are now tentatively recovering, as the financial position of developed economies' banks improves, and South–South lending from developing economies' banks continues to expand. Improved liquidity conditions in global financial markets have led to increases in portfolio debt and equity flows to developing economies.

At the regional level, the pickup in capital flows was most pronounced in developing Asia, where they have risen from 1.2 per cent of GDP in 2015 to 3.7 per cent in 2016 and 4.7 per cent in 2017, driven primarily by increased inflows of international bank lending. In Africa, inflows rose modestly from 6.1 per cent of GDP to 6.6 per cent. Flows to Latin America and the Caribbean declined from 4.7 per cent of GDP to 4.3 per cent. In transition economies, inflows of bank lending remained negative in 2017, albeit less so than in 2016. Added to the contracting FDI flows, this trend pushed overall capital flows down from 2.2 per cent of GDP to 1.3 per cent.

## Box I.1. FDI in the context of cross-border capital flows

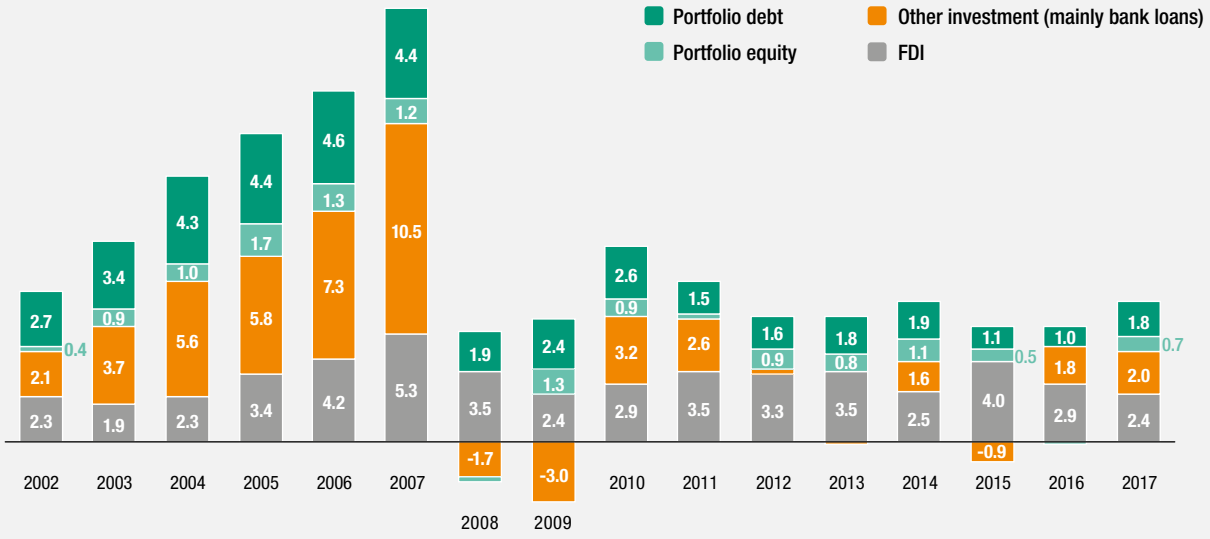
It is important to consider FDI in the context of other components of the financial account in the balance of payments – portfolio debt and equity investment, other bank and derivative flows – as well as other cross-border financial flows that have development implications, such as official development assistance (ODA) and migrants' remittances. The Addis Ababa Action Agenda on Financing for Development recognizes the important contribution that FDI can make to sustainable development, while noting that the other flows are also critical.

An additional motivation for considering other types of capital flows is that the dividing lines between FDI and other types of flows are becoming increasingly blurred, for three main reasons:

- FDI, as measured in the balance of payments, contains components that behave like portfolio flows. They can be relatively short-term and volatile.
- Portfolio equity flows can be used for FDI-like purposes. MNEs can acquire long-term strategic stakes in foreign enterprises, with a measure of control (even if below the 10 per cent threshold – see *WIR2016*).
- Flows used for identical purposes can be classified differently depending on how funds are transferred across borders. For example, when MNEs from developing economies raise debt in developed economies with deeper financial markets, they can either use the services of a bank and transfer the proceeds back to the parent through a cross-border deposit, which would be counted as "other flows" in the balance of payments; or transfer funds through an intracompany loan by way of a local affiliate, which would be counted as FDI.

FDI has been the most stable component of the balance of payments over the past 15 years, and the most resilient to economic and financial crises. Debt-related flows, especially bank loans, have been the most volatile external source of finance, both globally and for developing economies specifically. Portfolio equity remains a relatively small share of total external finance and tends to be more volatile because it is invested in liquid financial assets rather than in fixed capital.

**Box figure I.1.1 Global capital flows, 2002–2017** (Per cent of GDP)




*Source*: UNCTAD, based on IMF World Economic Outlook database. Includes only the 115 countries for which the breakdown of portfolio flows into debt and equity is available.

Global capital movements, driven mainly by debt-related flows, increased rapidly in the run-up to the financial crisis but then collapsed from 22 per cent of global GDP in 2007 to 3.2 per cent in 2008. The subsequent recovery was modest and short lived. In 2015, flows slumped to 4.7 per cent of global GDP — a multi-decade low in global cross-border capital flows except for the crisis years of 2008 and 2009. Although some regions began to experience a revival in 2017, cross-border capital flows remain well below pre-crisis levels (box figure I.1.1).

The weakness in cross-border capital flows has been especially pronounced in developing economies. Overall net capital flows to those economies (inflows minus outflows, excluding official reserve accumulation) were negative in 2015 and 2016, before turning positive in 2017.

*Source:* UNCTAD.

## 5. FDI as a component of financing for development

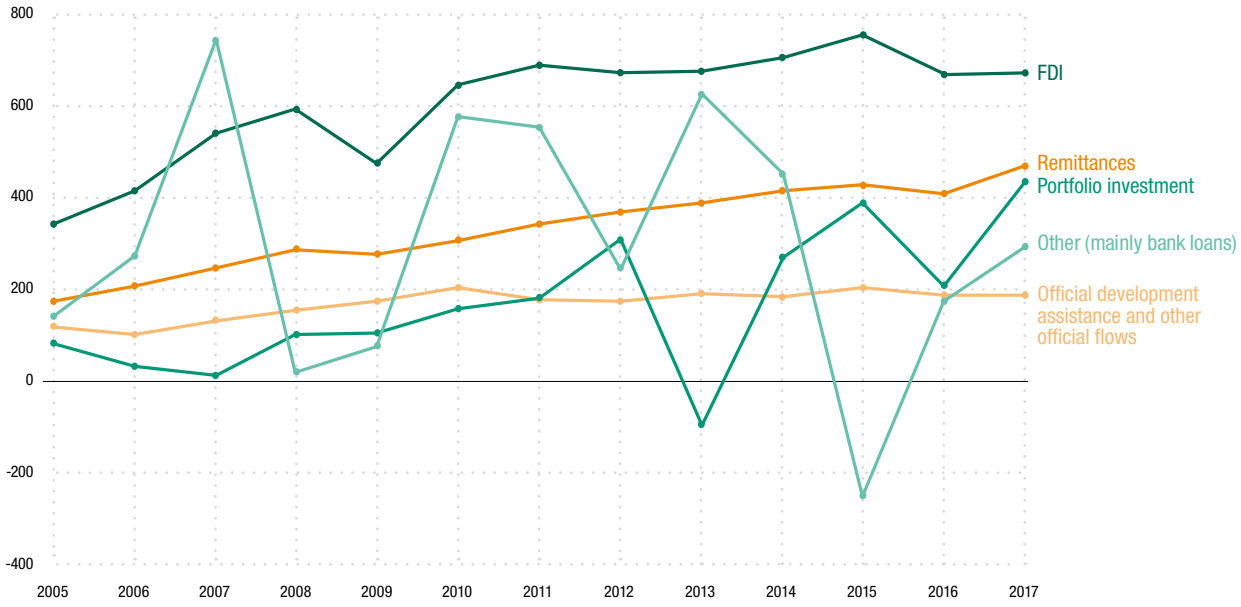
Developing economies can draw on a range of external sources of finance, including FDI, portfolio equity, long-term and short-term loans (private and public), ODA, remittances and other official flows (figure I.10). FDI has been the largest source of external finance for developing economies over the past decade, and the most resilient to economic and financial shocks.

On average, between 2013 and 2017 FDI accounted for 39 per cent of external finance for developing economies (figure I.11). For the LDCs, however, ODA is the most significant source of external finance, at 36 per cent of external finance over the same period, compared with 21 per cent for FDI.

FDI also exhibits lower volatility than most other sources. Debt-related flows are susceptible to sudden stops and reversals. For example, the widespread retrenchment of European banks' foreign lending in 2015 caused a drop in long-term loans to developing economies. Short-term loans declined sharply in the same year, as Chinese firms repaid dollar debt and foreign investors reduced exposure to renminbi-denominated assets. Portfolio equity flows account for a low share of external finance to developing economies, especially where capital markets are less developed. They are also relatively unstable because of the speed at which positions can be unwound.

The growth of ODA has stagnated over the past decade. It amounts to about a quarter of FDI inflows to developing economies as a group. Preliminary data indicate that net ODA from members of the OECD Development Assistance Committee fell by 0.6 per cent in 2017.

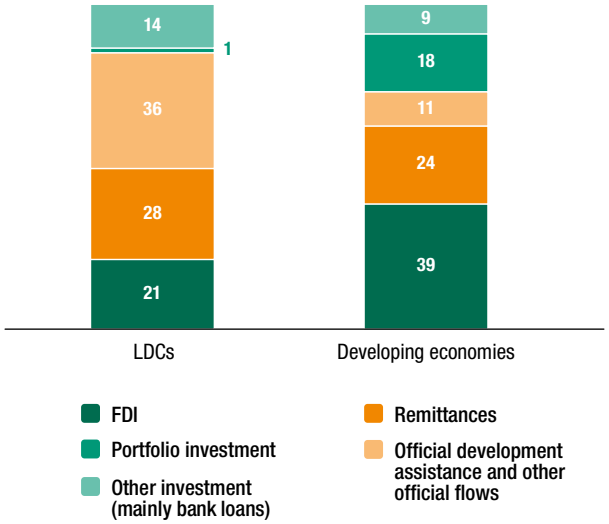
**Figure I.10. Sources of external finance, developing economies, 2005–2017** (Billions of dollars)




*Source:* UNCTAD, based on World Bank World Development Indicators (for remittances), UNCTAD (for FDI), IMF World Economic Dataset (for portfolio investment and other investment) and OECD (for ODA and other official flows).

*Notes:* ODA and other official flows is the sum of net disbursements from Development Assistance Committee (DAC) countries, non-DAC countries and multilateral donors, from OECD DAC Table 2a, and net other official flows from all donors, from OECD DAC Table 2b. Remittances data for 2017 are World Bank estimates. ODA and other official flows data for 2017 are estimated using preliminary OECD data on the annual growth rate of disbursements by OECD DAC countries.

## Figure I.11. Sources of external finance, developing economies and LDCs, 2013–2017 (Per cent)




| | Growth rates (%) | | |
|---|---|---|---|
| | 2017 | 2013–2017 average | Volatility index |
| **Developing economies** | | | |
| FDI | 0 | 0 | 20 |
| Remittances | 9 | 5 | 27 |
| ODA and other official flows | -1 | 2 | 19 |
| Portfolio investment | 110 | -80 | 88 |
| Other investment (mainly bank loans) | 70 | -25 | 90 |
| **Least developed countries** | | | |
| FDI | -17 | 6 | 23 |
| Remittances | 4 | 3 | 35 |
| ODA and other official flows | -1 | 2 | 17 |
| Portfolio investment | 21 | -13 | 237 |
| Other investment (mainly bank loans) | -58 | 6 | 113 |

*Source*: UNCTAD based on World Bank World Development Indicators (for remittances), UNCTAD (for FDI), IMF World Economic Dataset (for portfolio investment and other investment) and OECD (for ODA and other official flows).

*Note*: Percentages are each source's share of total inflows to LDCs and developing economies during 2013–2017. Volatility index is the standard deviation divided by the mean of annual absolute values for 2005–2016, multiplied by 100.

Remittances are becoming an increasingly important component of external finance for developing economies in general, and LDCs in particular. Remittances to developing economies are estimated to have risen by 8.5 per cent in 2017, with notably strong upticks in sub-Saharan African, Latin America and the Caribbean, and transition economies, owing to higher economic growth in the United States and the European Union. Growth in remittances to South Asia is expected to be weaker because of low oil prices and the tightening of labour market policies in the Gulf Cooperation Council countries.

Apart from volatility, there are important differences between types of flows. First, FDI represents not only a source of funds, but also a package of tangible and intangible assets that can help build productive capacity in developing economies. From a host or recipient country's macroeconomic perspective, FDI and portfolio equity are relatively more expensive types of external finance (i.e. they typically require a higher rate of return), but returns are contingent on profits (i.e. on business success or successful implementation of projects). Short- and long-term debt is cheaper, but interest payments must be made with regularity, and the repayment of interest and principal is independent of profitability. ODA and remittances do not generally create a liability for the recipient country. ODA is mainly used for direct budgetary support, as opposed to investment, but it can be spent on investment in projects related to the Sustainable Development Goals that might otherwise not be attractive to private sector investors. Remittances are predominantly spent on household consumption, with limited investment in productive assets, although there is increasing evidence that remittances are used to finance small businesses.

# B. FDI PROSPECTS

**Global FDI flows are projected to increase marginally, by about 5 per cent in 2018, to $1.5 trillion.** This expectation is based on current forecasts for a number of macroeconomic indicators and firm-level factors, UNCTAD's survey of investment promotion agencies (IPAs) regarding investment prospects, UNCTAD's econometric forecasting model of FDI inflows and preliminary 2018 data for announced greenfield projects.

## 1. Overall prospects assessment

The fragile growth of FDI flows expected for 2018 reflects an upswing in the global economy, strong aggregate demand, an acceleration in world trade and strong MNE profits (total profits, which may not reflect the profitability of overseas operations). The improving macroeconomic outlook has a direct positive effect on the capacity of MNEs to invest; business survey data indicates optimism about short-term FDI prospects. Also, the expected increase in FDI inflows in 2018 is consistent with project data (M&As and announced greenfield projects) for the first quarter.

However, the expectation of an increase in global FDI is tempered by a series of risk factors. Geopolitical risks, growing trade tensions and concerns about a shift toward protectionist policies could have a negative impact on FDI in 2018. In addition, tax reforms in the United States are likely to significantly affect investment decisions by United States MNEs in 2018, with consequences for global investment patterns. Moreover, longer-term forecasts for macroeconomic variables contain important downsides, including the prospect of interest rate rises in developed economies with potentially serious implications for emerging market currencies and economic stability (IMF, 2018).

Projections indicate that FDI flows could increase in developed and transition economies, while remaining flat in developing economies as a group (table I.4).

- FDI inflows to *Africa* are forecast to increase by about 20 per cent in 2018, to $50 billion. The projection is underpinned by the expectation of a continued modest recovery in commodity prices, and by macroeconomic fundamentals. In addition, advances in interregional cooperation, through the signing of the African Continental Free Trade Area (AfCFTA) could encourage stronger FDI flows in 2018. Yet Africa's commodity dependence will cause FDI to remain cyclical.
- FDI inflows to *developing Asia* are expected to remain stagnant, at about $470 billion. Inflows to China could see continued growth as a result of recently announced liberalization plans. Other sources of growth could be increased intraregional FDI in ASEAN, including to relatively low-income economies in the grouping, notably the CLMV countries. Investments from East Asia will also continue to be strong in these countries. In West Asia, the evolution of oil prices, the efforts of oil-rich countries to promote economic diversification, and political and geopolitical uncertainties will shape FDI inflows. If trade tensions should escalate and result in disruptions in GVCs, the subsequent effect on FDI would be more strongly felt in Asia.
- Prospects for FDI in *Latin America and the Caribbean* in 2018 remain muted, as macroeconomic and policy uncertainties persist. Flows are forecast to decline marginally, to some $140 billion. Economic prospects remain challenging. Uncertainty

**Table I.4. FDI inflows, projections, by group of economies and region, 2015–2017, and projections, 2018** (Billions of dollars and per cent)

| Group of economies/region | 2015 | 2016 | 2017 | Projections 2018 |
|---|---|---|---|---|
| **World** | **1 921** | **1 868** | **1 430** | **1 450 to 1 570** |
| **Developed economies** | **1 141** | **1 133** | **712** | **740 to 800** |
| Europe | 595 | 565 | 334 | ~380 |
| North America | 511 | 494 | 300 | ~320 |
| **Developing economies** | **744** | **670** | **671** | **640 to 690** |
| Africa | 57 | 53 | 42 | ~50 |
| Asia | 516 | 475 | 476 | ~470 |
| Latin America and the Caribbean | 169 | 140 | 151 | ~140 |
| **Transition economies** | **36** | **64** | **47** | **50 to 60** |
| *Memorandum:* annual growth rate (per cent) | | | | |
| **World** | **44** | **-3** | **-23** | **(1 to 10)** |
| **Developed economies** | **91** | **-1** | **-37** | **(5 to 10)** |
| Europe | 117 | -5 | -41 | ~15 |
| North America | 96 | -3 | -39 | ~5 |
| **Developing economies** | **9** | **-10** | **0** | **(-5 to 5)** |
| Africa | 8 | -6 | -21 | ~20 |
| Asia | 12 | -8 | 0 | ~0 |
| Latin America and the Caribbean | -1 | -17 | 8 | ~-5 |
| **Transition economies** | **-36** | **78** | **-27** | **(~20)** |

*Source:* UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
*Note*: Percentages are rounded.

associated with upcoming elections in some of the largest economies in the region, and possible negative spillovers from interest rate rises in developed countries and international financial market disruptions might have an impact on FDI flows in 2018.

- FDI flows to *transition economies* are forecast to rise by about 20 per cent in 2018, to $55 billion, supported by firming oil prices and the growing macro-stability of the Russian economy. However, they may be hindered by geopolitical risks.
- FDI flows to *developed countries* are projected to increase to about $770 million. Based on macroeconomic fundamentals, flows to Europe should increase by 15 per cent and to North America by 5 per cent. However, the repatriation of retained profits by United States MNEs as a result of tax reforms will have a dampening effect on FDI inflows in Europe, as will uncertainties arising from tensions in trade relations.

## 2. Key factors influencing future FDI flows

### Economic fundamentals

A positive short-term global macroeconomic outlook underpins an expected recovery of FDI in 2018, although growth will be fragile. GDP is expected to grow in all developed economies (table I.5) and in leading emerging economies. Commodity exporters will also experience a modest upswing following stronger export prices. Gross fixed capital investment is expected to pick up significantly in emerging and developing economies, but also in developed economies (see table I.5). And more buoyant economic activity will help lift world trade, which is already estimated to have expanded by 3.8 per cent in 2017, compared with just 2.3 per cent in 2016.

**Table I.5. Real growth rates of GDP and GFCF, 2016–2019** (Per cent)

| Variable | Region | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| GDP growth rate | World | 3.5 | 3.2 | 3.8 | 3.9 | 3.9 |
| | Advanced economies[a] | 2.3 | 1.7 | 2.3 | 2.5 | 2.2 |
| | Emerging and developing economies[a] | 4.3 | 4.4 | 4.8 | 4.9 | 5.1 |
| GFCF growth rate | World | 2.8 | 2.7 | 3.7 | 5.5 | 5.2 |
| | Advanced economies[a] | 2.7 | 1.9 | 3.5 | 4.5 | 4.3 |
| | Emerging and developing economies[a] | 2.9 | 3.3 | 3.9 | 6.3 | 5.9 |

*Source:* UNCTAD based on IMF (2018).
*Note:* GFCF = gross fixed capital formation.
[a] IMF's classifications of advanced, emerging and developing economies are not the same as the United Nations' classifications of developed and developing economies.

However, prospects are softer in the mid-term, influenced by elevated geopolitical risks and policy uncertainty. Financial conditions are expected to tighten as central banks in major developed economies normalize monetary policy.

## Policy factors

In recent months, significant tensions have emerged in global trade, encompassing a number of major economies. The resultant atmosphere of uncertainty could cause MNEs to cancel or delay investment decisions until the trade and investment climate is more stable. If tariffs come into force, trade and global value chains in the targeted sectors will be affected and so, consequently, would be efficiency-seeking FDI. MNE profitability would be affected in some sectors, further weakening the propensity to invest. MNEs could also be incentivized to relocate production activities to avoid tariffs.

Tensions and scrutiny extend beyond trade. The Committee on Foreign Investment in the United States (CFIUS), has become more proactive in blocking and discouraging acquisition of United States firms. More restrictive investment screening procedures are also being considered elsewhere. The European Commission, Germany, Italy and the United Kingdom have announced reforms to their investment control regime in the past year (see also Chapter III).

The tax reform bill adopted in the United States in December 2017 will also have a significant impact on global FDI stocks and flows (box I.2). The immediate impact of the one-off deemed repatriation measure will be the freeing up of more than $3.2 trillion in accumulated overseas retained earnings of United States MNEs, a significant portion of which could be repatriated. Such repatriations would result in a drop in outward FDI stock and negative outflows from the United States, with a mirror effect on inward stocks and flows of other countries.

## MNE and IPA expectations

The global economic upswing and short-term positive outlook have, for now, inspired optimistic spending plans among MNE executives. Almost 80 per cent of the executives surveyed reported plans to increase investment in the coming year. Top MNEs, and those operating in tech sectors, declared above-average spending intentions, suggesting that they foresee using part of their cash reserves. Corporations from developing and transition

## Box I.2. The potential impact of tax reforms in the United States

The United States tax reform bill, adopted in December 2017, could have a significant impact on global investment patterns, given that almost half of global FDI stock is either located in the United States or owned by United States multinationals.

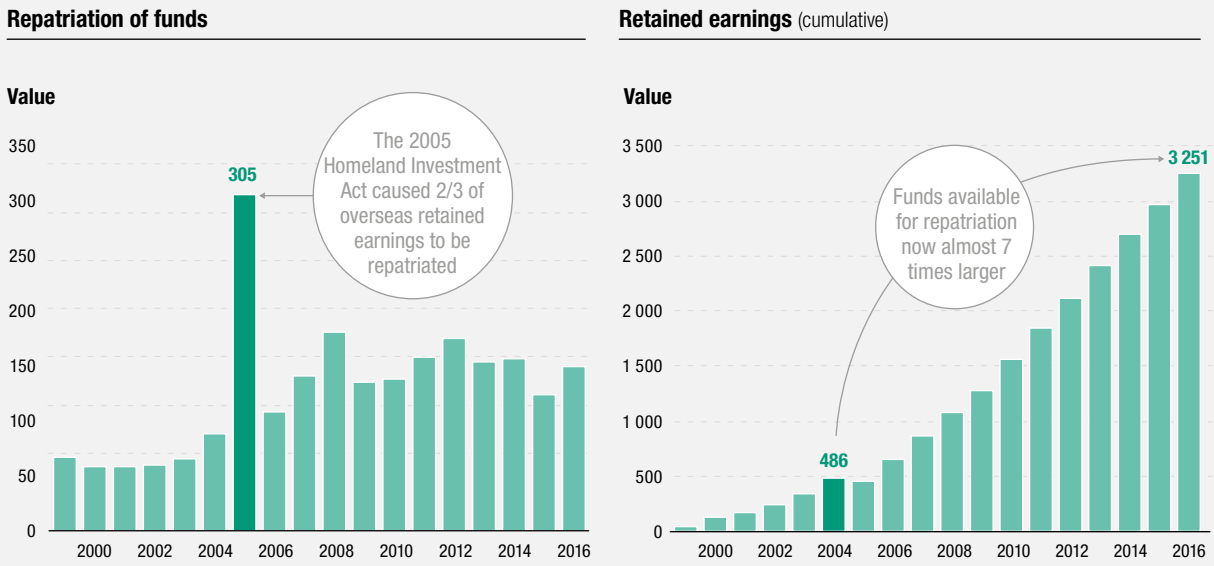
The bill includes changes to the corporate tax regime that directly affect the investment climate in the United States, and measures to encourage United States MNEs to bring overseas funds back home. The package also contains measures to tackle tax avoidance through complex cross-border corporate structures.

Measures that will directly affect the investment climate in the United States include (i) a reduction of the statutory corporate income tax (CIT) rate from 35 per cent to 21 per cent effective from 2018, (ii) immediate full expensing of investment cost, and (iii) the capping of deductible interest to 30 per cent of taxable income.

Measures directed at the international tax regime for MNEs include (i) a switch from a worldwide system (taxing worldwide income) to a territorial tax system (taxing only income earned at home) through a 100 per cent deductibility of dividends of foreign affiliates, (ii) a transitional measure for existing overseas retained earnings in the form of a mandatory deemed repatriation subject to a one-off tax payment (15.5 per cent on cash, 8 per cent on illiquid assets), and (iii) a set of anti-avoidance measures, including a tax on global intangible low-tax income and a tax on payments to overseas affiliated firms that erode the tax base in the United States.

A tax break on repatriation has been long awaited by MNEs since the last such break in 2005, in the form of the Homeland Investment Act (HIA). The HIA brought back two-thirds of the total funds available for repatriation at the time, or some $300 billion of retained earnings. Overseas retained earnings of United States MNEs are now much higher. At $3.2 trillion – with some $2 trillion held in cash – they are now about seven times the level in 2005 (box figure I.2.1). Repatriations could cause significant negative outward FDI flows and a large drop in the outward FDI stock position of the United States, from the current $6.4 trillion to possibly as low as $4.5 trillion, with inverse consequences for inward FDI stocks in other countries.

**Box figure I.2.1** **Retained and repatriated earnings of United States MNEs, 1999–2016** (Billions of dollars)




*Source*: UNCTAD analysis based on United States Bureau of Economic Analysis data.

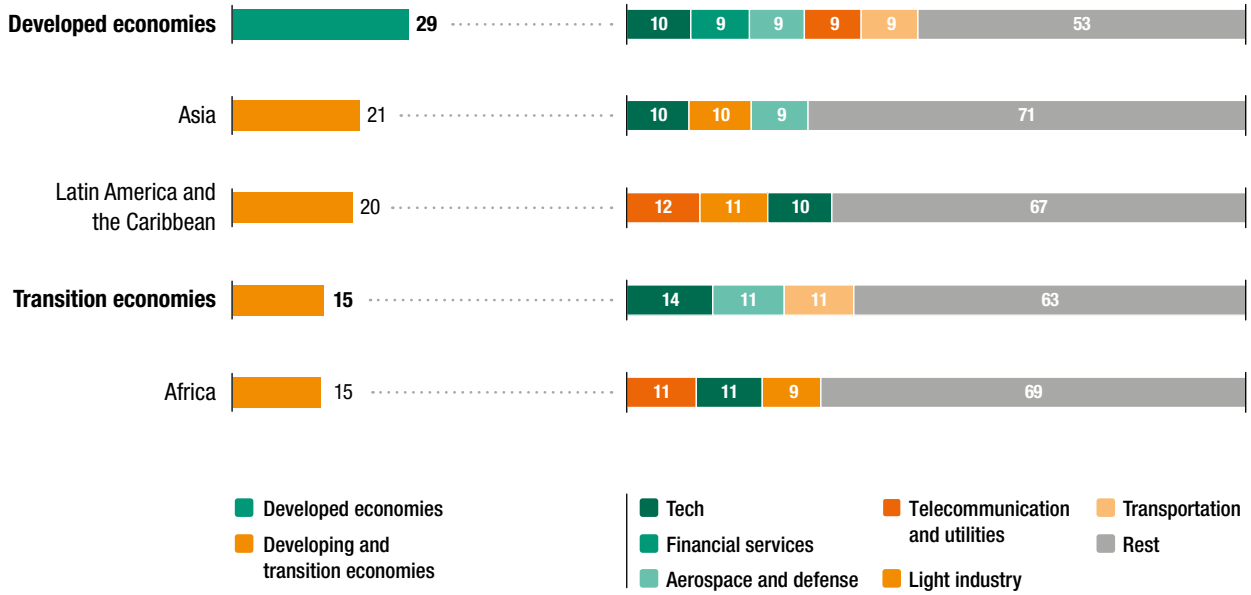
Beyond the immediate effect of the deemed repatriation measure, the impact of the overall tax reform package on global FDI and on capital expenditures by MNEs in the United States is likely to differ substantially by sector and industry. Likely implications include the following:

- The removal of the need to keep earnings overseas could lead to structurally lower retained earnings in foreign affiliates of United States MNEs and to a re-routing of FDI links in the international corporate structures of United States MNEs.
- The greater degree of freedom in the use of overseas cash could lead to a further increase in M&As (although perhaps more domestic M&As than cross-border M&As), but the curbs on interest deductibility could dampen this effect.
- The stimulus to investment in the United States provided by a lower CIT rate and full investment expensing could lead to higher inward investment in the United States, and possibly to further re-shoring of manufacturing activity.

In the longer term, global investment patterns could also be affected by a greater degree of tax competition.

*Source*: UNCTAD, Investment Trends Monitor, "Tax reforms in the United States: implications for international investment", Special edition, 5 February 2018.

**Figure I.12.** **Executives' selection of targets by region and industry** (Percentage of executives rating an investment in the region as highly likely or likely; on the right, industries they represent)




*Source*: Data provided by AT Kearney.

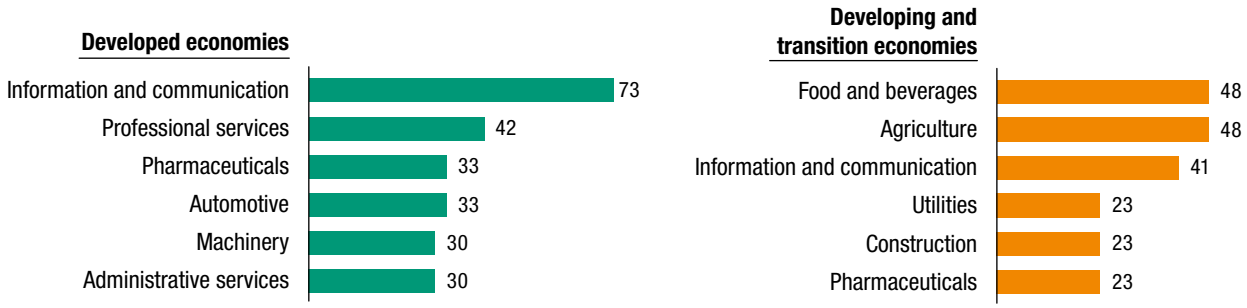
economies also traditionally have bolder spending plans. The survey was conducted in January, before trade tensions heightened. Should tensions subside, these spending intentions could translate into a more positive scenario for global FDI.[4]

Looking at likely locations, 30 per cent of executives who rated investment in the next three years as highly likely or likely prioritized developed economies as targets, and almost 20 per cent chose destinations in developing Asia and in Latin America and the Caribbean (figure I.12). Transition economies and African destinations were selected by 15 per cent of investors. Tech companies expect to be the most active investors; they are planning to expand in all regions. Financial companies are focusing mostly on developed economies, while light industry companies (such as those in consumer goods) are targeting developing economies, attracted by growing domestic markets and lower labour costs.

Executives from aerospace and defense corporations place more importance on technological and innovation capabilities. This results in their preference for developed countries as well as leading economies in developing Asia and transition economies. Executives in these industries rated investment in India at a similar probability as investment in France or the Netherlands, where a leading aeronautical producer (Airbus SE) is based. Telecommunication and utilities companies are mostly driven by domestic economic performance, hence investing in large domestic economies where the market is not yet saturated.

Investment promotion agencies (IPAs) in developing economies expect most investment to come from agribusiness corporations, followed by information and communication MNEs (figure I.13). IPAs also expect to attract utilities and construction investors to fill infrastructure gaps. IPAs in developed economies expect most investments to come from information and communication companies and professional services, and from specialized manufacturing industries: pharmaceuticals, automotive and machinery. There are some parallels within MNE expectations: IPAs from developing and transition economies all

**Figure I.13.** **IPAs' selection of most promising industries for attracting FDI in their own economy, by region** (Per cent of IPAs responding)




*Source*: UNCTAD, IPA Survey.

forecast investments from the food and beverages industry (light industry), matching corporations' plans of investments across the developing world. Another promising industry for developing economies is information and communication (that includes both tech and telecom corporations) as the digital economy spreads to frontier markets.

# C. INTERNATIONAL PRODUCTION

## 1. Key indicators of international production

International production continues to expand, but the rate of expansion is slowing down, and the modalities of cross-border transactions and exchanges of goods, services and factors of production are shifting. Table I.6 provides key indicators of international production (see box I.3 on the use of FDI statistics to measure international production).

The gradual growth in the sales and value added of MNE foreign affiliates, as reported in UNCTAD's annual statistics, is inherent in the functioning of international production networks. Existing stocks of investment, accumulated in affiliates already located overseas, generate returns that can be reinvested in foreign markets. Approximately 50 per cent of the income of foreign affiliates is reinvested, on average.

The average annual growth rates over the last five years of foreign affiliates' sales (1.5 per cent), value added (1.5 per cent) and employment (2.5 per cent) were all lower than during

**Table I.6. Selected indicators of FDI and international production, 2017 and selected years**

| Item | Value at current prices (Billions of dollars) | | | | |
|---|---|---|---|---|---|
| | 1990 | 2005–2007 (pre-crisis average) | 2015 | 2016 | 2017 |
| FDI inflows | 205 | 1 415 | 1 921 | 1 868 | 1 430 |
| FDI outflows | 244 | 1 452 | 1 622 | 1 473 | 1 430 |
| FDI inward stock | 2 196 | 14 487 | 25 665 | 27 663 | 31 524 |
| FDI outward stock | 2 255 | 15 188 | 25 514 | 26 826 | 30 838 |
| Income on inward FDI[a] | 82 | 1 027 | 1 461 | 1 564 | 1 581 |
| *Rate of return on inward FDI*[b] | *5.4* | *9.2* | *6.8* | *7.0* | *6.7* |
| Income on outward FDI[a] | 128 | 1 101 | 1 394 | 1 387 | 1 553 |
| *Rate of return on outward FDI*[b] | *7.8* | *9.5* | *6.1* | *5.8* | *6.2* |
| Net cross-border M&As | 98 | 729 | 735 | 887 | 694 |
| Sales of foreign affiliates | 6 755 | 24 217 | 27 559 | 29 057[c] | 30 823[c] |
| Value added (product) of foreign affiliates | 1 264 | 5 264 | 6 457 | 6 950[c] | 7 317[c] |
| Total assets of foreign affiliates | 5 871 | 54 791 | 94 781 | 98 758[c] | 103 429[c] |
| Employment by foreign affiliates (thousands) | 27 034 | 57 392 | 69 683 | 71 157[c] | 73 209[c] |
| *Memorandum* | | | | | |
| GDP[d] | 23 433 | 52 383 | 74 407 | 75 463 | 79 841 |
| Gross fixed capital formation[d] | 5 812 | 12 426 | 18 561 | 18 616 | 19 764 |
| Royalties and licence fee receipts | 31 | 174 | 299 | 312 | 333 |
| Exports of goods and services[d] | 4 414 | 14 957 | 20 953 | 20 555 | 22 558 |

*Source:* UNCTAD.

*Note*: Not included in this table are the value of worldwide sales by foreign affiliates associated with their parent firms through non-equity relationships and of the sales of the parent firms themselves. Worldwide sales, gross product, total assets, and employment of foreign affiliates are estimated by extrapolating the worldwide data of foreign affiliates of MNEs from Australia, Austria, Belgium, Canada, Czech Republic, Finland, France, Germany, Greece, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Portugal, Slovenia, Sweden, and the United States for sales; those from the Czech Republic, France, Israel, Japan, Portugal, Slovenia, Sweden, and the United States for value-added (product); those from United Kingdom and the United States (excluding financials) for assets; those from Czech Republic, Japan, Portugal, Slovenia, Sweden, and the United States for exports; and those from Australia, Austria, Belgium, Canada, Czech Republic, Finland, France, Germany, Italy, Japan, Latvia, Lithuania, Luxembourg, Macao (China), Portugal, Slovenia, Sweden, Switzerland, and the United States for employment.

[a] Based on data from 180 countries for income on inward FDI and 156 countries for income on outward FDI in 2017, in both cases representing more than 90 per cent of global inward and outward FDI stocks.

[b] Calculated only for countries with both FDI income and stock data. The stock is measured in book value.

[c] Data for 2016 and 2017 are estimated based on a fixed effects panel regression of each variable against outward stock measured in book value and a lagged dependent variable for the period 1980–2015.

[d] Data from IMF (2018).

## Box I.3. FDI statistics and international production

FDI data from the balance of payments have historically been a key source of information on the international activity of multinational enterprises (MNEs). Although the limitations of this approach have been recognized over the past decade (Lipsey, 2007; Beugelsdijk et al., 2010), concerns about the adequacy of FDI statistics for capturing patterns of international production have intensified and gained prominence in recent years (Leino and Ali-Yrkko, 2014; Blanchard and Acalin, 2016; Sauvant, 2017).

UNCTAD's *World Investment Report* is providing annual estimates of total sales, value added, assets and employees generated by foreign affiliates globally (see table I.6). The underlying idea is to employ FDI weights to estimate global values of foreign affiliates' relevant indicators from the subset of countries reporting official statistics on foreign affiliates (i.e. foreign affiliate statistics). Details of the approach are provided in the note to table I.6.

This extrapolation procedure based on FDI data leads to an acceptable approximation of foreign affiliates' operational metrics at the global level, thanks to good overall correlation between aggregate FDI and foreign affiliate statistics (Casella, forthcoming; Fukui and Lakatos, 2012; Ramondo and Rodríguez-Clare, 2013). However, the use of FDI data for more granular analysis of international production at the country or industry level requires addressing the main empirical issues involved in the relationship between FDI statistics and foreign affiliates' operational data. Box table I.3.1 summarizes these issues and points to counter-arguments and mitigating factors.

Despite their various limitations, FDI statistics remain a useful source of information on international production. In particular, for FDI recipients that are lower-income countries, FDI statistics from the balance of payments *must* be the starting point, given the dearth of good alternative sources of information on foreign affiliates' activity. For these countries, each of the three main critiques of the use of FDI to describe international production appear less relevant, as FDI in developing countries is more oriented towards productive assets (more greenfield investments) and relatively less affected by conduit flows, while local financial markets are less mature.

Thus, a pragmatic approach to the analysis of international production should be adopted, in which FDI is used as the main indicator of MNEs' activity, especially in developing and lower-income countries, complemented by other available data including project-based data (section I.A.3), survey-level data (section I.C.1), firm-level data (section I.C.3), and value added trade data (section I.C.2).

### Box table I.3.1. The use of FDI data from the balance of payments to describe MNE international activity: critiques and responses

| Critique | Response |
|---|---|
| **FDI is a financing instrument**, not necessarily an investment in productive assets (source of funds vs. use of funds) | ▸ The relative stability of FDI, among financing instruments, is indicative of its long-term, productive investment nature<br>▸ Data on foreign affiliates and global value chains indicate a link between FDI and MNEs' foreign operations<br>▸ The geographic and time coverage of FDI data from the balance of payments is superior to alternative data sources, especially for developing countries; data collection is hard-coded into international balance-of-payments reporting standards, thereby ensuring a minimum degree of reliability and comparability |
| **Conduit FDI through offshore financial centres have weakened the relationship between FDI and international production**, and affected the bilateral links in international production networks (direct vs. ultimate investors) | ▸ Conduit FDI through offshore financial centres can, to some extent, be excluded from FDI data and analysis, either directly (for those countries that report special purpose entities) or indirectly with estimation techniques<br>▸ Standard FDI reporting is being expanded to include statistics on the basis of ultimate investors; analytical techniques are under development to estimate bilateral FDI by location of the ultimate investor |
| **FDI ignores other financing options** and does not capture the full extent of international production (FDI vs. local financing) | ▸ There are no systematic measures of foreign affiliate financing other than FDI, and literature seeking to estimate non-FDI financing is sparse |

*Source*: UNCTAD.

the equivalent period before 2010 (at 9.7, 10.7 and 7.6 per cent, respectively). This is in line with the loss of growth momentum in the longer-term FDI trend – net of peaks caused by one-off transactions and corporate restructurings. The deceleration in international production is also a contributing factor behind slower growth in trade and in GVCs (see section I.C.2).

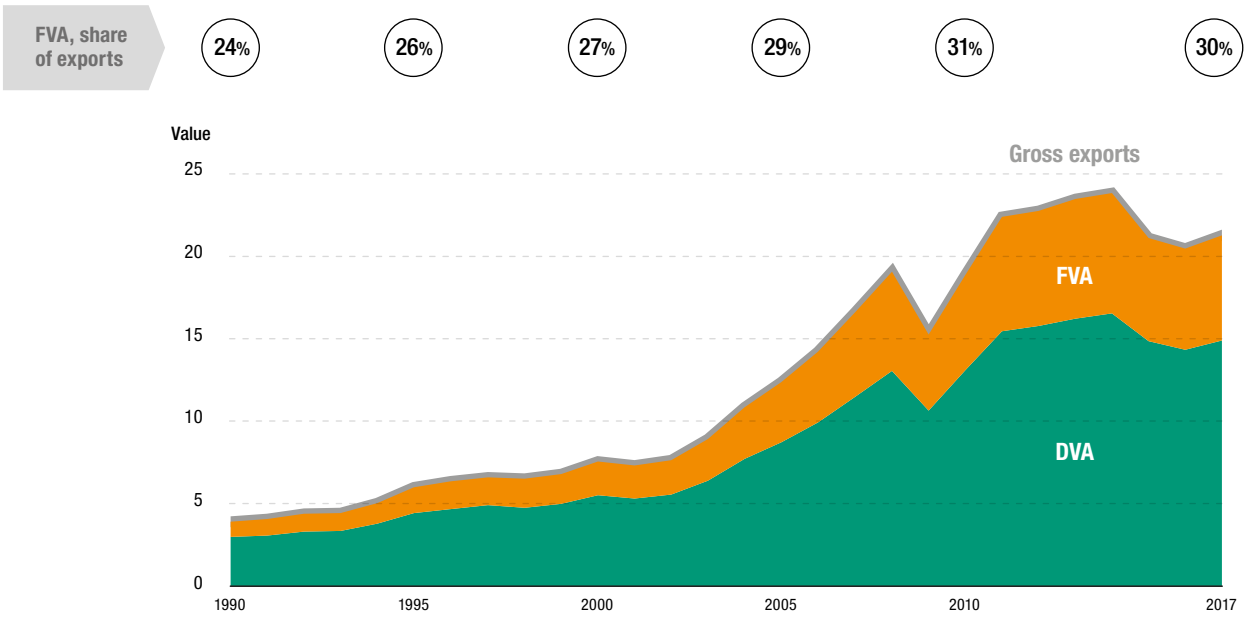
After the global financial crisis, the slowdown in the rate of growth of trade in goods and services, relative to global GDP, was only the first, most visible manifestation of a broader change. The relative rates of growth over the last five years of royalties and licensing fee receipts (almost 5 per cent annually) compared with trade in goods and FDI (less than 1 per cent per year) show how international production is shifting from tangible cross-border production networks to intangible value chains. The asset-light international production trend described in *WIR17* is visible again in this year's statistics, with assets and employment in foreign affiliates growing significantly more slowly than sales.

## 2. Trends in global value chains

**Growth in global value chains (GVCs) has stagnated.** Foreign value added (FVA) in trade – the imported goods and services incorporated in a country's exports, and a key measure of the importance of GVCs – appears to have peaked in 2010–2012 after two decades of continuous increase.

Figure I.14 shows the long-terms trends of gross exports, broken down into domestic value added (DVA) and FVA.[5] From 1990 until 2010, the share of FVA in total exports rose continuously, contributing to the growth in global trade. The rise was gradual – 7 percentage points in 20 years — but steady, without interruptions. In the past decade, for the first time in 30 years, the growth of GVCs has come to a halt, with the share of FVA declining to 30 per cent in 2017. This reversion in the trend of FVA share is consistent with the recent slowdown in economic globalization and with the FDI trend.

**Figure I.14. Global trade: long-term trends in value added terms, 1990–2017** (Trillions of dollars and per cent)



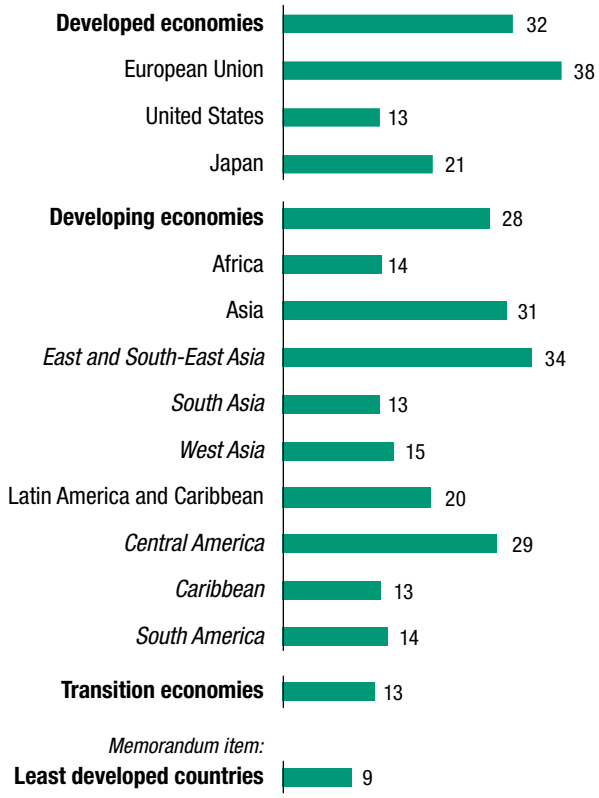

*Source*: UNCTAD; based on data from the UNCTAD-EORA GVC database.

**Developed economies lead in FVA**. In 2017, the share of FVA in total exports from developed economies stood at 32 per cent, above the global average of 30 per cent (figure I.15). The high average is driven largely by the European Union (38 per cent), where highly integrated markets and shared institutional settings have favoured the rise of strong regional value chains. Conversely, in the United States and Japan, the share of FVA is limited; as global service and technology leaders, they capture a large part of trade-generated value added domestically.

The share of FVA for developing economies as a whole is slightly lower than for developed economies, at 28 per cent of total exports. The subregions of East and South-East Asia and Central America stand out, with shares at 34 per cent and 29 per cent respectively. GVC integration in these regions has been boosted by a set of economies acting as major global and regional trade hubs, such as Singapore and Hong Kong (China) in East and South-East Asia, and Mexico in Central America.

The share of FVA for the other developing-economy groups is significantly lower, below 15 per cent. It is lowest in the LDCs, at 9 per cent. Low levels of FVA in these regions are due to poor overall participation in GVCs or to participation that is limited to the provision of natural resources, whereby countries provide input to other countries' exports (i.e. they are integrated *downstream*) but use limited input from other countries' exports (they are not integrated *upstream*).

**Figure I.15.** **Share of foreign value added in exports, by region, 2017** (Per cent)



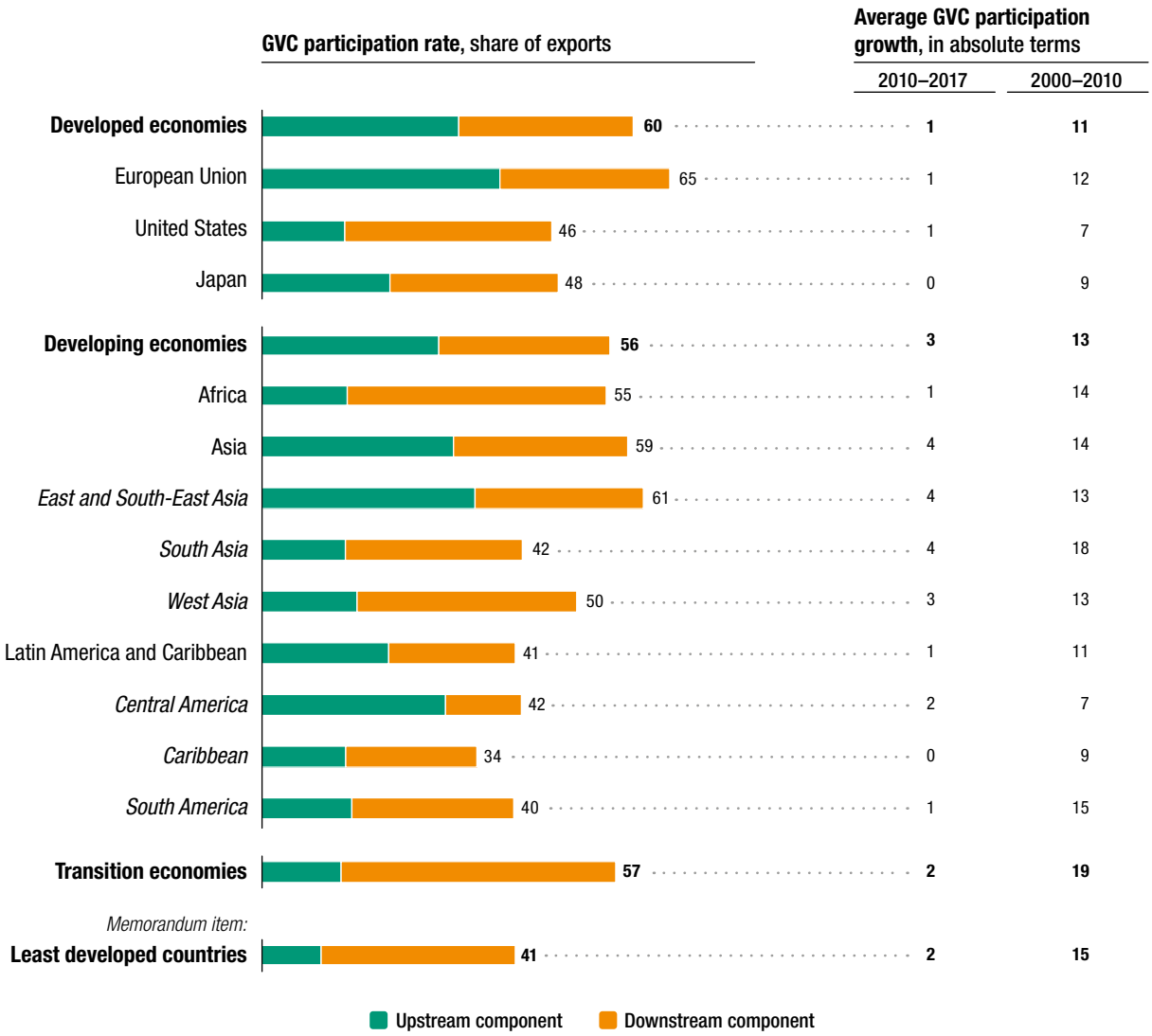

*Source*: UNCTAD; based on data from the UNCTAD-EORA GVC database.

**The GVC participation rate provides a more nuanced picture**. The GVC participation rate, capturing both upstream and downstream integration,[6] smooths the large differences in the regional patterns of FVA (figure I.16, in comparison with figure I.15). Regions with lower shares of FVA tend to have relatively larger downstream components. In the context of developed economies, this is clearly the case for the United States and for Japan. As the downstream component is part of DVA, under certain conditions, its prominence is an indicator of a country's ability to extract domestic value from participation in GVCs.

For developing and transition countries as well, the inclusion of the downstream component contributes to softening differences across regions. The most visible effect is on regions and groups dominated by commodity exporters, particularly Africa, transition economies and, to some extent, LDCs. In particular Africa and the transition economies moved from very low levels of FVA to a GVC participation rate aligned to the global average. GVC participation led by the (downstream) contribution of commodity exports has specific development implications. On the one hand, almost all exports translate into DVA creation; on the other, however, the share of value added captured on the upstream side of the value chain tends to be small relative to the value of the final output.

Figure I.16 also shows the regions' average annual growth in GVC participation over two periods, 2000–2010 and 2010–2017. Since 2010 the relative importance of GVCs in global

**Figure I.16. GVC participation rate, by region, 2017 and growth rates, 2010–2017 and 2000–2010** (Per cent)

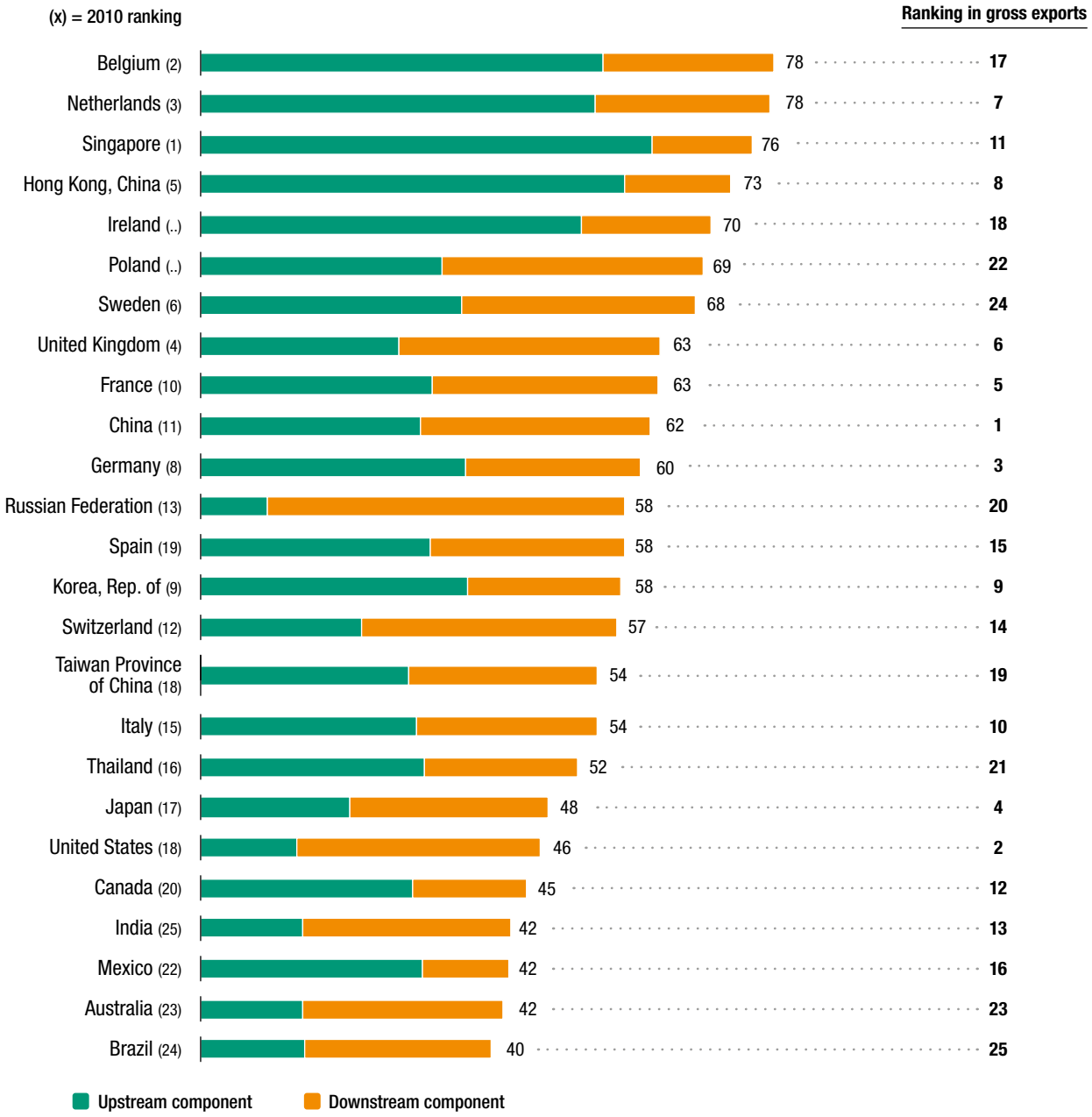



*Source*: UNCTAD; based on data from UNCTAD-EORA GVC database.

trade has been in retreat, as shown by the trend in FVA share in figure I.14; nonetheless, GVC participation has continued to increase in absolute terms, although with a substantial slowdown compared with the previous decade across all regions. Developing countries have integrated into GVCs more quickly than more mature economies, particularly in Asia. Growth in GVC participation in Africa and in Latin America and the Caribbean has been very weak recently (at about 1 per cent annually between 2010 and 2017). As deeper integration in GVCs can be an important development lever for poor countries, the struggle to further integrate into GVCs for some of the poorest regions of the world remains a challenge (for extensive analysis and discussion of the relationship between GVCs and development, see *WIR13*).

At the global level, the countries most integrated into GVCs are regional headquarters and logistical centres (as well as financial hubs) for MNE operations (Belgium; the Netherlands; Singapore; Hong Kong, China; and Ireland). Faced with a relatively small domestic market, these economies have gained a major role as global service, technological and financial hubs (figure I.17). Surprisingly, the upstream component (FVA) of the GVC participation rate is prominent in these economies. This suggests that even economies that provide high value added services to global production – which are commonly perceived as

## Figure I.17. Top 25 exporting economies by GVC participation rate, 2017 (Per cent)




*Source*: UNCTAD; based on data from UNCTAD-EORA GVC database.

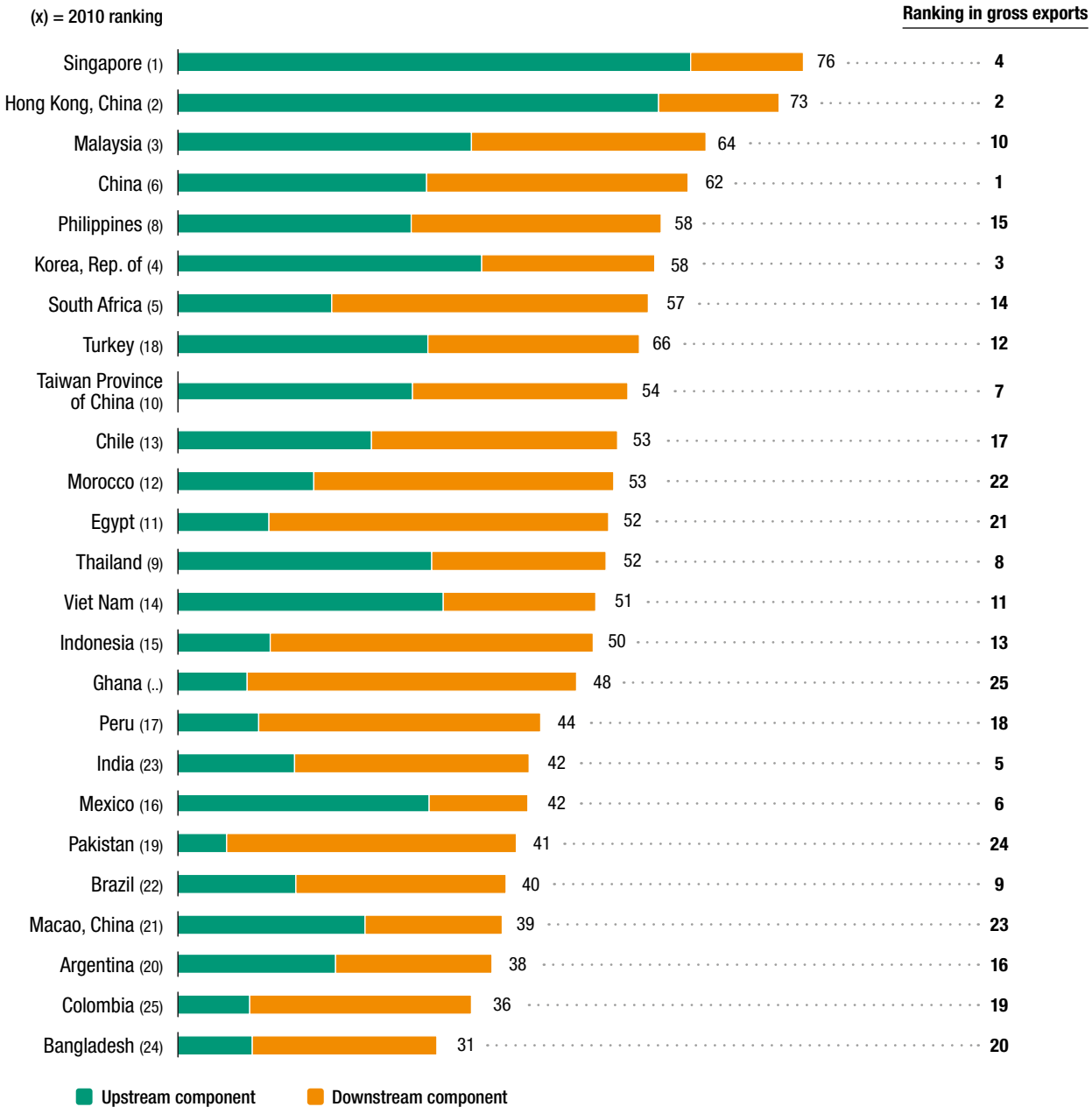
*Note*: Ranking excludes predominantly oil-exporting countries. The symbol (..) identifies countries that were not in the list of top 25 exporters in 2010.

requiring little foreign imports – still rely substantially on foreign inputs. In addition to foreign inputs, re-exports contribute significantly to high FVA, particularly in the top four countries (Belgium; the Netherlands; Singapore; and Hong Kong, China), which are characterized by the presence of very large commercial ports.

In developing countries, after Singapore and Hong Kong, China, the top positions are occupied by Asian countries that have become the site of large global factories, such as Malaysia, China and the Republic of Korea (figure I.18 on the following page).

The relative weight of countries in GVCs remains quite consolidated, with no major changes in rankings between 2010 and 2017, both at the global level and for developing countries as a group.

**Figure I.18. Top 25 exporting developing economies by GVC participation rate, 2017** (Per cent)




*Source*: UNCTAD; based on data from UNCTAD-EORA GVC database.
*Note*: Ranking excludes predominantly oil-exporting countries. The symbol (..) identifies countries that were not in the list of top 25 exporters in 2010.

## 3. Internationalization trends of the largest MNEs

**In 2017, the top 100 global MNEs' foreign operations represented 9 per cent of world foreign assets, 17 per cent of world foreign sales and 13 per cent of foreign employment.**[7] The top global MNEs represented a tiny 0.1 per cent of the estimated universe of MNEs, but their total sales in 2017 were equivalent to about 10 per cent of world GDP. The relative importance of the top 100 MNEs is a function partly of globalization and partly of concentration among the universe of MNEs.

**In 2017, top MNEs scaled up their global operations, increasing assets and sales by 8 per cent, although internationalization statistics remained roughly stable.** Assets and sales were boosted by a wave of megadeals across virtually all industries

## Box I.4. The updated UNCTAD-EORA GVC database

UNCTAD launched its UNCTAD-EORA GVC database in the context of the empirical and policy analysis conducted for the *World Investment Report 2013* (*WIR13*), whose theme was "Global Value Chains: Investment and Trade for Development". The database helps analysts explore trends and patterns in international production through the analysis of GVCs. GVCs are coordinated by MNEs investing in productive assets worldwide and trading inputs and outputs within firms, at arm's length or through their networks of non-equity mode partners. UNCTAD estimates that up to 80 per cent of global trade involves MNEs (*WIR13*). Thus, the analysis of GVCs is fully complementary to the analysis of FDI and international production developed in this chapter.

Recently, major analytical developments in the treatment of national input-output tables have opened new avenues in the empirical research on GVCs. In particular, the availability of databases of trade broken down according to the origin of its value added (value added trade data) enables systematic analysis of GVC patterns by countries and industries. Box table I.4.1 identifies the most important databases and the main ongoing projects.

### Box table I.4.1. Mapping value added in trade: selected initiatives

| Project | Institution | Data sources | Countries | Industries | Years | Comments |
|---|---|---|---|---|---|---|
| UNCTAD-Eora GVC Database | UNCTAD/Eora | National supply-use and I-O tables, and I-O tables from Eurostat, IDE-JETRO and OECD | 187 | 25–500 depending on the country | 1990–2015 (nowcast for 2016, 2017 and 2018) | Meta database, drawing together many sources and interpolating missing points to provide broad, consistent coverage, even of data-poor countries |
| Trade in Value Added (TiVA) Data Set | OECD | National I-O tables | 62 | 34 | 1995–2011 | Information on all OECD countries, and 27 non-member economies (including all G20 countries) |
| World Input-Output Database (WIOD), 2016 Release | Consortium of 11 institutions, EU funded | National supply-use tables | 43 | 56 | 2000–2014 | Based on official national accounts statistics, uses end-use classification to allocate flows across partners and countries |
| **Other multiregion input-output databases** | | | | | | |
| EXIOBASE | EU-based consortium, exiobase.eu | National supply-use tables | 44+5 | 200 | 1995–2013 | Covers 44 countries plus five rest-of-world regions |
| ADB Multi-Region Input-Output Database (ADB MRIO) | Asian Development Bank | An extension of WIOD that includes 5 additional Asian economies (Bangladesh, Malaysia, Philippines, Thailand and Viet Nam) | 45 | 35 | 2000, 2005–2008, 2011 | Information for the 5 additional Asian countries are estimates methodically produced to assist research and analysis, not official statistics |
| Asian International I-O Tables | Institute of Developing Economies (IDE-JETRO) | National account and firm-level surveys | 10 | 76 | 1975, 1980, 1985, 1990, 1995, 2000, 2005 | United States–Asia tables, as well as bilateral tables, including China-Japan |
| Global Trade Analysis Project (GTAP) | Purdue University | Contributions from individual researchers and organizations | 120 countries and 20 regions | 57 | 2004, 2007, 2011 | Unofficial data set; includes data on areas such as energy volumes, land use, carbon dioxide emissions and international migration |
| South American Input-Output Tables | ECLAC and Institute of Applied Economic Research (IPEA) from Brazil | National I-O tables | 10 | 40 | 2005 | Based on official information from national accounts |

*Source*: UNCTAD.

The distinctive feature of the UNCTAD-EORA database is its broad geographic coverage, including virtually all countries. This inclusiveness has made the UNCTAD-EORA database the reference source for value added trade data in GVC analysis involving developing economies (AfDB, OECD and UNDP, 2014; UNECA, 2015; UNIDO, 2016).

/...

## Box I.4. The updated UNCTAD-EORA GVC database (Continued)

Given the importance of GVC analysis in the context of globalization and development and the high demand for value added trade data, in particular for developing countries, UNCTAD has collaborated with EORA to enhance the database. This effort has produced an update of the 2013 data as well as an improved version, using a "nowcasting" methodology to project value added trade data up to the current year (2018, for this edition of WIR). This step addresses one of the main issues of the value added trade databases (including the WIOD, the TiVA and the previous version of the UNCTAD-EORA database), namely a time lag of at least three years between the most recent year of data and the time of publication of the GVC database.

**The UNCTAD-EORA nowcasting methodology**

The UNCTAD-EORA GVC results are based on data reported for the years 1990–2015 and are "nowcasted" to estimate results for 2016–2018. The nowcasting is based on the International Monetary Fund's World Economic Outlook (WEO), which provides estimates of the annual change in GDP, imports and exports in each country. These estimates are provided for recent years and with near-term forecasts for the next five years.

The nowcasting is done at country level in two stages. First, total exports from each country are scaled up or down according to the WEO forecast. Then, the contribution of value added from each country feeding into total exports is adjusted according to the relative change in GDP. If, for example, all countries have a 2 per cent increase in GDP, there will be no change in the composition of suppliers, but if GDP in country A grows by 2.2 per cent and GDP in country B grows by 1.8 per cent, then sources of value added will be rebalanced towards country A (specifically, the contribution of country A will increase 10 per cent and that of country B will decrease 10 per cent). As a direction for future work, a natural development of this approach is to extend the estimation to near-term forecasts based on WEO projections.

UNCTAD plans to systematically update GVC analysis and make it a recurring annual feature of the WIR. Granular GVC indicators at the country and industry levels underlying the GVC analysis in the WIR are available at EORA's website at http://worldmrio.com.

The methodology underlying the UNCTAD-EORA GVC database is presented in full in Moran et al. (2018).

*Source*: UNCTAD.

represented in the Top 100 that brought five new companies into the ranking: DowDuPont Inc., the chemical conglomerate formed after the merger of Dow Chemical and DuPont; the Canadian multinational energy transportation company Enbridge Inc.; the United Kingdom consumer goods company Reckitt Benckiser Group Plc; the German health care services group Fresenius SE & Co KGaA; and the Chinese conglomerate HNA Group Co Ltd. A sixth new company, the Chinese tech conglomerate Tencent Holding, was not involved in megadeals but rather accumulated foreign assets over the last few years, operating like an investment holding company. Among the companies exiting the rankings this year, some divested or split up (Schlumberger Ltd., ConocoPhillips, General Motors and Hewlett-Packard, all from the United States), while others simply slid out of the list as the threshold level of foreign assets increased (reaching over $40 billion this year) while they maintained constant assets (E.ON Ag (Germany), WPP Plc (United Kingdom)).

Internationalization statistics remained roughly stable (table I.7). Foreign assets decreased by 1.4 per cent influenced by some national deals including the Dow–DuPont merger, luxury goods group LVHM (France) consolidating its shares in fashion house Christian Dior and French electric utility EDF SA acquiring Areva's nuclear business. By contrast, foreign employees and foreign sales as a share of the total increased by 1.2 and 2.2 per cent, following the "asset-light" trend (*WIR17*). This trend is not visible in the Top 100 developing-economy MNEs, which are still dominated by large conglomerates.

**Companies not involved in cross-border megadeals expanded their business as well, especially in the automotive and tech industries.** Even in the consumer goods industry – a relatively slow-growing industry in developed economies – the British–Dutch conglomerate Unilever Plc grew revenues by investing in fast-growing opportunities and start-ups, including digital tools and platforms.[8] The corporation is planning to move its headquarters to the Netherlands, leading to a likely, albeit small, increase in its share of

**Table I.7. Internationalization statistics of the 100 largest non-financial MNEs, worldwide and from developing and transition economies**
(Billions of dollars, thousands of employees and per cent)

| Variable | 100 largest MNEs worldwide | | | | | 100 largest MNEs from developing and transition economies | | |
|---|---|---|---|---|---|---|---|---|
| | 2015[a] | 2016[a] | 2015–2016 Change (%) | 2017[b] | 2016–2017 Change (%) | 2015[a] | 2016 | Change (%) |
| **Assets** (billions of dollars) | | | | | | | | |
| Foreign | 8 015 | 8 337 | 4.0 | 9 004 | 8.0 | 1 716 | 1 886 | 9.9 |
| Domestic | 4 875 | 4 894 | 0.4 | 5 491 | 12.2 | 4 289 | 4 511 | 5.2 |
| Total | 12 891 | 13 231 | 2.6 | 14 495 | 9.6 | 6 004 | 6 397 | 6.5 |
| Foreign as share of total (%) | 62 | 63 | 0.8 | 62 | -1.4 | 29 | 29 | 0.9 |
| **Sales** (billions of dollars) | | | | | | | | |
| Foreign | 4 802 | 4 765 | -0.8 | 5 170 | 8.5 | 1 734 | 1 559 | -10.1 |
| Domestic | 2 851 | 2 737 | -4.0 | 2 793 | 2.1 | 1 903 | 1 965 | 3.3 |
| Total | 7 653 | 7 502 | -2.0 | 7 964 | 6.2 | 3 638 | 3 524 | -3.1 |
| Foreign as share of total (%) | 63 | 64 | 0.8 | 65 | 2.2 | 48 | 44 | -3.4 |
| **Employment** (thousands) | | | | | | | | |
| Foreign | 9 130 | 9 535 | 4.4 | 9 757 | 2.3 | 4 003 | 4 603 | 15.0 |
| Domestic | 7 141 | 6 920 | -3.1 | 6 889 | -0.4 | 7 900 | 7 434 | -5.9 |
| Total | 16 271 | 16 455 | 1.1 | 16 646 | 1.2 | 11 903 | 12 038 | 1.1 |
| Foreign as share of total (%) | 56 | 58 | 1.8 | 59 | 1.2 | 34 | 38 | 4.6 |

*Source:* UNCTAD.
*Note:* Note: Data refer to fiscal year results reported between 1 April of the base year and 31 March of the following year. Complete 2017 data for the 100 largest MNEs from developing and transition economies are not yet available.
[a] Revised results
[b] Preliminary results

**Table I.8. Composition of top 100 global MNEs by industry and home economy, 2012–2017** (Number of firms)

| Industry | 2012 | 2017 | Economy | 2012 | 2017 |
|---|---|---|---|---|---|
| Mining, petroleum and refining | 19 | 13 | United States | 24 | 20 |
| Automotive and aircraft | 13 | 13 | United Kingdom | 17 | 14 |
| Pharmaceuticals | 10 | 12 | France | 13 | 12 |
| Utilities | 10 | 9 | Germany | 9 | 11 |
| Wholesale and retail trade | 10 | 6 | Japan | 9 | 11 |
| Food, beverages and tobacco | 9 | 8 | Switzerland | 6 | 5 |
| Tech | 7 | 15 | Ireland | .. | 4 |
| Telecom | 6 | 7 | **Other developed economies** | **22** | **23** |
| Other industry | 12 | 13 | **Developing economies** | **7** | **8** |
| Other services | 4 | 4 | China | 3 | 4 |
| **Total** | **100** | **100** | | **100** | **100** |

*Source:* UNCTAD.

foreign assets. Automotive MNEs grew their assets by an average of 10 to 20 per cent, as they have been heavily investing in the development of new products, often seeking collaboration with tech companies. A notable exception is General Motors (United States), which, following a strategy of global downsizing, divested assets around the world (e.g. South Africa, Kenya, India, Australia, Indonesia, Europe) and exited the Top 100 ranking for the first time.

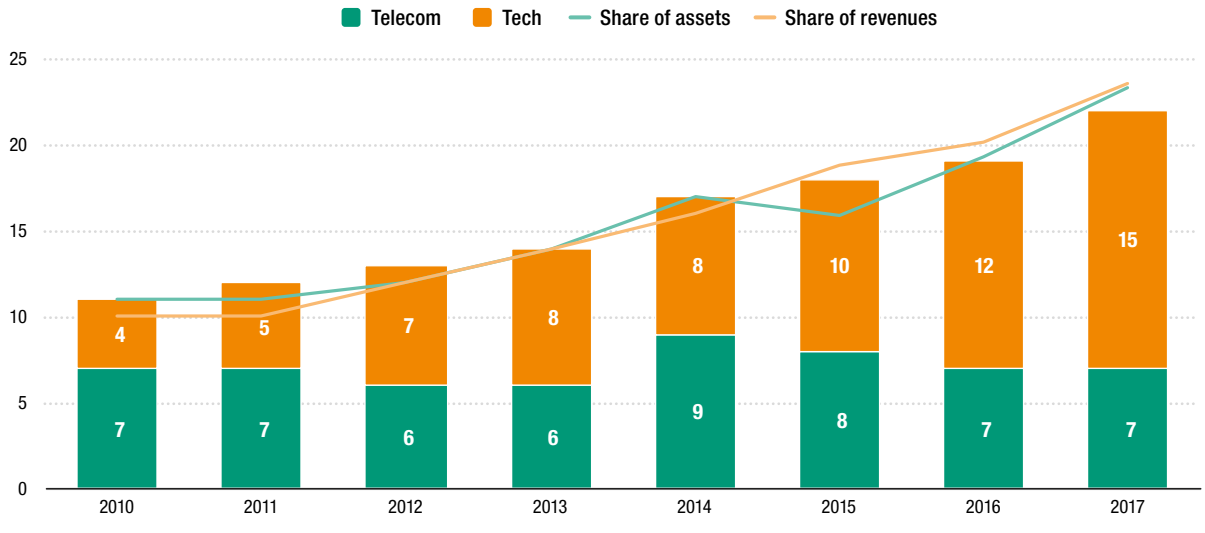
**The composition of the global Top 100 MNEs changed significantly in the past five years, with extractive industries and trade corporations leaving the ranking.** Most of the extractive companies exited the ranking in 2017, following divestments (table I.8). BG Group (United Kingdom) was bought by Royal Dutch Shell (United Kingdom–Netherlands)

in 2015. Among trading corporations, retailing MNEs (Carrefour (France), Tesco (United Kingdom)), which have long struggled to gain local scale in emerging markets, decided to leave countries where they could not be market leaders. The geography of MNEs' home economies changed slightly, with Ireland becoming the headquarters site of four corporations, and the number of MNEs from Japan and Germany in the ranking increasing. The representation of developing economies in the Top 100 increased by only one because although developing-economy MNEs are internationalizing at faster rates, the level of foreign assets necessary to be in the Top 100 keeps rising, allowing only the most dynamic of them to remain on the list.

**The presence of digital firms in the Top 100 global MNEs continues to increase** (figure I.19). The 2017 ranking includes 15 tech and 7 telecom MNEs. Since 2012, the number of tech companies has more than doubled, as eight companies joined the top ranking: Samsung Electronics Ltd (Republic of Korea), SAP SE (Germany), Nokia OYJ (Finland), Hitachi Ltd (Japan), Amazon.com (United States), Broadcom (Singapore), Intel Corporation (United States), Oracle Corporation (United States) and Tencent Holding Ltd (China). All companies have been investing heavily to maintain their leadership positions. The most recent entry, Tencent, has transformed into a very active investment holding conglomerate with a recent special focus on financing Asian tech start-ups. In the past year alone, it more than trebled its international assets, entering the Top 100 global MNE ranking for the first time. The semiconductor company Broadcom acquired competitors continuously over the past five years, until last year's hostile bid for United States chipmaker Qualcomm. That transaction, had it been approved, would have been the biggest tech deal in history ($142 billion). The e-commerce platform Amazon.com has invested in assets and processes including its own fleet of trucks, a crowd-sourced delivery service, robot-enhanced warehouses and its own aircraft. These investments made the company much less "intangible".

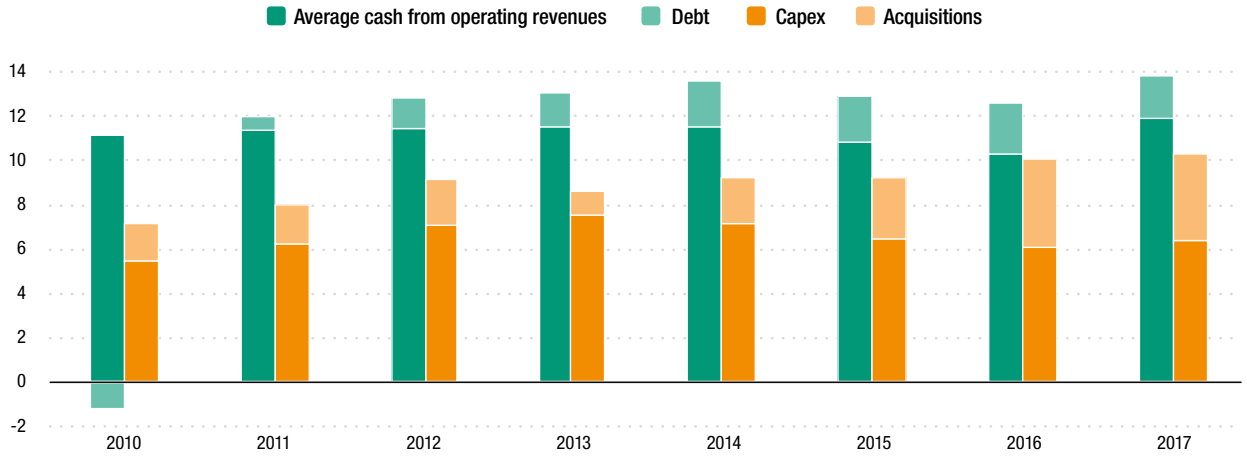
**Capital expenditures by the Top 100 MNEs have gradually declined since 2013** (figure I.20). This trend is partly explained by the low commodity prices that hit extractive companies in 2014. Also, tech MNEs, whose share in the Top 100 is increasing, are not deploying their high average cash flows towards capital expenditures or acquisitions as much as other MNEs. The average cash from operating revenues for the 15 tech MNEs has

**Figure I.19.** **Evolution of ICT MNEs in UNCTAD's ranking of the top 100 MNEs, 2010–2017**
(Number of companies and share of assets and revenues)




*Source:* UNCTAD.

**Figure I.20. Sources and uses of cash for top 100 MNEs, 2010–2017** (Average per company, values in billions of dollars)




*Source*: UNCTAD.

constantly been in excess of $15 billion per company since 2012, well above that of other MNEs, which maintained relatively stable cash flows of between $10 billion and $15 billion each. However, with the exception of 2017, tech companies' investments in the form of capital expenditures and acquisitions have been in line with those of other MNEs, ranging between $6 billion and $10 billion.

**In 2016, top MNEs from developing economies further increased their foreign operations, with Asian companies leading the way in cross-border megadeals.** For example, in just two years, the Chinese conglomerate HNA Group gained a lead position in the ranking of the top 100 MNEs from developing economies and entered the ranking of the top global MNEs. Some of its 2016 acquisitions include targets as diverse as technology distributor Ingram Micro (United States), London-based International Currency Exchange and Carlson Hotels (United States). Technological companies from South-East Asia engaged in several purchases and mergers to consolidate the semiconductors and electronic components industry. Tech companies that more than doubled their foreign assets during 2016 include Broadcom (Singapore), Flex Ltd (Singapore), Tencent Holding Ltd (China) and United Microelectronics Corp (Taiwan Province of China).

**In the five years from 2011 to 2016, the geographical mix of the Top 100 MNEs from developing and transition economies shifted towards a more pronounced representation of Chinese conglomerates** (table I.9). In 2016, there were 24 Chinese companies in the list, up from just 12 in 2011. The new entries did not alter significantly the industrial mix of the list, which remained almost unchanged.

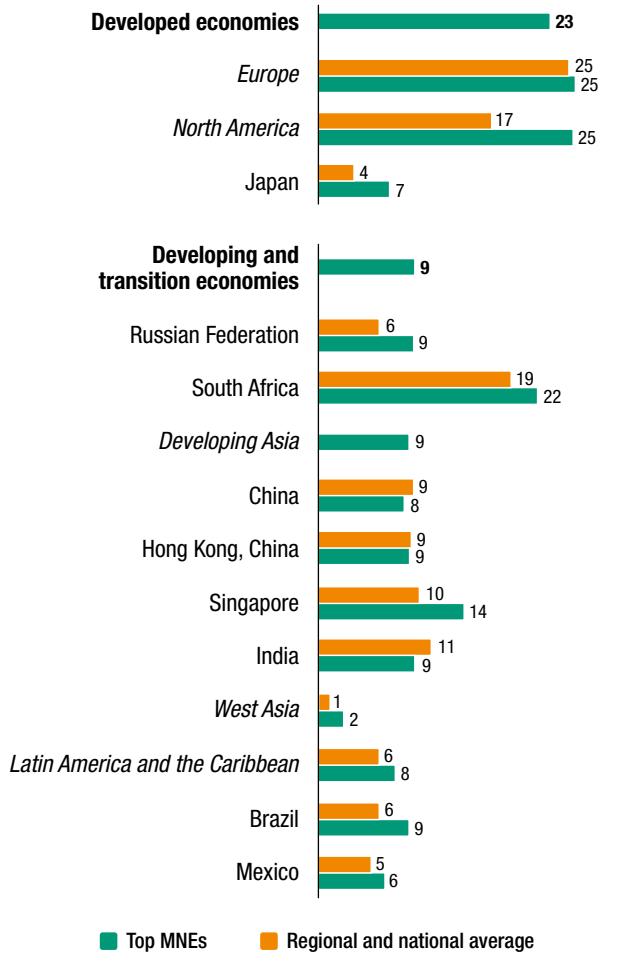
**At the end of 2017, women held an average of 22 per cent of board seats in the top 100 MNEs, and five corporations had a female CEO** (figure I.21). Board representation is slightly better than the S&P500 companies' average of 19.9 per cent (Catalyst, 2013) and compares favorably with other global studies, which place this percentage between 12 and 15 per cent (Credit Suisse, 2016; MSCI 2017; Deloitte, 2017). In recent years, board diversity has been increasingly perceived as a factor that improves corporate governance. A diverse board is more open to novel information and perspectives, and benefits from a better mix of talents and skills, and is thus believed to have more nuanced and informed discussions, as well as to better capture consumers' preferences. Studies have been linking board diversity with various measures of corporate performance, showing that companies with a gender-balanced board had better financial results than

**Table I.9. Composition of top 100 MNEs from developing and transition economies by industry and home country, 2011–2016** (Number of firms)

| Industry | 2011 | 2016 | Economy | 2011 | 2016 |
|---|---|---|---|---|---|
| Mining, petroleum and refining | 16 | 15 | **Africa** | **9** | **7** |
| Tech | 13 | 15 | South Africa | 8 | 6 |
| Telecom | 11 | 10 | **Asia** | **75** | **77** |
| Food, beverages and tobacco | 9 | 10 | Hong Kong, China | 20 | 13 |
| Wholesale and retail trade | 9 | 6 | China | 12 | 24 |
| Construction | 8 | 8 | Singapore | 9 | 9 |
| Metals and metal products | 7 | 8 | Taiwan Province of China | 9 | 6 |
| Utilities | 5 | 6 | India | 8 | 6 |
| Other industry | 12 | 12 | Malaysia | 6 | 5 |
| Other services | 11 | 10 | **Latin America and the Caribbean** | **10** | **14** |
| | | | Brazil | 4 | 5 |
| | | | Mexico | 4 | 7 |
| | | | Russian Federation | 6 | 2 |
| **Total** | **100** | **100** | | **100** | **100** |

*Source:* UNCTAD.

**Figure I.21. Board seats held by women, top MNEs, regional and national averages** (Per cent)




*Source:* Data from UNCTAD (top 100) and Credit Suisse, Deloitte and MSCI (national averages).

those without (Credit Suisse, 2016; McKinsey, 2018; MSCI, 2017). Although it is difficult to claim any causation, it is apparent that companies have a long way to go to improve their gender balance at the top. Only 3–4 per cent of all CEOs in the world are women. The MNEs with the most diverse boards are from Europe, where some countries have introduced quotas and targets, followed by North America, where the appointment of women is not regulated.[9] Among developing countries, South African corporations have a comparable share of women on their boards of directors. Companies in other developing countries, along with Japanese corporations, lag significantly behind their Western and South African counterparts.

**Financial MNEs' geographical spread has been declining, as global financial MNEs continue to restructure and reorient their global strategies.** UNCTAD's Geographical Spread Index (GSI) – a measure of global presence for MNEs – shows that financial MNEs scored a lower GSI in 2017 than they did in 2012, when GSI data were last calculated (table I.10).

The decline in GSI scores, along with a 5 per cent contraction in asset size, reflect financial MNEs' continued restructuring of assets and affiliates – a move intended to manage asset risk and reinforce capital. Overall, the financial MNEs in UNCTAD's ranking shed 15 per cent of their affiliates between 2012–2017, divesting some 5 per cent of their domestic affiliates and 20 per cent of their foreign

**Table I.10. Geographical spread trends among UNCTAD's ranking of the top 50 financial MNEs**

| Indicators | 2012 | 2017 | Change, 2012–2017 (%) |
|---|---|---|---|
| GSI score (group average) | 44.6 | 39.3 | -11.9 |
| Assets (group average, US$ billions) | 1 020.1 | 966.1 | -5.3 |
| Total number of affiliates | 19 768.0 | 16 778.0 | -15.1 |
| Foreign | 12 352.0 | 9 731.0 | -21.2 |
| Domestic | 7 416.0 | 7 047.0 | -5.0 |
| Number of host countries (group average) | 33 | 28 | -15.2 |

*Source:* UNCTAD top 50 financial MNEs (see box I.5), Thomson Reuters, company financial reports.
*Note*: GSI score is calculated by comparing the number of of foreign affiliates and country presence relative to domestic affiliates.

ones (box I.5). Though for some, divesting foreign assets was a move to comply with government regulations, the higher divestment in foreign affiliates compared with domestic ones may indicate MNEs' higher aversion towards the risk of operations abroad.

**As international banks from developed economies retrenched, banks from developing Asia have emerged in the top global ranking.** More than half of the banks in UNCTAD's ranking of the Top 50 financial MNEs had a lower GSI score in 2017 than in 2012, due to reductions in holdings of foreign affiliates. Banks headquartered in Europe and North America drove most of this reduction. Citigroup, which has exited more than 20 countries and divested affiliates all over Asia Pacific, the Middle East and South America since 2012, scored the largest decline. Asian banks are following an opposite trend.[10]

Other than South Africa's Standard Bank Group, most of the new entrants in the top 50 ranking are headquartered in Asia. The newcomers are First Abu Dhabi Bank (United Arab Emirates), UOB (Singapore), DBS (Singapore), Qatar National Bank (Qatar), Maybank (Malaysia), and three Chinese banks (namely ICBC, Bank of China and China Construction Bank). The foreign expansion of the three Chinese State-owned banks has been exceptionally rapid. Their GSI scores almost doubled, and they are now present in twice as many foreign countries as in 2012. Overall, banks headquartered in Asia represent nearly a third of the total assets of the top 50 group – a significant increase from just 9 per cent in 2012.

Asset growth trends suggest that a more global presence is likely to continue for banks headquartered in Asia. In the past five years, they have grown substantially more than – and did not experience as much asset reduction as – European and North American

**Box I.5. UNCTAD Top 50 Financial MNEs**

UNCTAD periodically ranks the largest financial MNEs by their Geographical Spread Index (GSI) scores to build its ranking of the Top 50 financial MNEs (see WIR Web Annex). They are ranked separately from the Top 100 MNEs because their international operations are disparate from other sectors. Financial MNEs are an important part of international production, not only because of their historically large assets – on average five times bigger than those of non-financial MNEs in 2017 – but also because of their role in facilitating trade and investments.

The list of the top 50 financial MNEs includes the largest banks, insurance and other financial services companies, by asset size. Commercial banks have consistently dominated, making up some 70–80 per cent of the group's total assets. For each financial MNE, a GSI score is calculated by comparing the number of foreign affiliates and country presence (outside their headquarters) with the number of domestic affiliates.

*Source*: UNCTAD.

**Figure I.22. Annual asset growth of global banks, 2012–2017** (Per cent)


*Source*: UNCTAD Top 50 Financial MNEs, Thomson Reuters, company financial reports.
*Note*: Time series data for the 30 banks within UNCTAD's Top 50 ranking 2017. Data refer to fiscal year results reported between 1 April of the stated year to 31 March of the following year.

banks, which have historically dominated the Top 50 ranking (figure I.22). Both groups have experienced an apparent rebound since 2016 driven by loan growth, which increased from 3 per cent in 2016 to 8 per cent in 2017.

**The geographical spread of global banks will continue to be constrained by relatively flat profits and by prudential requirements.** In the past three years, interest income relative to total assets – a measure of profitability – has remained flat for the banks in the top 50 ranking, hovering around 3 per cent. These stagnating profits could further dampen the appetite to expand abroad. Correspondingly, UNCTAD's data on the numbers of both cross-border M&As and greenfield projects in the financial sector shows a decline in 2017 (see tables I.3 and I.4). Any further international expansion will be driven by Asian MNEs, as the developments in UNCTAD's global ranking suggests. Recent acquisition deals also show how Asian banks are actively acquiring global financial companies. Ping An Insurance Group (China), for example, became the second largest stakeholder of HSBC Holdings in the last quarter of 2017.

Global financial MNEs will continue to be constrained by prudential requirements phased in since 2015–2016, which were part of reform efforts prompted by the global financial crisis. An example at the global level is the Financial Stability Board's rule on global systemically important banks, of which there are 30.[11] Phased in starting in 2016, the rule applies supplemental safety measures, which include higher capital and liquidity requirements, for these banks. Though there will be variations in the timing of implementation for each bank (planned between 2016 and 2019), the rules will affect how the biggest global banks manage their books and, in turn, their operations at home and abroad.

# NOTES

[1] FDI data may differ from one WIR issue to another as data are continually revised, updated and corrected by relevant national authorities, such as central banks and statistical offices, which provide FDI data to UNCTAD.

[2] All values and numbers referring to cross-border M&As in the report are presented on a net basis. Net cross-border M&As are calculated considering sales of companies in a host economy to foreign MNEs. It excludes sales of foreign affiliates (already owned by foreign MNEs) to other foreign MNEs. Divestments (sales of foreign affiliates to domestic firms) are subtracted from the value (number). Calculations for 2016 and 2017 net cross-border M&As are based on information reported by Thomson Reuters Eikon (TRE). For previous years, please see *WIR17* and its web annex tables.

[3] See also Casella and Formenti, 2018.

[4] Survey data provided by AT Kearney. Survey conducted in January 2018.

[5] Broadly, exports can be decomposed into a domestic value added (DVA) component and a foreign value added (FVA) component. The former is the "real" value added exchanged in trade; all countries participating in GVCs contribute to its creation through their own ("domestic") factors of production. The latter component is value added traded as part of imported inputs in multi-stage, multi-country production processes. In value added terms, it is thus double-counting rather than the creation of fresh value. The more ingrained the GVCs in the global economy, and the more fragmented the global production processes, the higher is the foreign value added. (At the other extreme, in the absence of GVCs, trade would serve only final consumers. In that situation, foreign value added would be null and domestic value added would equate to exports.)

[6] The interplay between the upstream and downstream components is an important dimension in the analysis of GVCs. It is best summarized by the GVC participation index (Koopman et al., 2014). For a given country, the index is computed as the sum of its FVA (upstream component) and the part of its DVA embedded in other countries' exports (downstream component), usually expressed as shares of the country's total exports (GVC participation rate). This indicator, although less intuitive than FVA, provides a more detailed picture of countries' and regions' participation in GVCs.

[7] Figures for foreign sales from the international production estimates and from the top 100 are not totally comparable as in one case they are defined as sales of foreign affiliates while the statistics of top corporations use reported geographical splits of revenues. Most corporations report foreign sales including exports (i.e. sales are reported by customer location and not by origin).

[8] For example, in 2017 investments by Unilever Venture (the capital venture arm of Unilever) included meal-kit outfit Sun Basket, skincare brand True Botanicals, customer care platform Limitless, digital ad platform Celtra and home-cleaning platform Helpling.

[9] In South Africa, State-owned enterprises are required to ensure gender equality in all appointed boards, with a minimum of 30 per cent of either gender. Also, the Broad-Based Black Economic Empowerment Act, passed in 2003 and revised in 2013, provides a financial incentive for companies to advance black women onto boards and into senior leadership roles.

[10] See also Lane and Milesi-Ferretti (2017), Bank for International Settlement 87th Annual Report (2017), which observed a diverging trend in cross-border activities between regions.

[11] See Financial Stability Board (2017) on post-crisis reform implementation.