UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD

WORLD INVESTMENT REPORT 2020

INTERNATIONAL PRODUCTION BEYOND THE PANDEMIC

30th anniversary edition

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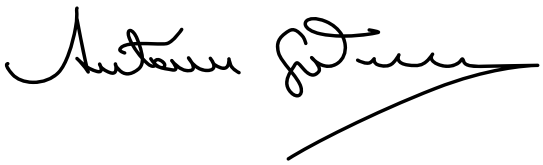
PREFACE

Global flows of foreign direct investment (FDI) will be under severe pressure this year as a result of the COVID-19 pandemic. These vital resources are expected to fall sharply from 2019 levels of $1.5 trillion, dropping well below the trough reached during the global financial crisis and undoing the already lackluster growth in international investment over the past decade. Flows to developing countries will be hit especially hard, as export-oriented and commodity-linked investments are among the most seriously affected.

The consequences could last well beyond the immediate impact on investment flows. Indeed, the crisis could be a catalyst for a process of structural transformation of international production this decade, and an opportunity for increased sustainability, but this will depend on the ability to take advantage of the new industrial revolution and to overcome growing economic nationalism. Cooperation will be crucial; sustainable development depends on a global policy climate that remains conducive to cross-border investment.

The *World Investment Report*, now in its thirtieth year, supports policymakers by monitoring global and regional FDI trends and documenting national and international investment policy developments. This year's Report naturally takes stock of the COVID-19 crisis. It also includes a new chapter, added at the request of the UN General Assembly, on investment in the Sustainable Development Goals. This analysis shows that international private sector flows to four out of ten key SDG areas have failed to increase substantially since the adoption of the goals in 2015. With less than a decade left to the agreed deadline of 2030, this makes it all the more important to evaluate the implications of the expected changes in the investment landscape over the coming years.

As such, this year's *World Investment Report* is required reading for policymakers and an important tool for the international development community. I commend its information and analysis to a wide global audience.



António Guterres
Secretary-General of the United Nations

FOREWORD

The global economy is in the midst of a severe crisis caused by the COVID-19 pandemic. The immediate impact on FDI will be dramatic. Longer term, a push for supply chain resilience and more autonomy in productive capacity could have lasting consequences.

But COVID-19 is not the only gamechanger for FDI. The new industrial revolution, the policy shift towards more economic nationalism, and sustainability trends will all have far-reaching consequences for the configuration of international production in the decade to 2030.

The overall directional trend in international production points towards shorter value chains, higher concentration of value added and declining international investment in physical productive assets. That will bring huge challenges for developing countries. For decades, their development and industrialization strategies have depended on attracting FDI, increasing participation and value capture in GVCs, and gradual technological upgrading in international production networks.

The expected transformation of international production also brings some opportunities for development, such as promoting resilience-seeking investment, building regional value chains and entering new markets through digital platforms. But capturing these opportunities will require a shift in development strategies.

Export-oriented investment geared towards exploiting factors of production, resources and low-cost labour will remain important. But the pool of such investment is shrinking, and the first rungs on the development ladder could become much harder to climb. A degree of rebalancing towards growth based on domestic and regional demand and promoting investment in infrastructure and domestic services is necessary.

That means promoting investment in SDG sectors. The large amounts of institutional capital looking for investment opportunities in global markets does not look for investment projects in manufacturing, but for value-creating projects in infrastructure, renewable energy, water and sanitation, food and agriculture, and health care.

The findings in the dedicated chapter in this report on investment in the SDGs show that sustainability-themed funds in global capital markets are growing rapidly. At the same time, they show these finances are not yet finding their way to investments on the ground in developing countries.

We have now entered the last decade for the implementation of the SDGs. We need action to translate increased interest in SDG finance into increased SDG investment in the least developed countries.

I hope that the Action Plan for Investment in the SDGs presented in this report will inspire and reinvigorate efforts around the world to make this happen.

Mukhisa Kituyi
Secretary-General of UNCTAD

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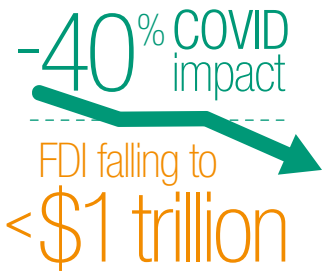
ABBREVIATIONS

3D	three-dimensional
AAAA	Addis Ababa Action Agenda
AfCFTA	African Continent Free Trade Area
AI	artificial intelligence
ACP	African, Caribbean and Pacific Group of States
AfCFTA	African Continental Free Trade Area
BIT	bilateral investment treaty
CAGR	compound annual growth rate
CARIFORUM	Caribbean Forum
CEPA	Comprehensive Economic Partnership Agreement
CETA	Comprehensive Economic and Trade Agreement
CFTA	Continental Free Trade Agreement
CIS	Commonwealth of Independent States
COVID-19	coronavirus disease 2019
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CSR	corporate social responsibility
ECT	Energy Charter Treaty
EGLS	estimated generalized least square
EPA	Economic Partnership Agreement
ESA	Eastern and Southern Africa States
ESG	environmental, social and governance
ETF	exchange-traded fund
EV	electric vehicle
FBSD	Family Business for Sustainable Development
FET	fair and equitable treatment
FT	free trade agreement
GCI	Guidance on Core Indicators
GMM	generalized method of moments
GVC	global value chain
IC	information and communication technology
ICMA	International Capital Market Association
ICSID	International Centre for Settlement of Investment Disputes
IFC	International Finance Corporation
IIA	international investment agreement
IMF	International Monetary Fund
INFF	Integrated National Finance Framework
IOSCO	International Organization of Securities Commissions
IoT	internet of things
IPA	investment promotion agency
IPFSD	Investment Policy Framework for Sustainable Development
ISDS	investor–State dispute settlement
LDC	least developed country
LLDC	landlocked developing country
M&As	mergers and acquisitions
MIGA	Multilateral Investment Guarantee Agency
MNE	multinational enterprise
MSME	micro, small and medium-sized enterprises
NAFTA	North American Free Trade Agreement
NEM	non-equity mode
NIR	new industrial revolution
OEM	original equipment manufacturer
PPE	personal protective equipment
PPP	public-private partnership
R&D	research and development
RCEP	Regional Comprehensive Economic Partnership
RVC	regional value chain
SDGs	Sustainable Development Goals
SEZ	special economic zone
SIDS	small island developing States
SMEs	small and medium-sized enterprises
SO-MNE	State-owned multinational enterprise
SSE	Sustainable Stock Exchanges (initiative)
TIFA	Trade and Investment Framework Agreement
TIP	treaty with investment provision
TiSA	Trade in Services Agreement
TPP	Trans-Pacific Partnership
TTIP	Transatlantic Trade and Investment Partnership
UNCITRAL	United Nations Commission on International Trade Law
UN DESA	United Nations Department of Economic and Social Affairs
UNGC	United Nations Global Compact
UNWTO	United Nations World Tourism Organization
USMCA	United States–Mexico–Canada Agreement
WEPs	Women's Empowerment Principles
WFE	World Federation of Exchanges
WEO	World Economic Outlook
WHO	World Health Organization
WTO	World Trade Organization

KEY MESSAGES

INVESTMENT TRENDS AND PROSPECTS



The COVID-19 crisis will cause a dramatic fall in FDI. Global FDI flows are forecast to decrease by up to 40 per cent in 2020, from their 2019 value of $1.54 trillion. This would bring FDI below $1 trillion for the first time since 2005. FDI is projected to decrease by a further 5 to 10 per cent in 2021 and to initiate a recovery in 2022. A rebound in 2022, with FDI reverting to the pre-pandemic underlying trend, is possible, but only at the upper bound of expectations.

The outlook is highly uncertain. Prospects depend on the duration of the health crisis and on the effectiveness of policy interventions to mitigate the economic effects of the pandemic. Geopolitical and financial risks and continuing trade tensions add to the uncertainty.

The pandemic is a supply, demand and policy shock for FDI. The lockdown measures are slowing down existing investment projects. The prospect of a deep recession will lead MNEs to re-assess new projects. Policy measures taken by governments during the crisis include new investment restrictions. Starting in 2022, investment flows will slowly recover, led by GVC restructuring for resilience, replenishment of capital stock and recovery of the global economy.

MNE profit alerts are an early warning sign. The top 5,000 MNEs worldwide, which account for most of global FDI, have seen expected earnings for the year revised down by 40 per cent on average, with some industries plunging into losses. Lower profits will hurt reinvested earnings, which on average account for more than 50 per cent of FDI.

Early indicators confirm the immediacy of the impact. Both new greenfield investment project announcements and cross-border mergers and acquisitions (M&As) dropped by more than 50 per cent in the first months of 2020 compared with last year. In global project finance, an important source of investment in infrastructure projects, new deals fell by more than 40 per cent.

The impact, although severe everywhere, varies by region. Developing economies are expected to see the biggest fall in FDI because they rely more on investment in global value chain (GVC)-intensive and extractive industries, which have been severely hit, and because they are not able to put in place the same economic support measures as developed economies.

- Among developed countries, FDI flows to *Europe* are expected to fall by 30 to 45 per cent, significantly more than those to *North America* and other developed economies (with falls of 20 to 35 per cent on average), because the region entered the crisis on a relatively more fragile footing. In 2019, flows to developed economies as a group increased by 5 per cent to $800 billion.
- FDI flows to *Africa* are forecast to fall by 25 to 40 per cent in 2020. The negative trend will be exacerbated by low commodity prices. In 2019, FDI flows to Africa already declined by 10 per cent to $45 billion.
- Flows to *developing Asia* will be severely affected due to their vulnerability to supply chain disruptions, the weight of GVC-intensive FDI in the region and global pressures

to diversify production locations. FDI is projected to fall by 30 to 45 per cent. In 2019, FDI flows to the region declined by 5 per cent, to $474 billion, despite gains in South-East Asia, China and India.

- FDI in *Latin America and the Caribbean* is expected to halve in 2020. Investment prospects are bleak because the pandemic compounds political turbulence and structural weaknesses in several economies. The industry profile of FDI in the region also makes it vulnerable. In 2019, FDI in Latin America and the Caribbean grew by 10 per cent to $164 billion.
- FDI flows to *economies in transition* are expected to fall by 30 to 45 per cent. The decline will largely undo a recovery of FDI to the region in 2019 (up 59 per cent to $55 billion) after several years of low inflows.
- *The outlook for FDI in structurally weak and vulnerable economies is extremely negative.* Many least developed countries (LDCs) are dependent on FDI in extractive industries, many small island developing States are dependent on investment in tourism, and landlocked developing countries are disproportionally affected by supply chain blockages. In 2019, FDI inflows to LDCs declined by 6 per cent to $21 billion, representing just 1.4 per cent of global FDI.

Despite the drastic decline in global FDI flows during the crisis, the international production system will continue to play an important role in economic growth and development. Global FDI flows will remain positive and continue to add to the existing FDI stock, which stood at $36 trillion at the end of 2019.

INVESTMENT POLICY DEVELOPMENTS

Investment policy is a significant component of the pandemic response. Several multilateral groupings, including the G20, have issued declarations in support of international investment. More than 70 countries have taken measures either to mitigate the negative effect on FDI or to shield domestic industries from foreign takeovers.

Support measures include online investment facilitation, pandemic-related services of investment promotion agencies (IPAs) and new incentives for investment in health care. Several countries have tightened foreign investment screening mechanisms to protect health care and other strategic industries. Other interventions include mandatory production, export bans on medical equipment and a reduction of import duties for medical devices. The crisis has also slowed the pace of negotiating international investment agreements (IIAs).

The pandemic could have lasting effects on investment policymaking. On the one hand, it may solidify the shift towards more restrictive admission policies for foreign investment in strategic industries. On the other, it may trigger increased competition for investment as economies seek to recover from the crisis. At the international level, the pandemic will accentuate the need for IIA reform as government responses to the health crisis and its economic fallout could create friction with IIA obligations.

Already in 2019, continuing the trend of recent years, several countries – almost all developed – introduced more rigorous screening of investment in strategic industries on the basis of national security considerations. At least 11 large cross-border M&A deals were withdrawn or blocked for regulatory or political reasons.

Attracting FDI remains an important policy objective. Overall, 54 economies introduced at least 107 measures affecting foreign investment in 2019; three-quarters were in the direction of liberalization, promotion and facilitation, with developing countries and emerging economies in Asia most active. Steps toward liberalization were made in mining, energy, finance, transportation and telecommunication. Several countries streamlined administrative procedures for investors or expanded investment incentive regimes.

Change in the IIA regime is underway. In 2019, the number of IIA terminations (34) exceeded the number of new IIAs (22) for the second time. This brought the total to 3,284 IIAs and 349 effective terminations. Several other developments will affect the international investment policy landscape, including the agreement by European Union (EU) member States to terminate intra-EU bilateral investment treaties, Brexit and the entry into force of the agreement establishing the African Continental Free Trade Area.

The number of treaty-based investor–State dispute settlement (ISDS) cases reached over 1,000. Most of the 55 publicly known ISDS cases initiated in 2019 were brought under IIAs signed in the 1990s or earlier. ISDS tribunals rendered at least 71 substantive decisions. In the decisions holding the State liable, the amounts awarded ranged from several millions to $8 billion.

Progress on the reform of the IIA regime is visible in treaties concluded in 2019. Nearly all new IIAs contain features in line with UNCTAD's Reform Package for the International Investment Regime, with the preservation of States' regulatory space being the most frequently seen area of reform. To support the IIA reform process, UNCTAD will launch its IIA Reform Accelerator later in 2020.

INTERNATIONAL PRODUCTION: A DECADE OF TRANSFORMATION AHEAD

The World Investment Report *has monitored FDI and the activities of MNEs for 30 years*, during which international production saw two decades of rapid growth followed by one of stagnation. Flows of cross-border investment in physical productive assets stopped growing in the 2010s, the growth of trade slowed down and GVC trade declined.

The 2010s were only the quiet before the storm. The crisis caused by the COVID-19 pandemic arrives on top of existing challenges to the system of international production arising from the new industrial revolution (NIR), growing economic nationalism and the sustainability imperative. These challenges were already reaching an inflection point; the pandemic looks set to tip the scales. *The decade to 2030 is likely to prove a decade of transformation for international production.*

Trade and investment trends unfold in three key dimensions of international production: the degree of fragmentation and the length of value chains, the geographical spread of value added, and the governance choices of MNEs that determine the prevalence of arm's-length trade versus FDI. This report identifies several archetypical configurations covering industries that, together, account for the lion's share of global trade and investment.

Three key technology trends of the NIR will shape international production going forward: robotics-enabled automation, enhanced supply chain digitalization and additive manufacturing. Each will have distinct effects on the length, geographical

distribution and governance of GVCs. Each technology, depending on industry-specific deployment, will flatten, stretch or bend the "smile curve" of international production in its own way.

The pace and extent of adoption of these technologies will depend in part on the policy environment for trade and investment, which is trending towards more interventionism, rising protectionism and a shift away from multilateral to regional and bilateral frameworks. *They will also depend on sustainability concerns,* including differences in approach between countries and regions on emission targets and environmental, social and governance (ESG) standards, market-driven changes in products and processes, and supply chain resilience measures.

The effects on international production of the technology, policy and sustainability trends are multifaceted. They are at times mutually reinforcing, they occasionally push in opposite directions and they will play out differently across industries and geographies. Depending on the starting point of individual industries – their archetypical international production configurations – they will tend to favour one of four trajectories.

4 trajectories
Replication
Regionalization
Diversification
Reshoring

(1) Reshoring will lead to shorter, less fragmented value chains and a higher geographical concentration of value added. It will primarily affect higher-technology GVC-intensive industries. The implications of this trajectory include increased divestment and a shrinking pool of efficiency-seeking FDI. For some economies it implies the need to re-industrialize, for others to cope with premature de-industrialization. Access to and upgrading along the GVC development ladder becomes more difficult for developing countries.

(2) Diversification will lead to a wider distribution of economic activities. It will primarily affect services and GVC-intensive manufacturing industries. This trajectory will increase opportunities for new entrants (economies and firms) to participate in GVCs, but its reliance on supply chain digitalization will cause those GVCs to be more loosely governed, platform-based and asset-light, and value capture in host countries will become more difficult. GVC participation will require high-quality hard and soft digital infrastructure.

(3) Regionalization will reduce the physical length but not the fragmentation of supply chains. The geographical distribution of value added will increase. This trajectory will affect regional processing industries, some GVC-intensive industries and even the primary sector. It will imply a shift from global efficiency-seeking investment to regional market-seeking investment, and from investment in vertical GVC segments to investment in broader industrial bases and clusters. Regional economic cooperation, industrial policy and investment promotion will become indispensable to build regional value chains.

(4) Replication will lead to shorter value chains and a rebundling of production stages. It will lead to more geographically distributed activities, but more concentrated value added. It will be especially relevant for hub-and-spoke and regional processing industries. This trajectory implies a shift from investment in large-scale industrial activity to distributed manufacturing, which relies on lean physical infrastructure and high-quality digital infrastructure. A local manufacturing base and producer services become prerequisites to attract the final stages of GVCs, but value capture and technology dissemination will not be guaranteed.

Although the different trajectories show that the expected transformation of international production is not unidirectional, overall, the trends show a system under severe pressure with heightened risks of a dismantling and hollowing-out of GVCs and declining cross-border investment in productive assets. Given the importance of international

production for post-pandemic recovery, for economic growth and job creation, and for the development prospects of lower-income countries, *policymakers need to maintain a trade and investment policy environment that favors a gradual – rather than shock – adjustment of international production networks*.

The transformation of international production will bring both challenges and opportunities for investment and development policymakers:

- *Challenges* include increased divestment, relocations and investment diversion, and a shrinking pool of efficiency-seeking investment, implying tougher competition for FDI. Value capture in GVCs and development based on vertical specialization will become more difficult. Infrastructure built for a world of GVCs will see diminishing returns. Changes in locational determinants of investment will often negatively affect the chances of developing countries to attract MNE operations.
- *Opportunities* arising from the transformation include attracting investors looking to diversify supply bases and building redundancy and resilience. The pool of regional market-seeking investment will increase. Shorter value chains will bring more investment in distributed manufacturing and final-goods production with broader industrial capacity-building and clustering. And digital infrastructure and platforms will enable new applications and services and improve bottom-up access to GVCs.

Confronting the challenges and capturing the opportunities requires a change in the investment-development paradigm: (i) From a focus on export-oriented efficiency-seeking investment in narrowly specialized GVC segments to an "export-plus-plus" focus – plus investment in production for regional markets, plus investment in a broader industrial base. (ii) From cost-based competition for single-location investors to competition for diversified investments based on flexibility and resilience. And (iii) from prioritizing large-scale industrial investors with "big infrastructure" to making room for small-scale manufacturing facilities and services with "lean infrastructure". This report proposes a new framework for investment-development policies to reflect this change.

Finally, a shift in investment promotion strategies towards infrastructure and services is necessary. For the past three decades international production and the promotion of export-oriented manufacturing investment have been the pillars of development and industrialization strategies of most developing countries. Investment geared towards exploiting factors of production, resources and low-cost labour will remain important, but the pool of such investment is shrinking. This calls for a degree of rebalancing towards growth based on domestic and regional demand and on services. *Investment in the green economy and the blue economy, as well as in infrastructure and domestic services, presents great potential for contributing to achieving the Sustainable Development Goals (SDGs).*

INVESTING IN THE SDGs

SDG-investment trends in developing countries

UNCTAD first estimated investment requirements for the SDGs in *WIR14*, identifying 10 relevant sectors (encompassing all 17 SDGs) and estimating an annual investment gap of in developing countries of $2.5 trillion. Progress on investment in the SDGs – from all sources (domestic and international, public and private) – is now evident across six

of the 10 SDG sectors: infrastructure, climate change mitigation, food and agriculture, health, telecommunication, and ecosystems and biodiversity. *However, overall growth is falling well short of requirements.*

SDG-financing trends in global capital markets

Sustainability funds have grown rapidly in number, variety and size. UNCTAD estimates that funds dedicated to investment in sustainable development have reached $1.2-1.3 trillion today. However, most of these funds are invested in developed countries (e.g. in renewable energy).

The global effort to fight the pandemic is boosting the growth of sustainability funds, particularly social bonds. In the first quarter of 2020, social bonds related to COVID-19 crisis relief raised $55 billion, exceeding the total value of social bonds issued in all of 2019. Stock exchanges actively support the fast-growing COVID-19 response bond market, for example by waiving listing fees.

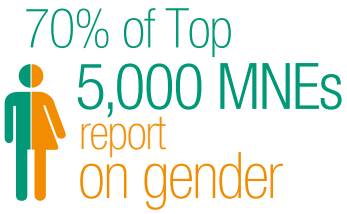
Over the next 10 years, the "decade of delivery" for the SDGs, capital markets can be expected to significantly expand their offering of sustainability-themed products. The challenge will be *how to combine growth with a greater focus on channeling funds to SDG-relevant investment projects in developing countries, and especially LDCs*.

ESG integration trends

Progress on investing in the SDGs is not just about mobilizing funds and channeling them to priority sectors. It is also about *integrating good environmental, social and governance (ESG) practices in business operations to ensure positive investment impact*. Global capital markets are again instrumental in this process. Stock exchanges provide a platform for sustainable finance and guidance for corporate governance. More than half of exchanges worldwide now provide guidance to listed companies on sustainability reporting. Security regulators and policymakers, as well as international organizations, such as the UN Sustainable Stock Exchanges initiative and IOSCO, also push for ESG integration.

Companies and institutional investors acknowledge the need to align investment and business decisions with positive SDG outcomes. *The SDGs are increasingly becoming a focus of investor interest and company reporting for impact.* A key challenge is the quality of disclosure and harmonization of reporting standards.

One SDG on which companies are increasingly expected to report is gender equality. *About 70 per cent of the world's 5,000 largest MNEs now report on progress in this area.* Overall, women's representation remains unequal. Regulation and investor pressure have led to better representation at the board level, but not at managerial levels. The implementation of gender equality policies related to flexible work and childcare remains weak.



Mainstreaming the SDGs in investment policies

More than 150 countries have adopted national strategies on sustainable development or revised existing development plans to reflect the SDGs. An analysis by UNCTAD shows that although many of these strategies highlight the need for additional financial resources, *very few contain concrete road maps for the promotion of investment in the SDGs*.

Existing investment promotion instruments applicable to the SDGs are limited in number and follow a piecemeal approach. UNCTAD's global review of national investment policy regimes shows that less than half of UN member States maintain specific tools for

promoting investment in the SDGs. Countries promote inward investment in the SDGs primarily through incentive schemes. Nevertheless, several key SDG sectors, such as health, water and sanitation, education and climate change adaptation, are rarely covered by specific investment promotion measures.

Since the adoption of the SDGs, some efforts have been made to enhance the promotion of investment in sustainable development. More than 150 investment measures have been put in place worldwide to specifically liberalize or promote investment, targeting mostly transportation and innovation, as well as food and agriculture. This is far from sufficient to re-orient the entire national investment regime towards SDGs investment.

Factoring the SDGs into the international investment treaty regime also presents a daunting task. The vast majority of the 3,300 existing treaties pre-date the SDGs and need to be modernized. Recent treaties increasingly incorporate them, and many countries are reformulating their treaty models in line with UNCTAD's Reform Package for the IIA regime.

A more systematic approach is needed for mainstreaming SDGs into national investment policy frameworks and the IIA regime, and to factor investment promotion into national SDG strategies.

A big push for investment in the SDGs – a new set of transformative actions

A new set of global actions to facilitate a "Big Push" in private sector investment in the SDGs is urgently needed. Building on the six transformative actions proposed in its Investment Policy Framework for Sustainable Development, UNCTAD's new Action Plan combines several policy instruments to provide an implementation framework for the UN Secretary-General's Strategy for Financing the 2030 Agenda for Sustainable Development.

The Action Plan presents a range of policy options to respond to the investment mobilization, channeling and impact challenges faced especially by developing countries. Its transformative actions include these six:

- Mainstreaming the SDGs in national investment policy frameworks and in the international investment treaty regime
- Re-orienting investment promotion and facilitation strategies toward SDG investment
- Establishing regional SDG Investment Compacts
- Fostering new forms of partnerships for SDG investment
- Deepening ESG integration in financial markets by establishing a global monitoring mechanism with a harmonized approach to disclosure
- Changing the global business mindset

The updated Action Plan is a response to the call in the United Nations General Assembly resolution on "Promoting investments for sustainable development" (A/RES/74/199), for "concrete recommendations for the advancement of investment for the implementation of the 2030 Agenda".

As requested by the General Assembly, UNCTAD will continue its regular monitoring of global SDG investment trends and policies through the *Global SDG Investment Trends Monitor*, the *Global SDG Investment Policy Monitor* and the *World Investment Report*. It will also continue to promote investment in the SDGs through global platforms, such as the World Investment Forum, in partnership with all key investment-development stakeholders.

CHAPTER I

GLOBAL INVESTMENT TRENDS AND PROSPECTS

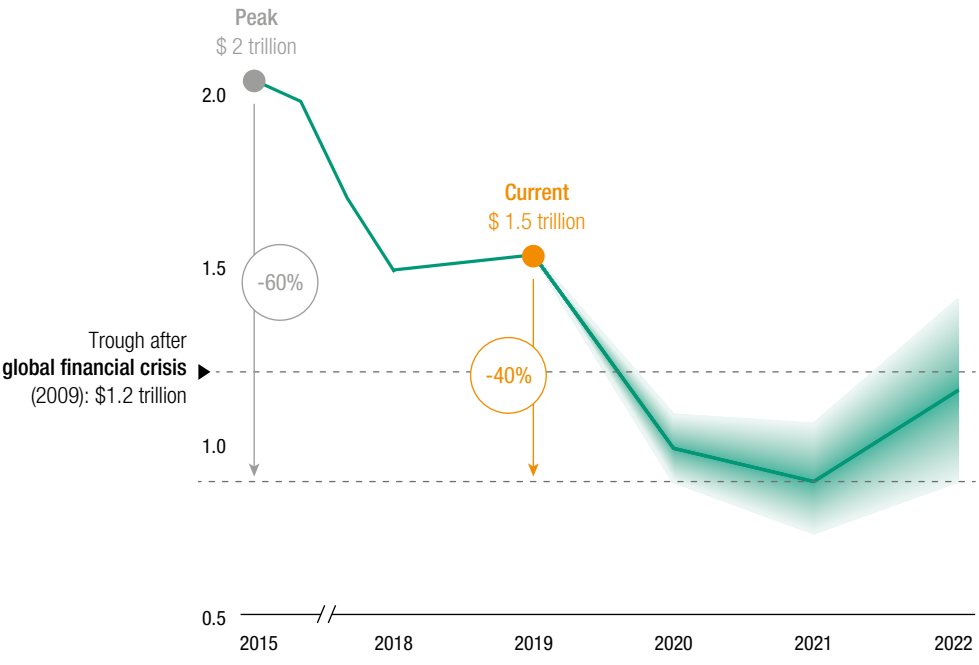
A. FDI AND THE COVID-19 CRISIS

The COVID-19 crisis will cause a dramatic drop in foreign direct investment (FDI) in 2020 and 2021. It will have an immediate negative impact in 2020, with a further deterioration in 2021 (figure I.1). Global FDI flows are forecast to decrease by up to 40 per cent in 2020, from their 2019 value of $1.54 trillion. This would bring FDI below $1 trillion for the first time since 2005. FDI is projected to decrease by a further 5 to 10 per cent in 2021.

In relative terms the projected fall is expected to be worse than the one experienced in the two years following the global financial crisis. At their lowest level ($1.2 trillion) then, in 2009, global FDI flows were some $300 billion higher than the bottom of the 2020 forecast. The downturn caused by the pandemic follows several years of negative or stagnant growth; as such it compounds a longer-term declining trend. The expected level of global FDI flows in 2021 would represent a 60 per cent decline since 2015, from $2 trillion to less than $900 billion.

The outlook beyond 2021 is highly uncertain. A U-shaped trajectory, with a recovery of FDI to its pre-crisis trend line before 2022, is possible but only at the upper bound of the expectations. Economic and geopolitical uncertainty look set to dominate the investment landscape in the medium term. At the lower bound of the forecast, further stagnation in 2022 will leave the value of global FDI well below the 2019 level. The trend in FDI could enter a phase of gradual stabilization at a structurally lower level than before the crisis.

Figure I.1. **Global FDI inflows, 2015–2019 and 2020–2022 forecast**
(Trillions of dollars)



Source: UNCTAD.

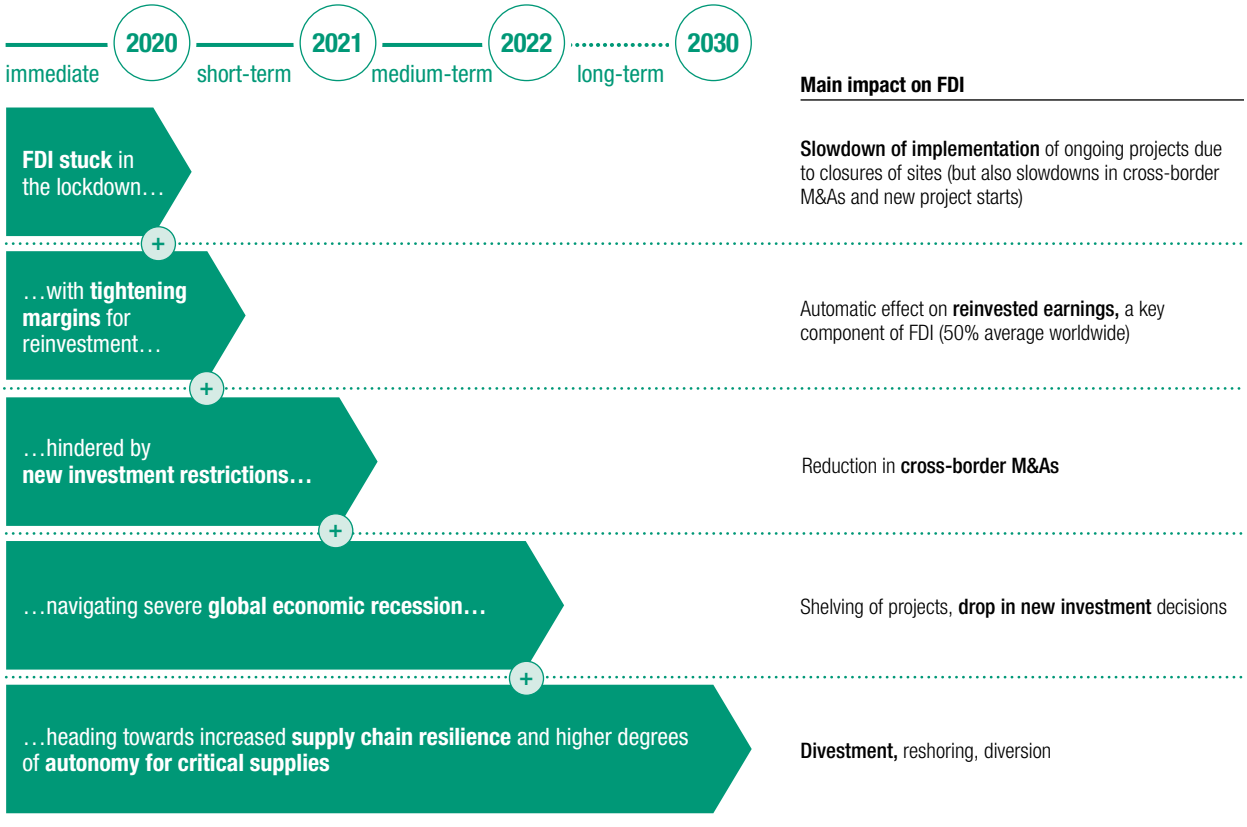
1. The impact of the pandemic on FDI

The COVID-19 crisis has had immediate effects on FDI and will have potentially lasting consequences. The sudden and simultaneous interaction of supply- and demand-side shocks, combined with policy reactions to the crisis around the world, is triggering a series of effects on FDI (figure I.2). The impact will be felt with exceptional vehemence in 2020 when the cumulative effect across all transmission mechanisms is strongest.

Immediate impacts: FDI stuck in the lockdown. The physical closure of places of business, manufacturing plants and construction sites to contain the spread of the virus causes immediate delays in the implementation of investment projects. Some investment expenditures continue (e.g. the fixed running costs of projects), but other outlays are blocked entirely.

Announcements of greenfield projects are also delayed. Similarly, many mergers and acquisitions (M&As) are temporarily suspended. Like greenfield projects, M&As are generally long-term commitments to overseas markets. Nevertheless, completions of already announced M&A transactions have been running into delays that could result in cancellations (table I.1). Regulators in the United States and in Europe have reported delays in approval processes for some of the world's biggest planned mergers, including the acquisition of Deliveroo (United Kingdom) by Amazon (United States) and the acquisition of Embraer (Brazil) by Boeing (United States). Financial markets have been pricing down the stocks of firms that had been the subject of takeover plans or that have been affected by delays in regulatory approval for a merger.

Figure I.2. **Impact of the pandemic on FDI: transmission mechanisms**



Source: UNCTAD.

Table I.1. Examples of M&A transactions cancelled for pandemic-related reasons

Alimentation Couche-Tard Inc – Caltex Australia Ltd	On 20 March 2020, Alimentation Couche-Tard (Canada) withdrew its plans to acquire the share capital of Caltex Australia, a Sydney-based petroleum refinery operator, for an estimated $5.9 billion. Couche-Tard halted the operations over uncertainties about the economic outlook due to the pandemic, amid a demand shock on jet fuel, one of Caltex's core businesses.
Public Storage, Inc – National Storage REIT	On 18 March 2020, Public Storage (United States) withdrew its plans to acquire the share capital of National Storage REIT (Australia) for an estimated $1.2 billion. National Storage REIT stated the bidder had decided not to pursue the takeover because of market conditions arising from the pandemic.
Asia Pacific Village Group Ltd – Metlifecare Ltd	On 27 April 2020, Pacific Village Group, a unit of EQT Holdings Cooperatief (Netherlands), withdrew its agreement to acquire the share capital of Metlifecare (New Zealand) in a $1 billion deal. EQT stated that a significant decline in Metlifecare's value due to the pandemic was the main reason for termination.
HOT Telecommunication Systems Ltd – Partner Communications	On 31 March 2020, HOT Telecommunication Systems, a subsidiary of Next Alt SARL (Luxembourg), withdrew its tender offer for the share capital of Partner Communications (Israel) for $900 million. HOT's parent company Altice (Luxembourg) said the declines in the financial markets and the ongoing crisis had caused difficulties in raising financial resources for the deal.
Melco Resorts & Entertainment Ltd – Crown Resorts	On 6 February 2020, Melco Resorts & Entertainment (Hong Kong, China) announced that due to the pandemic and the Macao, China decision to lock down casinos, it would drop investment plans in Crown Resorts (Australia), in a transaction worth $600 million.
Alphatec Holdings Inc – EOS Imaging SA	On 24 April 2020, Alphatec Holdings (United States) withdrew its tender offer for a stake in EOS Imaging (France) for just over $100 million. According to Alphatec, the termination resulted from their assessment of the economic impact of the pandemic on EOS.

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

Short-term impacts: tightening margins for reinvestment and new investment restrictions. Foreign affiliates are facing exceptionally challenging operational, market and financial conditions. Their profits are expected to plummet in 2020. The vast majority of the top 5,000 largest multinational enterprises (MNEs) revised their earnings expectations for 2020 between February and May, with the average downward revision surpassing 35 per cent (table I.2). With reinvested earnings accounting for more than 50 per cent of FDI flows, on average, the impact of lower foreign affiliate profits on global FDI could be severe.

On the policy side, in parallel with temporary trade restrictions taken in some countries to prevent shortages of critical medical supplies during the pandemic, several governments have taken measures to avoid fire sales of domestic firms during the crises, introducing new screening requirements and investment restrictions. For example, the European Union (EU) brought out guidance concerning investment from non-member economies for the protection of member States' strategic assets; Australia introduced investment reviews to protect national interest and local assets from acquisition.

Medium-term effects: navigating a global economic recession. Already in the early stages of the pandemic, macroeconomic forecasts for 2020 were revised down into negative territory. Current expectations are for a modest and highly uncertain recovery of GDP in 2021 if economic activity picks up with the support of policy stimulus (IMF, 2020a). A deep contraction of demand will have strongly negative effects on international production. Uncertainty about economic prospects will dampen new investment plans. Financial distress and liquidity issues limit the room for maneuver for many businesses, which during this crisis are forced to divert any funds available for investment to working capital. Depending on the severity of the recession, ongoing or announced projects that were initially delayed due to the lockdown measures could be shelved indefinitely.

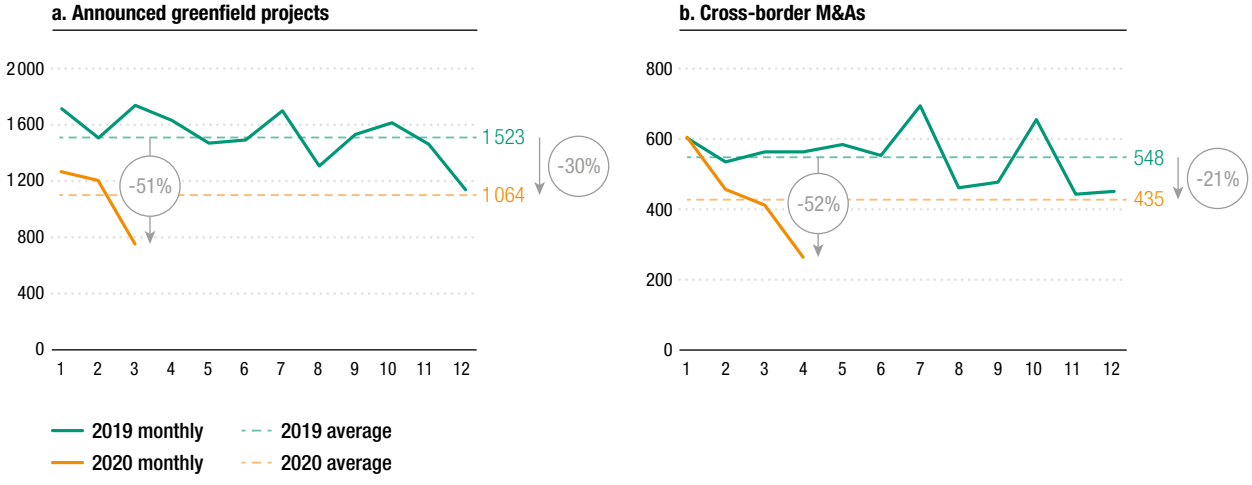
Over the two critical years 2020 and 2021, the demand shock will be the biggest factor pushing down FDI. Although in general the trend in FDI reacts to changes in GDP growth with a delay, the exceptional combination of the lockdown measures and the demand shock will cause a much faster feedback loop on investment decisions. The demand contraction will hit FDI in 2020 and then fully unfold in 2021.

Long-term effects: heading towards supply chain resilience and secure access to critical supplies. The pandemic will drive MNEs to consider options to achieve greater supply chain resilience and could lead to a policy push for a higher degree of national or regional self-sufficiency in the production of critical supplies – which may extend to broader strategic industrial capacity. Tighter restrictions on international trade and investment have already emerged as a result of the pandemic (see chapter III.B). The trend towards rationalization of international operations, reshoring, nearshoring and regionalization looks likely to accelerate, leading to downward pressure on FDI (see chapter IV).

Early indicators – FDI projects in the first months of 2020 – are showing sharp declines. The numbers of announced greenfield projects in March and cross-border M&A deals in April decreased by over 50 per cent compared with the 2019 monthly average (figure I.3).

Earnings revisions are a preliminary warning of the potential impact of the pandemic on FDI through reinvested earnings. Earnings forecasts for fiscal year 2020 of the top 5,000 (listed) MNEs show average downward revisions since the outbreak of -36 per cent (table I.2). Services industries directly affected by the lockdown are among the most severely hit, particularly accommodation and food service activities (-94 per cent) and transportation and storage (-63 per cent, with passenger airlines taking crippling losses) (table I.2, column i). Commodity-related industries are expected to suffer from the combined effect of the pandemic and plummeting oil prices, with downward earnings revisions of -70 per cent in the extractive industries. In manufacturing, some industries that are global value chain (GVC) intensive, such as automotive and textiles, were hit early on by supply chain disruptions. Because of their cyclical nature they are vulnerable to both supply and demand shocks; their revised earnings stand at half their original forecast. Overall, industries that are projected to lose 30 per cent or more of earnings together account for almost 70 per cent of FDI projects (table I.2, columns ii and iii).

Figure I.3. **Announced greenfield projects and cross-border M&A deals, monthly and average number, 2019 and early 2020**



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 projects.
Note: Numbers of announced greenfield projects are as of March 2020; numbers of cross-border M&A deals are as of April 2020.

Table I.2. Top 5,000 MNEs average earnings revisions, number of announced greenfield projects and cross-border M&As, by industry, 2019 and early 2020 (Per cent)

Industry	Pandemic impact on industry performance	Importance of industry for FDI projects, 2019		Pandemic impact on FDI projects, early 2020	
	(i) Average earnings revision as of May 11	(ii) Share in number of announced greenfield projects, 2019	(iii) Share in number of cross-border M&A deals, 2019	(iv) Number of greenfield projects, growth rate, monthly average, Q1 2020 vs all 2019	(v) Number of cross-border M&A deals, growth rate, monthly average, January-April 2020 vs all 2019
Total	**-36**	**100**	**100**	**-30**	**-21**
Primary	**-65**	**1**	**7**	**-29**	**-9**
Mining, quarrying and petroleum	-70	-	5	-40	-7
Agriculture, forestry and fishing	-1	-	1	-17	-16
Manufacturing	**-34**	**45**	**21**	**-38**	**-22**
Motor vehicles and other transport equipment	-50	6	1	-41	-25
Textiles, clothing and leather	-49	8	1	-54	-24
Basic materials	-47	10	7	-38	-18
Machinery and equipment	-39	5	2	-26	-28
Other manufacturing	-28	4	2	-34	-10
Computer, electronic, optical products and electrical equipment	-20	7	4	-31	-40
Food, beverages and tobacco	-15	3	3	-21	-35
Pharmaceuticals, medicinal chemicals and botanical products	-14	2	2	-51	13
Services	**-35**	**54**	**72**	**-23**	**-21**
Accommodation and food service activities	-94	3	2	-49	-11
Transportation and storage	-63	4	4	-25	-18
Other services	-44	3	7	-48	-35
Business activities	-32	11	23	-20	-12
Information and communication	-31	18	11	-22	-29
Trade	-28	4	8	-33	-11
Financial and insurance activities	-23	6	13	-17	-33
Construction	-21	2	2	-20	-17
Electricity, gas, water and waste management	-16	3	3	2	-25

Source: UNCTAD, based on data from Refinitiv SA. Cross-border M&A database (www.unctad.org/fdistatistics) and information from the Financial Times Ltd, fDi Markets (www. fDimarkets.com) for announced greenfield projects.

Note: Earning revisions are based on the top 5,000 public companies with at least one earnings forecast revision for fiscal year 2020 since February 1. A few outliers at the extremes were excluded.

Early indicators confirm the link between earnings impact and FDI. Industries with the largest downward revisions show the biggest drops in new investment projects. In the first months of 2020, industries accounting for 90 per cent of projects in 2019 experienced an average decline of more than 20 per cent in the number of newly announced greenfield projects. The decline is less widespread for cross-border M&As, but equally significant (table I.2, columns iv and v).

2. Global and regional FDI forecasts

UNCTAD forecasts show a sharp decline in global FDI in 2020 and 2021, to a level about 40 per cent lower than in 2019 (see figure I.1). Even before the outbreak of COVID-19, UNCTAD's model forecasts a stagnant trend (-3 per cent in 2020 and +1 per cent in 2021) as a result of political and trade tensions and an overall uncertain macroeconomic outlook.

This projection is subject to significant uncertainty. The exogeneous shock of the pandemic adds to the usual volatility of FDI. The range forecast for FDI through 2020 is between -30 and -40 per cent and for 2021 between -30 and -50 per cent. The main factor that will determine the severity of the drop is the development of the health emergency. Another key element of uncertainty will be the extent of the economic damage and the effectiveness of extraordinary measures that governments around the world are implementing to support businesses and households. Specific trade and investment policies in response to the crisis will also critically affect investor confidence and investment decisions.

The projections for the underlying FDI trend – an UNCTAD indicator designed to capture the long-term dynamics of FDI by netting out fluctuations driven by one-off transactions and volatile financial flows – indicate a milder but still substantial decline in 2020 (-12 per cent). The underlying trend is expected to start a recovery in 2021. The forecasts for the underlying trend in 2020-2021 can be interpreted as the more systemic effect of the pandemic and the economic crisis, after discounting the temporary shock.

The widening range of the forecast beyond 2021 depicted in figure I.1 recognizes that the results of the forecasting model can reflect only current projections of underlying fundamental variables and cannot account for the uncertainty surrounding the development of the health and economic crises, particularly over the medium and longer terms. The lower bound reflects the result of the forecast for FDI inflows for 2022, following an L-shaped pattern, with the FDI value substantially aligned with the central forecast of 2021; in other words, these prospects do not show any rebound over the next three years. In addition, a U-shaped trajectory is presented as an upper bound for 2022. This scenario is based on the assumption that the aggregate FDI inflows will ultimately revert to the underlying FDI trend projections once the COVID-19 shock is fully absorbed (box I.1).

Box I.1. UNCTAD's forecasting model

For this edition of the *World Investment Report*, UNCTAD substantially revised and upgraded its FDI forecasting model. Similar to the previous model (*WIR11*, box I.3), the new model employs panel econometric techniques to forecast FDI. These techniques consider the effects of relevant variables across countries simultaneously. However, the new approach introduces two innovations.

Econometric technique. Forecasting is based on dynamic panel econometric techniques, particularly the system generalized method of moments (system GMM) of Arellano and Bover (Arellano and Bover, 1995; Blundell and Bond, 1998). Dynamic panel econometric techniques address the heterogeneous nature of FDI across countries and FDI dynamics across time. Compared with the previous approach employing panel estimated generalized least square (panel EGLS), system GMM is more suited to deal with endogeneity issues caused by the inclusion of lagged FDI and other endogenous variables.

Underlying FDI trend. System GMM forecasting is not only applied to FDI inflows but also to the underlying FDI trend, which is a smoothed version of the FDI time series. It removes large fluctuations, typically driven by one-off factors such as megadeals and volatile financial flows, with the aim of capturing the more structural nature of FDI. Analytically, the underlying FDI trend discounts flows through typical conduit locations and smooths the FDI components related to M&As and intracompany loans through moving average techniques. The forecast for the underlying FDI trend complements the standard FDI forecast by providing an indication of the long-term future dynamics of FDI.

Forecasts of FDI inflows and the underlying FDI trend are based on past values of FDI (autoregressive term) and the projection of GDP and trade for 2020 to 2022. GDP and trade projections for 2020 and 2021 are from the IMF World Economic Outlook of April 2020 (IMF, 2020a) and the WTO (April 2020), respectively. To simulate the prospects for 2022, it is assumed that GDP and trade revert to the levels forecast before the pandemic.

Future UNCTAD research aims to explore additional forecasting domains, in addition to panel econometrics, including time series analysis and spatial econometrics.

Source: UNCTAD. Details on the new UNCTAD forecasting model, including a comparison between different econometric techniques, a statistical analysis of the FDI underlying trend and a discussion of future directions appear in a background paper (Vujanovic, Casella and Bolwijn, forthcoming).

Table I.3. FDI inflows and projections, by group of economies and region, 2017–2019, and forecast 2020 (Billions of dollars and per cent)

Group of economies/region	2017	2018	2019	Projections 2020
World	**1 700**	**1 495**	**1 540**	**920 to 1 080**
Developed economies	**950**	**761**	**800**	**480 to 600**
Europe	570	364	429	240 to 300
North America	304	297	297	190 to 240
Developing economies	**701**	**699**	**685**	**380 to 480**
Africa	42	51	45	25 to 35
Asia	502	499	474	260 to 330
Latin America and the Caribbean	156	149	164	70 to 100
Transition economies	**50**	**35**	**55**	**30 to 40**
Memorandum: annual growth rate (per cent)				
World	**-14**	**-12**	**3**	**(-40 to -30)**
Developed economies	**-25**	**-20**	**5**	**(-40 to -25)**
Europe	-16	-36	18	(-45 to -30)
North America	-40	-2	0	(-35 to -20)
Developing economies	**7**	**0**	**-2**	**(-45 to -30)**
Africa	-10	22	-10	(-40 to -25)
Asia	7	-1	-5	(-45 to -30)
Latin America and the Caribbean	14	-5	10	(-55 to -40)
Transition economies	**-25**	**-31**	**59**	**(-45 to -30)**

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: Projections are based on UNCTAD's forecasting model (box I.1) and expert judgement. Numbers are rounded.

All regions and economic groupings will see negative FDI growth rates in 2020 (table I.3). Developed economies as a group are projected to see a decline of between -25 and -40 per cent. FDI in Europe will fall most (-30 to -45 per cent relative to 2019), as the vehemence of the virus adds to economic fragility in several large economies. Due to the economic integration of investment and trade within the EU, shocks in individual countries will easily propagate within the region.

Developing economies as a group are expected to see a larger decrease in the range of 30 per cent to 45. Developing economies appear more vulnerable to this crisis (contrary to the situation after the global financial crisis, which had a much stronger effect on FDI to developed countries). Their productive and investment footprints are less diversified and thus more exposed to systemic risks. Dependence on commodities for Latin America and the Caribbean and Africa and on GVC-intensive industries for Asia push these regions to the frontline of the crisis from an FDI perspective. Political responses and support measures – critical at this juncture to limit the depth of the crisis and initiate a recovery – are likely to be significantly weaker in these regions than in developed economies because of their tighter fiscal space. Longer term, developing economies may be further penalized by the trend towards re-shoring or regionalization of international production, which could accelerate in response to the COVID-19 crisis.

Projections indicate that FDI in developing Asia, normally the growth engine of FDI worldwide, will decrease by 30 to 45 per cent. While early indicators suggest that the region has already initiated an investment recovery after the shock of the early outbreak of the virus in China, the dependence on GVC-related investment leaves international production and FDI in Asia highly exposed to economic and policy trends in developed economies.

Latin America and the Caribbean is expected to experience the largest decline, with a projected drop in FDI of between 40 and 55 per cent in 2020. Much of FDI in the region is concentrated in extractive industries, which make up a significant share of total FDI in Argentina, Brazil, Chile, Colombia and Peru. The combination of collapsing oil prices and the demand shock due to the pandemic affecting prices of most commodities is driving down FDI forecasts in this region more than elsewhere. Relatively weak starting conditions due to structural vulnerabilities and political uncertainty also make the region more exposed to the shock. GDP forecasts for 2020 from the International Monetary Fund (IMF, 2020a), used as an input in UNCTAD's forecasting model, project a decrease of -5 per cent for Latin America and the Caribbean, against a slight change of +1 and -2 per cent for Asia and Sub-Saharan Africa, respectively.

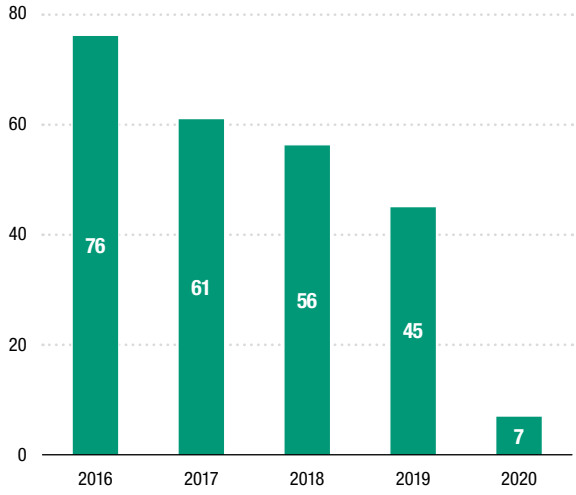
Africa is expected to see a decline of FDI between 25 and 40 per cent in 2020. Despite early concerns about the potential spread of COVID-19 in Africa, the continent appears to have been spared the initial outbreak seen in other parts of the world. Although it also suffers from structural vulnerabilities and commodity dependence, recent macroeconomic indicators show a relatively more solid growth path than in other regions. The ongoing regional cooperation, including through the African Continental Free Trade Area, may also prove instrumental in designing regionally coordinated responses to the crisis and supporting regional trade and FDI.

FDI flows to transition economies are expected to fall by 30 to 45 per cent. In natural-resource-based projects, prospects are being revised downward as demand for commodities weakens and the price of oil, one of the main exports from several economies in transition, remains depressed. Export-oriented production for GVCs, e.g. in special economic zones, will also be heavily affected.

3. IPA expectations

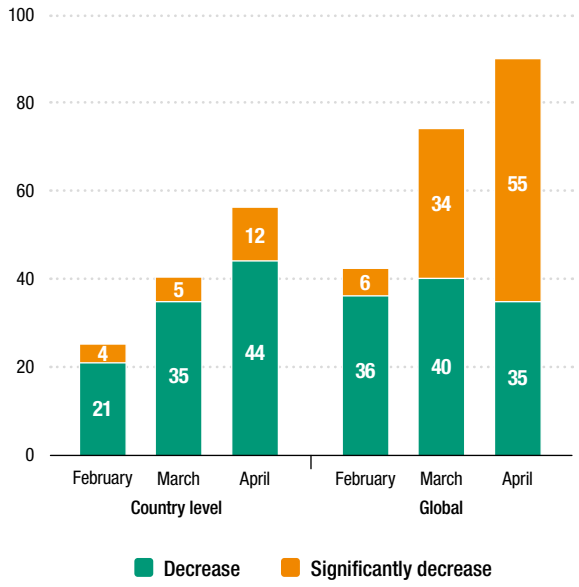
The pandemic has led IPAs to drastically lower their expectations for the attraction of new FDI projects. Their expectations for FDI flows had already been on a downward trajectory since 2016; they have now dropped precipitously (figure I.4). There is some variance in IPA perceptions of the impact of the pandemic on investment prospects, with heavily affected countries such as Italy reporting an

Figure I.4. IPAs expecting an increase in FDI flows, 2016–2020
(Per cent of respondents)



Source: UNCTAD IPA Surveys (2016–2020).
Note: Percentages reflect survey result of each year.

Figure I.5. **IPAs expecting a decrease in country-level and global FDI flows, 2020**
(Per cent of respondents)



Source: UNCTAD IPA Survey (2020).

expected 40 per cent drop in investment and other countries, less hard-hit by the outbreak, expecting no significant change in investment.

IPA expectations in 2020 grew progressively dimmer between February, when the survey launched, and April, when the survey closed (figure I.5).[1] The impact of the pandemic is also apparent in the industries characterized as relatively more promising for FDI promotion. IPAs around the world expect that information and communication, food and beverage, agriculture and pharmaceuticals are more likely to still yield investment projects. Pharmaceuticals is not traditionally ranked high for investment prospects, but many IPAs now expect it to become more important.

B. 2019 FDI TRENDS

Global FDI flows rose modestly in 2019, following the sizable declines registered in 2017 and 2018. At $1.54 trillion, inflows were 3 per cent up (figure I.6). They remained below the average of the last 10 years and some 25 per cent off the peak value of 2015. The rise in FDI was mainly the result of higher flows to developed economies, as the impact of the 2017 tax reforms in the United States waned. Flows to transition economies also increased, while those to developing economies declined marginally. FDI stock increased by 11 per cent, reaching $36 trillion, on the back of rising valuations in global capital markets and higher MNE profitability in 2019.

1. FDI by geography

a. FDI inflows

FDI flows to developed economies rose by 5 per cent, to $800 billion, from their revised level of $761 billion in 2018. The increase occurred despite weaker macroeconomic performance and policy uncertainty for investors, including trade tensions and Brexit.

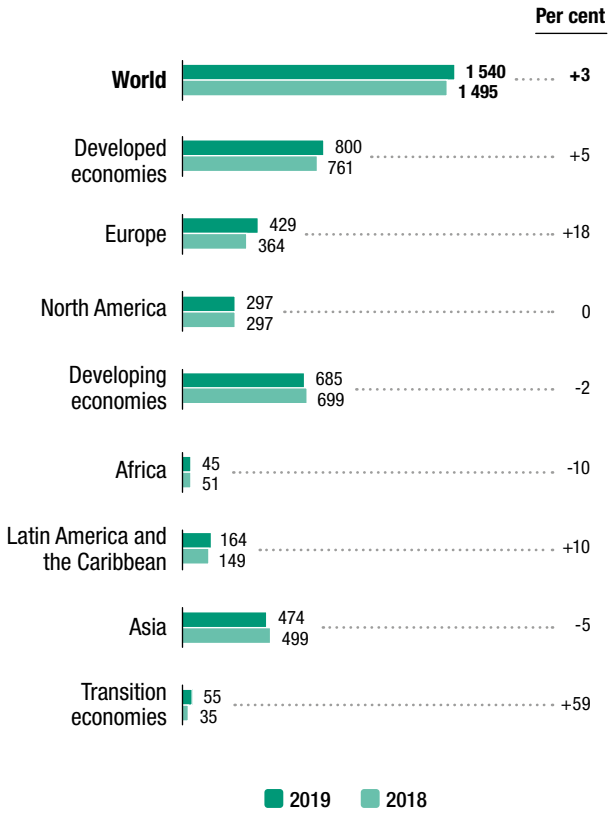
The trend was mainly driven by FDI dynamics in *Europe*, where inflows increased by 18 per cent to $429 billion. Several European countries experienced strong volatility. For example, flows to Ireland reached $78 billion in 2019, from -$28 billion in 2018. FDI in some of the larger economies decreased. Inflows halved in Germany and fell slightly in France and the United Kingdom.

Flows remained flat in *North America*, at $297 billion (figure I.6). Despite a slight decline of FDI in the United States (-3 per cent), that country remained the largest recipient of FDI (figure I.7). Declining FDI flows were also registered in Australia, mainly due to a decrease in the value of cross-border M&As.

FDI flows to developing economies declined marginally, by 2 per cent, to $685 billion. Since 2010, flows to developing economies have been relatively stable, hovering within a much narrower range than those to developed countries, at an average of $674 billion.

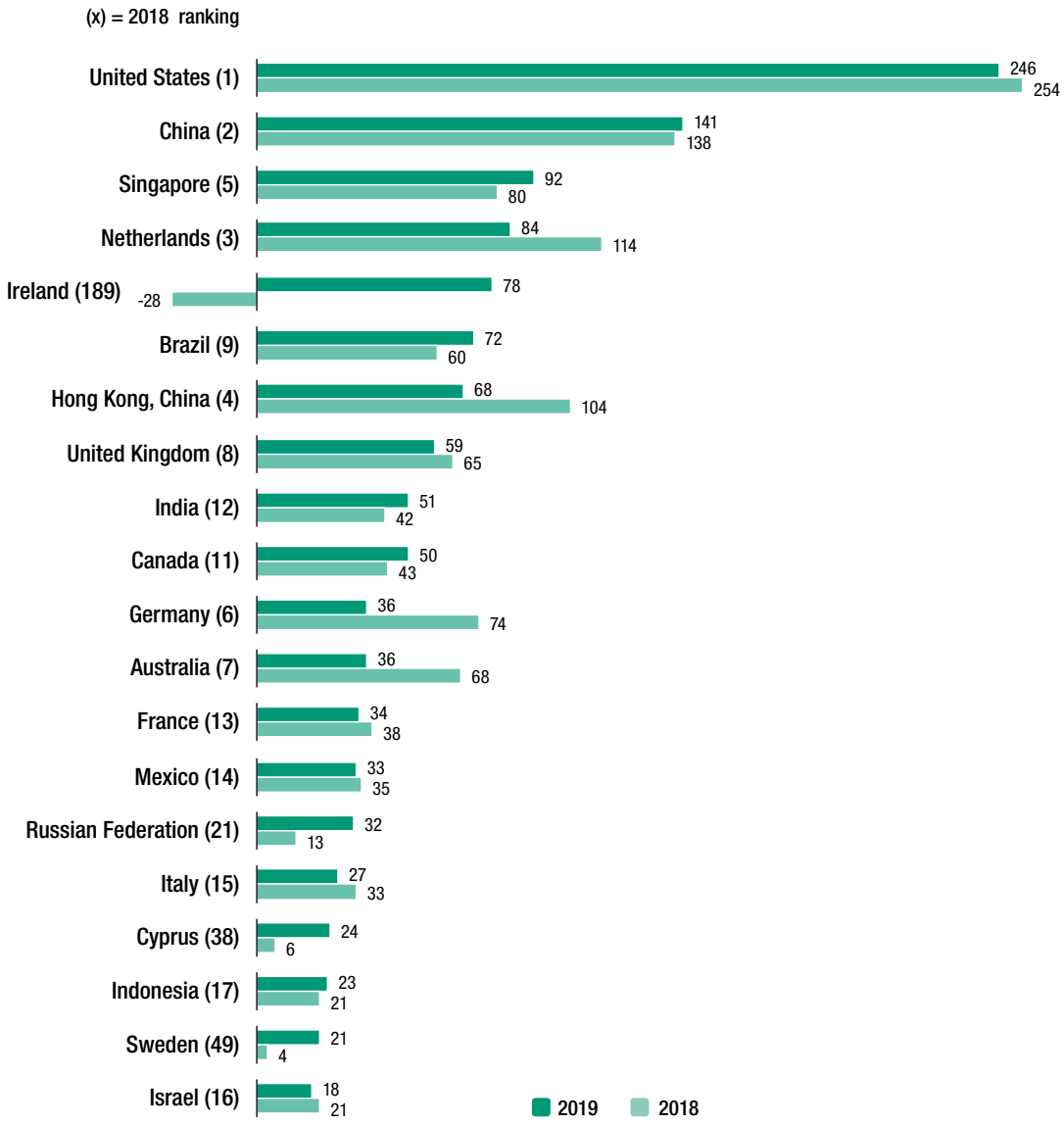
The slump in FDI flows to *Africa* in 2019, by 10 per cent to $45 billion, was due to more moderate economic growth and dampened demand for commodities. This reduced flows to countries with relatively more diversified FDI inflows (e.g. South Africa, Morocco and Ethiopia) as well as flows to

Figure I.6. **FDI inflows, by region, 2018 and 2019**
(Billions of dollars and per cent)



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

Figure I.7. FDI inflows, top 20 host economies, 2018 and 2019 (Billions of dollars)



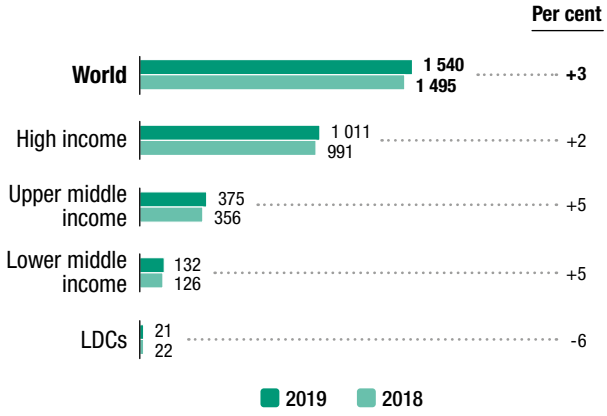
Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

commodity-exporting economies (e.g. Nigeria, the Sudan). Few countries received higher inflows in 2019. Flows to Egypt – the largest recipient of FDI in Africa – increased by 11 per cent to $9 billion. In 2019, FDI flows into *developing Asia* declined by 5 per cent, to $474 billion. Despite the decline, it remained the largest FDI recipient region, hosting more than 30 per cent of global FDI flows. The decline was driven primarily by a 34 per cent fall in Hong Kong (China). The largest five recipients were China, Hong Kong (China), Singapore, India and Indonesia. With reported inflows reaching an all-time high, China continued to be the second largest FDI recipient after the United States. FDI flows to *Latin America and the Caribbean* (excluding financial centres) increased by 10 per cent to $164 billion. FDI rose in Brazil, Chile, Colombia and Peru, much of it in commodities, although investment in utilities and services increased as well. In 2019, Latin America and the Caribbean also became a hotspot for FDI in renewable energy. *Transition economies* saw FDI inflows increase by 59 per cent, to $55 billion, prompted by a recovery of FDI in the Russian Federation, an uptick in Ukraine following two years of decline and an increase in newly liberalizing Uzbekistan.

The uptick in global FDI flows hides significant differences between economic groupings. In 2019, the least developed countries (LDCs) were the only grouping that saw a fall in FDI flows, by 5.7 per cent (figure I.8).

FDI flows to structurally weak, vulnerable and small economies remained stable overall, declining by only 1 per cent: flows to LDCs fell moderately (by 6 per cent to $21 billion); flows to landlocked developing countries (LLDCs) fell only marginally (by 1 per cent, to $22 billion), while flows to small island developing States (SIDS) rose by 14 per cent, to $4.1 billion (table I.4).

Figure I.8. FDI inflows, by income group, 2018 and 2019
(Billions of dollars and per cent)



Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: Income groups follow the classification by United Nations Statistics Division based on income per capita, except for the group of LDCs, which follows the UN-OHRLLS list.

Table I.4. FDI flows, by region, 2017–2019 (Billions of dollars and per cent)

Region	FDI inflows			FDI outflows		
	2017	2018	2019	2017	2018	2019
World	**1 700**	**1 495**	**1 540**	**1 601**	**986**	**1 314**
Developed economies	950	761	800	1 095	534	917
Europe	570	364	429	539	419	475
North America	304	297	297	379	-41	202
Developing economies	701	699	685	467	415	373
Africa	42	51	45	12	8	5
Asia	502	499	474	417	407	328
East and South-East Asia	422	416	389	367	345	280
South Asia	52	52	57	11	12	12
West Asia	28	30	28	39	50	36
Latin America and the Caribbean	156	149	164	38	0.1	42
Oceania	1	1	1	0.1	-0.3	-1
Transition economies	50	35	55	38	38	24
Structurally weak, vulnerable and small economies[a]	**40**	**39**	**39**	**6**	**2**	**0.4**
LDCs	21	22	21	2	1	-1
LLDCs	26	22	22	4	1	0.5
SIDS	4	4	4	0.3	0.3	1
Memorandum: percentage share in world FDI flows						
Developed economies	55.9	50.9	52.0	68.4	54.1	69.8
Europe	33.5	24.3	27.9	33.7	42.5	36.1
North America	17.9	19.9	19.3	23.7	-4.1	15.3
Developing economies	41.2	46.8	44.5	29.2	42.0	28.4
Africa	2.4	3.4	2.9	0.8	0.8	0.4
Asia	29.5	33.3	30.8	26.0	41.2	24.9
East and South-East Asia	24.8	27.8	25.2	22.9	34.9	21.3
South Asia	3.0	3.5	3.7	0.7	1.2	0.9
West Asia	1.6	2.0	1.8	2.4	5.1	2.7
Latin America and the Caribbean	9.2	10.0	10.7	2.4	0.01	3.2
Oceania	0.1	0.1	0.1	0.01	-0.03	-0.1
Transition economies	2.9	2.3	3.6	2.4	3.8	1.8
Structurally weak, vulnerable and small economies[a]	2.4	2.6	2.5	0.4	0.2	0.03
LDCs	1.2	1.5	1.4	0.1	0.1	-0.04
LLDCs	1.5	1.5	1.4	0.2	0.1	0.04
SIDS	0.2	0.2	0.3	0.02	0.04	0.1

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: LDCs = least developed countries, LLDCs = landlocked developing countries, SIDS = small island developing States.
[a] Without double counting countries that are part of multiple groups.

b. FDI outflows

Investment by MNEs based in developed economies increased significantly as the large-scale repatriations in 2018 of accumulated foreign earnings by United States MNEs waned and their outflows turned positive. In 2019, MNEs from developed economies invested $917 billion abroad – a 72 per cent increase from the previous year. This increase notwithstanding, their level of FDI remained relatively low, at only about half of the 2007 peak. Outflows from developing and transition economies declined. These trends resulted in a significant shift in the overall share of developed economies in world FDI outflows, from 54 per cent in 2018 to 70 per cent in 2019.

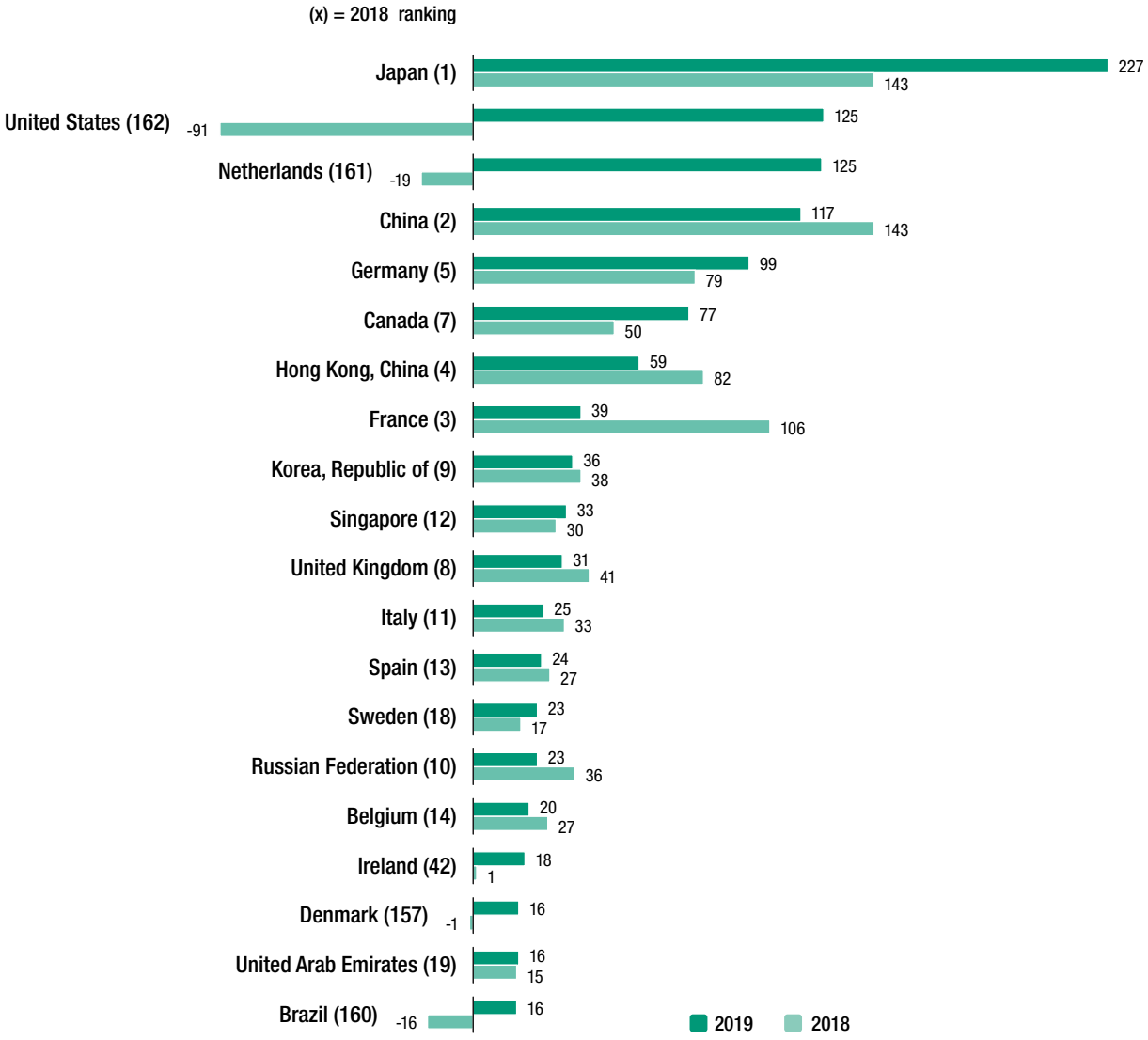
Outflows from MNEs in Europe rose by 13 per cent, mainly due to large investments by MNEs based in the Netherlands, and a doubling of reinvested earnings by German MNEs abroad. In contrast, outflows from France and Switzerland, which both recorded large outflows in 2018, declined in 2019 by 63 per cent and 82 per cent, respectively. Investment by MNEs based in *North America* reached $200 billion. Outflows from the United States turned positive (mostly in the form of reinvested earnings) after falling to -91 billion in 2018 when firms repatriated funds as a result of tax reforms. Investment by Canadian MNEs jumped by 54 per cent. Japan remained the largest investor in the world (figure I.9). Investments by *Japanese* MNEs rose by 58 per cent to a record $227 billion, due to a spike in cross-border M&As (reaching $104 billion from $36 billion in 2018, including a large megadeal). Japanese MNEs doubled their investments in Europe and North America.

Investment activity abroad by MNEs from developing economies declined by 10 per cent, reaching $373 billion. Outflows from *developing Asia* fell by 19 per cent as outflows from China declined for the third consecutive year. Chinese M&A purchases abroad decreased to the lowest level of the past 10 years. The decrease was attributed to continued restrictions on outward investment, geopolitical tensions and a challenging global trade and investment policy environment. Outflows fell also from Hong Kong (China) and the Republic of Korea. Outflows from Singapore and Malaysia – traditionally the largest investors from South-East Asia – increased.

Outward investment by *Latin American* MNEs increased sharply in 2019, to $42 billion, mostly driven by a reduction of negative outflows that dampened the totals in previous years. The biggest increases were registered in Brazil, Mexico and Chile. Brazilian companies, in particular, appear to have suspended their practice of collecting funds through foreign affiliates to finance operations at home, because of the falling domestic interest rate.

FDI outflows from *economies in transition* declined by 37 per cent, to $24 billion, in 2019. As in previous years, the Russian Federation accounted for almost all outward FDI. Russian MNEs remained cautious about foreign expansion, especially in developed-market economies, in which they face increasing restrictions in access to international finance and technology, as well as international sanctions.

Figure I.9. FDI outflows, top 20 home economies, 2018 and 2019 (Billions of dollars)

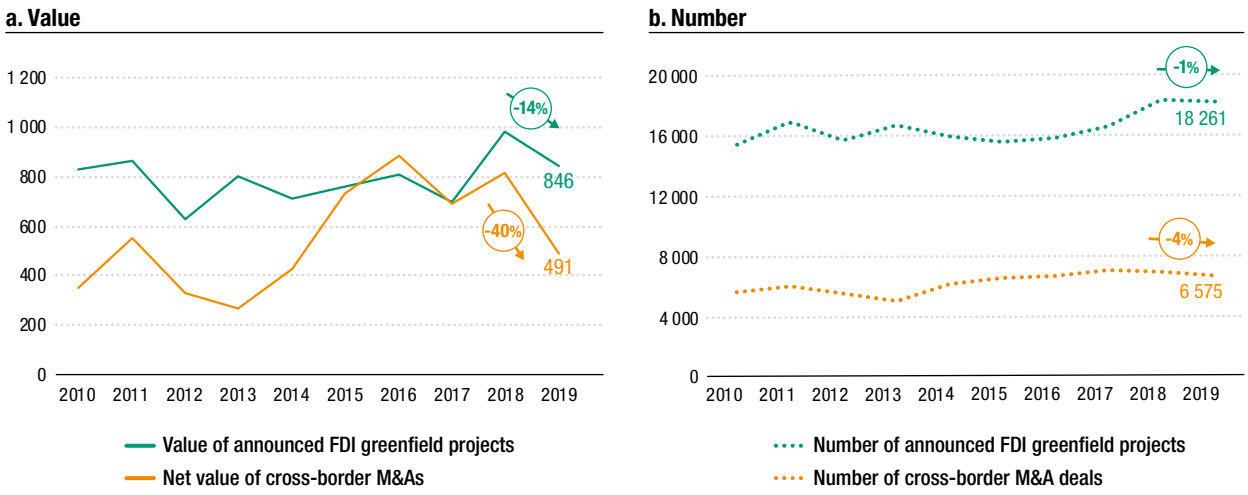


Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

2. Trends in greenfield investment projects and cross-border M&As by sector

In 2019, the values of net cross-border M&As and announced greenfield projects decreased (figure I.10). The value of greenfield projects decreased by 14 per cent to $846 billion. A lower average project size was the main driver, as investment activity measured by the number of projects fell by only 1 per cent. The value of net cross-border M&As fell by 40 per cent to $491 billion, the lowest level in the last five years. The decrease was mainly due to the lack of large deals, as the number of deals declined only by 4 per cent.

Figure I.10. **Value and number of cross-border M&As and announced greenfield FDI projects, 2010–2019** (Billions of dollars and number)



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 projects.

a. Greenfield investment trends

The total value of announced greenfield projects in the primary sector halved to $21 billion (table I.5), mostly due to a decline in mining and quarrying, to $19 billion – the lowest level recorded since 2003.

Announced greenfield projects in manufacturing decreased by 14 per cent to $402 billion. Despite the decline in extractive industries, announced investments in the manufacturing of coke and refined petroleum products rose by 12 per cent, to $94 billion. The top five deals were announced in this industry. For example, Sri Lanka's State-owned Board of

Table I.5. **Value and number of announced FDI greenfield projects, by sector and selected industries, 2018–2019**

	Value ($ billions)		Growth rate	Number		Growth rate
Sector/industry	**2018**	**2019**	(%)	**2018**	**2019**	(%)
Total	**982**	**846**	**-14**	**18 359**	**18 261**	**-1**
Primary	46	21	-53	205	151	-26
Manufacturing	468	402	-14	8 659	8 180	-6
Services	469	422	-10	9 495	9 930	5
Top 10 industries in value terms:						
Electricity, gas, steam and air conditioning supply	92	113	23	430	560	30
Coke and refined petroleum products	84	94	12	88	109	24
Construction	112	66	-41	484	437	-10
Information and communication	76	66	-13	3 193	3 332	4
Motor vehicles and other transport equipment	74	62	-16	1 176	1 022	-13
Computer, electronic, optical products and electrical equipment	61	53	-13	1 243	1 201	-3
Accommodation and food service activities	49	49	1	462	478	3
Chemicals and chemical products	83	47	-43	835	752	-10
Transportation and storage	44	43	-3	788	764	-3
Financial and insurance activities	24	24	-3	997	1 028	3

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

Investment signed a $24 billion deal with Hambantota Oil Refinery, an affiliate of Sugih Energy (Singapore), to operate an oil refinery at the Magapura Mahinda Rajapakse Port. Sherwood Energy (China) concluded an agreement with the Russian Federation's Far East Agency for Investment and Export Support to develop a gas project with an estimated value of $11 billion.

b. Cross-border M&A trends

Cross-border M&A sales in developed countries declined by 40 per cent in 2019, to $411 billion. Amid sluggish Eurozone growth and Brexit, European M&A sales halved to $190 billion. Deals targeting United States companies, at $157 billion, remained significant – accounting for 32 per cent of the value of total cross-border M&As. In developing and transition economies, net M&A sales declined by 37 per cent, to $80 billion. The decline of cross-border M&As in 2019 was much stronger than the 14 per cent decrease in total M&A activity (including domestic deals) worldwide, continuing the trend of the last few years in the relative unpopularity of cross-border expansions and consolidations through deals. The fall in global cross-border M&As sales was deepest in the services sector, followed by the manufacturing sector (table I.6).

In the primary sector, the largest deal was the acquisition of gold mining company Goldcorp (Canada) by Newmont (United States) for $9.9 billion. In manufacturing, net M&A sales targeting chemical and chemical products returned to prior values, at $35 billion, after large megadeals in 2018 ($119 billion). In contrast, the value of deals in the pharmaceutical industry almost doubled, to $98 billion. This included the largest deal recorded in any industry in 2019, in which Takeda (Japan) acquired the share capital of Shire (Ireland) for $60 billion. In services, net cross-border M&A sales fell by 54 per cent to $215 billion. The largest divestment in 2019 was a $36 billion IPO of Myriad, an affiliate of Nasper (South Africa) in the Netherlands.

Table I.6. Value and number of net cross-border M&As, by sector and selected industries, 2018–2019

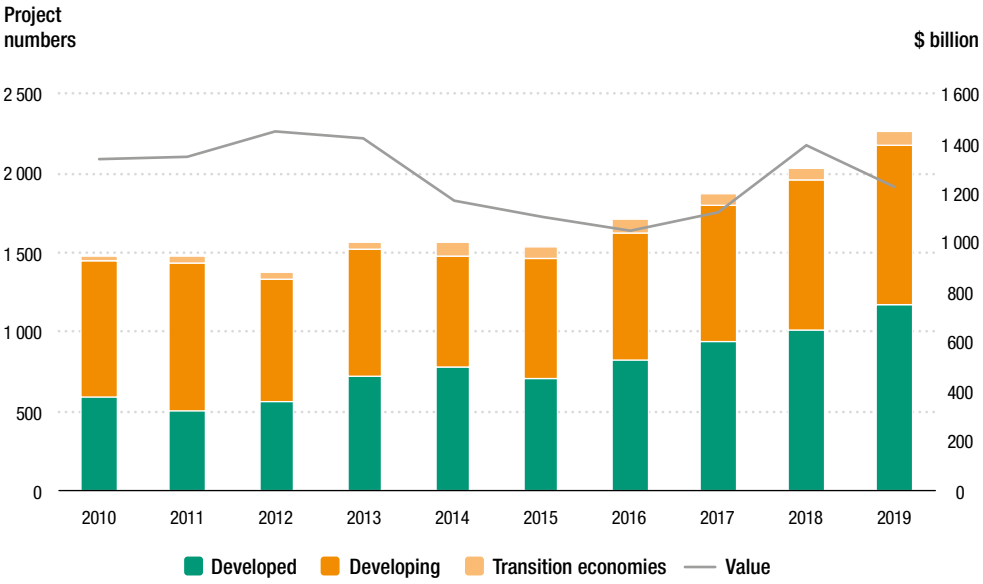
	Value (Billions of dollars)		Growth rate	Number		Growth rate
Sector/industry	2018	2019	(%)	2018	2019	(%)
Total	**816**	**491**	**-40**	**6 821**	**6 575**	**-4**
Primary	39	34	-14	406	410	1
Manufacturing	307	243	-21	1 599	1 531	-4
Services	470	215	-54	4 816	4 634	-4
Top 10 industries in value terms:						
Pharmaceuticals, medicinal chemicals and botanical products	58	98	70	182	180	-1
Business activities	87	66	-24	1 327	1 156	-13
Financial and insurance activities	108	48	-55	599	565	-6
Chemicals and chemical products	119	35	-71	158	152	-4
Mining, quarrying and petroleum	38	32	-16	329	336	2
Information and communication	116	21	-82	1 173	1 210	3
Computer, electronic, optical products and electrical equipment	42	21	-51	257	264	3
Transportation and storage	46	20	-57	229	249	9
Food, beverages and tobacco	55	19	-65	205	177	-14
Trade	35	13	-62	501	509	2

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

3. Project finance

Project finance is a significant part of cross-border investment flows. Most of it concerns investment in infrastructure (box I.2). As such, it is an important form of finance for SDG-relevant investment. In 2019 the total number of project finance transactions announced grew by 11 per cent to almost 2,300, for a total value of $1.2 trillion (figure I.11). About one-third of projects were cross-border. The number of project finance deals announced yearly has risen by almost 50 per cent since 2015, from an average of 1,500 projects in the period 2010–2015 to last year. This growth has been driven mainly by increases in projects in renewable energy and in developed countries. The value of projects declined in 2014–2016 and only partly recovered in the next three years, to an average of $1.25 trillion. The decline in average size was particularly significant in power generation (including both fossil fuel and renewables) and in mining, and for projects in developing economies.

Figure I.11. Project financing globally, 2010–2019
(Number of projects and billions of dollars)



Source: UNCTAD, based on Refinitiv SA.
Note: All announced projects excluding cancelled; all industries by date of announcement. The value of the project is estimated for about a third of cases.

Box I.2. Definitions and data on project finance

Project finance can be purely domestic or international. It is a form of FDI when foreign sponsors participate in the equity of a project company at shares of more than 10 per cent. The project company set up to carry out the project is usually financed with a loan structure that relies primarily on the project's cash flow for repayment, with the project's assets, rights and interests held as secondary collateral. The financing of the project company can involve a combination of MNEs and commercial lenders, as well as public sector partners, such as bilateral and multilateral donors, regional development banks and export credit agencies.

The data set used in this section, based on project finance data from Refinitiv SA, records deals starting from their announcement date; all project details are constantly updated with reference to this date. For the most recent projects, then, many details – including cost information – are not yet available. This information is estimated on the basis of the year of announcement, industry, country of project, and foreign or domestic sponsor. Announced projects give a more accurate and forward-looking overview of this form of investment, without including only completed projects, as in the case of the World Bank's Private Participation in Infrastructure database. The Refinitiv project database also covers all countries, all industries and all types of projects, both with and without public participation.

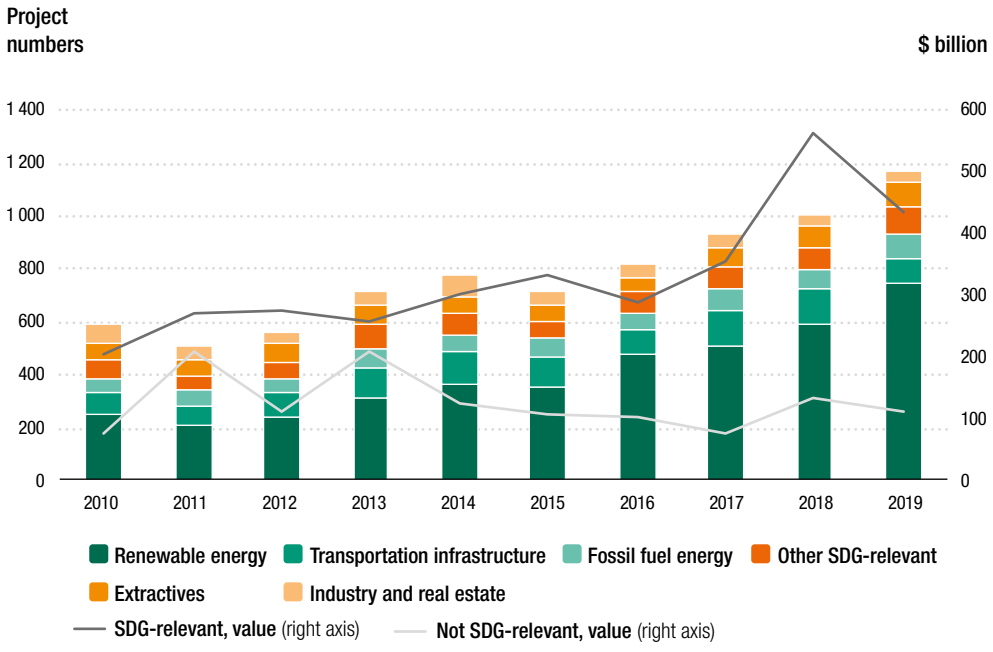
Source: UNCTAD.

The share of cross-border projects varies by industry. Mining is the most international industry, as more than half of all projects are sponsored by foreign companies, followed by oil and gas and industrial projects, of which 45 and 40 per cent, respectively, have foreign sponsors. Power generation projects attract a slightly smaller share, with renewables involving foreign companies in almost 40 per cent of cases. Infrastructure projects (hospital and school construction, transport, water and sewerage) and real estate construction are mostly domestic projects, with only 20 per cent involving foreign sponsors.

Across industries, international projects tend to be bigger. There are important exceptions where non-financial considerations come into play, such as the need for technology and know-how in renewables and telecommunication or the importance of local stakeholders in other SDG-relevant infrastructure projects. For international projects in developed economies, the top investors are from the United States (15 per cent of all foreign investors), the United Kingdom (12 per cent) and Germany (8 per cent) (figure I.12). By contrast, top investors in developing economies are from Spain (12 per cent) – mainly for energy and construction projects in Latin America – the United States (9 per cent) and China (8 per cent) (figure 1.13). The number of projects sponsored by Chinese MNEs in developing economies has been increasing in the last five years; the focus is on transport infrastructure and power generation, not only in Asian neighbors but also in Africa and in Latin America and the Caribbean.

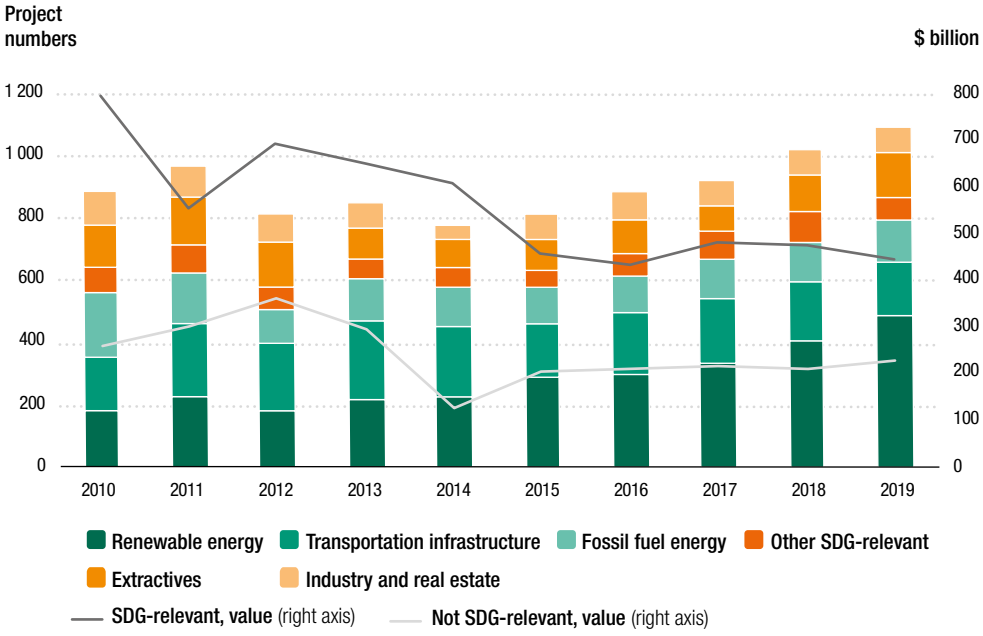
Most international sponsors are financial firms and institutional investors. Several non-financial international sponsors also participate in many projects, including top MNEs in the utilities sector (Engie from France, Enel from Italy, Iberdrola from Spain, RWE from Germany) and in the construction sector (Vinci from France, Atlantia from Italy, and Everbright and CRCC, both from China).

Figure I.12. **Project finance by sector, developed economies, 2010–2019**
(Number of projects and billions of dollars)



Source: UNCTAD based on Refinitiv SA.
Note: Other SDG-relevant industries include education and health infrastructure, water and sanitation, agriculture and telecommunication. Total SDG-relevant investment includes renewable energy, transport infrastructure, fossil fuel energy and other SDG-relevant industries. Costs of projects are estimated for about one-third of the projects on the basis of year, industry, country of project, and foreign or domestic sponsor.

Figure I.13. Project finance by sector, developing and transition economies, 2010–2019 (Number of projects and billions of dollars)



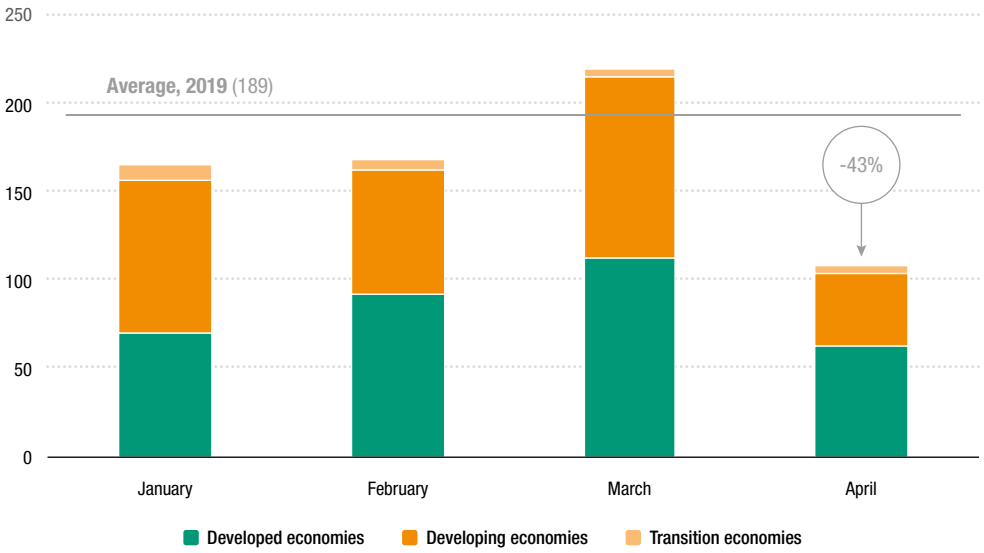
Source: UNCTAD based on Refinitiv SA.
Note: Other SDG-relevant industries include education and health infrastructure, water and sanitation, agriculture and telecommunication. Total SDG-relevant investment includes renewable energy, transport infrastructure, fossil fuel energy and other SDG-relevant industries. Costs of projects are estimated for about one-third of the projects on the basis of year, industry, country of project, and foreign or domestic sponsor.

Over the last 10 years, investments in renewable energy have grown constantly, to make up more than 50 per cent of all investment projects globally in 2019. This preponderance is even more marked in developed economies, where the industry already represented more than 50 per cent of investment projects in 2015 and has driven the growth in the number of projects since then. In developing economies, investment in renewable energy projects has grown as well, from 20 per cent in 2010 to 44 per cent in 2019. In these countries investments in transport infrastructure are also important, representing more than 20 per cent of all projects over the decade, with a peak of about 30 per cent in 2013–2014, in part due to the launching of the Chinese Belt and Road Initiative.

The overall decline in the average size of projects is driven by investments in renewable energy. The average cost of projects in the sector decreased during the decade by more than 30 per cent.[2] Renewables have thus entered a virtuous cycle of falling costs, expanding deployment and accelerating technological progress. According to the International Renewable Energy Agency, solar panel prices have fallen by about 80 per cent since 2010, while wind turbine prices have fallen by 30 to 40 per cent.

The impact of the pandemic will result in new projects struggling to attract international financing. Many already announced projects have been delayed or halted and some cancelled to give priority to the crisis response. One of the first signs of the crisis to come was the decrease in new project announcements. Globally, that impact was visible in April 2020, with a drop of more than 50 per cent from March and more than 40 per cent from the monthly average in 2019, driven mostly by drops in developing economies (figure I.14). Transport infrastructure projects fell by almost 70 per cent from the 2019 monthly average; only fossil fuel energy fell farther, with a drop of 80 per cent. Renewable energy projects proved the most resilient, with only a 26 per cent drop, as key stakeholders in the industry remain committed to their long-term focus on supporting the transition to a low-carbon future.

Figure I.14. Project finance, average monthly number, 2019 and January–April 2020



Source: UNCTAD, based on Refinitiv SA.
Note: Data accessed on 3 May 2020.

C. INTERNATIONAL PRODUCTION

1. Key indicators of international production

In 2019, international production continued to expand (table I.7). Estimated values for sales and value added of MNE foreign affiliates rose by 1.9 per cent and 7.4 per cent, respectively. Employment in foreign affiliates reached 82 million, an increase of about 3 per cent over the previous year. The rate of return on inward FDI generated by foreign affiliates in host economies continued its moderate decline to 6.7 per cent in 2019 from 7 per cent in 2018.

Table I.7. Selected indicators of FDI and international production, 2019 and selected years

	Value at current prices ($ billions)				
Item	**1990**	**2005–2007** (pre-crisis average)	**2017**	**2018**	**2019**
FDI inflows	205	1 414	1 700	1 495	1 540
FDI outflows	244	1 452	1 601	986	1 314
FDI inward stock	2 196	14 484	33 218	32 944	36 470
FDI outward stock	2 255	15 196	33 041	31 508	34 571
Income on inward FDI[a]	82	1 027	1 747	1 946	1 953
Rate of return on inward FDI[b]	*5.3*	*9.0*	*6.8*	*7.0*	*6.7*
Income on outward FDI[a]	128	1 102	1 711	1 872	1 841
Rate of return on outward FDI[b]	*8.3*	*9.6*	*6.2*	*6.4*	*6.2*
Cross-border M&As	98	729	694	816	483
Sales of foreign affiliates	6 929	24 610	29 844	30 690[c]	31 288[c]
Value added (product) of foreign affiliates	1 297	5 308	7 086	7 365[c]	8 000[c]
Total assets of foreign affiliates	6 022	55 267	101 249	104 367[c]	112 111[c]
Employment by foreign affiliates (thousands)	27 729	58 838	77 543	80 028[c]	82 360[c]
Memorandum					
GDP[d]	23 522	52 428	80 606	85 583	87 127
Gross fixed capital formation[d]	5 793	12 456	20 087	21 659	21 992
Royalties and licence fee receipts	31	172	369	397	391

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, exports and employment of foreign affiliates are estimated by extrapolating the worldwide data of foreign affiliates of MNEs from Australia, Austria, Belgium, Canada, Czechia, Finland, France, Germany, Greece, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Portugal, Slovenia, Sweden and the United States for sales; those from Czechia, France, Israel, Japan, Portugal, Slovenia, Sweden and the United States for value added (product); those from United Kingdom and the United States for assets; those from Czechia, Japan, Portugal, Slovenia, Sweden and the United States for exports; and those from Australia, Austria, Belgium, Canada, Czechia, Finland, France, Germany, Italy, Japan, Latvia, Lithuania, Luxembourg, Macao (China), Portugal, Slovenia, Sweden, Switzerland and the United States for employment, on the basis of three-year average shares of those countries in worldwide outward FDI stock.

[a] Based on data from 174 countries for income on inward FDI and 143 countries for income on outward FDI in 2019, in both cases representing more than 90 per cent of global inward and outward stocks.

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

[c] Data for 2018 and 2019 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 1980–2017.

[d] Data from IMF (2020a).

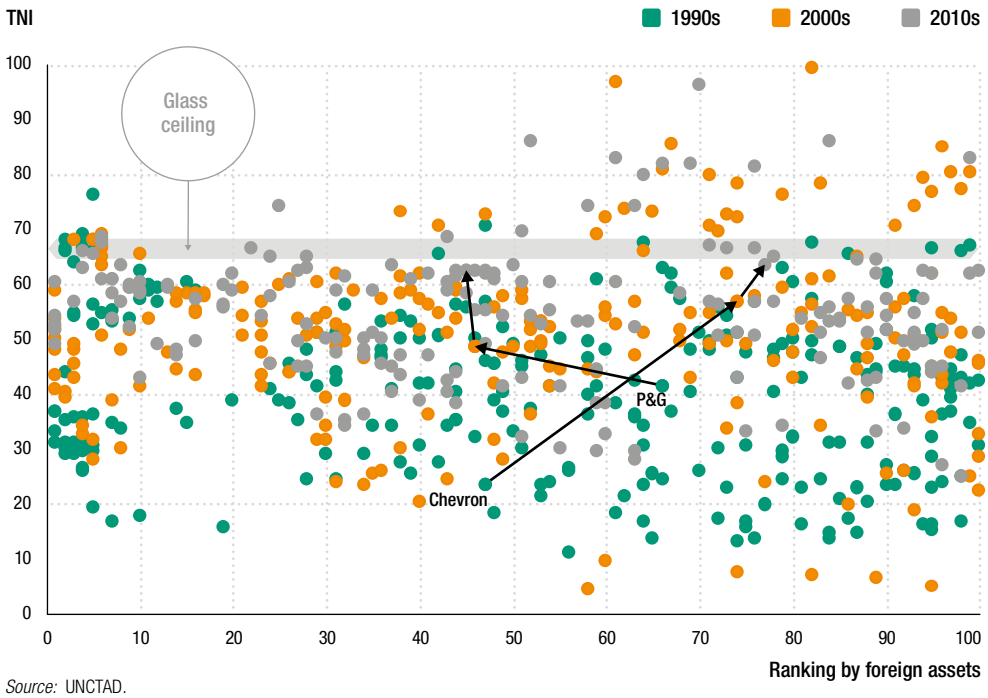
2. Internationalization trends of the largest MNEs

In 2019, the internationalization rates of the top 100 MNEs remained flat. Falling rates among heavy industrial MNEs were offset by increases among technology and telecommunication MNEs. Pharmaceutical companies also expanded operations abroad, with GlaxoSmithKline (United Kingdom) gaining 27 positions in the ranking as a result of deals concluded in 2018; namely the acquisition of its share of a joint venture with Novartis AG (Switzerland) for $13 billion and the acquisition of Tesaro (United States) for $4.3 billion. Other companies that made a significant increase in their foreign operations included Amazon.com (United States), which continued to enter new markets; Coca-Cola (United States), which expanded its production network in Africa and entered the European coffee market; pharmaceutical company Sanofi (France), which acquired biopharma companies in the United States; and the technology company Huawei (China), which continued to expand its global operations albeit at a slower rate than in 2018.

New MNEs in the top 100 ranking include construction company Vinci (France); gold mining company Barrick Gold (Canada), following two very active years of consolidating deals in the industry; and the parent of computer manufacturing firm Lenovo, Legend Holdings (China), through its activity of financing and entering joint ventures with successful tech start-ups. Among the companies that saw a sizable reduction of their operations abroad, resulting in their exiting the list, are several MNEs that merged in recent years, reconfigured their businesses, shed assets or split: DowDuPont (United States), Johnson Controls International (Ireland) and Reckitt Benckiser (United Kingdom).

The average Transnationality Index (TNI) of the top 100 – the relative shares of their foreign assets, sales and employees – has stagnated in the last decade around 65 per cent, in line with a global loss of momentum for FDI (see chapter IV). The stagnation is explained in part by the change in composition of the list, with new emerging-market entrants starting out at lower levels of internationalization. In addition, few MNEs in the top 100 have broken through the "glass ceiling" of transnationality (figure I.15).

Figure I.15. Glass Ceiling of Transnationality for United States MNEs



Source: UNCTAD.

After reaching a peak of 15 companies in 2017, the number of tech and digital companies among the top 100 decreased to 13 in 2019. Having dropped one tech firm in 2018, the group also dropped Oracle (United States) in 2019. However, the share of tech and digital MNEs in the total foreign sales of the top 100 still increased over the same period, from less than 17 per cent to more than 18 per cent, and their share in foreign assets increased from 10 per cent to 11 per cent (attesting to the asset-light nature of their foreign operations). The trend towards a stronger role for tech and digital firms in the top 100 thus continues. They included five emerging-market companies: Hon Hai (Taiwan Province of China), Samsung (Republic of Korea), Tencent (China), Huawei (China) and Legend Holding (China).

The new entries from China were among the fastest companies to internationalize their operations and pushed the industry average up. In contrast, Apple (United States) dropped 12 places in the ranking, after reducing its non-current assets[3] in China by over 30 per cent. The company asked manufacturing partners such as Hon Hai, Pegatron and Wistron (all Taiwan Province of China) to evaluate available options for diversifying their supply chain. The tech giant cited trade tensions but also more structural factors such as lower local demand, higher labour costs and the risk of overly centralizing production in one country.[4]

The stagnation in the number of tech MNEs is partly explained by two concurring strategies pursued by industry leaders. First, large tech MNEs have been consolidating their position in new technologies by buying successful start-ups. Second, they have been pursuing vertical integration, engaging in the creation of content for their platforms or expanding into retailing and other services. An example of the first strategy: in an effort to match competitors' lead in artificial intelligence (AI), in the past year Apple engaged in a number of small deals worth in total less than $1 billion to acquire small AI companies. This trend has intensified during the pandemic, with tech companies using their abundant cash reserves to acquire smaller companies, many of them affected by the crisis. In May large tech MNEs announced 15 acquisitions against a monthly average in 2019 of fewer than nine. Examples of the second strategy include the bid by Amazon (United States) for food delivery company Deliveroo (United Kingdom), and the sizable expenditures by Apple and Alphabet (both United States) to set up streaming services, develop video games and produce TV shows and films. In addition, the pandemic could reinforce the dominant position of tech and digital companies as world consumers move to e-commerce solutions.

The internationalization rate of companies from developing and transition economies increased by almost 2 per cent, with foreign assets and sales growing fastest (table I.8). (The trend for MNEs from developing and transition economies relates to 2018, the latest available year of data.) The growth rate of foreign assets was driven by a group of Chinese and Korean companies, mostly in the technology industry. The growing role of Huawei (China) in global telecommunication networks is reflected in its more than tripling of foreign assets during 2017-2018. Technology groups Tencent and Legend (both China) increased their foreign assets by about 50 per cent each. LG Electronics (Republic of Korea) tripled its non-current assets in North America and Europe through various deals and projects, including the acquisition of ZKW (Austria), a manufacturer of motor vehicle electrical equipment, for $1.2 billion. These investments brought the company back into the ranking after several years. Similarly, the IT group SK Holding (Republic of Korea) also increased its foreign assets significantly following efforts to vertically integrate the chipmaking business of its subsidiary SK Hynix and gain market share, including through a $3 billion deal to buy a stake in Toshiba Memory (Japan). Companies that reduced or did not increase foreign operations fast enough during 2018 and fell out of the ranking include the food company BRF (Brazil), the health group MediClinic (South Africa), the oil company Petrobras (Brazil) and the conglomerate Sime Darby (Malaysia), which split into several smaller groups.

Heavy-industry MNEs remain preponderant in the ranking of MNEs from developing and transition economies, partly due to the significant presence of Chinese State-owned MNEs (SO-MNEs). Companies from China represented almost half (44) of the companies in the ranking with SO-MNEs, concentrated in the extractive (eight companies), utilities (seven) and metals (five) industries.

The COVID-19 pandemic has affected all companies in the top 100 ranking. Top MNEs in GVC-intensive industries were among the first affected by supply chain disruptions. All firms are now grappling with falling global demand. On average, the top 100 have seen earnings expectations for fiscal year 2020 revised downward by 39 per cent between February and May. Pharmaceutical and tech MNEs were the least affected. Three MNEs in these sectors actually revised earnings upwards: Takeda Pharma (Japan), NTT (Japan) and Microsoft (United States). The worst affected are extractives and automotive firms. Some MNEs, including Ford (United States) and Honda (Japan), have pulled or withheld earnings guidance because of the uncertainty created by the shutdown of plants and by the sharp drop in global demand. Nissan Motor and Hitachi (both Japan), which close their fiscal year at the end of March, have delayed the release of financial reports; Nissan anticipates a downward revision of more than 30 per cent with respect to February's forecast.

Table I.8. 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)

	100 largest MNEs, global					100 largest MNEs from developing and transition economies		
Variable	2017[a]	2018[a]	2018–2017 Change (%)	2019[b]	2018–2019 Change (%)	2017[a]	2018	Change (%)
Assets (billions of dollars)								
Foreign	9 139	9 335	2.1	9 535	2.1	2 434	2 581	6.1
Domestic	6 625	6 710	1.3	6 819	1.6	5 726	5 430	-5.2
Total	15 763	16 045	1.8	16 354	1.9	8 160	8 011	-1.8
Foreign as share of total (%)	58	58	0.2	58	0.2	30	32	2.4
Sales (billions of dollars)								
Foreign	5 366	5 916	10.3	5 796	-2.0	2 224	2 559	15.1
Domestic	3 539	3 919	10.8	3 870	-1.3	2 576	2 751	6.8
Total	8 904	9 836	10.5	9 666	-1.7	4 800	5 311	10.6
Foreign as share of total (%)	60	60	-0.1	60	-0.3	46	48	1.9
Employment (thousands)								
Foreign	9 750	9 604	-1.5	9 466	-1.4	4 691	4 693	5.8
Domestic	9 536	8 548	-10.4	9 049	5.9	9 118	9 248	1.4
Total	19 286	18 152	-5.9	18 515	2.0	13 808	14 211	2.9
Foreign as share of total (%)	51	53	2.4	51	-3.4	34	35	1.0

Source: UNCTAD.
Note: Data refer to fiscal year results reported between 1 April of the base year and 31 March of the following year. Complete 2019 data for the 100 largest MNEs from developing and transition economies are not yet available.
[a] Revised results.
[b] Preliminary results.

NOTES

[1] The World Association of Investment Promotion Agencies carried out a pulse survey of IPAs in the first week of April that confirmed UNCTAD's assessment. All respondents expected a decline in FDI, with a 20-30 per cent decline earmarked as the most likely scenario (25 per cent of respondents).

[2] Considering only financed projects with confirmed values for the costs involved, without considering the size of the project.

[3] Non-current assets include long-term investments, property, plant, equipment and intangible assets.

[4] "Apple May Move 30% of its IPhone Production From China", *Fortune*, 19 June 2019.

CHAPTER II

REGIONAL TRENDS

DEVELOPING ECONOMIES

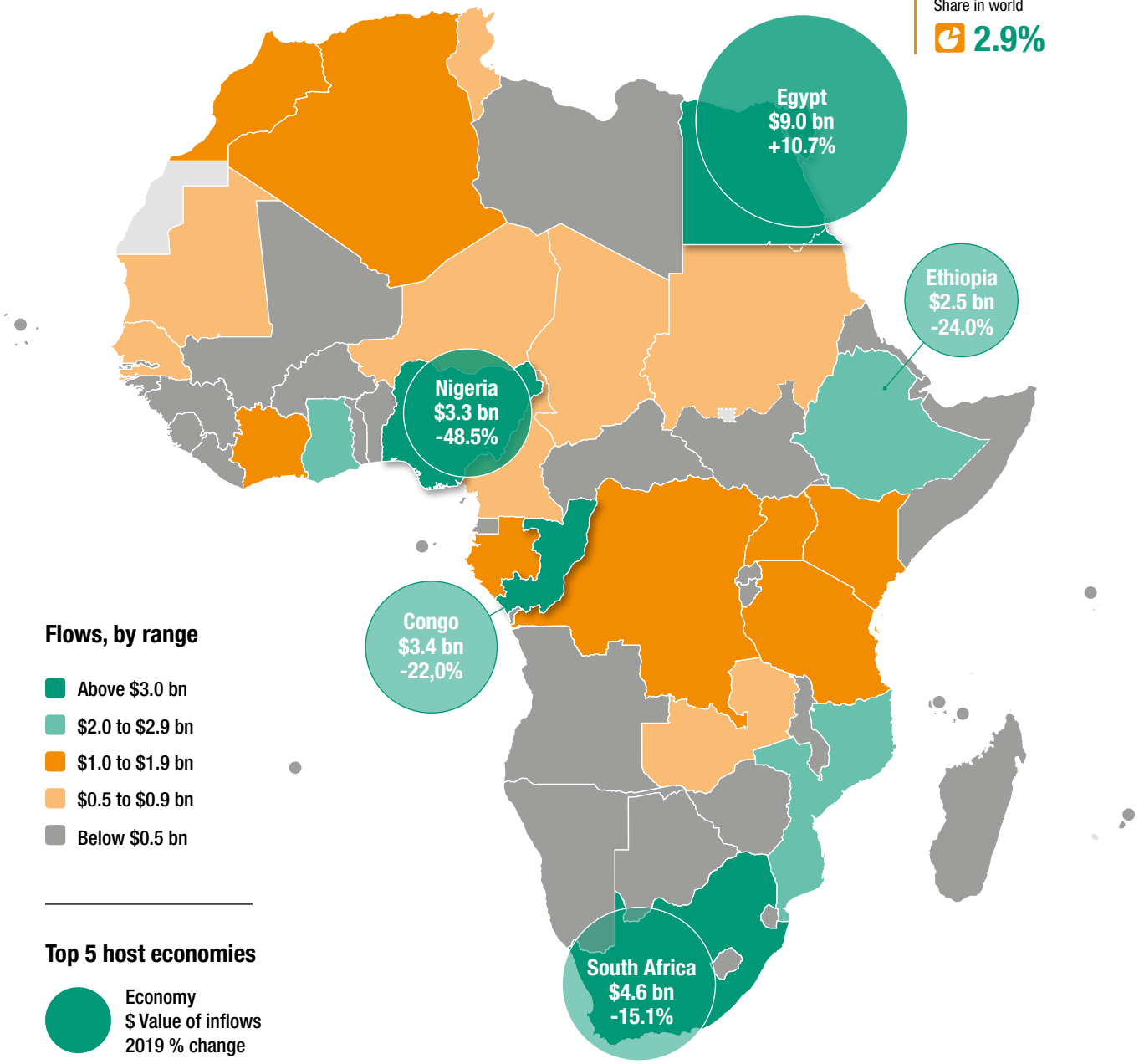
AFRICA

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
45.4 bn

2019 Decrease
-10.3%

Share in world
2.9%



Flows, by range

- Above $3.0 bn
- $2.0 to $2.9 bn
- $1.0 to $1.9 bn
- $0.5 to $0.9 bn
- Below $0.5 bn

Top 5 host economies

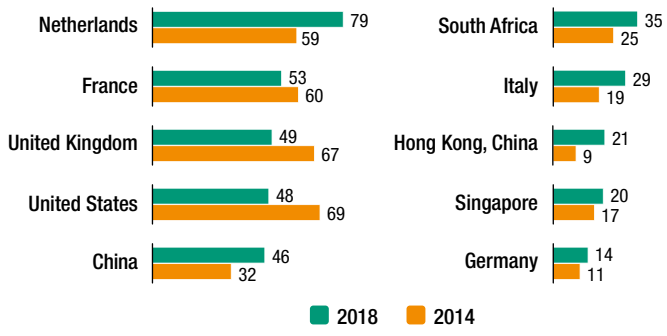
Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Billions of dollars and 2019 growth)

South Africa	$3.1	-23.5%
Morocco	$1.0	+32.1%
Togo	$0.7	+863.8%
Egypt	$0.4	+25.2%
Côte d'Ivoire	$0.4	+172.6%

Figure A. **Top 10 investor economies by FDI stock, 2014 and 2018** (Billions of dollars)



Source: UNCTAD.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Sudan and South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

HIGHLIGHTS

- Pandemic, low oil prices set to push down FDI
- State-backed partnerships, regional integration could mitigate effects
- In 2019, FDI flows already declined by 10 per cent

Figure B. FDI inflows, 2013–2019
(Billions of dollars and per cent)

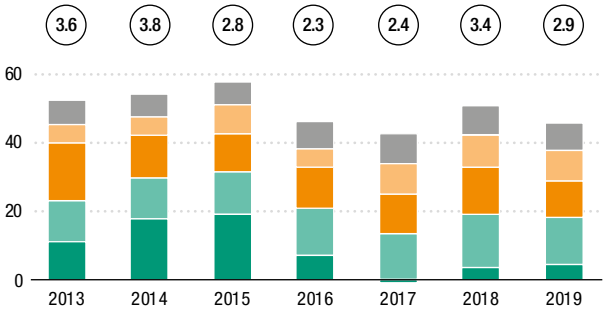


Figure C. FDI outflows, 2013–2019
(Billions of dollars and per cent)

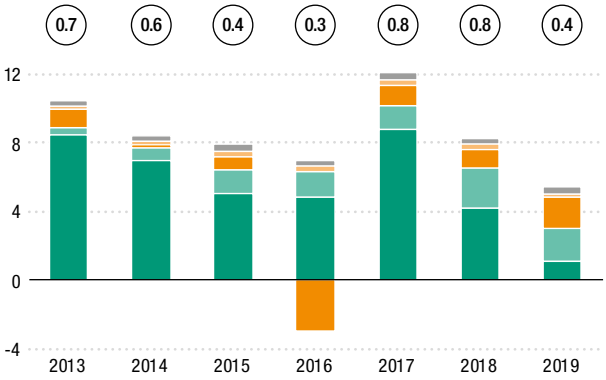


Table A. Net cross-border M&As by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**1 570**	**5 312**	**3 651**	**-33 445**
Primary	**-59**	**120**	**205**	**1 583**
Mining and quarrying	-59	114	205	1 621
Manufacturing	**-247**	**1 747**	**-67**	**-897**
Food, beverages and tobacco	426	685	-73	-
Coke and refined petroleum products	-973	1 044	-	-
Pharmaceuticals, medicinal chemical and botanical products	50	9	-	-999
Services	**1 876**	**3 445**	**3 513**	**-34 131**
Trade	-	4	-253	22
Transportation and storage	-	532	3	-46
Information and communication	37	-126	497	-34 663
Financial and insurance activities	1 615	-68	2 970	324
Business services	215	3 095	274	184

Table B. Net cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**1 570**	**5 312**	**3 651**	**-33 445**
Developed economies	**-1 606**	**4 311**	**2 266**	**-33 988**
European Union	1 483	3 263	2 455	-34 909
Netherlands	108	-60	-45	-35 938
United Kingdom	1 840	3 087	1 535	1 209
Switzerland	-1 713	1 087	-	70
United States	-1 405	-136	-	38
Developing economies	**2 914**	**-55**	**1 386**	**-617**
Africa	1 175	15	1 175	15
Morocco	-	21	783	-
South Africa	1 033	4	31	7
China	554	95	-	108
India	26	-171	134	48

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Africa as destination		Africa as investor	
	2018	2019	2018	2019
Total	**77 104**	**76 637**	**8 885**	**12 056**
Primary	**17 032**	**2 829**	**42**	**113**
Mining and quarrying	16 782	2 640	2	113
Manufacturing	**33 053**	**32 621**	**2 969**	**6 973**
Chemicals and chemical products	11 159	6 189	1 226	3 710
Coke and refined petroleum products	6 483	7 727	-	1 413
Food, beverages and tobacco	4 660	2 448	25	280
Motor vehicles and other transport equipment	2 563	4 015	43	-
Services	**27 019**	**41 186**	**5 874**	**4 970**
Construction	4 779	9 576	1 393	86
Electricity, gas, steam and air conditioning supply	5 712	10 228	664	1 017
Information and communication	3923	4639	1316	1817
Transportation and storage	5 203	5 402	490	213

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

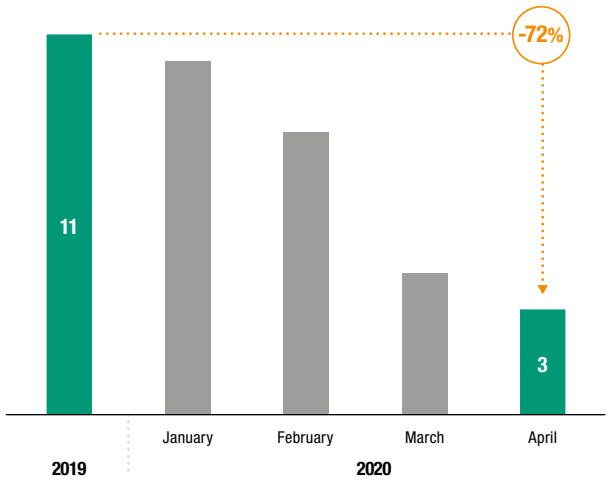
Partner region/economy	Africa as destination		Africa as investor	
	2018	2019	2018	2019
World	**77 104**	**76 637**	**8 885**	**12 056**
Developed economies	**38 793**	**39 993**	**2 215**	**1 166**
European Union	25 725	28 305	1 495	534
United Kingdom	5 569	3 102	113	158
United States	10 565	3 226	254	549
Switzerland	910	2 973	15	-
Developing economies	**35 915**	**36 286**	**6 496**	**10 839**
Africa	5 485	10 002	5 485	10 002
Nigeria	326	2 897	1 330	2 912
China	11 907	11 915	81	231
United Arab Emirates	4 118	5 631	80	89
Saudi Arabia	2 311	4 443	44	190
Transition economies	**2 395**	**358**	**174**	**51**

The COVID-19 pandemic will severely curtail foreign investment in Africa in 2020, mirroring the global trend. The downturn will be further exacerbated by the extremely low oil prices, considering the resource-oriented investment profile of the continent. Foreign direct investment (FDI) flows are expected to decline between 25 and 40 per cent. Depending on the duration and severity of the global crisis, the longer-term outlook for FDI in Africa could draw some strength from the implementation of the African Continental Free Trade Area Agreement in 2020, including the conclusion of its investment protocol. In addition, investment initiatives for Africa by major developed and emerging economies could help the recovery. In 2019, FDI flows to Africa had already declined by 10 per cent to $45 billion. Increased FDI flows to some of the continent's major economies, including Egypt, were offset by reductions in others, such as Nigeria and South Africa. The negative effects of tepid global and regional GDP growth and dampened demand for commodities inhibited flows to countries with both diversified and natural resource-oriented investment profiles alike, although a few countries received higher inflows from large new projects. Investment in Africa through mergers and acquisitions (M&As) increased substantially to $5.3 billion, compared with $1.6 billion in 2018. The rise was driven to a large degree by MNEs from the United Kingdom and Switzerland, which invested $3.1 billion and $1.1 billion, respectively. M&A investment from developing economies declined significantly.

Prospects

FDI prospects for Africa in 2020 remain negative amid the pandemic, the economic impact of which is being compounded by extremely low oil prices. UNCTAD's forecast of a 25-40 per cent decline is based on GDP growth projections as well as a range of investment-specific factors. Projected GDP growth for the continent has already been downgraded from 3.2 per cent to -2.8 per cent, and trade is also set to contract (IMF, 2020a). Due to the widespread economic uncertainty and restrictions in movement, many announced and planned investment projects are likely to be either shelved or put on hold. As of April 2020, the number of cross-border M&As targeting Africa had declined 72 per cent from the monthly average of 2019 (figure II.1).

Figure II.1. Africa: Average monthly number of cross-border M&As, January–April 2020 (Number)



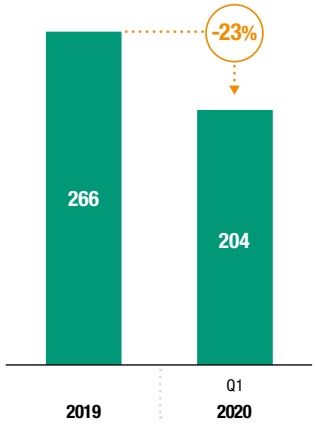
Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics).

Although the pandemic will affect all industries, several services industries are being hit disproportionally, including aviation, hospitality, tourism and leisure. These industries cumulatively contributed to approximately 10 per cent of the $77 billion in announced greenfield projects in Africa in 2019. Manufacturing industries that are global value chain (GVC) intensive,[1] which accounted for an additional 7 per cent of announced greenfield projects in 2019, are also being significantly affected, which is a sign of concern in regard to efforts to promote economic diversification and industrialization in Africa. Overall, there was a notable downward trend in the first quarter of 2020 in announced greenfield investment projects compared with 2019, although the value of projects (62 per cent) has declined more severely than their number (-23 per cent) (figure II.2).

The economic and investment implications for FDI of the pandemic will be further compounded by the oil glut in global markets, which is causing extremely low oil prices as well as declining commodity prices in general.[2] A large part of FDI to Africa is resource-seeking, with 40 per cent of all greenfield project announcements in 2019 targeting industries directly linked to natural resources.

Although Africa is not integrated deeply into GVCs, its five largest export industries will be significantly affected by lower demand for manufactured goods and services because the continent's role is largely as a provider of inputs in key internationalized industries, as indicated by its high rate of GVC forward participation.[3] Already in 2020, the impact of the dual shock of the pandemic and low oil prices has become apparent, as the value of greenfield project announcements in the first quarter fell sharply for both extractive industries (82 per cent) and petroleum and chemicals (75 per cent) (table II.1).

Figure II.2. Africa: Average quarterly number of announced greenfield investment projects, 2019 and Q1 2020 (Number)



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

The expected earnings of African MNEs that are among the world's 5,000 largest MNEs have been revised down by 27 per cent since the start of the pandemic. The expected earnings of MNEs from the five largest investors in Africa (the Netherlands, France, the United Kingdom, the United States and China) have also been downgraded significantly. Reinvested earnings of MNEs account for a notable share of FDI inflows in the major recipient economies on the continent, including Egypt (41 per cent) and Nigeria (26 per cent) (figure II.3, on the next page). Therefore, the downward revision of earnings projections will have a tangible impact on investment flows to Africa in 2020.

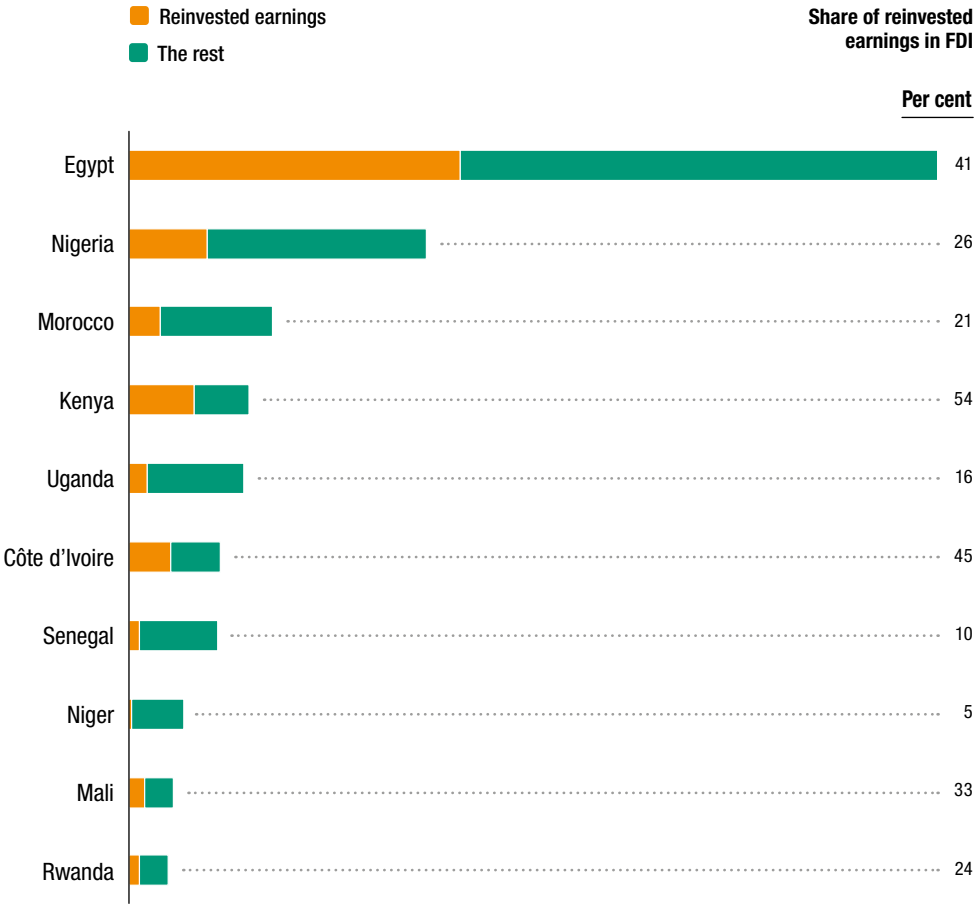
Despite the immediate negative prospects for FDI to Africa, some mitigating factors could limit the extent of the investment decline and help stimulate a recovery in 2021 and beyond. One is the higher value being assigned to investment ties to the continent by major global economies, primarily the United States and China but also the United Kingdom, the Russian Federation and France (table II.2). Some of the investment initiatives supported by these countries are focused on infrastructure, especially those from China. Others also target natural resources and manufacturing capacity. The new French initiative, Choose Africa, for example, is designed specifically for small and medium-sized projects that contribute to local manufacturing capacity and employment generation.

Table II.1. Africa: five largest export industries and announced greenfield projects (Per cent)

Industry	Exports (Share of African)	Value added in exports (Share of global)	GVC forward participation	GVC backward participation	Value of announced greenfield FDI project change in Q1 2020
Extractive	32.8	11.3	83	17	-82
Petroleum and chemicals	10.6	1.6	51	49	-75
Electrical and machinery	6.6	1.9	68	32	-36
Automotive	6.5	0.6	45	55	-29
Agriculture	6.4	5.5	76	24	18

Source: UNCTAD, based on Eora26 database for GVC data and information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com) for greenfield project announcements.

Figure II.3. Africa: FDI inflows and reinvested earnings, 2019 (Volume and per cent)



Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: The figure covers only economies that report reinvested earnings separately.

Similarly, in 2020, the United States announced plans to promote private investments in Africa, including through the new Prosper Africa initiative and the $60 billion (global investment cap) International Development Finance Corporation. Under the programme, the United States aims to invest up to $5 billion in Ethiopia in the next three years in industries that are being opened for privatization, such as telecommunication, geothermal energy, logistics and sugar. Despite being affected by the joint impact of the pandemic and low oil prices to some degree, investments from all of the aforementioned countries, which have varying degrees of political backing, could be relatively more resilient.

The expected commencement of trading under the African Continental Free Trade Area Agreement in 2020 could also provide support to FDI in the continent. The formal implementation of the treaty after years of deliberation could offer some cushion against the negative economic and investment impacts of the pandemic and low oil prices in the medium to long run. Intracontinental investment, in particular, could receive a positive stimulus, especially after the finalization of the investment protocol in the second phase of the negotiations, which are scheduled for December 2020. Seen together, the growth of State-backed investment initiatives and the implementation of the Agreement indicate that the investment downturn in Africa could be mitigated in 2021 and beyond, although State-backed investment initiatives and the operationalization of the Agreement could now both run into temporary delays.

Table II.2. Major developed and emerging economies' investment initiatives for Africa

Country	Name of initiative	Highlights	Key projects
United States	Prosper Africa Initiative (2019)	Projects in the form of equity, debt financing, risk insurance and technical development through the International Finance and Development Corporation, which has a global investment cap of $60 billion	Announcement of $5 billion in investment in Ethiopia by 2022 in newly privatized industries
China	Forum on China–Africa Cooperation (October 2010, latest summit in 2018)	$60 billion financing package, including $10 billion in private investment	$12 billion coastal railway in Nigeria, $4.5 billion Addis Ababa–Djibouti railway, and $11 billion megaport in Tanzania
United Kingdom	United Kingdom–Africa Investment Summit (January 2020)	Deals worth about $8.5 billion to set the groundwork for post-Brexit economic and investment ties between the United Kingdom and African countries	Tullow Oil announcement of investment of $1.5 billion to continue oil production in Kenya
Russian Federation	Russia–Africa Summit and Economic Forum (October 2019)	50 agreements for a total of more than $10 billion, in mainly infrastructure and natural resources development project	Announcement of $2.2 billion investment to build oil refinery in Morocco by VEB, a state development corporation
France	Choose Africa (December 2019)	$3 billion in financing for start-ups and SMEs in Africa until 2022, in the form of credit, technical support and equity financing	FISEA equity investment in Agri VIE II, a a venture capital fund for agribusiness in Sub-Saharan Africa

Source: UNCTAD, based on initiative websites.

In the short term, curtailing the extent of the investment downturn and limiting the economic and human costs of the pandemic is of paramount importance. Longer term, diversifying investment flows to Africa and harnessing them for structural transformation remains a key objective. There is a risk that progress made in that direction may now be disrupted. The current global crisis is already leading MNEs to re-evaluate locations of supply chain activities to make them more resilient. Considering Africa's largely forward participation in major GVCs (see table II.1), moving up the value addition ladder through FDI will require intense and coordinated efforts. The pharmaceutical and health care industries could provide opportunities for countries on the continent to promote domestic value addition.

Inflows in 2019

FDI inflows to North Africa decreased by 11 per cent to $14 billion, with reduced inflows in all countries except Egypt. *Egypt* remained the largest FDI recipient in Africa in 2019, with inflows increasing by 11 per cent to $9 billion. Economic reforms instituted by the Government have improved macroeconomic stability and strengthened investor confidence in the country. Although FDI was still driven by the oil and gas industry, investments have been made in the non-oil economy as well, notably in telecommunication, consumer goods and real estate. One of the largest investments was by an Israeli consortium, which acquired a 39 per cent stake in East Mediterranean Gas, an oil and gas pipeline service provider, for more than $500 million. FDI flows to *Morocco* decreased by 55 per cent to $1.6 billion in 2019. FDI to the *Sudan* fell by 27 per cent to $825 million in 2019, primarily in oil and gas exploration and in agriculture. In *Tunisia*, FDI flows decreased by 18 per cent to $845 million due to slow economic growth (1 per cent in 2019). Most FDI went to the industrial sector ($450 million), followed by energy ($300 million) and services ($95 million). There was a sharp decline in investment in the services sector.

After a significant increase in 2018, FDI flows to Sub-Saharan Africa decreased by 10 per cent in 2019 to $32 billion. This decrease can mostly be attributed to a decline in investment flows to traditional major investment recipients, including Nigeria, South Africa and Ethiopia.

FDI to West Africa decreased by 21 per cent to $11 billion in 2019. This was largely due to the steep decline in investment in *Nigeria*, after consecutive increases in 2017 and 2018. Inward FDI to Nigeria almost halved, to $3.3 billion, due to a slowdown in investment in the oil and gas industry. The development of a $600 million steel plant in Kaduna state offers some evidence of investment diversification, a long-standing policy objective. FDI to *Ghana* dropped by 22 per cent to approximately $2.3 billion in 2019. Investment was concentrated in oil and gas facilities, mining (including gold and manganese) and to some degree in agriculture (cocoa). However, there are plans for investment diversification, including attracting investment in the country's six-phase Railway Master Plan, which is set to commence in 2020. FDI to *Senegal* increased by 16 per cent to $1 billion in 2019. Owing to historical ties, France has been the biggest investor in Senegal, but recently there have been important investments from other countries, including China, Turkey and the United Arab Emirates. In 2019, Turkish steelmaker Tosyali launched the Tosyali Economic Zone with the aim to develop a steel industry cluster. A ceramics factory built by Twyford (China) was inaugurated with a cumulative investment of nearly $50 million in Thies, Senegal. Investment to *Côte d'Ivoire* increased by 63 per cent to $1 billion on the back of sustained economic growth, with investments in natural resources, agriculture and services.

FDI flows to East Africa decreased by 9 per cent to $7.8 billion in 2019. Inflows to *Ethiopia* contracted by a fourth to $2.5 billion. FDI was adversely affected by instability in certain parts of the country, including regions with industrial parks. Yet Ethiopia remained the biggest FDI recipient in East Africa. China was the largest investor in 2019, accounting for 60 per cent of newly approved FDI projects, with significant realized investments in manufacturing and services. Inflows to *Uganda* increased by almost 20 per cent, to $1.3 billion, due to continued development of major oil fields and an international oil pipeline, as well as projects in construction, manufacturing and agriculture. Inflows to *Kenya* dropped by 18 per cent to $1.3 billion, despite several new projects in information technology (IT) and health care.

FDI flows to Central Africa decreased by 7 per cent to nearly $8.7 billion. FDI to the *Democratic Republic of the Congo* decreased by 9 per cent to $1.5 billion. Foreign investment continued to be directed towards mining, especially of cobalt, of which the country is the world's leading producer. Demand for other metals used in electric vehicle batteries, such as lithium, nickel and copper, also continue to underpin investment flows to the country despite profound political and economic challenges.

FDI to Southern Africa increased by 22 per cent to $4.4 billion. This was mainly caused by the slowdown in net divestment from Angola. FDI flows to *Angola* in 2019 remained negative (-$4.1 billion) due to repatriations in the oil sector. There were some important foreign investment deals in the country, such as the $100 million investment by a unit of the Indonesian State-owned PT Pertamina (Persero) in an offshore oil block.

FDI inflows to *South Africa* decreased by 15 per cent to $4.6 billion in 2019. FDI to this country is mostly directed to mining, manufacturing (automobiles, consumer goods) and services (finance and banking). Although traditionally the major investor partners have been countries from the European Union (EU), China is slowly expanding its investment footprint in the country. Despite the decline in 2019, the level of FDI inflows in South Africa was encouraging after the low inflows between 2015 and 2017 (an average $2 billion a year). However, a significant part of FDI consists of intrafirm financial transfers; there is still a dearth of new greenfield investments.

MNEs from developed economies accounted for almost 80 per cent of the nearly $5.3 billion in M&A investments in Africa in 2019. Those from the United Kingdom invested the most in M&As ($3.1 billion), followed by MNEs from Switzerland ($1.1 billion). In contrast, M&As from developing economies declined significantly, registering a net divestment of $55 million (table B).

On the basis of FDI stock data through 2018, firms from the Netherlands ($79 billion) overtook those from France ($53 billion) as the largest foreign investors in Africa (figure A). More than two-thirds of investment stock held by the Netherlands is concentrated in only three countries, Egypt, Nigeria and South Africa. The investment stocks held by the United States declined by 15 per cent to $48 billion owing to profit repatriation[4] and divestment. Meanwhile, the investment stocks of the United Kingdom and China increased by 10 per cent to $49 billion and $46 billion, respectively. In the coming years, owing to a number of political and economic factors, these two countries are set to become even more important investors in Africa. There was also evidence of a rise in intracontinental investment, with the stock of investment in Africa held by South Africa increasing by $7 billion in 2017 to $35 billion in 2018.

Outflows in 2019

FDI outflows from Africa decreased by 35 per cent to $5.3 billion. South Africa continued to be the largest outward investor, despite the reduction in its outflows from $4.1 billion to $3.1 billion. Outflows from Togo increased 10-fold, from a mere $70 million to $700 million. In North Africa, outward FDI from Morocco increased to approximately $1 billion from $800 million. A significant part of FDI outflows from African countries entail intracontinental flows, as indicated by some major investments by South African and Moroccan MNEs within the continent. Togo's outward investment also included notable projects within the West Africa region.

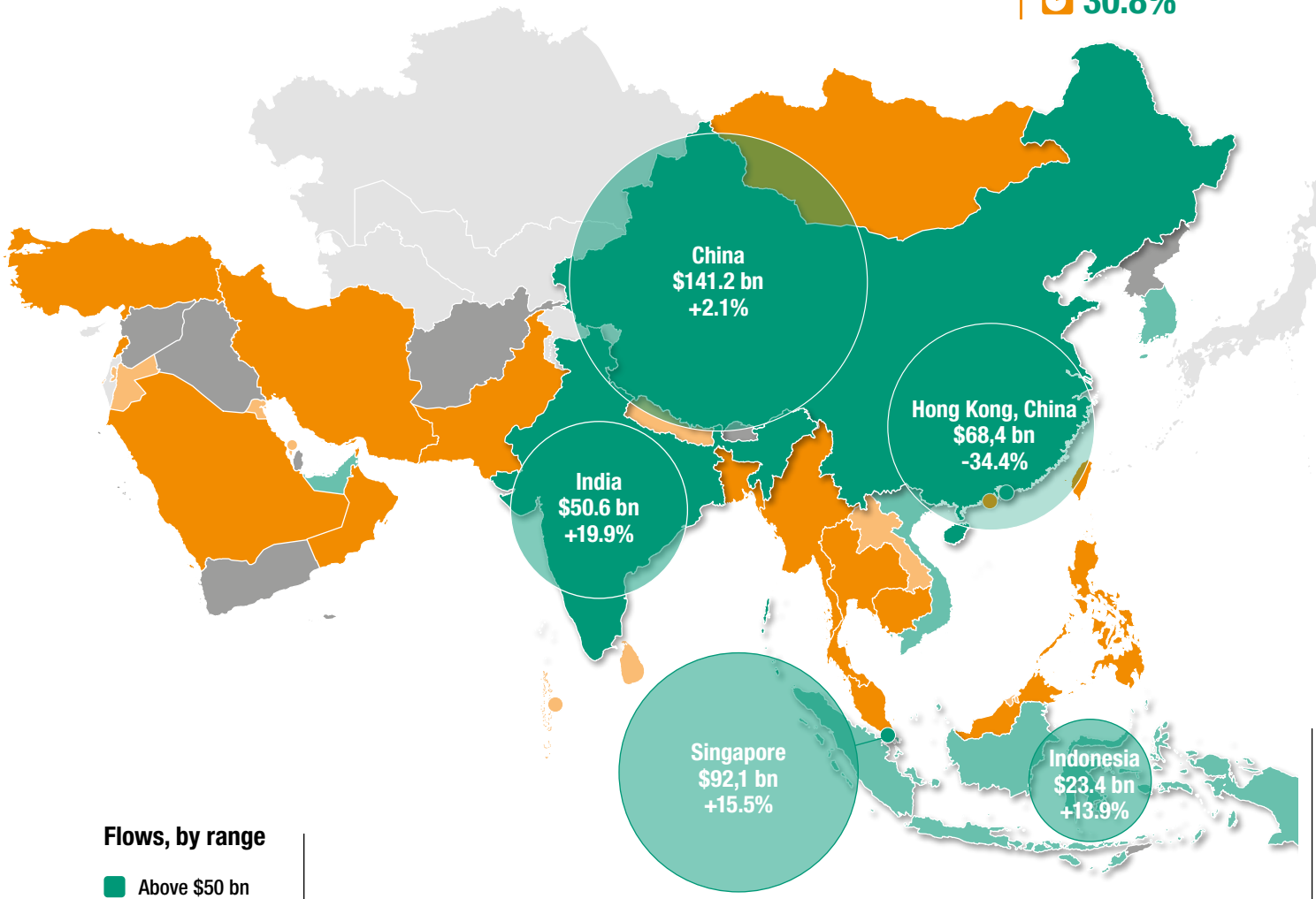
DEVELOPING ASIA

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
$ 473.9 bn

2019 Decrease
-4.9%

Share in world
30.8%



Flows, by range

- Above $50 bn
- $10 to $49 bn
- $1.0 to $9.9 bn
- $0.1 to $0.9 bn
- Below $0.1 bn

Top 5 host economies

Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Billions of dollars and 2019 growth)

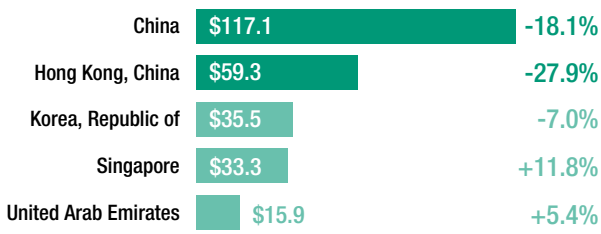
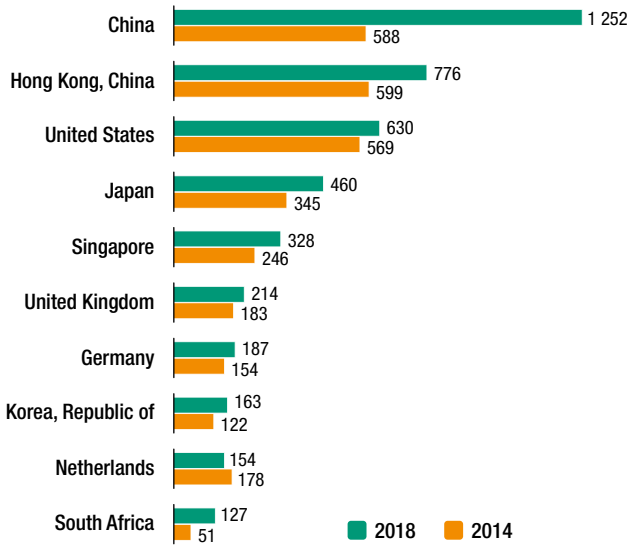


Figure A. Top 10 investor economies by FDI stock, 2014 and 2018 (Billions of dollars)



HIGHLIGHTS

- Severe impact of pandemic, due to GVC-intense profile
- In 2019, record FDI flows to China and South-East Asia
- Outflows in 2019 down for second consecutive year

Figure B. FDI inflows, 2013–2019
(Billions of dollars and per cent)

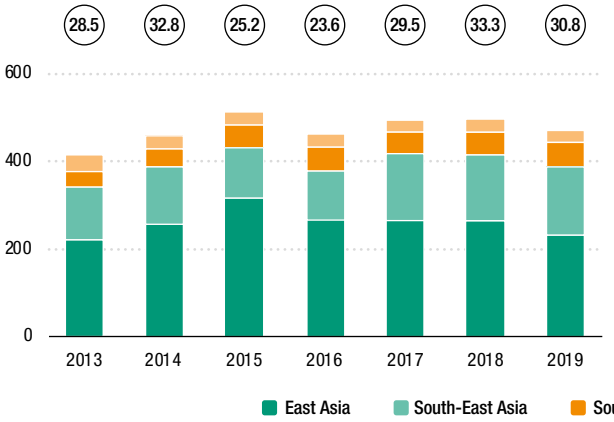
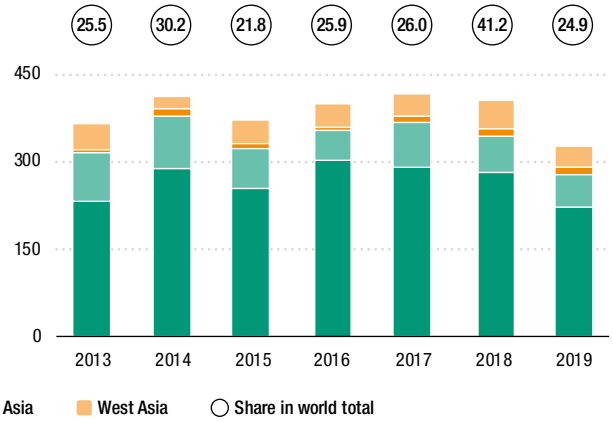


Figure C. FDI outflows, 2013–2019
(Billions of dollars and per cent)



East Asia | South-East Asia | South Asia | West Asia | Share in world total

Table A. Cross-border M&As by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**83 769**	**48 819**	**89 256**	**42 961**
Primary	**3 670**	**1 107**	**4 640**	**5 437**
Agriculture, forestry and fishing	95	716	-1 698	-2 218
Manufacturing	**13 584**	**19 828**	**12 563**	**-3 878**
Basic metal and metal products	321	9 491	850	-188
Chemicals and chemical products	2 099	2 030	4 093	4 041
Pharmaceuticals, medicinal chemicals and botanical products	240	1 042	560	-222
Services	**66 515**	**27 884**	**72 053**	**41 402**
Transportation and storage	7 937	8 896	9 701	-1 418
Financial and insurance activities	1 256	7 834	54 827	46 725
Human health and social work activities	2 515	3 749	-825	-1 924
Business services	16 133	3 476	2 588	-12 690
Information and communication	14 074	2 096	1 479	3 892

Table B. Cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**83 769**	**48 819**	**89 256**	**42 961**
Developed economies	**43 311**	**31 022**	**39 930**	**20 283**
European Union	16 478	9 225	28 026	16 908
United States	20 668	10 884	1 380	-2 521
Japan	6 523	9 355	1 503	-756
Developing economies	**38 308**	**19 554**	**48 208**	**22 132**
Africa	191	271	1 739	-70
Latin America and the Caribbean	-715	-386	7 643	4 785
Asia	38 826	17 175	38 826	17 175
China	31 959	1 206	5 395	7 161
Hong Kong, China	6 658	9 501	13 618	-4 723
Thailand	236	4 450	-469	4 564
United Arab Emirates	374	2 357	1 382	-649

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Developing Asia as destination		Developing Asia as investor	
	2018	2019	2018	2019
Total	**398 001**	**265 117**	**294 086**	**241 752**
Primary	**7 369**	**4 545**	**13 456**	**5 141**
Mining and quarrying	6 475	4 132	12 178	4 442
Manufacturing	**206 648**	**149 375**	**136 880**	**150 304**
Coke and refined petroleum products	39 535	52 656	16 490	70 459
Chemicals and chemical products	40 418	16 686	31 023	9 778
Computer, electronic, optical products and electrical equipment	36 760	20 410	29 430	23 549
Motor vehicles and other transport equipment	38 733	24 099	14 792	15 659
Services	**183 984**	**111 197**	**143 750**	**86 307**
Electricity, gas, steam and air conditioning supply	37 349	19 682	24 400	17 311
Construction	59 500	11 466	60 811	20 521
Accommodation and food service activities	22 482	25 706	16 559	15 436
Information and communication	16 885	14 373	10 674	8 017

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

Partner region/economy	Developing Asia as destination		Developing Asia as investor	
	2018	2019	2018	2019
World	**398 001**	**265 117**	**294 086**	**241 752**
Developed economies	**202 505**	**140 138**	**57 671**	**54 147**
European Union	89 047	54 140	20 946	17 769
United States	60 240	48 989	24 695	30 405
Japan	37 029	23 732	3 597	1 425
Developing economies	**182 566**	**120 678**	**218 829**	**164 825**
China	34 242	13 304	40 476	21 808
Korea, Republic of	20 048	16 656	4 163	410
Indonesia	818	24 260	13 607	5 885
Saudi Arabia	506	15 840	2 914	5 457
Singapore	18 918	11 245	5 385	961
Viet Nam	482	70	14 730	17 613
Transition economies	**12 931**	**4 302**	**17 587**	**22 781**

FDI inflows to the region in 2020 are expected to fall by between 30 and 45 per cent as a result of the COVID-19 pandemic. All subregions and the five largest recipients, which accounted for about 80 per cent of FDI inflows in Asia in 2019, will see a decline in investment across a wide range of industries, primarily in manufacturing and services. The number of announced greenfield investment projects in the first quarter of 2020 dropped by 37 per cent. The number of M&As fell by 35 per cent in April 2020. Many MNEs have warned of earnings shortfalls and postponed their investment plans for 2020 as they concentrate on rebuilding or consolidating their business operations. The pandemic will precipitate a fall in reinvested earnings of foreign affiliates based in the region. Outward FDI is also expected to fall because of the growing liquidity challenges faced by companies from the region. A global economic recession will further weigh on inflows and outflows. Economic growth in Asia is expected to stall at zero per cent.

In 2019, FDI flows into developing Asia declined by 5 per cent, to $474 billion, though the region remained an important FDI destination, hosting more than 30 per cent of global FDI flows. The decline was driven mostly by a 13 per cent drop in investment in East Asia, primarily in Hong Kong (China) and the Republic of Korea. Inflows to China rose marginally and reached an all-time high of $141 billion. In South-East Asia, inflows grew 5 per cent to a record level of $156 billion, propelled by strong investment in a few countries, in particular Indonesia, Singapore and Viet Nam. Inflows to South Asia rose 10 per cent to $57 billion, with 20 per cent growth in inflows to India. West Asia recorded a 7 per cent decline in inflows to $28 billion, despite a notable increase in investment in the United Arab Emirates and Saudi Arabia. Outflows from Asia declined by 19 per cent to $328 billion, due to the decline in commodity prices, a drop in M&A purchases, geopolitical tensions and China's restrictions on outward FDI.

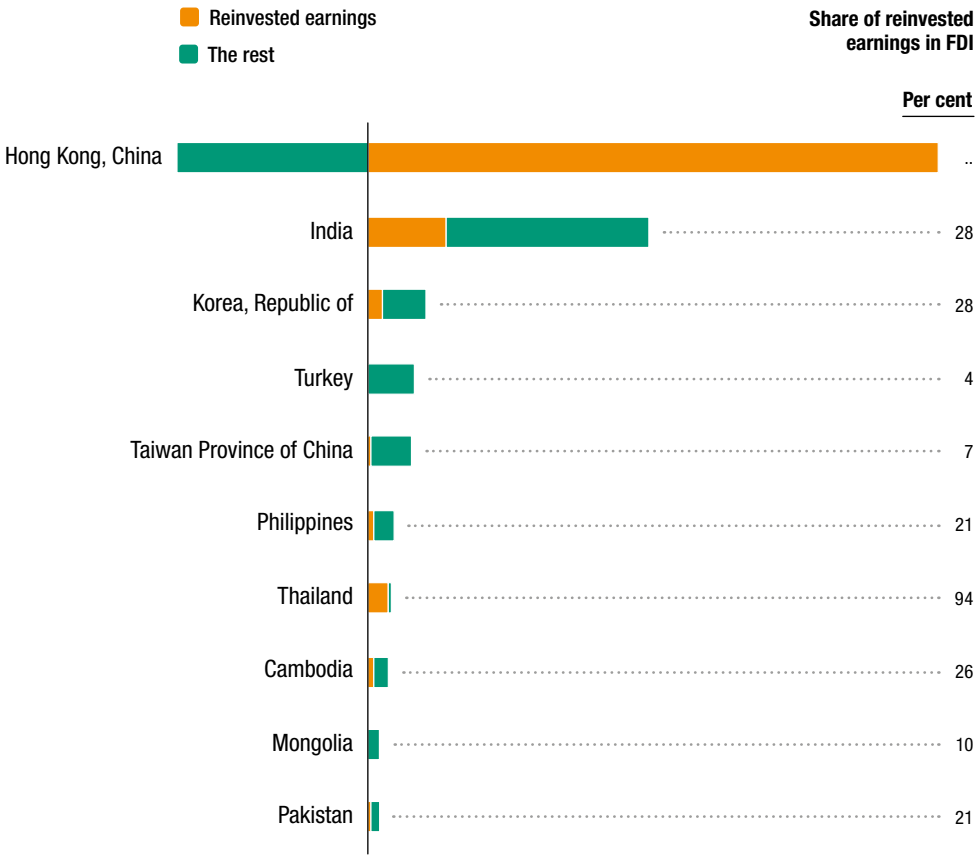
Prospects

FDI flows to the region are expected to decline in 2020 by between 30 and 45 per cent because of the impact of the pandemic and the consequent lockdown measures, supply chain disruptions and economic slowdown. Declining corporate earnings and the slump in global demand are also affecting investment in the region (figure II.4). The pandemic has highlighted the dense interconnection of economies and factories in Asia and with other parts of the world. Work stoppages in China have significantly disrupted the supply chain of many factories in East and South-East Asia. The pandemic has also underscored the vulnerability of these supply chains, and the important role of China and other Asian economies as global production hubs. It could encourage MNEs to speed up relocations of investment and reshoring of GVC activities, affecting the longer-term trend of FDI in the region.

The number of announced greenfield investment projects in the first quarter of 2020 dropped by 37 per cent from the quarterly average of 2019 (figure II.5). The number of M&As dropped by 35 per cent in April 2020 from the monthly average of 2019 (figure II.6).

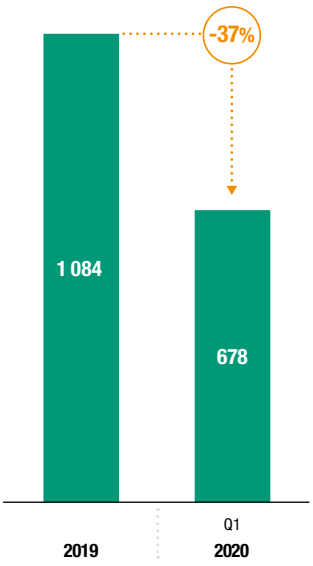
China has been severely affected by the pandemic. In the first quarter of 2020 its economy contracted for the first time on record, with a growth rate of -6.8 per cent. The drastic measures taken to contain the spread of the virus had a profound economic impact. Retail spending, which contributed nearly 60 per cent of China's economic growth in 2019, plunged 19 per cent from a year earlier. Fixed-asset investment, another major growth driver, sank 16 per cent.[5] The capital expenditure of Chinese MNEs in the first two months of 2020 declined by 25 per cent. Against these developments, FDI inflows to China in the first quarter of 2020, excluding the financial sector, were reported to have dropped by 13 per cent to $31 billion, as compared with the same period last year.[6]

Figure II.4. Asia: FDI inflows and reinvested earnings, 2019 (Volume and per cent)



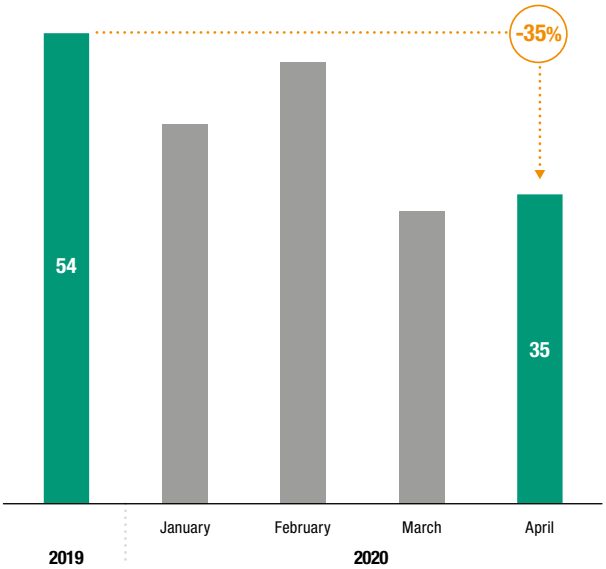
Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: The figure covers only economies that report reinvested earnings separately.

Figure II.5. Asia: Average quarterly number of announced greenfield investment projects, 2019 and Q1 2020 (Number)



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

Figure II.6. Asia: Average monthly number of cross-border M&As, January–April 2020 (Number)



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

In stimulating the economy and in encouraging FDI, the Government issued relief policies and measures to stabilize foreign investment, including "end-to-end" services to large-scale foreign-invested projects under construction to guarantee completion as planned. As the economy gradually reopens and new investment liberalization policies are implemented (e.g. the new Foreign Investment Law and removal of foreign ownership limitations in the financial and automotive industries), there are signs that market-oriented FDI is resuming. For instance, Starbucks (United States) announced a $130 million investment to open a roasting facility as part of its Coffee Innovation Park in Jiangsu, the company's largest manufacturing investment outside of the United States and its first in Asia. Positive growth in FDI inflows and exports in April (a reported 12 per cent and 4 per cent, respectively) suggest an improving investment and production situation, although the growth numbers may represent a temporary catch-up due to pent-up activity in the previous months.

Other external factors underscore the weak FDI outlook. The slump in global demand in electronics, automotive and other products is expected to weigh on existing production capacity and export-oriented investment. Declining corporate earnings of MNEs will have an impact on reinvestment. Investment diversification and production reshoring driven by the pressure to build supply chain resilience in the post-pandemic world will add pressure to the country's efforts to attract FDI. The continued uncertainty about the trade tensions with the United States could further undermine investor confidence in an already tightening global investment environment.

The FDI outlook for Hong Kong, China is bleak because of declining corporate earnings and the impact of the continuing social unrest on the economy. High reinvested earnings by MNEs is a key feature of FDI in the economy. Some 80 per cent of FDI between 2013 and 2018 was financed through reinvested earnings of affiliates. Announced greenfield investment has also fallen significantly. The number and value of announced greenfield investments in the first quarter of 2020 were, respectively, only one-third and one-half of the quarterly average of 2019.

In the Republic of Korea, the economy contracted 1.4 per cent in the first quarter of 2020. Realized FDI reported by the Korean Government for the first quarter of this year declined 18 per cent to $2.4 billion, with manufacturing FDI shrinking by 52 per cent to $431 million from a year earlier.[7] The decline is likely to continue in 2020 as the pandemic continues to affect the earnings and investment capacity of companies in the United States and Europe, the two major sources of investment in the country.

Following high inflows in 2019, *South-East Asia* has not been spared the impact of the pandemic. The region is experiencing a significant economic slowdown, including a major disruption of production and supply chains in many industries. Lockdown measures have led to factory stoppages. Major automotive manufacturers in Thailand such as Mazda, Mitsubishi and Nissan (all Japan) have temporarily halted production. Ford (United States) has temporarily suspended production in Thailand and Viet Nam, while Toyota (Japan) has done the same at plants in Indonesia and Thailand. Supply chains of GVC-intensive manufacturing industries were already disrupted by lockdowns in China and other countries, which affected the flow of parts and components to factories in this subregion. Factories in Indonesia, Thailand and Viet Nam source between 40 per cent and 60 per cent of electronics parts and components from China. In the apparel industry, supply chain disruption of raw materials from China has also directly affected the subregion. More than 55 per cent of inputs for apparel factories in Cambodia, Myanmar and Viet Nam come from China.

The slump in global and regional demand is likely to lead to further scaling down of factory operations in the automotive, electronics and apparel industries. In the automotive industry, Nissan reduced production in Thailand in response to slowing demand[8] and is to close a plant in Indonesia.[9] In the important export industry of apparel, many factories in Cambodia,

Myanmar and Viet Nam have temporarily closed. Factory stoppages in the first half of the year were triggered by the cancellation of or decline in orders from distributors and retailers in Europe and the United States.[10] They include Primark (United Kingdom), Zara (Spain) and JC Penney (United States).

The slowdown in manufacturing is expected to affect investment throughout 2020 and 2021. Announced greenfield investment in automotive production in the first quarter of 2020 fell by 67 per cent to $628 million and in computer and electronics by 36 per cent to $752 million as compared with the quarterly average of 2019. The number of announced greenfield investment projects in Singapore in the first quarter fell by 20 per cent; investment commitments in Indonesia and Viet Nam declined by 10 per cent. These three countries were the subregion's largest FDI recipients, together receiving more than 80 per cent of inflows in 2019. M&A sales also dropped, by 87 per cent in the first three months. Weak corporate earnings of South-East Asia MNEs and foreign affiliates will further hamper investment.

Market-oriented investment in construction, real estate, hospitality and other services will also be significantly affected by the economic slowdown. Longer term, a few countries with low labour cost advantages (e.g. Indonesia and Viet Nam) could fare relatively better as MNEs pick up operations. They could benefit from MNE decisions to diversify geographical risks and build more resilient supply chains. The relocation of production facilities to the region from East Asia, already ongoing due to trade tensions, is expected to continue.

In *South Asia*, FDI is also expected to contract sharply. In the first quarter of 2020, the number and value of greenfield investments declined by 4 and 31 per cent, respectively, and M&As fell by 56 per cent from their 2019 quarterly average to $1.7 billion, signaling a reversal of the growth trend in the subregion. In India, the biggest FDI host in the subregion, with more than 70 per cent of inward stock, the number of greenfield investment announcements declined by 4 per cent in the first quarter, and M&As contracted by 58. However, the country's economy could prove the most resilient in the region. FDI to India has been on a long-term growth trend. Positive, albeit lower, economic growth in the post-pandemic period and India's large market will continue to attract market-seeking investments to the country.[11]

Nevertheless, the magnitude of the logistical challenges during both the lockdown and the recovery remain a big downside risk for FDI in the medium term. The digital economy and real estate and property development, two industries that attracted growing FDI before the pandemic, could evolve in different directions. Whereas the digital economy will likely see continued investments, real estate and property development will face significant pressures from slowing demand and financing constraints. India's most sought-after industries, which include professional services and the digital economy, could see a faster rebound as global venture capital firms and technology companies continue to show interest in India's market through acquisitions. Investors concluded deals worth over $650 million in the first quarter of 2020, mostly in the digital sector.[12] Large deals in energy were also concluded, such as the acquisition by Total (France) of Adani Gas (India), valued at $800 million.

West Asia is confronting the dual economic shock of plummeting oil prices and the pandemic, which is expected to result in an economic contraction of 3 to 4 per cent (IMF, 2020a). FDI inflows could drop significantly in 2020. Major FDI recipient industries such as oil and gas, tourism, aviation and financial services are likely to be acutely affected. There are already significant downward revisions in the projected earnings of major MNEs from the region, a large number of which operate in the most severely affected industries. For example, MNEs from Saudi Arabia, Turkey and the United Arab Emirates have reported downward earnings revisions of 67 per cent, 27 per cent and 21 per cent, respectively. Similarly, the value and number of announced greenfield projects in the first quarter of 2020 declined, by 56 and 34 per cent, respectively, compared with the quarterly average of 2019.

Although the immediate prospects for investment in West Asia are bleak, there are some indications that FDI will recover in the medium term. First, investment levels before the current crisis were already at a fraction of earlier peak levels and not commensurate with the economic potential of the region. Second, major economies in the region have announced large stimulus packages, which might limit the economic damage of the crisis and provide some cushion for FDI inflows. Third, recent announcements of some major investment projects in West Asia, despite the multifaceted crises, suggest persistent investor confidence. For example, in February of 2020, Marubeni (Japan) announced a $1.5 billion investment to develop a combined-cycle gas-turbine power plant in Fujairah, in the United Arab Emirates, with a planned capacity of 2.4 gigawatts. Also in February, Air Products, a subsidiary of Air Products and Chemicals (United States), proceeded with the groundbreaking ceremony of an $800 million industrial gas complex in Jubail, Saudi Arabia, which is projected to be completed by 2023.

An improved investment environment in some countries could also mitigate the downward impact on investment in the medium term. For instance, FDI to Saudi Arabia could benefit from new regulations that permit 100 per cent foreign ownership in several industries, including tourism, and the easing of investor licenses and visa regulations. Similarly, the approval of the positive list for FDI in the United Arab Emirates in April 2020 paves the way for full foreign ownership in many activities and could support investment flows to the country in the longer term.

Inflows in 2019

FDI inflows to *East Asia* declined by 13 per cent to $233 billion in 2019. Inflows to *China*, the world's second largest FDI recipient, rose marginally and reached an all-time high of $141 billion despite trade tensions. Continuing investment liberalization and removal of investment restrictions contributed to a 13 per cent increase in investment in services industries, which accounted for more than 70 per cent of total FDI flows. Project realization and investment expansion in manufacturing, such as by BASF (Germany), Exxon Mobil (United States) and automotive MNEs such as Tesla (United States), Toyota (Japan), Volkswagen and Daimler (both Germany), helped sustain the rise.

The composition of major investors in China was largely unchanged. Inflows from the United States and Europe declined, but regional investment continued to increase as flows from ASEAN countries grew. MNEs from the Republic of Korea and Japan continued their strategic adjustment in China, shifting some labour-intensive production abroad while investing in high-end production activities. For example, Samsung closed its last mobile phone manufacturing factory in China in October 2019 but in the following month invested $8 billion in memory chip production there.

Investment flows to *Hong Kong, China* declined by 34 per cent to $68 billion in 2019, recording a fourth consecutive annual decrease, with $48 billion in equity divestment since the onset of social unrest. Flows to the *Republic of Korea* dropped by 13 per cent, to $11 billion, due to trade tensions with Japan and the end of tax breaks for foreign investors in 2018. Investment flows from major investors, such as China, the EU and Japan, declined. Investment from the United States, in contrast, increased after the exceptionally low level in 2018, but they remained significantly below the 2013–2017 annual average.

***South-East Asia* continued to be the region's growth engine last year.** FDI to the subregion rose to a record level of $156 billion (a 5 per cent rise) on the back of high investment flows into Singapore, Indonesia and Viet Nam, in that order. Inflows to other ASEAN member States, except for Cambodia, were flat or declined. Strong investments from East Asia, the United States and from within ASEAN pushed up inflows.

Continued relocation of factories and labour-intensive activities, partly as a response by MNEs aiming to circumvent United States–China trade tensions, also contributed to the surge in investment (*AIR 2019*).

Singapore, the subregion's biggest recipient, recorded a 15 per cent rise in FDI to $92 billion, its highest ever level. Strong investment in electronics manufacturing, energy, the chemical industry and services pushed up inflows. Major investments in 2019 included the expansion by Micron Technology (United States) of its semiconductor operation and the new complex of gas giant Linde (United Kingdom). The services sector received sizeable investment in finance, wholesale and retail trade, and in the digital economy. The expansion of headquarters functions by MNEs also contributed to the record inflows. They include Freshworks (United States), Dyson (United Kingdom) and Bombardier (Canada). In M&As, Qualcomm (United States) acquired local firm RF360 for $3 billion in a 5G infrastructure deal. Other megadeals involved Singapore software and technology companies such as the acquisition by Softbank (Japan) of an undisclosed stake in Grab for $1.5 billion and the acquisition by YY Inc (China) of a 68 per cent stake in Bigo Technology for $1.4 billion.

Inflows to *Indonesia* grew by 14 per cent to a record level of $23 billion, with strong investments in manufacturing, financial services and mining. Investments in these industries accounted for about 65 per cent of inflows in 2019. Asian companies (mainly from Japan and within ASEAN) were the largest investors, with companies based in Singapore and Japan being major investors in manufacturing. Korean companies have also been active. For instance, Lotte Chemical is building a $4.3 billion petrochemical complex and Hyundai a $1.5 billion vehicle plant. In financial activities, MNEs from Japan and the Republic of Korea were major investors. Investment in the digital economy remained dynamic, underscoring the growing attractiveness of the country for e-commerce and other digital operations. In addition to FDI, many foreign MNEs participated in the country's infrastructure and development of special economic zones (SEZs) through non-equity means, including as engineering, procurement and construction contractors.[13]

Inflows to *Viet Nam* rose marginally and reached an all-time high of $16 billion, with robust inflows into manufacturing. Strong investment from Japan and the Republic of Korea and from intraregional sources played a role in sustaining the high level of inflows. Relocations of investment by MNEs to avoid the trade tensions between the United States and China helped push up FDI. Companies such as Intel (United States), Nintendo (Japan) and Kyocera (Japan) have relocated operations from China to Viet Nam.

Cambodia recorded its highest ever FDI, $3.7 billion, because of robust investments in manufacturing and services. Most investments came from China, intra-ASEAN sources and Japan. FDI in *Malaysia* was flat at $8 billion. A few M&A megadeals such as in health care and mining (e.g. the acquisition of a stake in IHH Healthcare by Mitsui & Co (Japan) and in Seb Upstream by OMV (Austria)) supported the level of investment in that country. Investment in other ASEAN member States (e.g. Myanmar, the Lao People's Democratic Republic, the Philippines and Thailand) fell.

FDI to *South Asia* grew 10 per cent to $57 billion. The growth was driven largely by a rise in investment in India, which further relaxed investment barriers in mid-2019 (including in retail, insurance and downstream coal processing). FDI to *India* increased 20 per cent to $51 billion, sustaining the country's upward FDI trend. Most of the investments were in the information and communication technology (ICT) and the construction industry. ICT investments into India have evolved from information technology services for global companies to the rapidly growing local digital ecosystem, with many local and regional digital champions, particularly in e-commerce (such as Flipkart and Zomato), attracting international investment. A number of megadeals also contributed to M&A activity.

These included investments in internet companies, which amounted to $2.7 billion,[14] as well as the $7 billion acquisition of Essar Steel (India) by a Japanese-Indian joint venture.

Inflows to *Bangladesh*, an important FDI recipient in South Asia, fell by 56 per cent to $1.6 billion. The decline reflects an adjustment from a record-high level in 2018. The export-oriented apparel industry remains an important FDI recipient, with major investors from the Republic of Korea, Hong Kong, China and China. In 2020, the sector is expected to be severely affected by both factory close-downs and falling global demand for apparel. As of April 2020, the country's garment manufacturers and exporters association estimated that more than $3 billion worth of exports have been cancelled or suspended. In *Pakistan*, FDI recovered in 2019, growing 28 per cent to $2.2 billion after a deep fall of 30 per cent in 2018 as the country faced balance-of-payment challenges. The growth was driven by equity investments in the energy, financial, and textiles industries, with major investors from China and the United Kingdom.

FDI to West Asia declined by 7 per cent to $28 billion. The geographical spread of FDI flows to *West Asia* remained uneven. Just three countries (Turkey, the United Arab Emirates and Saudi Arabia) accounted for the majority of inflows in 2019. The United Arab Emirates was the largest FDI recipient in the subregion, with flows of almost $14 billion, growing by a third from the previous year. This was largely due to major investment deals in oil and gas, primarily in Abu Dhabi. For example, BlackRock (United States) and KKR Global Infrastructure (United States) acquired a 40 per cent ownership interest in the pipeline assets of the Abu Dhabi National Oil Company for about $4 billion. Also, Eni SpA (Italy) acquired a 20 per cent stake in Abu Dhabi Oil Refining Company for more than $3 billion. Abu Dhabi has supported FDI inflows to the United Arab Emirates for the past few years with its streamlined procedures and capacity in facilitating megadeals. In 2019, the Emirate further strengthened its commitment to foreign investment by launching the Abu Dhabi Investment Office under the Ghadan 21 programme, a broad-based initiative to enhance the commercial ecosystem, including by cultivating an attractive and diversified environment for FDI.

Flows to *Saudi Arabia* increased for the second consecutive year by a further 7 per cent to $4.6 billion, mainly because of a few large M&A deals. The new investment policy and a broader economic reform programme under the Saudi Vision 2030 initiative are intended to improve the country's investment environment and promote economic diversification. Several large non-oil investment deals took place in 2019. For instance, Tronox (United States) acquired a stake in National Titanium Dioxide Company for more than $2 billion, RAM Holdings (United Arab Emirates) invested $600 million to increase its ownership in Banque Saudi Fransi and Tenaris (Luxembourg) acquired a stake in Saudi Steel Pipe Company for $144 million. A major greenfield project is being implemented by Pan-Asia Pet Resin (China), a plastic bottle supplier, which launched a facility in Jazan City valued at approximately $1 billion.

FDI flows to *Turkey* declined significantly (by 35 per cent), to nearly $8.4 billion in 2019. The slowdown was triggered by global economic uncertainty as well as weak economic growth. Unlike other major economies in West Asia, which are rich in natural resources, Turkey's economy is more exposed to global macroeconomic conditions, which thus limited FDI flows in 2019.

FDI flows to other countries in West Asia in 2019 were flat or declined. Investment into Lebanon decreased by 20 per cent to $2.1 billion, largely due to political instability, macroeconomic imbalances and a foreign currency crisis. Investment in the country was directed to the services sector, and nearly one-third came from other countries in the subregion. Inflows to Jordan declined by 4 per cent to about $900 million, but were still at half the level of 2017. FDI to Jordan was diversified, with notable investments in manufacturing, real estate and services. The Government introduced a new initiative to

encourage investment, including offering investors a single-window application facility through the Jordanian Investment Commission. FDI to Bahrain fell by 43 per cent to below $1 billion in 2019. The main reason was the country's investment profile, which centres on light manufacturing and services, which are more sensitive to global and regional economic headwinds. However, the Government is striving to enhance FDI flows by promoting non-traditional industries such as health care and the digital economy.

Outflows in 2019

Outward FDI flows from *Asia* declined by 19 per cent to $328 billion due to a 52 per cent drop in M&A purchases by Asian companies in 2019 (table B), falling commodity prices and a decline in outward investment from MNEs based in major economies in the region. Outward FDI flows from *East Asia* recorded a third consecutive annual decrease, by 21 per cent, to $224 billion. This was due to an 18 per cent decrease of outflows from China, to $117 billion, and a 28 per cent decline in investment outflows from Hong Kong, China, to $59 billion. Investment from China, the largest developing-country investor, declined for the third consecutive year from its peak in 2016. Chinese M&A purchases globally decreased to a record low for the past 10 years. The decline was attributed to continued restrictions on outward investment, geopolitical tensions and a challenging environment in terms of global trade and investment policy. Outflows from the Republic of Korea declined by 7 per cent to $36 billion.

Investment from *South-East Asia* declined from $63 billion in 2018 to $56 billion, primarily because of a drop in investment from Indonesia and Thailand. Flows from the subregion's two largest investors (Singapore and Malaysia) rose but were not sufficient to compensate for the declines registered in the other ASEAN member States. Singapore remained the largest source of intraregional investment and a major investor in India. MNEs from the subregion are also notable investors in East Asia, mainly in China, strengthening intraregional connections through investment and production between the two subregions. Companies from South-East Asia were active in cross-border M&A activities, as well. Indorama Ventures (Thailand) acquired the chemical intermediate business of Huntsman Corporation (United States) for $2 billion, and GIC (a sovereign wealth fund in Singapore) acquired the logistics real estate portfolio of Apollo Global Management (Germany) for $1 billion.

Outflows from *South Asia* grew 6 per cent, driven by investment from India. Yet they remained small, representing only 1 per cent of global outflows. Companies in India are the subregion's largest investors, with more than 90 per cent of outflows in 2019. Investments from India are expected to decline in 2020, with the largest MNEs revising their earnings down by 25 per cent in early 2020 due to the impact of the pandemic.

FDI outflows from *West Asia* contracted significantly, from $50 billion in 2018 to $36 billion in 2019. In Saudi Arabia, outward investment declined from $23 billion in 2018 to $13 billion, and firms in Kuwait divested $2.5 billion of overseas investments. Major outward investments announced in 2019 included a $10 billion project by Saudi Aramco (Saudi Arabia) to develop oil and gas facilities in China and a $9 billion oil project by Qatar Petroleum to expand its existing facilities in the United States, although it is unclear when these projects will be fully realized.

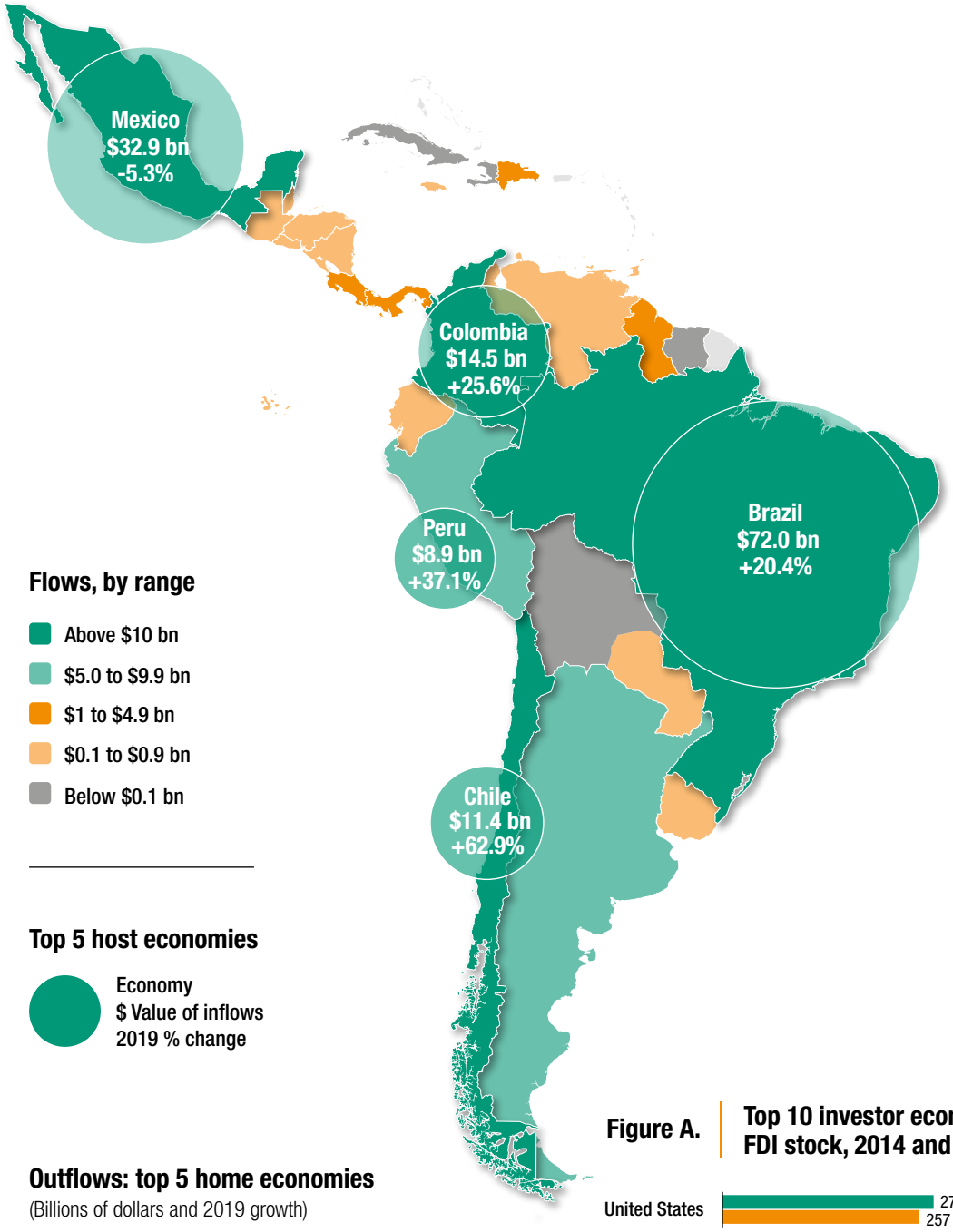
LATIN AMERICA AND THE CARIBBEAN

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
164.2 bn

2019 Increase
+10.3%

Share in world
10.7%



Flows, by range

- Above $10 bn
- $5.0 to $9.9 bn
- $1 to $4.9 bn
- $0.1 to $0.9 bn
- Below $0.1 bn

Top 5 host economies

Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Billions of dollars and 2019 growth)

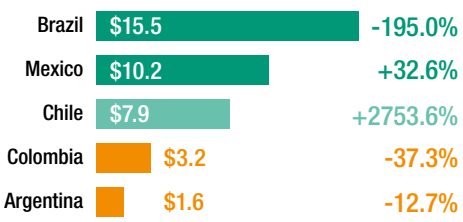
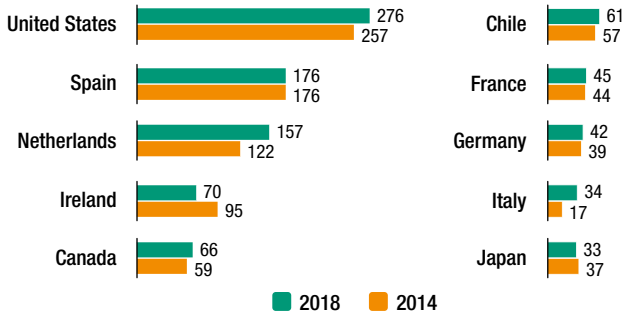


Figure A. Top 10 investor economies by FDI stock, 2014 and 2018 (Billions of dollars)



HIGHLIGHTS

- Pandemic expected to halve FDI in region in 2020
- Industries most affected: extractives, tourism, automotive
- 2019 registered a 10 per cent increase in FDI

Figure B. FDI inflows, 2013–2019
(Billions of dollars and per cent)

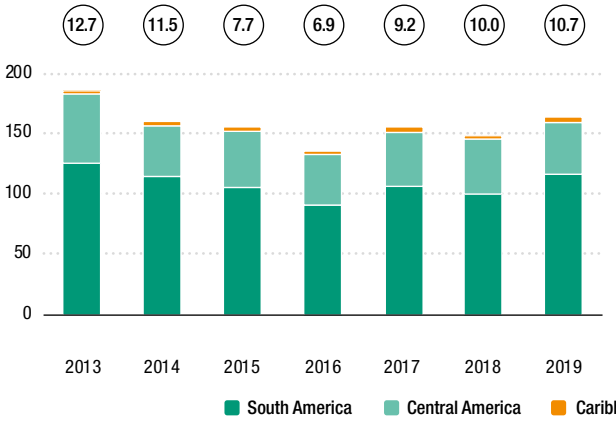
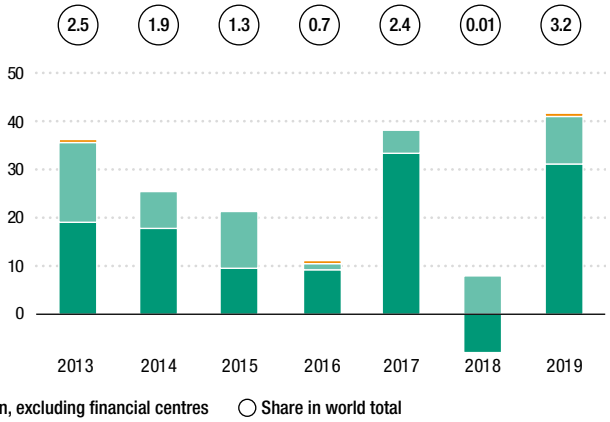


Figure C. FDI outflows, 2013–2019
(Billions of dollars and per cent)



South America · Central America · Caribbean, excluding financial centres · Share in world total

Table A. Net cross-border M&As by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**39 148**	**23 854**	**3 469**	**6 023**
Primary	**6 237**	**1 491**	**547**	**-44**
Manufacturing	**9 429**	**2 706**	**348**	**1 320**
Food, beverages and tobacco	2 063	1 042	-757	1 285
Chemicals and chemical products	6 987	193	1 930	-127
Pharmaceuticals, medicinal chemicals and botanical products	108	311	258	479
Services	**23 482**	**19 657**	**2 573**	**4 747**
Electricity, gas and water	9 040	11 331	57	111
Trade	483	393	1 317	1 276
Transportation and storage	2 019	4 016	59	155
Information and communication	8 384	1 014	4	1 282
Financial and insurance activities	2 265	1 826	1 554	1 971
Business services	728	690	-1 284	-38

Table B. Net cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**39 148**	**23 854**	**3 469**	**6 023**
Developed economies	**28 612**	**16 404**	**1 361**	**3 189**
France	2 229	9 191	-	12
Luxembourg	999	1 147	-	-
Spain	-2 963	688	-596	443
Canada	5 728	-1 206	-	316
United States	12 704	4 014	-418	771
Japan	587	2 122	-	-
Developing economies	**10 486**	**7 102**	**2 108**	**2 834**
China	5 731	3 142	-	-22
Brazil	613	1 261	404	1 429
Colombia	85	-160	78	1 389
Mexico	1 645	1 423	118	-160

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	LAC as destination		LAC as investor	
	2018	2019	2018	2019
Total	**78 520**	**112 315**	**18 874**	**18 453**
Primary	**13 445**	**8 026**	**5 667**	**4 140**
Manufacturing	**26 320**	**41 204**	**5 282**	**5 087**
Food, beverages and tobacco	4 250	3 147	675	832
Paper, printing and packaging	1 598	5 526	193	85
Basic metal and metal products	2 348	4 405	1 317	1 550
Motor vehicles and other transport equipment	6 676	10 087	1 123	48
Services	**38 755**	**63 084**	**7 925**	**9 226**
Electricity, gas, steam and air conditioning supply	8 008	25 701	-	1 697
Transportation and storage	5 579	8 270	1 462	432
Accommodation and food service activities	7 506	6 691	2 539	2 647
Information and communication	8 264	9 272	1 942	2 431
Financial and insurance activities	3 169	3 626	299	903

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

Partner region/economy	LAC as destination		LAC as investor	
	2018	2019	2018	2019
World	**78 520**	**112 315**	**18 874**	**18 453**
Developed economies	**58 828**	**79 202**	**6 178**	**4 303**
France	2 782	5 371	107	54
Germany	4 475	7 257	62	567
Spain	9 724	16 079	419	334
United States	17 943	19 204	2 730	1 933
Developing economies	**18 891**	**32 729**	**12 642**	**14 071**
China	1 527	10 827	818	221
Brazil	1 199	1 031	540	1 630
Chile	2 359	2 140	259	390
Colombia	251	1 181	1 090	1 164
Peru	322	270	4 622	7 024
Mexico	3 288	6 398	1 849	1 130

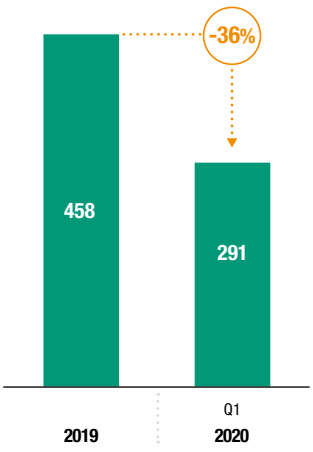
The rapid spread of the coronavirus and the expected severe economic downturn compound an already weak economic situation to discourage investors into the region. FDI for 2020 is expected to halve. Commodity exporters in the region face a double shock of collapsing prices and lower volumes of exports to major trading partners. Investment in extractives, the largest FDI sector in the region, already tumbled in the first quarter and is not expected to recover this year. Flows to the tourism industry, a key services sector industry in many economies of the region, especially in the Caribbean, are also sinking. In the manufacturing sector, two important industries in the region, automotive and textiles, will suffer both supply and demand shocks. Central America and the Caribbean might see some new international investment to expand production of medical equipment. In 2019, FDI in Latin America and the Caribbean still grew by 10 per cent to $164 billion, driven by increased flows to Brazil, Chile and Colombia. Outflows grew to $42 billion, sustained by intraregional flows and a reduction of negative outflows that dampened the totals in previous years.

Prospects

Investment flows to the region are expected to halve in 2020 from the $164 billion received last year. The pandemic arrived relatively late in the region and compounded both political and social unrest and structural weaknesses to push the region's economies into a deep recession, exacerbating challenges in attracting foreign investment. Projections for this year are for a contraction in GDP of more than 5 per cent (IMF, 2020a).

Data on announced greenfield investments show a decline by 36 per cent in the number of projects in the first quarter of this year (figure II.7). Brazil reported direct equity investment flows[15] at almost half of last year's quarterly average. In Mexico new equity inflows dropped by 31 per cent.[16] However, this is still a conservative projection as most of the impact on projects will become evident starting from April, after the lockdown (most countries in the region closed down around mid-March; the United States, the most important trade and investment partner for the region, did so a week later). This is confirmed by expectations of the private sector in Mexico in the central bank's monthly survey: the outlook for incoming FDI in 2020 fell sharply in April, with expected net inflows 38 per cent lower than those forecast in January.[17] The shock is also reflected in the most recent data available: the number of foreign acquisitions in the region decreased every month with respect to the average number in 2019 to drop by a total 78 per cent in April (figure II.8).

Figure II.7. **Latin America and the Caribbean: Average quarterly number of announced greenfield investment projects, 2019 and Q1 2020** (Number)

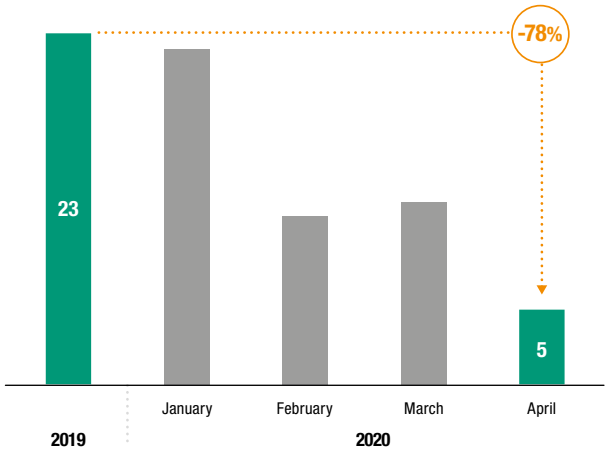


Source: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fDimarkets.com).

The shock will have different impacts across sectors, with commodities and tourism and transportation among the most severely hit. In manufacturing, automotive and textiles, two important industries in the region, will suffer both supply and demand shocks. The region's commodity exporters, a sector that normally accounts for sizeable shares of both inward and outward FDI flows, are facing a double shock of collapsing prices for commodities (oil, copper, iron ores, soya beans) and lower volumes of exports to major trading partners. The extraction and processing of oil, coke and

petroleum take up 32 per cent, 82 per cent and 40 per cent of total FDI in Brazil, Argentina and Colombia, respectively. Mining accounts for 20 to 30 per cent of FDI stock in Chile and Peru, the world's largest producers of copper. In these industries the sales of assets, privatizations in the case of Brazil and new investments in production and exploration are likely to suffer delays. First-quarter data for Brazil show foreign equity investment in oil and gas extraction dropped by 77 per cent. The number of announced greenfield projects for oil and gas extraction and mining projects fell by 25 and 40 per cent, respectively.

Figure II.8. **Latin America and the Caribbean: Average monthly number of cross-border M&As, January–April 2020** (Number)



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

The Caribbean and Central American economies will be hard hit by the sharp downturn in tourism. The industry is vital to the economy: FDI in tourism in this region can account for as much as 30 per cent of stock (e.g. in the Dominican Republic). Announced projects to construct tourism infrastructure fell by 45 per cent in the first quarter of this year compared with last year's quarterly average. The textile industry is also severely affected. It, too, is a crucial industry for the poorest economies of the region, including El Salvador, Guatemala, Honduras, Nicaragua and Haiti, where it can represent 30 to 40 per cent of inflows.[18] The industry found a lifeline in the form of orders to produce face masks, gowns and other medical gear; nevertheless the impact of the crisis will lead to foreign affiliate exits[19] while new investment projects this year have come to a halt.

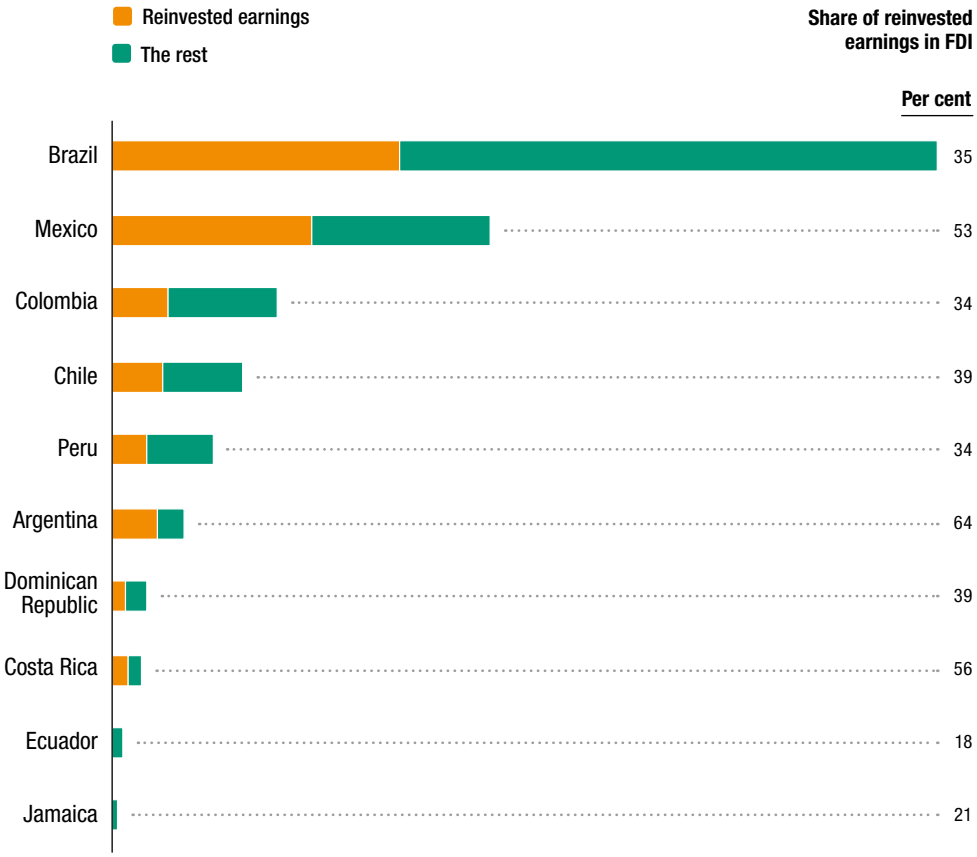
The automotive industry, one of the hardest hit by the pandemic, is contracting severely; in the first quarter the number of announced greenfield projects to set up new factories decreased by over 73 per cent. Mexico will be among the most affected, as FDI in this industry last year accounted for more than 20 per cent of inflows. The high level of integration of its industry in the United States automotive value chain also exposes it to supply chain disruptions. In the first quarter, FDI inflows fell by 48 per cent. The industry already suffered in 2019 from uncertainties related to the ratification of the United States–Mexico–Canada Agreement and the addition of several rules to limit the foreign content of cars produced in the United States. However, exposure to international supply chains is not the only factor. In Brazil, where car production is mostly oriented to the domestic and neighbouring markets, first-quarter FDI fell by 64 per cent.

There are some isolated positive signals for specific industries registering an increase in incoming projects. FDI in medical supplies in Costa Rica, the Dominican Republic and Mexico has led to new manufacturing of medical gear, and MNEs already present in these countries are now expanding production. Announced projects for manufacturing medical devices increased by a third in the first quarter. In addition, some MNEs are converting current production facilities to increase capacity, leveraging global and regional value chains. For example HanesBrands (United States) shifted its production from t-shirts and underwear to cotton masks in factories in El Salvador, the Dominican Republic and Honduras. This production, under a United States federal contract, is expected to deliver 5 million or more protective masks weekly. Except for Costa Rica, where SEZs have increasingly specialized in the production of medical devices and protection gear,[20] this industry did not account for a large share of inflows to the region. This recent development could strengthen the position of the region for future flows.

In 2019, Latin America and the Caribbean became a hotspot for FDI in renewable energy – in particular Brazil, with 42 projects announced by foreign investors, representing almost 40 per cent of the regional total. In the first quarter of 2020 the industry still registered an increase of 12 per cent in the number of announced projects. Projects are expected to drop in the second quarter (see chapter I) as economic deterioration will create unfavourable conditions for contract negotiations, rising counterparty risks and delinquencies; in addition, projects now under construction face higher risks of schedule delays and higher costs to import equipment.[21] In many countries, auctions have been suspended. The contrasting trend with fossil fuel energy projects is nevertheless a sign of the commitment of governments in the region to green energy.

Beyond the industry-specific effects, an automatic impact of the crisis on FDI is tightening margins for reinvestments. The shutdowns, falling demand and limited access to trade (for both imports of inputs and exports) are pushing companies towards sizeable losses. Since the beginning of February, major companies in the region revised their earnings expectations for fiscal year 2020 downwards by more than 50 per cent, more than companies in other regions. For major recipient economies in the region, reinvested earnings account for more than a third of inflows, and for some important destinations such as Mexico, Argentina, and Costa Rica they represent more than half (figure II.9). The implications of significant losses in foreign affiliates based in the region directly involve a drop in inflows.

Figure II.9. **Latin America and the Caribbean: FDI inflows and reinvested earnings, 2019** (Volume and per cent)



Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: The figure covers only economies that report reinvested earnings separately.

In the medium term, the implications of COVID-19 for FDI flows to the region will depend on the severity of the economic contraction and the speed of the recovery. As many countries in other regions are starting to ease confinement measures, many in Latin America and the Caribbean are still on an upward slope of the contagion at the beginning of the winter season; this could prolong the health crisis and related economic struggle. The forecast for the region is for a contraction of GDP in 2020 by 5.2 per cent followed by limited recovery of 3.4 per cent in 2021 (IMF, 2020a). The region's economies will be significantly affected by the slowdown in global demand and in particular in their trade partners, notably China and the United States. China is an important importer of raw materials for Argentina, Brazil, Ecuador and Venezuela. It was the first country to reopen its economy, nevertheless prices for commodities will remain subdued. The contraction in the United States will mainly affect Mexico and other countries in Central America, Colombia and the Caribbean.

The Mercosur–EU trade agreement, which could have beneficial longer-term impacts on investment flows between the two groups, is temporarily on hold due to the pandemic. It forced the technical teams to suspend the legal review of the agreement, which must be concluded for parliaments to allow it to enter into force.

Inflows in 2019

In South America in 2019, FDI increased by 16 per cent to $117 billion, driven by higher flows to all major economies of the subregion. *Brazil* registered a 20 per cent increase to $72 billion, with investors attracted by the oil and gas extraction and electricity industries. Economic conditions appeared to improve in the country, and a wide-ranging privatization program was launched in July as part of the administration's efforts to relaunch the economy. During the first nine months of 2019, the Government raised about $20 billion through privatizations and divestments, $1.4 billion in payments for rights to operate infrastructure and about $3 billion in "sales of natural assets," consisting mainly of the State-controlled Petrobras oil exploration areas. The first and biggest of these privatizations involved a gas distribution company – Transportadora Associada de Gas – bought by a consortium of investors led by Engie (France) for almost $8.7 billion. For 2020 the Government was expecting to be able to sell another $35 billion of assets; however, as the coronavirus pandemic is tipping the economy back into recession, the volatility associated with the crisis has worsened the selling conditions, pushing the authorities to postpone most of the announced share sales. Similarly, transactions waiting for regulatory approval have been halted. They include for example the much-awaited sale of Electrobras – Latin America's largest power utility – and the sale of eight refineries by Petrobras worth $10 billion. Sales of oil exploration and production assets are likely to be the most affected by the drop in oil prices, which has erased more than half the market value of Petrobras. The renewable energy industry attracted increasing number of projects in recent years is also experiencing a slowdown following the outbreak of COVID-19. The Government is indefinitely postponing a series of auctions for transmission and generation assets until the pandemic subsides.

In *Colombia,* FDI inflows increased by 26 per cent to $14 billion last year. Some 32 per cent of investment went to the oil and mining industries, while 21 per cent was designated for financial and professional services, and manufacturing received 11 per cent. Flows into the oil industry rose by 11 per cent, to $2.8 billion, and into the mining industry by 29 per cent, to $1.8 billion. With the exception of the logistics services industry all other industries also saw investment increases. During 2019, oil production rose as a result of the award of 31 contracts to oil companies for exploration and extraction. This year was expected to be a turning point for the oil industry, with an increase in investment of more than 20 per cent;

this target is now unlikely to be met, given the current price of oil. In addition, prolonged low coal prices due to a supply glut and a global recession, especially in China, the biggest importer, will hurt investment as royalties from coal plunge.

Flows into *Chile* increased by 63 per cent to $11 billion in 2019, sustained by investment in utilities, mining and services. FDI inflows decelerated sharply in the last quarter of 2019 following the protests that broke out in mid-October, significantly weakening the investment climate. This period was characterized by a marked increase in uncertainty, following the subsequent announcement that the Government would redraft the constitution. Despite falling copper prices during 2019, the devaluated peso allowed for increased margins for mining companies because as much as half of their expenditure is denominated in pesos. In contrast, plummeting lithium prices prompted some miners to put off near-term investments. Albemarle (United States) and SQM (Chile), the main lithium miners in Chile, announced in mid-2019 that they were postponing extensions of their operations. The lithium auction held in 2018 (*WIR18*) saw all three winners, including electronics giant Samsung SDI (Republic of Korea), Sichuan Fulin Industrial Group (China), and steelmaker Posco (Korean), subsequently drop out. For 2020, the pandemic spread has prompted major mining companies to announce a suspension of activities and a delay in expansion projects.

In *Peru,* flows increased by 37 per cent to $8.9 billion last year, boosted by new equity investments which more than tripled to almost $3 billion. Non-financial services received more than 30 per cent of inflows, growing by 16 per cent to $2.8 billion. Mining had a similar share at $2.5 billion, while the energy industry received $1.7 billion. Manufacturing accounted for only $734 million. During 2019 mining investment continued to post double-digit growth, as firms ramped up their processing capacity. Like other economies in the region reliant on mining activities, Peru will suffer from the global economic recession, especially for the mining of copper and zinc, but may possibly benefit from the stable demand for gold, which is perceived as a safe-haven asset. The agriculture sector will also be negatively affected by slowing demand.

Flows to *Argentina* halved to $6.2 billion in 2019, hampered by a deepening economic crisis. The economy contracted 2 per cent, the inflation rate averaged above 50 per cent, taxes increased sharply and capital controls were imposed. Companies such as Amazon, General Motors and Nike (all United States) have been reported in local media to be freezing investment plans. The prospects for the Vaca Muerta shale gas field to be developed and provide much-needed export revenue are fading as the intensive foreign investments needed are drying up. Uncertainty about the restructuring of foreign debt was already negatively influencing inflows in 2020 before the COVID-19 outbreak.

In Central America FDI inflows decreased by 5 per cent in 2019, to $43 billion. Flows to *Mexico* decreased by 5 per cent to $33 billion. As usual, the manufacturing sector absorbed almost half of FDI inflows (47 per cent) with $16 billion, driven by the automotive industry (representing 21 per cent of FDI). That amount was a decrease of 6 per cent from 2018. The auto parts segment, which received about half of the flows to the industry, suffered a 31 per cent decrease, owing to uncertainty related to the ratification of the new regional trade agreement (which in the United States and Canada took place only in early 2020). Most services industries registered an increase in flows. Financial services, representing about 15 per cent of FDI, saw inflows more than double; trade was up 9 percent and media registered a large increase (61 per cent). FDI to the energy generation industry fell sharply (by 75 per cent to $1.3 billion) after private participation was curtailed to support the national oil company and the electricity utility. Investor confidence was negatively affected by a public vote to stop a $1.4 billion brewery project of Constellation Brands (United States) that was already two-thirds complete. As economic growth forecasts for 2020 were being

revised sharply downwards in the face of the pandemic, the Government launched a new energy plan worth about $13 billion that foresees the participation of private investors in selected projects and the acceleration of public expenditures on infrastructure. Projections for 2020 GDP growth[22] place Mexico among the worst hit by the crisis because of its integration with the United States manufacturing sector, especially in the automotive value chain, and because of its reliance on tourism, remittances and oil.

In *Costa Rica,* FDI inflows increased by 13 per cent to $2.5 billion in 2019. Investment in SEZs, which represented almost two-thirds of the inflows, grew by 24 per cent to $1.6 billion. Investment in high-skill industries such as high-tech medical equipment has been considerable in recent years, with that industry becoming Costa Rica's main exporter. After registering increasing numbers of COVID-19 cases, the Government adopted temporary export restrictions on certain categories of critical medical supplies, but producers operating in SEZs were not affected. MNEs from SEZs were invited to join local companies, academia and the public sector to produce medical equipment for the COVID-19 emergency under an initiative spearheaded by the Ministry of Health. The Collaborative Design of Costa Rica initiative aims to leverage the transfer of knowledge and technology from SEZs based on their experience in the production of medical devices. It already has engaged the collaboration of important United States MNEs.

In the Caribbean, excluding financial centres, flows increased by 47 per cent to $4 billion in 2019. Inflows into the *Dominican Republic* increased by 19 per cent to $3 billion, pushed by investments in the telecommunication and power industries. The United States maintained its central role as investor with a share of almost 32 per cent. Mexico's share of inflows increased sharply to more than 21 per cent due to América Móvil's investment programmes through 2022 (for a total of $1 billion) to prepare for the deployment of 5G connectivity. This could give support to the development of the IT services industry as envisaged by the initiative República Digital, launched by the Government with the aim to attract more high-tech foreign investment. In the Dominican Republic, the tourism industry attracted almost 30 per cent of all flows, with cruise tourism sustaining a high demand for accommodation and restaurants. New projects for ecotourism infrastructure are now postponed and risk cancellation. Lower trade also imperils recent efforts to promote air cargo with the objective to develop the island into a logistics hub in the Caribbean. In the first months of this year, MNEs in SEZs producing medical gear were expanding operations.

Outflows in 2019

Outward investment by Latin American MNEs increased sharply in 2019 to $42 billion, mostly driven by a reduction of negative outflows. Brazilian, Mexican and Chilean MNEs were the most active, supported by falling interest rates at home. Brazilian companies especially appear to have suspended their practice of collecting funds through foreign affiliates to finance operations at home, as the domestic interest rate has fallen to historical lows. This shift is combined with some important acquisitions abroad, especially in the retail industry. A notable example is Cia Brasileira de Distribuicao's acquisition of department store Éxito (Colombia) from Groupe Casino (France) for almost $1.1 billion.

Intraregional flows also increased, accounting for almost three-quarters of all outgoing announced greenfield projects. For example, Peru attracted regional MNEs in the extractive industries (Grupo México), tourism (Grupo Selina (Panama)) and textiles (Falabella (Chile)).

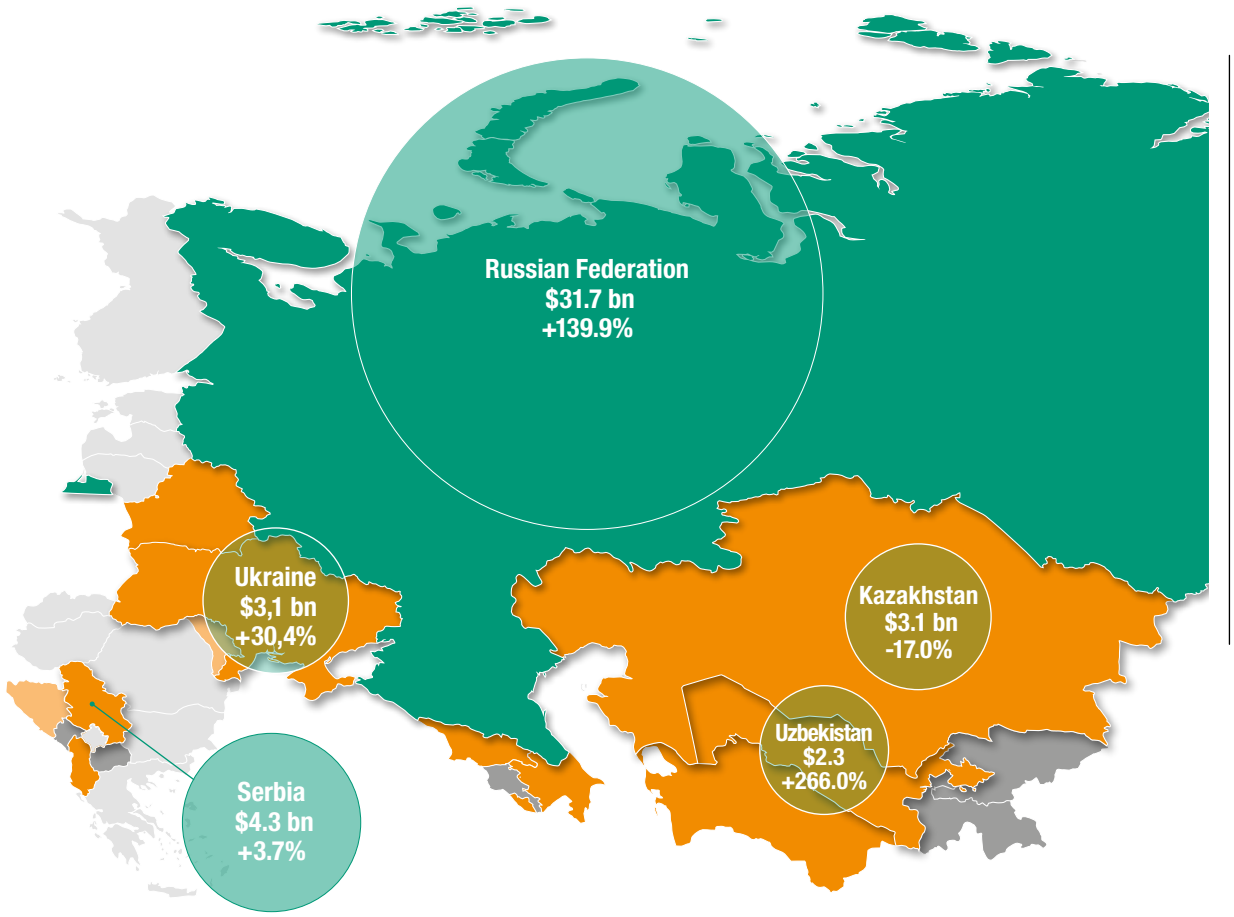
TRANSITION ECONOMIES

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
$ 54.9 bn

2019 Increase
+59.1%

Share in world
3.6%



Flows, by range

- Above $10.0 bn
- $5.0 to $9.9 bn
- $1.0 to $4.9 bn
- $0.5 to $0.9 bn
- Below $0.5 bn

Top 5 host economies

Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Billions of dollars and 2019 growth)

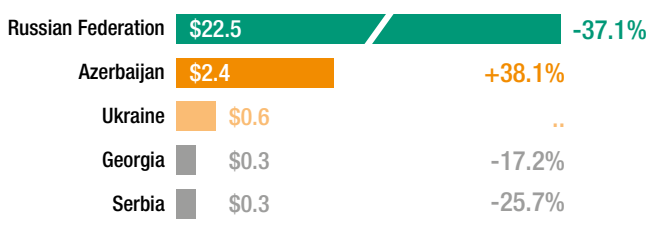
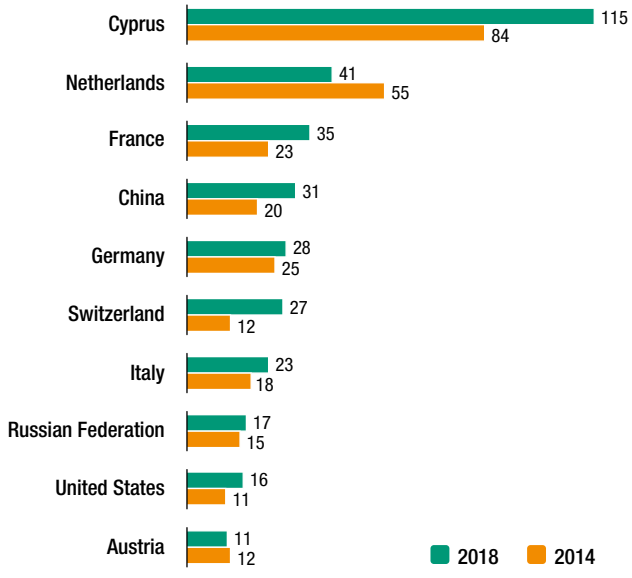


Figure A. Top 10 investor economies by FDI stock, 2014 and 2018 (Billions of dollars)



HIGHLIGHTS

- Impact of pandemic and low oil prices to hit FDI hard
- Slide in outward FDI continues due to falling MNE earnings
- In 2019, FDI rose, notably in the Russian Federation

Figure B. FDI inflows, 2013–2019
(Billions of dollars and per cent)

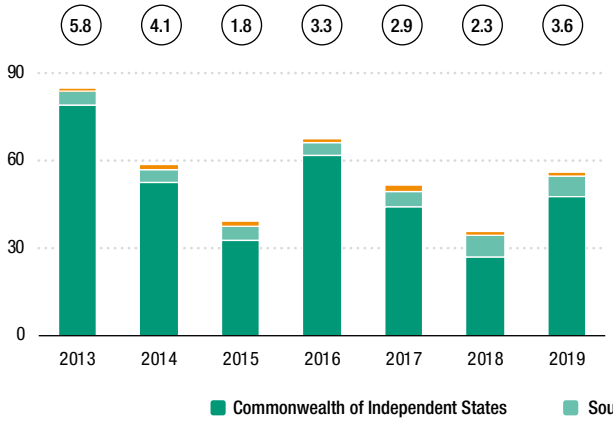
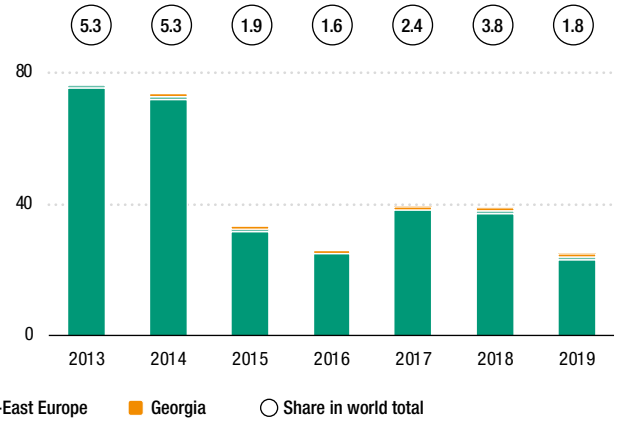


Figure C. FDI outflows, 2013–2019
(Billions of dollars and per cent)



Commonwealth of Independent States | South-East Europe | Georgia | Share in world total

Table A. Net cross-border M&As by sector/industry 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**2 602**	**1 392**	**1 914**	**-4 193**
Primary	**610**	**352**	**-34**	**-131**
Agriculture, forestry and fishing	69	224	-	14
Mining and quarrying	541	128	-34	-145
Manufacturing	**2 275**	**293**	**653**	**-44**
Food, beverages and tobacco	1 914	28	-	-
Pharmaceuticals, medicinal chemical and botanical products	-	199	-	-
Rubber and plastics products	-	47	-	-
Services	**-282**	**748**	**1 295**	**-4 017**
Wholesale and retail trade and repair of motor vehicles and motorcycles	-	124	-	-
Transportation and storage	61	447	-	-
Information and communication	-795	127	275	-2 811
Financial and insurance activities	166	283	1 012	-1 195

Table B. Net cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**2 602**	**1 392**	**1 914**	**-4 193**
Developed economies	**458**	**-302**	**663**	**-2 176**
European Union	-1 295	511	8	-103
Ireland	4	283	-	-
Netherlands	-460	543	-	-
United Kingdom	-23	551	-	-
Developing economies	**1 119**	**1 706**	**273**	**-1 955**
China	542	310	-	-
South Africa	-	1 160	-	-
Turkey	-599	104	273	-2 752
Transition economies	**84**	**978**	**84**	**978**
Azerbaijan	3	734	-	-
Russian Federation	972	-757	1 004	85

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Transition economies as destination		Transition economies as investor	
	2018	2019	2018	2019
Total	**50 850**	**46 036**	**22 055**	**8 302**
Primary	**2 698**	**806**	**2 141**	**689**
Manufacturing	**30 341**	**31 870**	**11 539**	**5 145**
Food, beverages and tobacco	2 545	3 285	2 273	99
Coke and refined petroleum products	4 230	11 457	6 840	2 977
Chemicals and chemical products	4 696	2 918	171	434
Other non-metallic mineral products	2 034	1 687	250	202
Motor vehicles and other transport equipment	4 321	5 393	425	299
Services	**17 810**	**13 360**	**8 375**	**2 468**
Electricity, gas, steam and air conditioning supply	7 340	5 127	3 635	245
Construction	2 149	1 629	1 242	-
Trade	1 381	1 382	284	515
Transportation and storage	1 545	1 903	891	260

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

Partner region/economy	Transition economies as destination		Transition economies as investor	
	2018	2019	2018	2019
World	**50 850**	**46 036**	**22 055**	**8 302**
Developed economies	**29 111**	**21 085**	**2 003**	**1 220**
European Union	17 678	14 900	937	1 147
France	2 707	1 486	2	15
Germany	3 870	4 957	79	110
Japan	5 702	1 421	110	55
United States	2 298	3 222	324	2
Developing economies	**17 815**	**22 910**	**16 127**	**5 043**
China	9 251	15 715	1 786	113
Korea, Republic of	1 530	1 593	-	-
Turkey	1 664	3 828	6 348	109
Transition economies	**3 924**	**2 040**	**3 924**	**2 040**
Russian Federation	1 880	1 371	363	37

FDI flows to the economies in transition in South-East Europe, the Commonwealth of Independent States (CIS) and Georgia will be hard hit by the economic downturn caused by the pandemic. For the Russian Federation, a protracted decline in global demand for raw materials, coupled with reluctance to tackle overproduction, has exerted strong downward pressure on commodity prices. The country traditionally attracts the bulk of FDI in extractive industries. Market-seeking projects will also suffer in that country and in others in the region as the economic downturn deepens. In South-East Europe and the Republic of Moldova, a large number of inbound FDI projects target export-oriented automotive production and tourism, both industries that have been among the hardest hit by the coronavirus crisis. The expected decline in FDI follows a rise in inflows to the region in 2019 (up 59 per cent, to $55 billion). That rise was prompted by a rebound of FDI in the Russian Federation and, to a lesser degree, in Ukraine following two years of decline, and by an increase in FDI to newly liberalizing Uzbekistan. In the rest of the region, flows remained mostly unchanged. Outflows declined by 37 per cent to $24 billion, as large Russian MNEs, accounting for the bulk of outward FDI from economies in transition, found it increasingly difficult to acquire assets abroad, despite efforts to diversify to developing regions.

Prospects

In 2020, FDI inflows to the economies in transition are projected to decline by about 38 per cent. The degree of contraction projected is similar to the world average (see table I.3). Growth in FDI inflows is forecast to return to the region in 2022.

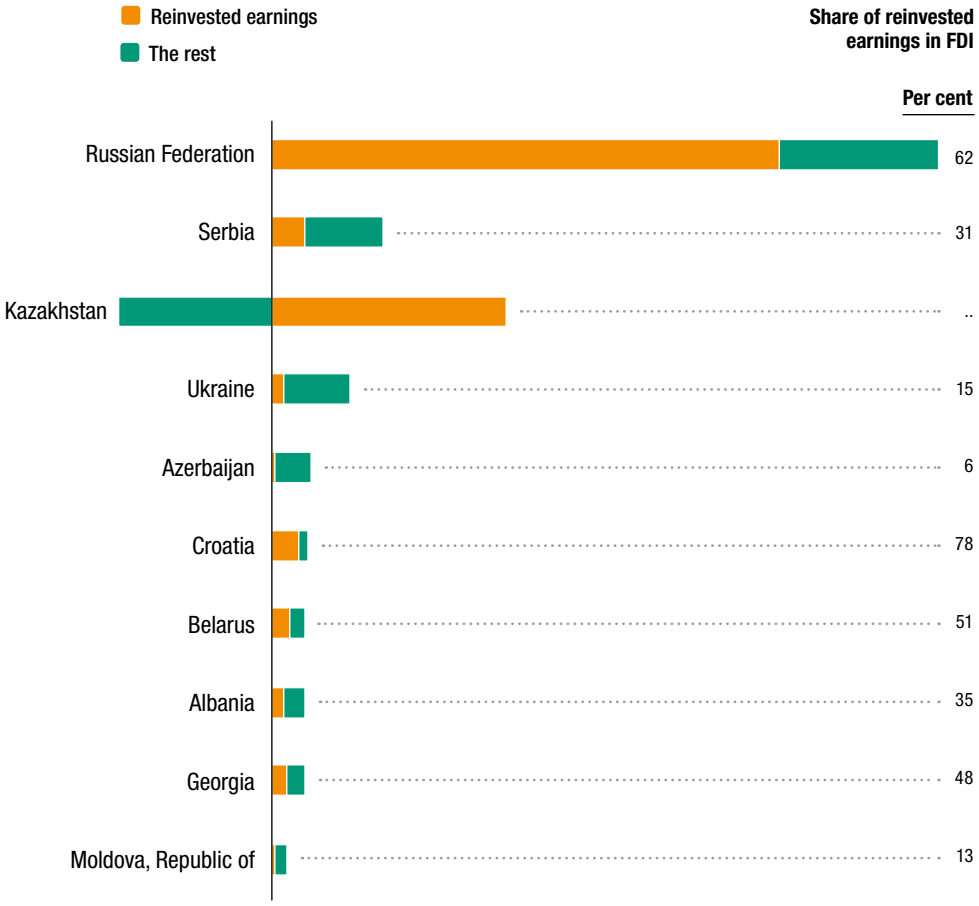
The pandemic has provoked a recession in economies in transition that affects market-seeking FDI directly. In the Russian Federation, the largest economy of the region, GDP growth was already relatively low in 2019 (2 per cent). It is expected to decline sharply in 2020 despite government stimulus and measures to help small and medium-sized firms.[23] This is likely to prompt market-seeking investors to adjust their planned investments downward. In natural-resource-based projects, prospects are also being revised downward as demand for commodities weakens and the price of oil, one of the main exports from various economies in transition (Azerbaijan, Kazakhstan, the Russian Federation, Uzbekistan), remains depressed, despite efforts to resolve the price war between major oil producers.

In South-East Europe and the Republic of Moldova, export-oriented projects located in SEZs that are linked to GVCs will be significantly affected. The situation could prove particularly difficult in the automotive value chain, in which some foreign affiliates have had to scale down or suspend operations.[24] A slowdown of activities has also been observed in other export-oriented industries. Several South-East European economies will also be affected through their broad exposure to the tourism and hospitality industries.

In all transition economies, as in other regions, reinvested earnings will inevitably transmit the negative 2020 operational results of MNE investors to FDI. In these countries, the share of reinvested earnings in total FDI (88 per cent in 2018, 66 per cent in 2019) is higher than the average share globally (about 50 per cent), which will result in a particularly negative impact on overall inflows of the region (figure II.10).

Greenfield project announcements, an indicator of investors' intentions, were already on a downward slope in 2019 and are falling farther in 2020. In 2019, greenfield commitments dropped by 9 per cent to $46 billion (table C). The majority of the economies of the region experienced a decrease, with South-East Europe seeing the value of announcements fall by 46 per cent. The region depends on greenfield investment

Figure II.10. **Transition economies: FDI inflows and reinvested earnings, 2019**
(Volume and per cent)



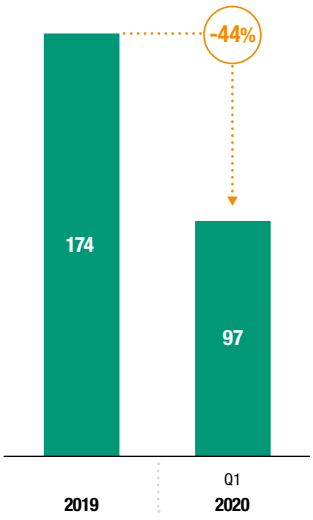
Source: *Source:* UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: The figure covers only economies that report reinvested earnings separately.

in industries that are severely affected by the COVID-19 crisis. In 2019, the manufacturing of coke and petroleum products accounted for 25 per cent of such investment, automotive production for 12 per cent and transportation for 4 per cent (table C). Hospitality was already slowing, representing only 2 per cent of the total. In the first quarter of 2020, the number of greenfield project announcements in the region declined by 44 per cent from the average quarterly level of 2019 (figure II.11).

Cross-border M&A sales of firms from economies in transition were already low in 2019 (table A) and fell further in the first quarter of 2020. The value recorded in 2019 ($1.4 billion) was the lowest since 2013. In the first three months of 2020, sales amounted to just $220 million, one of the lowest quarterly values ever recorded.

Outward FDI from economies in transition is expected to continue its decline in 2020 and 2021, as economic recessions in home economies and the low oil prices affect the capacities of MNEs from the region to invest abroad. Announced greenfield deals abroad by MNEs based in economies in transition were valued at $8 billion in 2019, 72 per cent less than in the previous year (table D). In the manufacturing of coke and petroleum products, where MNEs from economies in transition enjoy a strong competitive position, the decline was 56 per cent, to $3 billion (table C). In the first three months of 2020, the downslide continued, to a net divestment of $90 million.

Figure II.11. **Transition economies: Average quarterly number of announced greenfield investment projects, 2019 and Q1 2020** (Number)



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

In 2020, the earnings forecasts of Russian MNEs, accounting for at least nine-tenth of the FDI outflows of the economies in transition in the past decade, are undergoing downward reviews. After the onset of the COVID-19 crisis, the projected earnings of the 36 largest Russian MNEs were revised down 41 per cent, similar to the revisions for other emerging-market MNEs. This development limits the capacity of Russian MNEs to reinvest their earnings, which accounted for almost two-thirds of their outward FDI in 2019 and more than one-third in the previous three years. Some industries are hit hard. For 2020, the Russian oil and gas industry, which represented a large part of FDI in the previous decade,[25] is now forecast to lose $9.8 billion in earnings,[26] due to the low prices and the production cut of 2.5 million barrels per day under the terms of the country's deal with other producers. In the first quarter of 2020, State-owned Rosneft, the third largest Russian MNE by foreign assets, reported its first loss in eight years, amounting to -$2.2 billion. Other industries, with more limited weight in outward FDI, had more mixed results. State-owned Sberbank saw profits fall sharply in January–March 2020 (by 47 per cent). In contrast, technology firms (such as internet providers Yandex and Mail.Ru) experienced more limited declines in profits (5 and 22 per cent, respectively), and their sales continued to increase. However, the first-quarter results do not reflect the full extent of the pandemic impact. It was only at the beginning of the second quarter that the Russian Government decreed a six-week, nationwide "non-working period", shutting down an estimated 30 per cent of the economy.[27] That measure further accelerated the decline in corporate earnings.

Inflows in 2019

Inbound FDI to economies in transition increased in 2019 (by 59 per cent, to $55 billion), due to higher inflows in the Russian Federation, Ukraine and Uzbekistan. Flows to the rest of the region declined slightly (down 3 per cent, to $18 billion). FDI to the CIS and Georgia together rose by 76 per cent to $48 billion, on the back of the increases in the Russian Federation, Ukraine and Uzbekistan (figure B). In South-East Europe, inflows remained practically unchanged at $7.2 billion (-3 per cent). Increases were registered in Bosnia and Herzegovina and Serbia, but decreases were registered in Montenegro and North Macedonia.

In the *Russian Federation*, FDI inflows increased by 140 per cent, to $32 billion, after two years of decline. This temporary reversal of the downward trend was still about 40 per cent lower than the level recorded in 2013. Reinvested earnings continued their rise in 2019 (to $20 billion), while equity investment recovered to $11 billion after posting a negative value in 2018 due to divestments. The rise in FDI occurred despite a second consecutive year of lower cross-border M&A sales of shares in Russian firms, which dropped by two-thirds, to $877 million.

Serbia, the second largest recipient of FDI among economies in transition, experienced an increase of 4 per cent in 2019, to $4.3 billion. This increase was mostly due to growth in equity capital; the value of reinvested earnings remained practically unchanged. Construction (28 per cent), transportation (16 per cent), trade (8 per cent) and ICT (5 per cent) attracted sizable projects. The country also continued to attract export-oriented projects in its automotive cluster. Five per cent of the inflows were realized in rubber and plastic products and another 5 per cent in vehicle production. More than half of FDI in 2019 originated in the EU.

FDI flows to *Kazakhstan* – the third largest recipient of FDI among these economies – declined again in 2019, dropping 17 per cent, to $3.1 billion. The largest project started in the country was a carbide plant of a Chinese chemical producer.[28] Mining of metals continued to attract the highest volumes of investment, followed by manufacturing, and then wholesale and retail trade. The United States, China and the Russian Federation were the largest source countries.

In *Ukraine*, FDI flows rose by 30 per cent, to $3.1 billion, after two years of decline. Equity capital and reinvested earnings remained stable, while intracompany loans more than doubled. Finance, ICT, mining, real estate and electricity and gas attracted the bulk of FDI. A sizeable share of FDI, estimated at about one-third of the value in 2019, was reported to be roundtripping of Ukrainian capital through offshore centres.[29]

Inflows to Uzbekistan more than tripled in 2019 (up 266 per cent to $2.3 billion). The value of equity investment and reinvested earnings together expanded by 231 per cent to $2.1 billion, while intracompany loans turned from negative to positive (to $169 million). Part of the inflows related to ongoing large projects in oil and gas by Lukoil (Russian Federation). In addition, a series of projects started in chemical production, with Chinese, Russian, Singaporean, United Kingdom and United States firms. Orano Mining (France) invested large amounts in uranium exploration and development. In the textiles and apparel industry, projects were started by Chinese, German, Indian, Korean, Thai and Turkish companies. In the near future, the Government plans to focus its industrialization efforts on its 21 newly established free economic zones (*WIR19*). Under the current circumstances, FDI prospects will hinge on the capacity of the country to attract more diversified inflows, as investment into the energy industry may slow down.

Data from investor countries shows the continued importance of Cyprus and the Netherlands as sources of FDI in economies in transition (figure A), followed by France, China and Germany. The Russian Federation was the largest intraregional source, occupying the eighth position among such investors in 2018.

Outflows in 2019

FDI outflows from economies in transition declined by 37 per cent, to $24 billion, in 2019 (figure C). As in previous years, the Russian Federation accounted for almost all outward FDI (95 per cent). Russian MNEs remained cautious about foreign expansion, especially in developed-market economies, in which they face increasing restrictions in access to international finance and technology, as well as in acquisition of firms. Their caution in international markets is also linked to international sanctions, which affect some large Russian MNEs (*WIR19*). Net cross-border acquisitions fell to -$4 billion in 2019. There were various cases of divestments by Russian MNEs, such as the sales of Sberbank's assets in Denizbank (Turkey) to the State-owned Investment Corp of Dubai (United Arab Emirates).

The downturn of outflows from the Russian Federation into traditional target countries was partly compensated by investment in new markets. In 2019, State-owned Gazprom Neft expanded oil production in the Kurdistan Region of Iraq, and Novatek started a liquefied natural gas project in Viet Nam. Russian MNEs have also initiated various projects in Africa, some of them backed by a Russian Government initiative aimed at strengthening economic links with the continent (box II.1 and section on Africa).

Box II.1. Russian FDI in Africa

Russian MNEs are expected to continue searching for investment opportunities on the African continent, encouraged by a public initiative adopted at the first Russia–Africa Summit and Economic Forum in 2019.

The annual volume of Russian FDI in Africa is usually small. However, there have been exceptions. In 2019, for example, the Congo received Russian FDI flows of $779 million as *Lukoil*, the country's largest outward investor, bought 25 per cent of gas company Marine XII, currently in the exploration stage. Other Russian companies engaged in Africa include State-owned *Alrosa* (investing in Angola, Botswana and Zimbabwe), Bahamas-registered but Russian-owned *Renova* (mining in Gabon, Mozambique and South Africa), State-owned nuclear operator *Rosatom* (investing in Egypt and Nigeria) and State-owned *Rosneft* (investing in Egypt).

The Russia–Africa Summit in 2019 also provided an opportunity to sign deals for new projects, the most important of which for FDI were the following:

- State-owned IT security firm *Avtomatika* (part of Rostec Corporation) signed a contract with Angolan mobile operator Movicel to protect the company's IT infrastructure.
- Russian specialized-fats producer *EFKO Group* and United Oil (Egypt) signed an agreement of intent to create a joint venture for a production facility worth about $300 million.
- Rosatom and the Government of Rwanda signed an agreement to build a centre for nuclear science and technology in Kigali.
- Cyprus-registered but Russian-owned *Uralchem* and Angolan Grupo Opaia Holding (operating in civil construction, solar energy, drinking-water systems, tourism, agriculture, finance and other industries) signed a memorandum to build a urea plant in Angola for $1 billion.
- State-owned bank *VEB* signed a deal to build an oil refinery in Morocco for $2.2 billion.

Source: UNCTAD, based on various media sources. New projects from "What contracts were concluded at the Russia-Africa forum?" (in Russian), RBC News, 23 October 2019, https://www.rbc.ru/business/23/10/2019/5db035149a79473afc68a097.

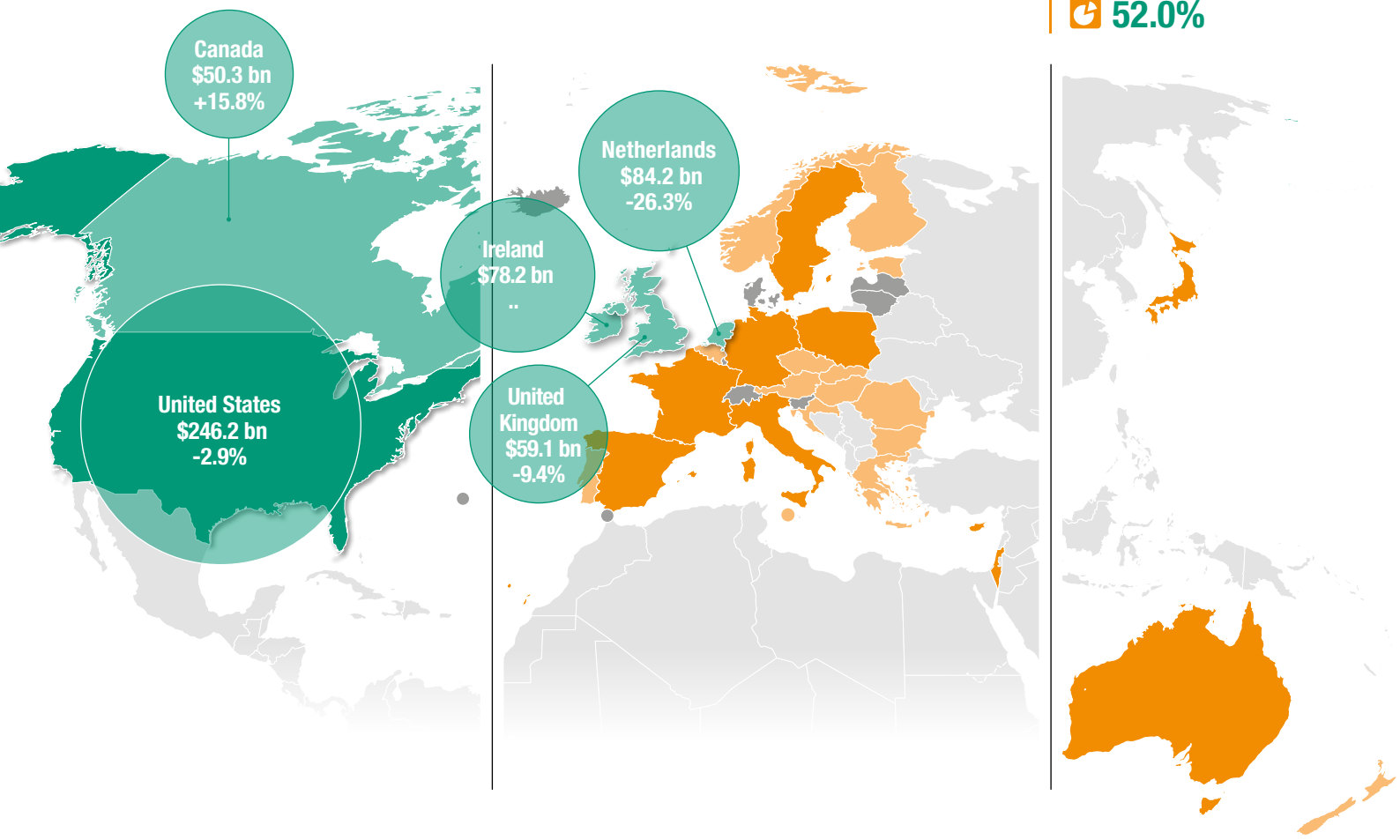
DEVELOPED ECONOMIES

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
$ 800.2 bn

2019 Increase
+5.1%

Share in world
52.0%



Flows, by range

- Above $100 bn
- $50 to $99 bn
- $10 to $49 bn
- $1 to $9 bn
- Below $1 bn

Top 5 host economies

Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Billions of dollars and 2019 growth)

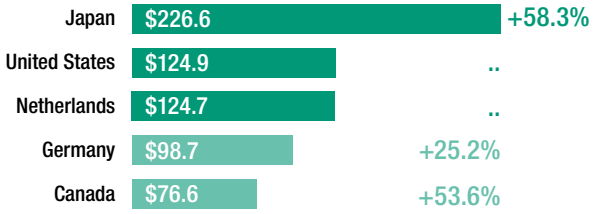
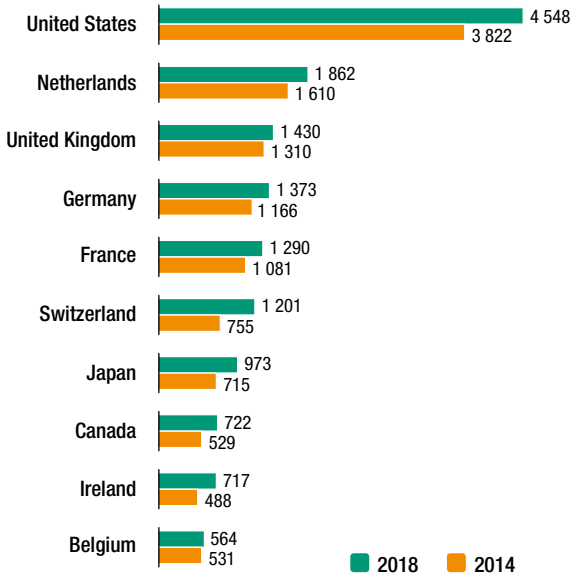


Figure A. Top 10 investor economies by FDI stock, 2014 and 2018 (Billions of dollars)



Source: UNCTAD.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations.

HIGHLIGHTS

- FDI flows expected to fall by up to 35 per cent
- Falling profits to hurt reinvested earnings (60 per cent of FDI)
- In 2019, outflows up as earnings repatriations wane

Figure B. FDI inflows, 2013–2019
(Billions of dollars and per cent)

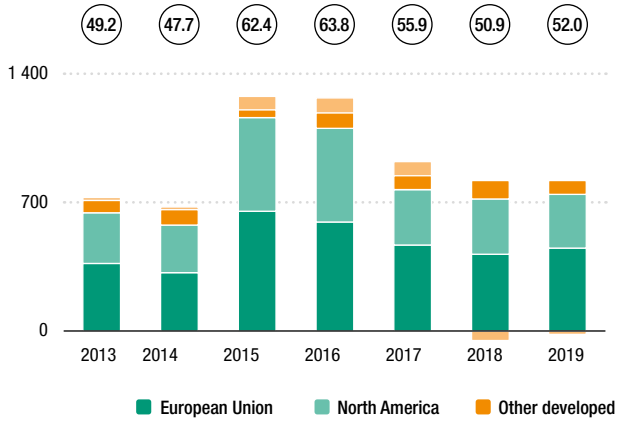
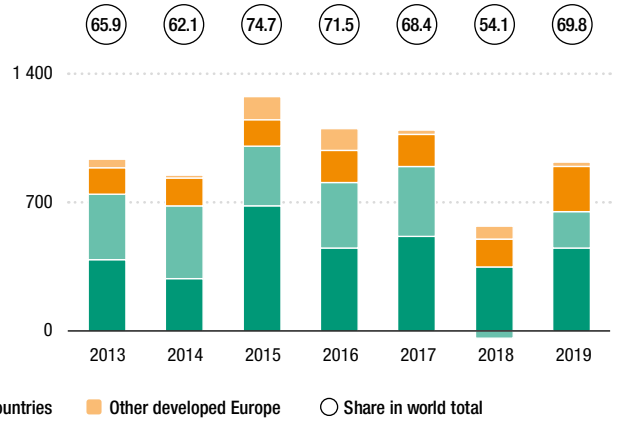


Figure C. FDI outflows, 2013–2019
(Billions of dollars and per cent)



European Union | North America | Other developed countries | Other developed Europe | Share in world total

Table A. Cross-border M&As by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**688 859**	**411 080**	**701 976**	**462 055**
Primary	**28 632**	**30 376**	**24 253**	**45 893**
Mining and quarrying	28 114	29 515	23 393	45 230
Manufacturing	**282 163**	**217 708**	**228 778**	**169 553**
Food, beverages and tobacco	44 451	18 244	40 008	13 815
Chemicals and chemical products	140 207	42 916	107 250	19 432
Pharmaceuticals, medicinal chemicals and botanical products	27 149	86 084	43 906	95 118
Computer, electronic, optical products and electrical equipment	40 186	20 238	7 216	7 181
Services	**378 065**	**162 997**	**448 945**	**246 608**
Transportation and storage	37 325	6 278	17 451	6 363
Information and communication	68 345	-18 155	78 646	9 905
Financial and insurance activities	103 091	38 620	261 181	197 733
Business services	94 852	94 112	42 499	35 133

Table B. Cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**688 859**	**411 080**	**701 976**	**462 055**
Developed economies	**631 423**	**410 542**	**631 423**	**410 542**
France	91 904	41 914	16 804	14 852
United Kingdom	59 786	11 489	86 869	41 368
United States	221 486	89 853	190 114	150 663
Japan	27 174	92 496	16 530	3 892
Developing economies	**43 556**	**-10 450**	**70 095**	**51 815**
Africa	2 266	-33 988	-1 606	4 311
Latin America and the Caribbean	1 361	3 189	28 612	16 404
Asia	39 930	20 283	43 311	31 022
China	18 611	6 436	1 247	-1 827
Singapore	4 206	-10 110	5 727	467
Transition economies	**663**	**-2 176**	**458**	**-302**

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Developed countries as destination		Developed countries as investor	
	2018	2019	2018	2019
Total	**377 286**	**345 740**	**638 521**	**565 357**
Primary	**5 207**	**5 180**	**24 446**	**11 348**
Manufacturing	**171 234**	**147 242**	**311 432**	**234 804**
Coke and refined petroleum products	33 090	20 474	60 741	18 866
Chemicals and chemical products	24 055	16 837	50 151	32 534
Computer, electronic, optical products and electrical equipment	20 396	28 452	31 092	28 755
Motor vehicles and other transport equipment	22 140	18 756	58 049	46 345
Services	**200 844**	**193 317**	**302 643**	**319 206**
Electricity, gas, steam and air conditioning supply	33 601	52 506	63 312	92 975
Construction	43 683	42 634	48 293	45 508
Transportation and storage	18 011	14 650	32 890	29 936
Accommodation and food service activities	13 258	11 995	28 660	30 699
Information and communication	45 214	36 924	60 794	53 301

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

Partner region/economy	Developed countries as destination		Developed countries as investor	
	2018	2019	2018	2019
World	**377 286**	**345 740**	**638 521**	**565 357**
Developed economies	**309 219**	**284 904**	**309 219**	**284 904**
Europe	190 254	183 569	190 025	180 162
North America	92 294	75 044	91 316	78 508
Other developed economies	26 670	26 292	27 878	26 234
Developing economies	**66 064**	**59 616**	**300 192**	**259 368**
Africa	2 215	1 166	38 793	39 993
Asia and Oceania	57 671	54 147	202 571	140 172
China	18 449	10 639	68 303	39 627
Singapore	7 903	4 567	10 695	5 833
India	3 922	3 685	29 871	20 679
Latin America and the Caribbean	6 178	4 303	58 828	79 202
Transition economies	**2 003**	**1 220**	**29 111**	**21 085**

The outbreak of the COVID-19 pandemic will cause a decline in FDI flows to developed economies of between 25 and 40 per cent. Falling corporate profits will have a direct impact on reinvested earnings – a major component of FDI in the group. New equity investments will be curtailed, as already reflected in the decline of cross-border M&As and announced greenfield investments in the first quarter of 2020. FDI trends could also be affected by COVID-19-related emergency measures, including increased scrutiny of inward investment. An expected push to improve supply chain resilience in critical industries could affect longer-term trends. In 2019, after three successive years of contraction, FDI inflows to developed economies rose by 5 per cent, despite weaker macroeconomic performance and policy uncertainty for investors, including trade tensions and Brexit. FDI to Europe increased by 18 per cent and FDI to North America remained stable.

Prospects

FDI flows to developed countries are expected to decline sharply to about $500 billion, as the outbreak of COVID-19 slows down MNE capital expenditures. Data on the first months of 2020 provide an indication of the impact. In April 2020, the number of cross-border M&As targeting developed economies was 53 per cent lower than the monthly average of 2019 (figure II.12). The drop in the number and value of announced greenfield projects in Q1 2020 (by 26 per cent) (figure II.13) was a further sign that MNE capital expenditures will be cut drastically.

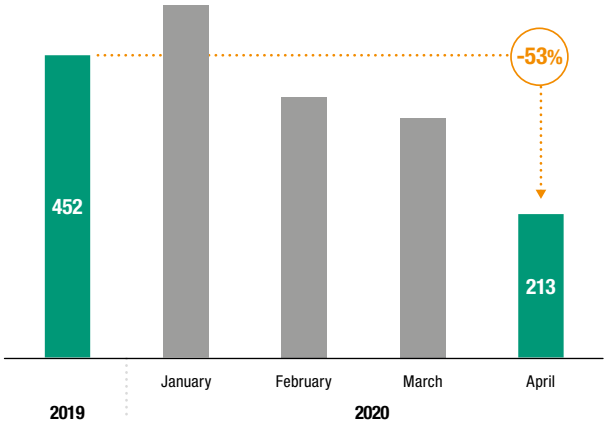
Although the impact will be severe, overall, the projected decline in developed economies is lower than in developing economies. Their capacity to implement fiscal support packages to absorb the worst effects of the economic shock and aid the recovery is higher. In addition, FDI flows in developed economies contain higher levels of financial flows that could be less affected by the crisis than investment in physical productive assets.

Flows to Europe are expected to fall the most (by 30 to 45 per cent), due to the dramatic impact of the pandemic on several major economies in the region and pre-existing economic fragility. FDI flows to North America are forecast to fall by up to 35 per cent.

Reinvested earnings have become an increasingly important component of FDI inflows to and from developed economies, accounting for more than half of the total (figure II.14 and table II.3). The projected fall in profits of MNEs will have an automatic effect on FDI through this component.

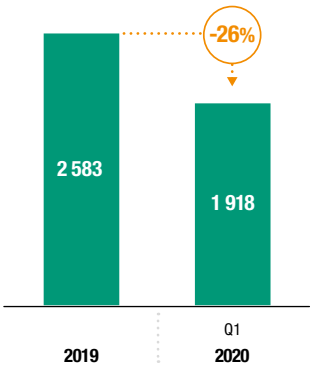
Earnings forecasts for 2020 of the top MNEs based in developed countries show an average downward revision since the outbreak of 39 per cent (table II.3). The share of the reinvested earnings component of outward FDI flows in some countries is indicative of the potential effect that earnings losses will have on FDI. For example, the average 50 per cent earnings losses projected for French MNEs could affect half of FDI outflows from the country (this assumes losses are spread uniformly across MNE operations; in reality it is more likely that earnings losses would be concentrated in foreign affiliates in affected areas, exacerbating the impact on reinvested earnings).

Figure II.12. Developed economies: Average monthly number of cross-border M&As, January–April 2020
(Number)



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

Figure II.13. **Developed economies: Average quarterly number of announced greenfield investment projects, 2019 and Q1 2020** (Number)



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

Several developed countries have introduced or are considering measures aimed at protecting critical domestic infrastructure and other sensitive industries as a direct consequence of the COVID-19 crisis. For example, the European Commission issued guidance concerning the protection of Europe's strategic assets with the aim to shield EU companies and critical assets from foreign takeovers. In a similar vein, a few developed countries expanded their foreign investment screening regimes (see chapter III).

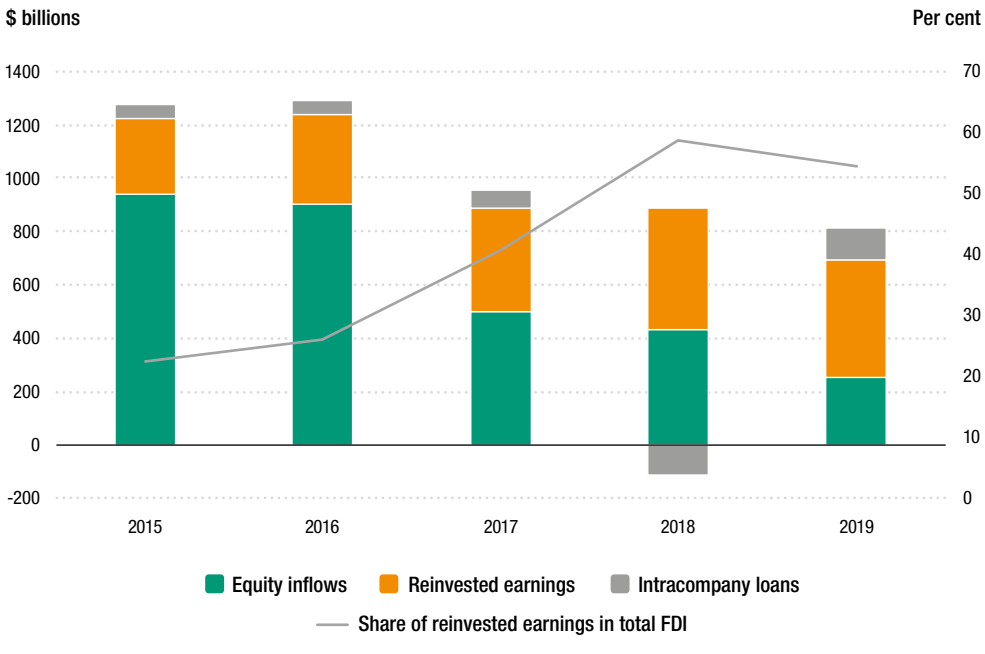
Inflows in 2019

Inflows to developed economies rose by 5 per cent to $800 billion from a revised $761 billion in 2018, despite investor uncertainties related to trade tensions and Brexit, and weakening macroeconomic performance.

FDI flows to *Europe* rose by 18 per cent to $429 billion, regaining some of the ground lost since 2015. Nonetheless, they remained at only half of their 2007 peak value. Flows grew in 11 of 31 European economies in 2019 but fell in some of the region's major economies.

In 2018, the repatriation of accumulated earnings by United States MNEs following the tax reform had a major impact on FDI flows to some European countries that host finance functions of United States MNEs, such as Ireland and Switzerland. As the impact of the tax reforms waned in 2019, there were increases of FDI in *Ireland* (from -$28 billion in 2018 to $78 billion) and *Switzerland* (from -$53 billion to -$22 billion). FDI flows to Ireland were

Figure II.14. **Developed economies: FDI inflows, by component, 2015–2019** (Billions of dollars and per cent)



Source: UNCTAD.

Table II.3. Average earnings revisions of the top MNEs in developed economies and relative importance of reinvested earnings in outward FDI, by region/economy

Region/economy	Number of companies with earnings revision, early 2020	Average of earnings revisions, early 2020	Share of reinvested earnings in FDI, 2019 (%)
Developed	2561	-39	51
Europe	817	-43	36
France	104	-51	49
Germany	92	-57	46
Italy	44	-48	27
United Kingdom	177	-42	-11
North America	1120	-47	101
United States	1006	-47	136

Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics) for reinvested earnings and Refinitiv SA for average MNE earnings revisions. Data are updated as of mid-May 2020.

also affected by a large cross-border deal, in which Takeda (Japan) acquired the share capital of Shire (Ireland) for $60 billion.

Inflows halved in *Germany* to $36 billion, mainly due to a sharp fall in new equity investment (from $53 billion in 2018 to only $3 billion in 2019). MNEs extended loans to foreign affiliates (from $1.8 billion to $12.9 billion) in a year of slow growth (the German economy grew at 0.6 per cent in 2019, marking a sharp slump in growth and the weakest expansion since 2013). FDI flows to *France* declined by 11 per cent (to $34 billion), but remained relatively high – above the average of the last 15 years. Large deals included the purchases of B&B Hotels SAS (France) by Goldman Sachs Group (United States) for $2 billion. The *United Kingdom* saw its FDI decline by 9 per cent to $59 billion, mainly owing to a lack of large deals targeting the country; in 2019, the value of cross-border M&As reached $49 billion, about half of the level of 2018. FDI to the *Netherlands* fell by 26 per cent (from $114 billion to $84 billion), in part due to a single large transaction – the $36 billion IPO of a foreign affiliate of Nasper (South Africa), registered as a divestment.

After three consecutive years of growth, flows to *Spain* fell by 72 per cent. Cross-border M&As targeting the country fell from $72 billion in 2018 to $8.3 billion in 2019. European MNEs more than halved their investments from $35 billion to $15 billion. The reverse happened in *Sweden*, where FDI flows jumped from $3.9 billion to $21 billion, mainly due to the rise of EU investments from -$0.5 billion to $16 billion.

In 2019, FDI to *Czechia*, *Hungary*, *Poland* and *Slovakia*, the so-called Visegrád group, did not follow the rise of FDI in Europe as a whole. Their combined inflows declined by 18 per cent, to $28 billion. Flows increased in Slovakia but dropped in the other three. Most of the inflows into the Visegrád countries originated in other EU member countries; however, MNEs from third countries often use EU affiliates to invest in the group. FDI data for ultimate investors that were available for Czechia, Hungary and Poland indicate a high share of Chinese, Korean and United States investors.

FDI to North America remained flat at $297 billion. Flows to the *United States* decreased by 3 per cent to $246 billion. While investments from European MNEs declined by 30 per cent, there was an increase of investment from MNEs based in Japan and Australia. Inflows decreased significantly in the chemicals industry, reducing the share of manufacturing FDI from the high level of 2018 (67 per cent) to 34 per cent in 2019. Cross-border M&A sales of United States assets to foreign investors continued to decline for the fourth consecutive year, reaching $156 billion, down by 21 per cent to $199 billion, largely due to the absence of cross-border megadeals and divestments by MNEs in emerging markets.

Cross-border M&As sales of assets in developed economies as a group fell by 40 per cent in 2019 due to the decline of acquisitions by MNEs from the United States, France and the United Kingdom (table B). Sales to Chinese MNEs dropped to just $6 billion – the lowest level since 2007 – from $93 billion in 2017 and $18 billion in 2018. Cross-border M&A sales fell sharply in chemicals and chemical products and in financial services (table A).

Announced greenfield projects declined by 9 per cent due to a fall of investments in the manufacturing of coke and refined petroleum products (tables C) and a decrease in projects announced by Chinese investors (table D). The number of announced greenfield projects remained stable at just over 10,000. Announced projects decreased by 21 per cent, mostly due to low numbers from China, and there was a slight increase in greenfield projects by MNEs from several developed economies, mainly in Europe.

Outflows in 2019

Outward FDI flows from developed economies rose by 72 per cent to $917 billion in 2019. The increase was mainly due to the waning of the effect of the United States tax reforms at the end of 2017, which had caused large negative outflows in 2018. The overall level of outward FDI remained relatively low, at only about half of the 2007 peak. The value of cross-border M&A purchases by MNEs in developed countries actually fell by 34 per cent, mainly in manufacturing and services (table A). Several countries, including the United States, the Netherlands and Germany experienced high volatility in their outflows.

Outflows from MNEs in *Europe* rose by 13 per cent, mainly due to a large increase in investment by MNEs based in the *Netherlands* (from -19 billion to $125 billion) and a high level of FDI outflows from *Germany* (to $99 billion). Foreign affiliates of German MNEs, which provided large loans to their parents in 2018 (-$95 billion), did not repeat that performance in 2019. Among the largest deals by MNEs from Germany was the acquisition of Qualtrics International (United States) by SAP (Germany) for $8 billion and the purchase of USG (United States) by Gebr Knauf (Germany) for $6 billion.

Investment by MNEs based in *North America* reached $202 billion from -$41 billion in 2018. Outflows from the *United States* turned positive (mostly in the form of reinvested earnings) after the negative $91 billion registered in 2018 when firms repatriated funds as a result of tax reforms. As the tax reform is permanent, MNEs from the United States continued in 2019 to withdraw profits from several European countries (for example total outflows to Ireland were $77 billion).

Investment by MNEs from *Canada* also jumped by 54 per cent, owing to a tripling of equity outflows to $39 billion. Among the largest deals were the acquisitions by Brookfield Business Partners (Bermuda) and Caisse de Depôt et Placement du Quebec (Canada) of the Power Solutions business of Johnson Controls International (United States) for $13 billion.

Outflows from *Japan* rose by 58 per cent to a record $227 billion, mainly due to a jump in cross-border M&As from $36 billion to $104 billion. In addition to the Takeda-Shire deal, Renesas Electronics (Japan) acquired the share capital of Integrated Device Technology, a manufacturer of semiconductors and related devices, for $6.3 billion, and SoftBank Group (Japan) acquired a stake in WeWork (United States), a provider of office workspace services, for $6 billion. Japanese MNEs doubled their investments in Europe, mainly in wholesale and retail, chemicals and pharmaceuticals. In North America the increase of 139 per cent occurred mostly in the communication and electric machinery industries. Investment in Asia, the second largest destination of outflows from Japan, rose by only 6 per cent.

STRUCTURALLY WEAK, VULNERABLE AND SMALL ECONOMIES

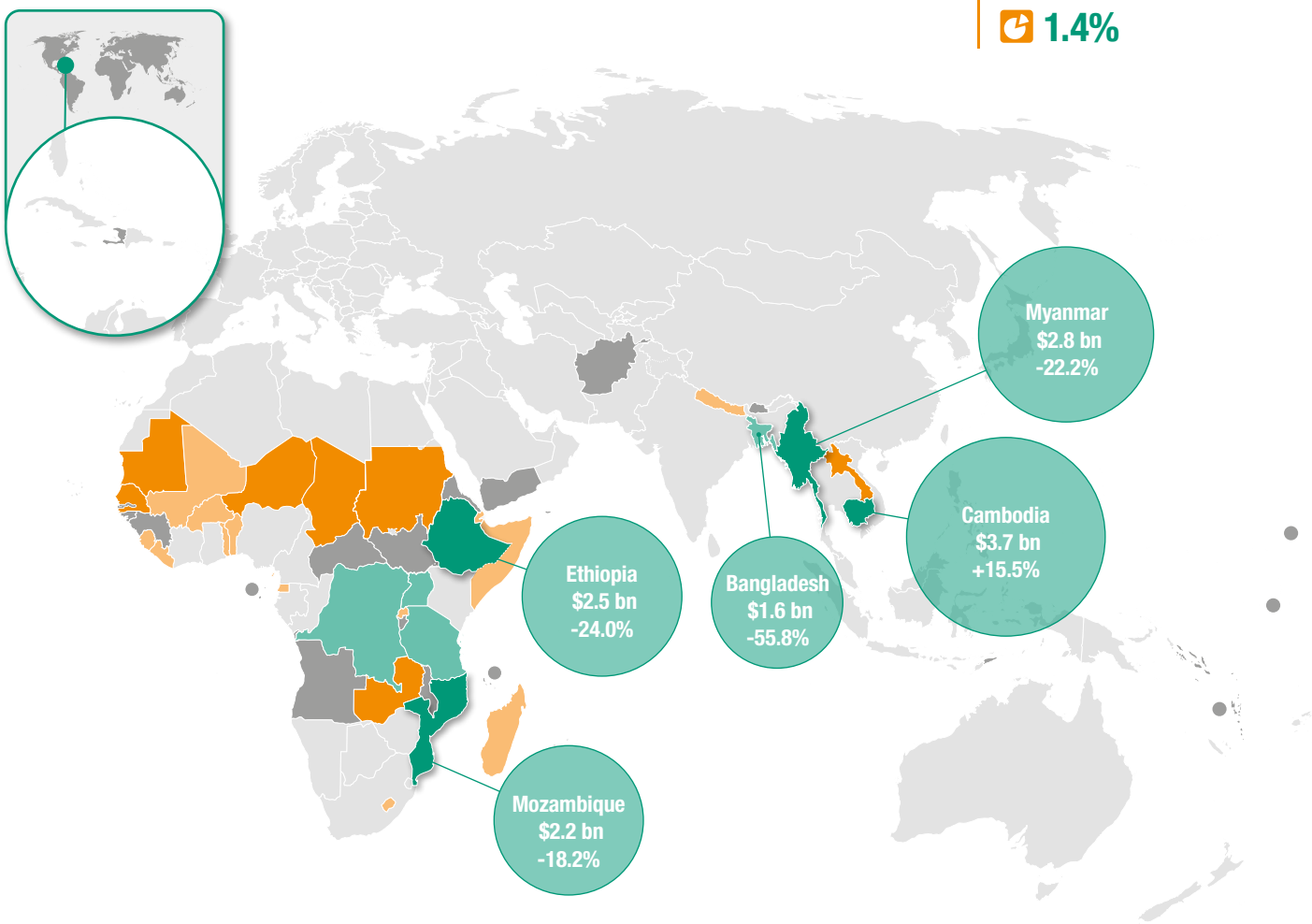
LEAST DEVELOPED COUNTRIES

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
$ 21.1 bn

2019 Decrease
-5.7%

Share in world
1.4%



Flows, by range

- Above $2.0 bn
- $1.0 to $1.9 bn
- $0.5 to $0.9 bn
- $0.1 to $0.4 bn
- Below $0.1 bn

Top 5 host economies

Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Billions of dollars and 2019 growth)

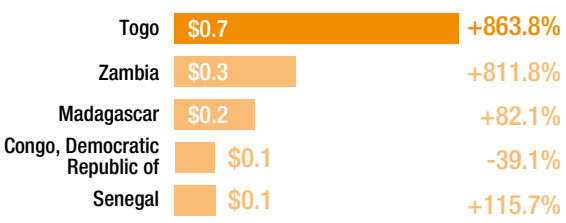
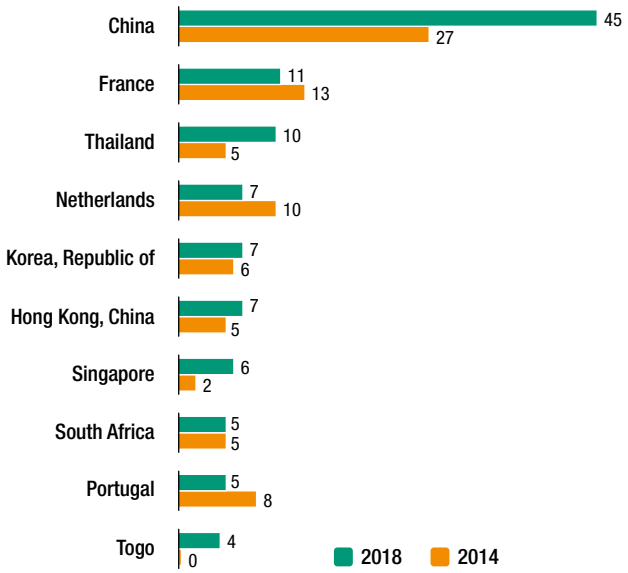


Figure A. Top 10 investor economies by FDI stock, 2014 and 2018 (Billions of dollars)



Source: UNCTAD.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined. Dotted line in Jammu and Kashmir represents approximately the Line of Control agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

HIGHLIGHTS

- FDI vulnerable to oil and commodities price shocks
- Greenfield FDI already in decline in 2019, further fall in Q1 2020
- In 2019, FDI increased only in African LDCs

Figure B. FDI inflows, 2001–2019 (Billions of dollars and per cent)

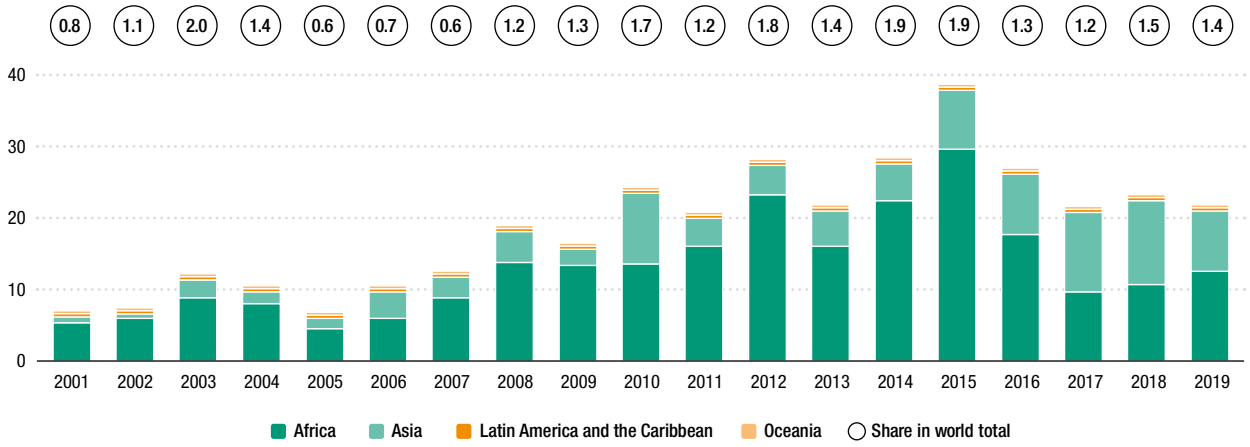


Table A. Net cross-border M&As by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**1 342**	**125**	**130**	**-2**
Primary	**-310**	**-521**	**-**	**-**
Agriculture, forestry and fishing	20	6	-	-
Mining and quarrying	-329	-527	-	-
Manufacturing	**1 501**	**118**	**77**	**-**
Food, beverages and tobacco	1 474	98	-	-
Textiles, clothing and leather	7	-	77	-
Services	**150**	**528**	**53**	**-2**
Construction	-	330	-	1
Trade	-	128	-	-
Transportation and storage	-	-	23	-
Financial and insurance activities	83	9	30	-3
Business services	64	29	-	-

Table B. Net cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**1 342**	**125**	**130**	**-2**
Developed economies	**1 157**	**-218**	**-**	**-**
European Union	-10	-7	-	-
Canada	19	347	-	-
Australia	-338	-1 070	-	-
Japan	1 486	468	-	-
Developing economies	**185**	**343**	**130**	**-2**
Africa	80	21	-	-
Asia	105	322	130	-2
China	-	-12	-	-
Korea, Republic of	-	195	30	-
Indonesia	10	105	-	-
Singapore	-13	32	23	-

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	LDCs as destination		LDCs as investor	
	2018	2019	2018	2019
Total	**40 369**	**35 427**	**1 836**	**693**
Primary	**7 664**	**2 399**	**-**	**-**
Mining and quarrying	7 327	2 253	-	-
Manufacturing	**12 638**	**20 848**	**202**	**227**
Food, beverages and tobacco	915	1 345	87	26
Coke and refined petroleum products	5 661	8 859	-	-
Chemicals and chemical products	138	3 481	-	-
Other non-metallic mineral products	952	1 588	-	103
Furniture	58	2 160	34	34
Services	**20 066**	**12 180**	**1 634**	**466**
Electricity, gas, steam and air conditioning supply	9 896	3 510	953	150
Construction	1 966	1 516	-	-
Transportation and storage	2 209	3 812	423	109

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

Partner region/economy	LDCs as destination		LDCs as investor	
	2018	2019	2018	2019
World	**40 369**	**35 427**	**1 836**	**693**
Developed economies	**18 399**	**18 185**	**16**	**23**
European Union	6 881	9 153	16	15
Japan	930	3 750	-	8
Switzerland	459	2 008	-	-
United States	9 841	1 965	-	-
Developing economies	**21 820**	**17 129**	**1 733**	**670**
China	8 707	3 876	-	81
Nigeria	91	2 526	-	-
Thailand	2 438	807	-	-
Saudi Arabia	34	3 465	-	15
Singapore	915	1 877	-	-
Transition economies	**149**	**114**	**87**	**-**

The outlook for FDI into the 47 least developed countries (LDCs) is extremely weak. Necessary health measures to control COVID-19 hinder the implementation of ongoing and announced investment projects. LDCs are highly dependent on investment in natural resources, which is being negatively affected by the oil and commodity price shocks. Tourism-dependent LDCs will also see a fall of FDI in this industry. Announced greenfield FDI projects, a key indicator of foreign investor intentions, were already down in 2019 and contracted further during the first quarter of 2020. The drop in 2020 will add to the decline in 2019 of 6 per cent (to $21 billion), when FDI flows to Asian LDCs shrank, although those to African LDCs grew.

Prospects

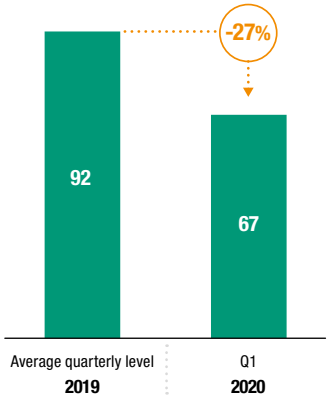
The pandemic and its economic consequences will hit LDCs hard, making prospects for FDI bleak. Limited domestic resources and weak health care capacity present an immediate challenge for LDCs in responding to the pandemic. Restrictive measures to control the pandemic have had negative consequences for economic activities. The immediate impact on FDI is a freeze in ongoing investment activities and operations in host economies. A prolonged shutdown of economic activities will discourage new investment, slow down FDI from existing investors and possibly result in divestments. This could affect many LDCs that are highly dependent on foreign investors both for export-oriented industrial activity and in public-private partnership projects in infrastructure development (such as power generation plants and industrial parks). A delay in these projects will diminish not only short-term prospects for new FDI flows to LDCs but also decelerate long-term economic growth.

The decline in announced greenfield FDI in LDCs accelerated in the first quarter of 2020. They were down 27 per cent in number (figure II.15) and almost 20 per cent in value from the quarterly average of 2019 (figure II.16). Levels in 2019 were already 12 per cent below those of 2018, due largely to a slump in power generation (mainly in Asian LDCs) and a nearly 70 per cent contraction in mining and quarrying projects (in African LDCs). New capital spending plans by investors from all the top three home economies plummeted (by 55 per cent from China, 80 per cent from the United States and 67 per cent from Thailand) (table D). In only a handful of industries (food and beverages, chemicals and furniture manufacturing) did announced investment grow in 2019, contributing to an overall uptick in investment in non-extractive activities in LDCs (table C).

In early 2020, a limited number of projects broke the downward trend in announced greenfield projects, though their implementation was becoming increasingly uncertain. For example, manufacturing projects (exceeding $1.5 billion in total) were announced by investors from China (in the Democratic Republic of the Congo, Mozambique, Senegal and Zambia) and Malaysia (in Cambodia), and large-scale projects by Chinese MNEs in electricity (in Myanmar) and telecommunication (in Bangladesh).

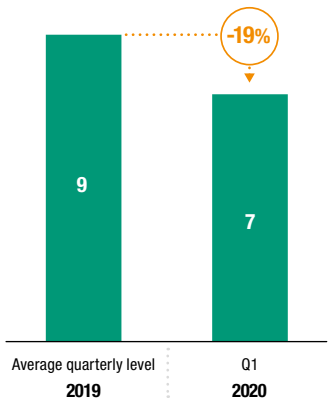
The resilience of LDCs to external shocks is low,[30] due to their multiple structural weaknesses.

Figure II.15. LDCs: Number of announced greenfield investment projects, average quarterly 2019 and Q1 2020
(Number)



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

Figure II.16. **LDCs: Value of announced greenfield investment projects, average quarterly 2019 and Q1 2020**
(Billions of dollars)



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

The composition of announced greenfield projects in the past decade confirms the existence of major vulnerabilities in LDCs. By value of projects, the share of announced investment in extractive industries (including processing) remained high, though it diminished from over 40 per cent in 2010–2014 to about a quarter of the total in the past five years (table II.4). Taking into account that nearly half of transportation and storage investment was attributed to infrastructure projects linked to extractive industries (e.g. oil and gas pipelines and terminals), about a third of the total FDI investment announced in LDCs went to extractive industries. In resource-based LDCs, the collapse in oil and other commodity prices has caused revenue shortages that make it even more difficult to respond to the public health and economic emergency. The downward earnings revisions by energy MNEs during the pandemic could even affect FDI prospects for LDCs that are not traditionally resource based (for example in Bangladesh and Senegal, where MNEs have recently announced oil and gas related projects).

Several LDCs have been severely affected by the sudden halt in international tourism investment. Measured by the direct and indirect contributions of travel and tourism activities in GDP, dependency on tourism is particularly high in Vanuatu (40 per cent) and Cambodia (more than 30 per cent) and moderately so in the

Table II.4. **LDCs: Shares in total value of announced greenfield FDI projects in selected industries and home economies, 2015–2019 average, and average MNE earnings revisions for fiscal year 2020** (Per cent)

Industry	Share in total value of projects, 2015–2019 average	Average earnings revisions
Extractive industries	**27**	**-61**
Mining and quarrying	10	-70
Coke and refined petroleum products	10	-86
Other non-metallic mineral products	4	-28
Basic metal and metal products	2	-54
Others	**..**	**..**
Electricity, gas, steam and air conditioning supply	21	-16
Construction	11	-21
Transportation and storage	9	-63
Information and communication	4	-31
Accommodation and food service activities	3	-94
Textiles, clothing and leather	3	-49

Home economy	Share in total value of projects, 2015–2019 average	Average earnings revisions
Developed economies	**40**	**-39**
United States	11	-47
Japan	6	-13
France	4	-51
Developing and transition economies	**60**	**-30**
China	17	-20
Thailand	8	-43
India	4	-34
United Arab Emirates	3	-35
Singapore	3	-29
Malaysia	3	-43
Morocco	2	0

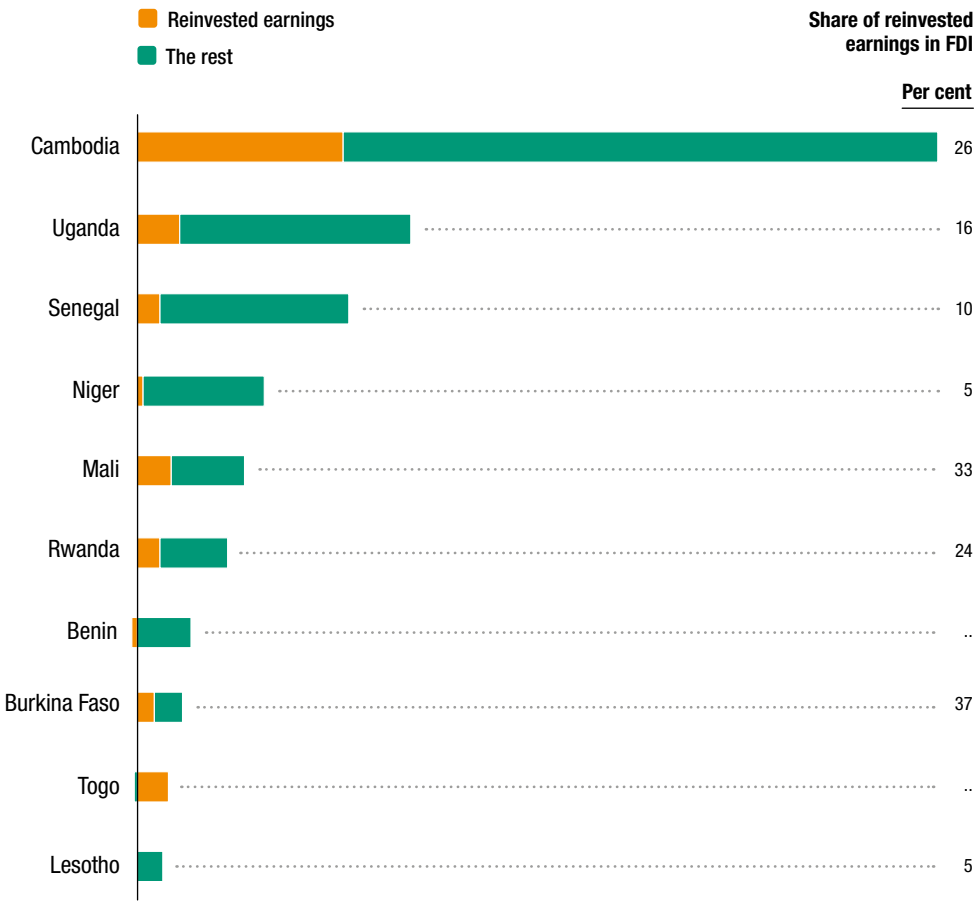
Source: UNCTAD, based on information from Financial Times Ltd, fDi Markets (www.fDiMarkets.com) for announced greenfield projects and Refinitiv SA for average MNE earnings revisions as of mid-May 2020.
Note: Total value of announced greenfield projects is $36.5 billion annually. Cement and concrete products represent 90 per cent of the manufacture of other non-metallic mineral projects. Transportation and storage includes oil and gas pipelines and terminals. Revisions on earnings exceeding +/-500 per cent were excluded.

Lao People's Democratic Republic and the United Republic of Tanzania (over 10 per cent) (UN DESA, 2020a). In announced greenfield FDI in the last five years, Bhutan, Cambodia, Ethiopia, the Lao People's Democratic Republic, Myanmar and the United Republic of Tanzania all attracted sizeable projects. The share of tourism broadly defined (including casino resort projects and some transportation projects) amounted to about 5 per cent of the total value of projects in all LDCs. In this industry, global MNEs project their earnings for fiscal year 2020 to collapse by more than 90 per cent (see table II.4). Prolonged restrictions on international travel will hurt tourism-dependent LDCs disproportionately.

Lower corporate earnings of MNEs will affect reinvested earnings, which constitute an important part of FDI in some LDCs. The available data, however, suggest that the importance of reinvested earnings in LDCs overall is not as high as it is in other developing economies. FDI component data for the leading host LDCs (including Ethiopia, Mozambique and Myanmar) suggest that reinvested earnings play a relatively minor part. However, in several other LDC host economies reinvested earnings constitute a quarter to a third of FDI inflows (figure II.17).

The decline in FDI will add to the economic problems of LDCs. Although the decline in GDP forecast for LDCs as a group is less than that forecast for the rest of the world,[31] the pandemic could still undo much of the modest progress made during the decade of the Istanbul Programme of Action (2011–2020).

Figure II.17. LDCs: FDI inflows and reinvested earnings, 2019 (Volume and per cent)



Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: The figure covers only economies that report reinvested earnings separately.

Some LDCs are making strenuous efforts to mitigate the effect of the crisis on business and investors, accelerating the implementation of eGovernment services. To keep basic administrative procedures and public services open to firms and investors, several LDCs have turned to online-only services. In Benin, for example, the business registration system (MonEntreprise.bj, based on UNCTAD's eRegistrations platform) has been the only way for entrepreneurs and investors to register their businesses. During the first week of the public office closure, MonEntreprise.bj was used to create 182 businesses. Governments in other LDCs, including Bhutan, Lesotho and Mali, have also used eRegistrations to provide essential support for businesses, integrating services such as social security.

Inflows in 2019

In 2019 FDI flows to the 33 African LDCs rose by 17 per cent to $12 billion (figure B). Part of the increase was due to lower negative inflows in fuel exporter *Angola*. Increases were reported by *Zambia* (up by $345 million, a rebound from a 13-year low in 2018) and *Togo* (up by $317 million, a turnaround from -$183 million in 2018, caused by growing intracompany loans and record-high reinvested earnings). With an increase of $211 million, FDI in *Uganda* reached a record high of $1.3 billion (up by 20 per cent from 2018). Flows to the *United Republic of Tanzania* increased by 5 per cent to $1.1 billion. Among those posting smaller increases in absolute terms, *Mauritania* (up by 15 per cent to a six-year high of $885 million) and *Senegal* (up by 16 per cent to a record high of $983 million) joined the top 10 host LDCs in 2019. In Senegal, FDI grew for a seventh consecutive year, driven by a 40 per cent rise in equity investment (contributing to nearly half of the inflows in 2019).

In contrast, declines were recorded in some large FDI hosts, including *Ethiopia* (down by $794 million), *Mozambique* (down by $491 million), and *the Sudan* (down by $310 million, or 27 per cent, to a record low of $825 million). In Ethiopia, FDI inflows fell for the second year, from a peak in 2016, down 24 per cent to a five-year low of $2.5 billion. FDI in manufacturing, construction and real estate shrank as the pace of industrial park development slowed and FDI from China plateaued. FDI in Mozambique fell to a 10-year low of $2.2 billion (down by 18 per cent, but to a similar level as that reported in 2017), as FDI in mining contracted by a third. In the *Democratic Republic of the Congo*, FDI dipped by 9 per cent to $1.5 billion. Among the smaller host LDCs, FDI contracted sharply (by $308 million) in commodity-based *Guinea* to a 17-year low of $45 million.

FDI inflows to the nine Asian LDCs fell for the first time in eight years, to $9 billion, a decline of 27 per cent (figure B). The top three FDI recipients – *Cambodia*, *Myanmar* and *Bangladesh* – accounted for 94 per cent of those flows. While FDI growth in Cambodia continued, Bangladesh and Myanmar saw declining FDI flows. In Cambodia, FDI reached a record $3.7 billion (up 16 per cent), making this country the largest FDI host among LDCs in 2019. The equity component of FDI remained the largest and fastest growing, contributing to three-quarters of inflows. Investment in manufacturing and services grew. FDI from China rose to represent over 40 per cent of the total. FDI in *Nepal* also rose, recovering from a three-year low of $67 million in 2018 to $185 million in 2019, driven by hydropower projects by Indian investors.

In contrast, FDI in Bangladesh contracted by 56 per cent to $1.6 billion with the tapering-off of the effects of a boost from major M&A sales recorded in 2018 (exceeding $1.5 billion in total).[32] In Myanmar, FDI flows diminished for the second year to $2.8 billion (down by 22 per cent), the lowest level in five years. Policy reforms to facilitate FDI and MNE operations, such as full liberalization of wholesale and retail trade, liberalization of foreign

investment in mining, and opening of financing and banking services to branches of foreign banks, have not yet had the expected effect. In the *Lao People's Democratic Republic*, FDI inflows more than halved to an eight-year low of $557 million (down by 58 per cent), with diminishing investment in capital-intensive projects in power generation and mining.[33]

Sales of stakes in foreign-invested projects to local owners reduced net M&A flows to LDCs to a six-year low of $125 million. The largest deal of this type was a sale totalling $650 million in a stalled multinational oil and gas project in Timor-Leste, in which the national oil company acquired a majority stake from ConocoPhillips (United States) and Royal Dutch Shell (Netherlands).[34] Two large deals were also recorded in the primary sector, involving sales of assets between foreign investors (in Angola, for the value of $105 million, and in Burkina Faso, for $335 million). In the services sector, the net sales value more than trebled from 2018 to 2019 (table A), driven by two transactions in Asia: a $330 million deal in Bangladesh and a $128 million deal in Myanmar. Japan, Canada and the Republic of Korea were the three largest acquiring nations in these transactions (table B).

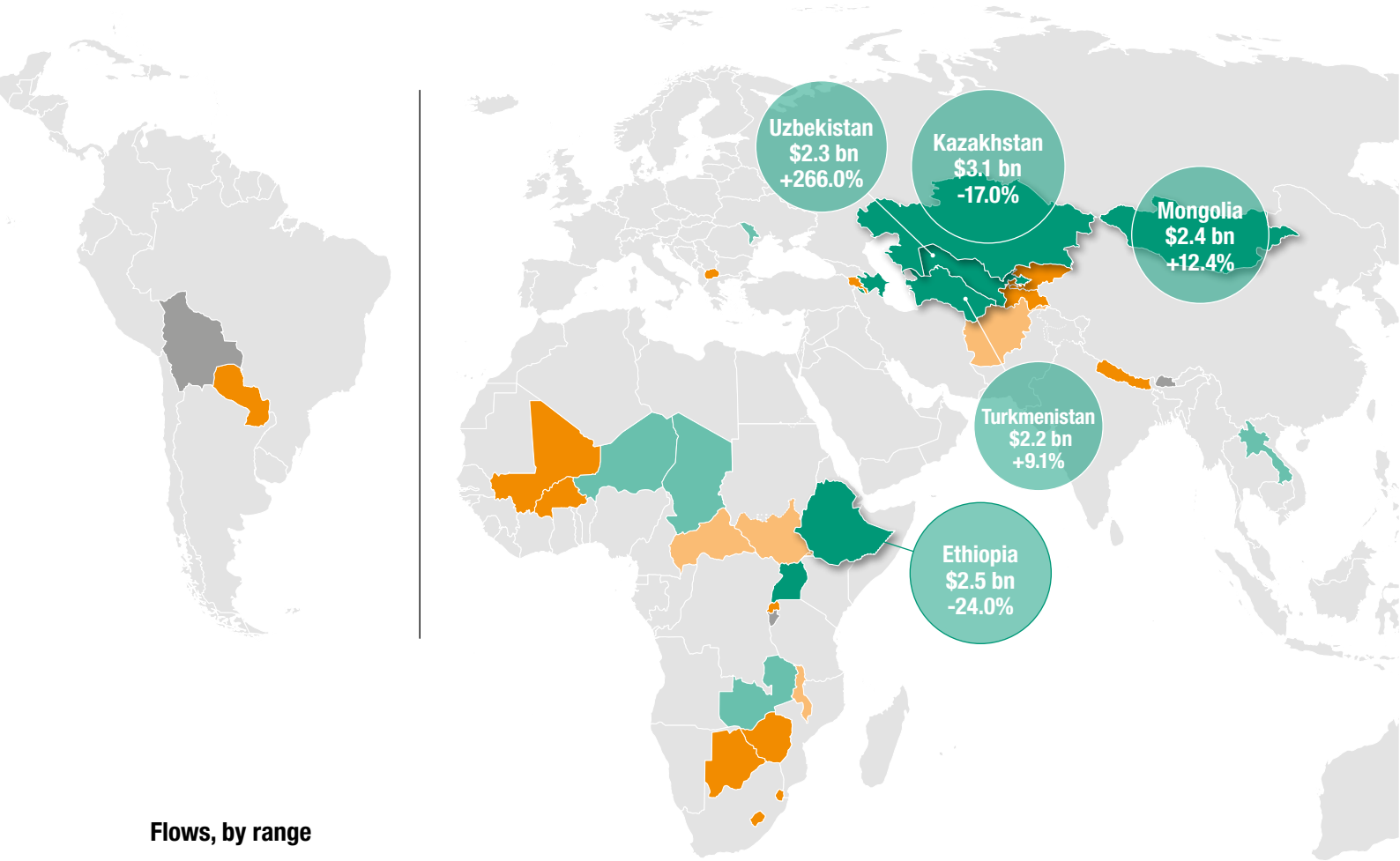
LANDLOCKED DEVELOPING COUNTRIES

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
22.0 bn

2019 Decrease
-1.0%

Share in world
1.4%



Flows, by range

- Above $1 bn
- $0.5 to $0.9 bn
- $0.1 to $0.5 bn
- $10 to $99 mn
- Below $10 mn

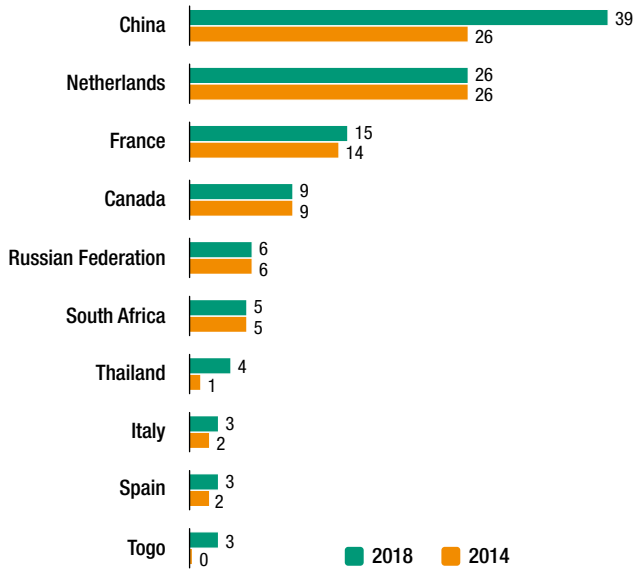
Top 5 host economies

Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Billions of dollars and 2019 growth)

Figure A. Top 10 investor economies by FDI stock, 2014 and 2018 (Billions of dollars)



Source: UNCTAD.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of the Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined. Dotted line in Jammu and Kashmir represents approximately the Line of Control agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

HIGHLIGHTS

- Pandemic border closures amplify structural weaknesses in FDI
- Greenfield project numbers down 55 per cent in Q1 2020
- FDI stagnated in 2019

Figure B. FDI inflows, 2001–2019 (Billions of dollars and per cent)

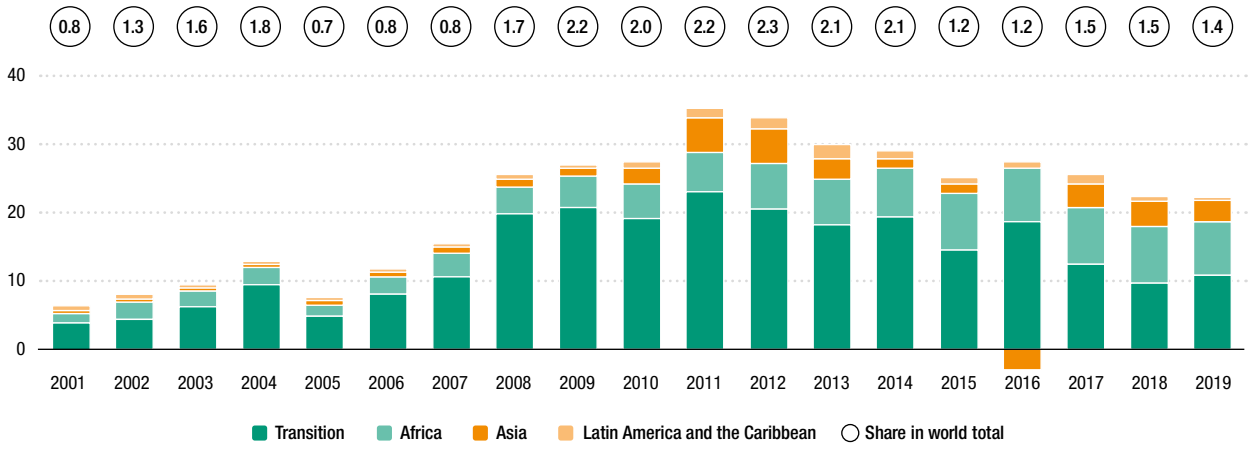


Table A. Net cross-border M&As by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**-236**	**149**	**323**	**714**
Primary	**130**	**-19**	**-**	**-40**
Agriculture, forestry and fishing	20	6	-	-
Mining of metal ores	14	128	-	-
Manufacturing	**93**	**-**	**-**	**-**
Food, beverages and tobacco	79	-	-	-
Pharmaceuticals, medicinal chemical and botanical products	14	-	-	-
Services	**-459**	**168**	**323**	**754**
Trade	-	6	3	-
Transportation and storage	-	9	-	-
Finance	113	148	45	754
Business services	-	18	-	-
Education	7	11	-	-

Table B. Net cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**-236**	**149**	**323**	**714**
Developed economies	**-116**	**167**	**-**	**23**
European Union	-101	170	-	-
Austria	-	62	-	-
Netherlands	26	128	-	-
United Kingdom	30	153	-	-
Canada	22	365	-	-
Developing economies	**-115**	**47**	**319**	**-2**
China	190	59	-	-
Korea, Republic of	-	9	30	-
Turkey	-446	104	273	-
United Arab Emirates	-	20	-	-
Transition economies	**-34**	**-80**	**3**	**694**
Ukraine	-	-	-	734

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	LLDCs as destination		LLDCs as investor	
	2018	2019	2018	2019
Total	**40 669**	**25 058**	**8 631**	**1 161**
Primary	**5 461**	**704**	**-**	**3**
Mining and quarrying	4 999	335	-	3
Manufacturing	**19 484**	**13 892**	**6 462**	**415**
Food, beverages and tobacco	662	2 848	87	-
Textiles, clothing and leather	3 441	516	6	6
Coke and refined petroleum products	8 176	34	6 327	206
Chemicals and chemical products	1 436	4 995	-	-
Motor vehicles and other transport equipment	1 201	851	-	-
Services	**15 724**	**10 463**	**2 169**	**742**
Electricity, gas, steam and air conditioning supply	6 393	5 116	-	-
Construction	2 270	440	-	-
Accommodation and food service activities	2 854	447	819	-

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

Partner region/economy	LLDCs as destination		LLDCs as investor	
	2018	2019	2018	2019
World	**40 669**	**25 058**	**8 631**	**1 161**
Developed economies	**20 785**	**9 700**	**121**	**19**
European Union	8 594	4 758	121	12
France	478	1 003	-	-
Germany	823	1 756	3	-
Japan	4 474	839	-	-
United States	5 574	2 735	-	6
Developing economies	**18 186**	**13 674**	**7 503**	**937**
China	7 870	5 241	-	61
Turkey	1 064	3 286	6 305	105
United Arab Emirates	1 072	1 028	-	5
Transition economies	**1 698**	**1 684**	**1 008**	**205**
Russian Federation	1 071	1 348	18	18

The economic impact of the pandemic has amplified the structural weaknesses of the 32 landlocked developing countries (LLDCs), leading to projections of a major decline in FDI for at least two years. With the closing of borders, transportation links with the global economy have been seriously disrupted. In several LLDCs, the impact of the lockdown on GVCs is causing a decline in export-oriented operations. Deficiencies in health infrastructure are forcing economic activities across most LLDCs to function at a low ebb, which is expected to prolong the downturn in FDI. These negative developments will compound the effects of two years of decline in inbound FDI, which in 2019 reached $22 billion – or 1.4 per cent of global FDI inflows.

Prospects

All 32 LLDCs are struggling with the economic impact of the pandemic on FDI inflows. Despite the heterogeneity of the group, their common disadvantage has become particularly acute at a time when borders are closed for health reasons. Border closures affect LLDC trade and investment links disproportionately, as they cannot turn to direct sea transport, the mode that carries an estimated 80 per cent of global trade. Border closure measures also hinder regional integration efforts, which have been an important factor mitigating the disadvantage of being landlocked, and disrupt trade corridors, land transport and connectivity efforts. One example is the Belt and Road Initiative, with the pandemic making it difficult to get workers to Chinese-led projects abroad. During the lockdown it has become problematic to send experts to remote mining areas in LLDCs, such as the You Tolgoi mine in Mongolia.[35] Moreover, disruptions in manufacturing activities along supply chains are hindering the sourcing of equipment and machinery for the Belt and Road Initiative. This affects many LLDCs, which are dependent on imported equipment that must cross various land borders.

LLDCs may suffer major losses from the prolongation of the decline in both their GDPs and the GDPs of their most important trading partners. This decline adds difficulty to plans to attract foreign investors, who are already wary of the structural weaknesses of these economies. Increasingly, projects will be put on hold or postponed. Already in 2019, the value of announced greenfield projects, a key indicator of FDI prospects, fell from $41 billion in the previous year to $25 billion (table D). The list of industries most affected included coke and refined petroleum products, mining, textiles, accommodation and food services, and construction (table C). Motor vehicles and other transport equipment production also fell by almost 30 per cent. Most of these industries continued their decline at the beginning of 2020 due to their vulnerability to the early pandemic shock. The largest greenfield projects announced in 2019 (table II.5) included two Chinese chemicals projects in the Plurinational State of Bolivia and two Turkish electricity projects in Uzbekistan, all of which are expected to take place over multiple years. In the first quarter of 2020, the downward trend in greenfield announcements intensified. There were only 40 projects, a decline of 55 per cent from the quarterly average of 2019 (figure II.18).

Longer-term patterns of announced greenfield projects indicate a concentration in a limited number of sectors, some of which are highly sensitive to the effects of the pandemic. The largest industry of the 2010–2019 decade (coke and refined petroleum) is one of the activities most severely affected by the fall in earnings (see table I.1). In terms of home countries of announced greenfield investment, the main concern is LLDCs' dependence on a small number of source countries, predominantly China, Turkey, the United States and Germany (table D). The relative concentration of project values in a handful of source countries raises the question of whether geographical diversification in the future could bring more stability to FDI in LLDCs.

Table II.5. Largest announced greefield projects targeting LLDCs, 2019

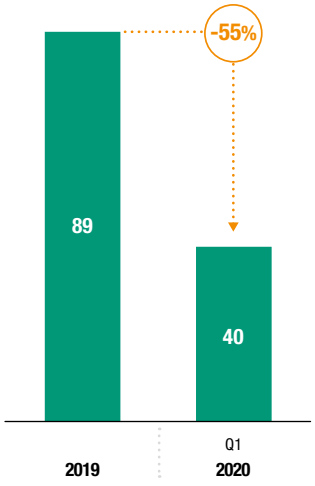
Home country	Host country	Business	Industry	Amount	Jobs created	Investor
China	Bolivia, Plurinational State of	Manufacturing	Chemicals, basic chemicals	1 490	3 000	Xinjiang TBEA Group
Turkey	Uzbekistan	Electricity	Coal, oil and gas, fossil fuel electric power	996	116	Cengiz Enerji Sanayii ve Ticaret
Turkey	Uzbekistan	Electricity	Coal, oil and gas, fossil fuel electric power	996	116	Yildirim Holding
China	Bolivia, Plurinational State of	Manufacturing	Chemicals, basic chemicals	896	1 882	Xinjiang TBEA Group
Brazil	Paraguay	Manufacturing	Renewable energy, biomass power	800	3 000	ECB Group
China	Kazakhstan	Manufacturing	Chemicals, basic chemicals	600	1 183	North Huajin Chemical Industries
France	Bolivia, Plurinational State of	Logistics, distribution	Transportation, support activities for transportation	420	2 663	Aeroports de Paris Group
China	Rwanda	Manufacturing	Textiles, clothing and clothing accessories	374	7 500	Pink Mango C&D
Nigeria	Niger	Manufacturing	Building materials, cement and concrete products	322	640	Dangote Cement

Source: UNCTAD, FDI/MNE database.

Inflows in 2019

A region-by-region analysis reveals major differences in 2019. Investment into transition-economy LLDCs proved resilient to stagnation. FDI to African LLDCs declined moderately, while Asian and Latin American LLDCs experienced a more pronounced downturn (figure B). Flows to LLDCs remained concentrated in a few economies, with the top five recipients (Kazakhstan, Ethiopia, Mongolia, Uzbekistan and Turkmenistan) accounting for 57 per cent of total FDI to the group. Cross-border M&A deals in the region recovered from a negative value in 2018, though the value remained negligible, and concentrated in financial services (table A).

Figure II.18. LLDCs: Average quarterly number of announced greenfield investment projects, 2019 and Q1 2020 (Number)



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

In 2019, FDI flows to the 16 African LLDCs declined by 5 per cent, to $7.8 billion. This drop was only slightly below the average for the African continent, which experienced a decrease of 10 per cent, to $45 billion. There were, however, major differences between economies. FDI inflows fell significantly for the second year in Ethiopia, the largest host economy of the region (after a peak in 2017). This decline put in evidence some of the vulnerabilities of the Ethiopian economy, such as its exposure to climate change (especially in agriculture) and the instability in some regions. FDI dropped in Zimbabwe as well. That country continues to suffer from general economic decline and instability, making it a challenging location in which to invest. In contrast, sizeable increases in FDI inflows were registered in other countries, especially Uganda and Zambia. In Uganda, various industries (such as oil and gas, construction, mining, retail, and telecommunication) attracted FDI. FDI also expanded in business services and agribusiness. In Zambia, renewable energy and food processing attracted large new projects.

FDI in the four landlocked Asian countries other than Mongolia (analysed with the landlocked economies in transition) fell by 48 per cent to below $800 million, after a less pronounced drop in 2018. Most of the decrease was due to a fall in FDI flows to the Lao People's Democratic Republic, which registered a second year of negative growth, this time down 58 per cent, to less than $600 million. This contraction of investment took place mostly because of a continued slowdown in FDI projects from China. FDI flows in Bhutan and Nepal increased, but from a very low base. The decline in investment flows to the four Asian LLDCs was deeper than the decline in flows to developing Asia as a whole (5 per cent, to $474 billion). This gap may widen as the COVID-19 crisis unfolds.

In the two Latin American LLDCs, FDI inflows contracted sharply, by 59 per cent, to $319 million. The inflows of the group fell to their lowest level since 2005. This trend was very different from that of Latin America and the Caribbean as a whole, which experienced a rise of 10 per cent (to $164 billion). In the Plurinational State of Bolivia, FDI flows turned negative, as investors held back new projects and repaid intracompany loans in a year of political turmoil and social unrest. Investment in Paraguay remained practically unchanged at $478 million.

Inflows to the nine landlocked transition economies and Mongolia increased by 12 per cent, to $13 billion, after two years of decline. Within this group, too, divergent trends were observed. As its opening-up accelerated, Uzbekistan recorded a leap in inflows (266 per cent, to $2.3 billion) due to the combined effects of continuing investment in natural resources and the arrival of new investors, especially from Asia. The Republic of Moldova also experienced a rise (91 per cent, to $589 million), as retail trade attracted international chains from Eastern European countries and from Germany. FDI also grew in Mongolia, by 12 per cent, to $2.4 billion, mostly due to continued large mining projects, especially the Oyu Tolgoi copper-gold mine. Equity capital and reinvested earnings accounted for the fastest-growing part of flows, expanding by 23 per cent. In contrast, flows to North Macedonia declined after the exceptional surge in 2018. FDI flows to Kazakhstan also dropped, despite ongoing large projects in metal mining.

FDI data provided by investing countries show that with an FDI stock of $39 billion, Chinese MNEs – supported by the Government through the Belt and Road Initiative (*WIR19*) – were by far the largest investors in LLDCs in 2018 (figure A). As of 2020, the Government of China had signed bilateral agreements under the Initiative with 26 of the 32 LLDCs. However, the sustainability of the initiative is being put to the test in 2020, with GVCs and shipping lines interrupted by the pandemic. On the list of the largest investors, China was followed by the Netherlands, France and Canada. The relatively high FDI stock of French MNEs ($15 billion) can be explained by their strength in natural resources, especially in Central Asia, and historical links with French-speaking LLDCs in Africa.

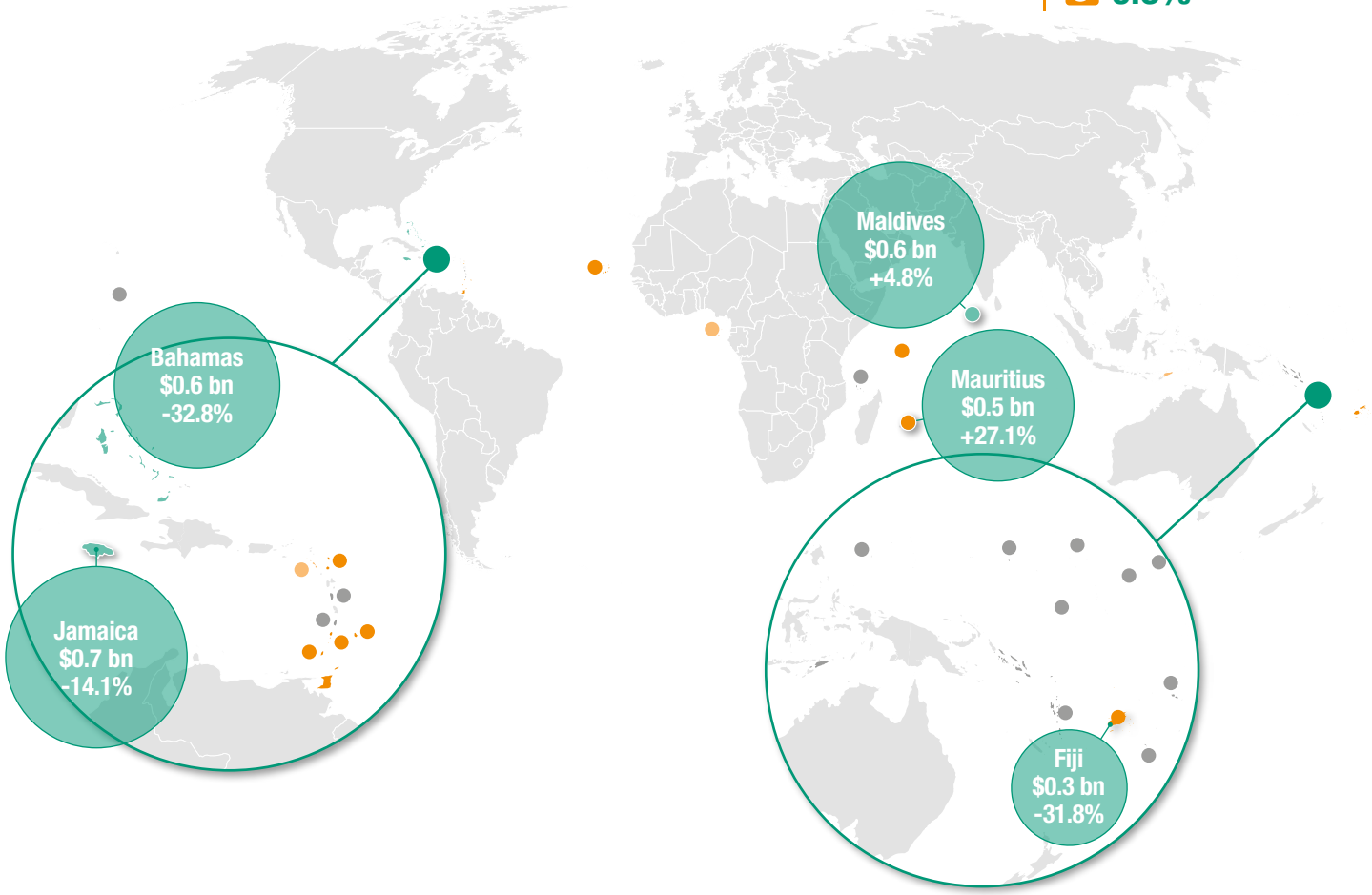
SMALL ISLAND DEVELOPING STATES

FDI flows, top 5 host economies, 2019 (Value and change)

2019 Inflows
4.1 bn

2019 Increase
+14.4%

Share in world
0.3%



Flows, by range

- Above $1 bn
- $500 to $1000 mn
- $100 to $500 mn
- $50 to $100 mn
- Below $50 mn

Top 5 host economies

Economy
$ Value of inflows
2019 % change

Outflows: top 5 home economies

(Millions of dollars and 2019 growth)

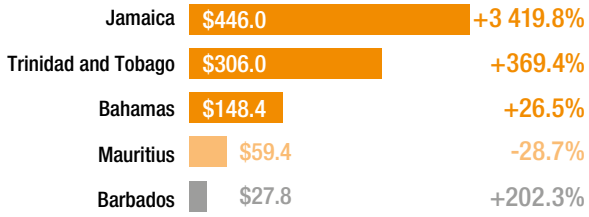
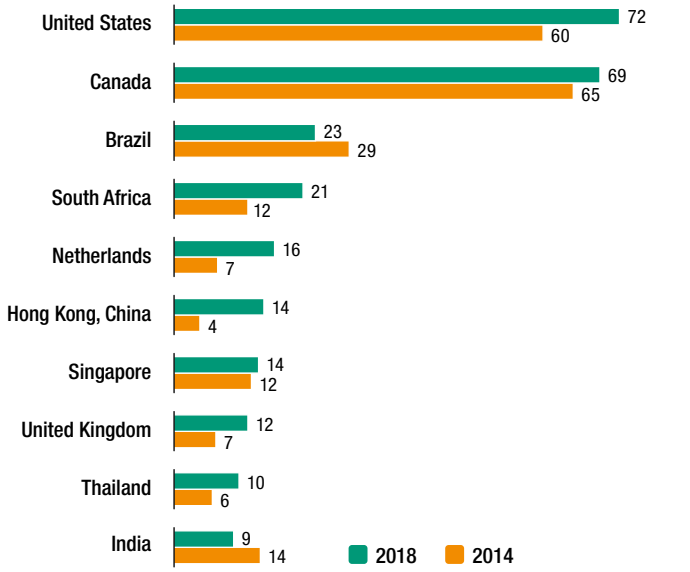


Figure A. Top 10 investor economies by FDI stock, 2014 and 2018 (Billions of dollars)



Source: UNCTAD.

Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Sudan and South Sudan has not yet been determined. Final status of the Abyei area is not yet determined. Dotted line in Jammu and Kashmir represents approximately the Line of Control agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

HIGHLIGHTS

- FDI in tourism-dependent SIDS to be hit hardest by pandemic
- Number of new projects down in early 2020 but less than in LLDCs, LDCs
- FDI flows in 2019 rose after two years of decline

Figure B. FDI inflows, 2001–2019 (Billions of dollars and per cent)

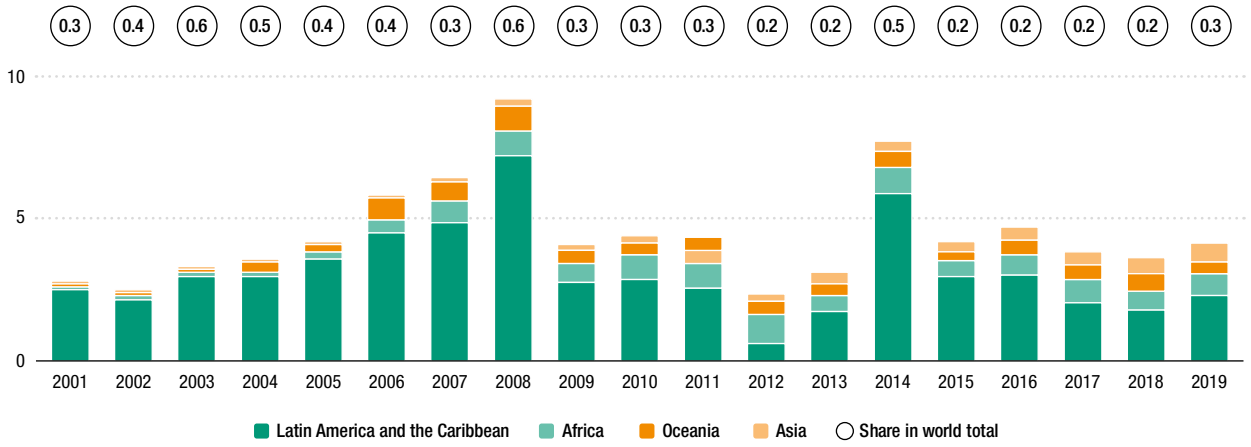


Table A. Net cross-border M&As by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	Sales		Purchases	
	2018	2019	2018	2019
Total	**834**	**750**	**2 860**	**2 354**
Primary	**219**	**-650**	**822**	**6**
Mining and quarrying	219	-650	813	5
Manufacturing	**-**	**14**	**-**	**-**
Motor vehicles and other transport equipment	-	14	-	-
Services	**615**	**1 385**	**2 038**	**2 348**
Electricity, gas, steam and air conditioning supply	-	-	103	-
Trade	0.1	-	583	-
Accommodation and food service activities	-131	-	-	-16
Information and communication	-91	-104	-	-
Financial and insurance activities	510	1 489	1 346	2 215
Business services	326	-	6	201
Human health and social work activities	-	-	-	-69

Table B. Net cross-border M&As by region/economy, 2018–2019 (Millions of dollars)

Region/economy	Sales		Purchases	
	2018	2019	2018	2019
World	**834**	**750**	**2 860**	**2 354**
Developed economies	**323**	**919**	**1 058**	**186**
European Union	478	184	1 049	-54
North America	195	1 385	9	227
Australia	-350	-650	-	14
Developing economies	**511**	**-169**	**1 763**	**2 168**
Africa	6	-16	74	-12
Latin America and the Caribbean	-	0.04	663	75
Asia	505	-153	1 026	2 104
China	505	-	103	2 050
Hong Kong, China	-18	-	-36	5
India	-	-	946	48
Malaysia	-	-169	-	-

Table C. Announced greenfield FDI projects by sector/industry, 2018–2019 (Millions of dollars)

Sector/industry	SIDS as destination		SIDS as investor	
	2018	2019	2018	2019
Total	**1 719**	**2 061**	**1 020**	**584**
Primary	**-**	**100**	**-**	**-**
Agriculture, forestry and fishing	-	100	-	-
Manufacturing	**44**	**59**	**-**	**45**
Pharmaceuticals, medicinal chemical and botanical products	-	38	-	-
Services	**1 675**	**1 903**	**1 020**	**538**
Accommodation and food service activities	1 008	1 202	-	202
Administrative and support service activities	114	119	-	30
Electricity, gas, steam and air conditioning supply	-	185	-	-
Financial and insurance activities	87	125	380	97
Information and communication	121	162	640	157
Professional, scientific and technical activities	11	49	-	-
Trade	21	37	-	42

Table D. Announced greenfield FDI projects by region/economy, 2018–2019 (Millions of dollars)

Partner region/economy	SIDS as destination		SIDS as investor	
	2018	2019	2018	2019
World	**1 719**	**2 061**	**1 020**	**584**
Developed economies	**1 044**	**1 738**	**28**	**42**
European Union	248	1 490	3	42
Spain	-	862	-	-
United States	578	224	10	-
Developing economies	**675**	**323**	**992**	**542**
Africa	2	62	470	286
South Africa	2	28	282	-
Latin America and the Caribbean	155	187	225	225
Jamaica	-	185	-	-
Asia and Oceania	519	74	298	30
China	95	43	-	-
United Arab Emirates	176	12	15	30

The outlook for FDI in the 27 structurally disadvantaged small island developing States (SIDS) is grim. Measures restricting the movement of people put in place in many parts of the world to control the spread of the pandemic are taking a severe toll on these already fragile economies, affecting FDI flows, too. Tourism-dependent SIDS will be hit the hardest, with the travel and tourism industries suffering from the demand shock and uncertainties about new restrictive measures to be introduced permanently in source countries as the global economy reopens. The first quarter of 2020 showed signs of a contraction in FDI flows. In 2019, FDI flows to SIDS had increased to $4.1 billion after two years of decline.

Prospects

The global health and economic crisis will affect FDI prospects for SIDS disproportionately. The negative outlook for GDP is more severe for SIDS (-4.7 per cent for 2020) other structurally vulnerable economies. (UN-DESA, 2020b).[36] SIDS are extremely vulnerable to external shocks. They have a small economic base and are highly dependent on a small number of trading partners. The pandemic is straining the already fragile sources of finance of these economies, which will be exacerbated by lower tourism revenues in most and by the sharp fall in oil and other commodity prices in resource-based SIDS.

From the onset of the pandemic, containment measures put in place at borders (e.g. travel restrictions and mandatory self-isolation or quarantine) have led to an unprecedented demand-side shock on the global tourism industry. The UN World Tourism Organization (UNWTO) has revised its initial projection of the COVID-19 impact on international tourism arrivals for 2020 from a 20–30 per cent contraction to 60–80 per cent, having noted a 57 per cent drop in March alone and the imposition of travel restrictions in every country around the world.[37] Global 5,000 MNEs in the travel, tourism and hospitality industries project their expected global earnings to drop by more than 70 per cent (table II.6). This will deeply affect most SIDS economies and their FDI inflows.

Table II.6. SIDS: Shares in total value of announced greenfield FDI projects in selected industries and home economies, 2015–2019 average, and average MNE earnings revisions for fiscal year 2020 (Per cent)

Industry	Share in total value of projects, 2015–2019 average	Average earnings revisions
Travel, tourism and hospitality industries	**54**	**-72**
Accommodation and food service activities	47	-94
Transportation and storage	4	-63
Leisure and entertainment	3	-32
Others	**..**	**..**
Information and communication	15	-31
Electricity, gas, steam and air conditioning supply	6	-16
Administrative and support service activities	5	-32
Financial and insurance activities	4	-23
Construction	3	-21
Basic metal and metal products	3	-54

Home economy	Share in total value of projects, 2015–2019 average	Average earnings revisions
Developed economies	**61**	**-39**
United States	27	-47
Spain	14	-33
France	9	-51
Canada	5	-53
United Kingdom	3	-42
Developing and transition economies	**39**	**-30**
Jamaica	8	..
China	5	-20
Bahamas	4	..
Hong Kong, China	3	-39

Source: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fDiMarkets.com) for announced greenfield projects and from Refinitiv SA for average MNE earnings revisions as of mid-May 2020.

Note: Total value of announced greenfield projects is $2.2 billion annually. Transportation and storage includes oil and gas pipelines and terminals. Revisions on earnings exceeding +/-500 per cent were excluded.

The immediate impact of the pandemic mitigation measures on FDI has been a freeze in ongoing investment projects and new investment decisions (see chapter I). If the shutdown of domestic economic activities is prolonged and foreign investors do not foresee a quick recovery from the unprecedented global demand shock, FDI projects will be cancelled. In the worst-case scenario, active foreign investors will be forced to withdraw from host economies. This risk is particularly high in the travel, tourism and hospitality industries, which will be forced to adopt new business models to comply with international safety requirements (e.g. limiting capacity to maintain social distancing) when they gradually reopen.

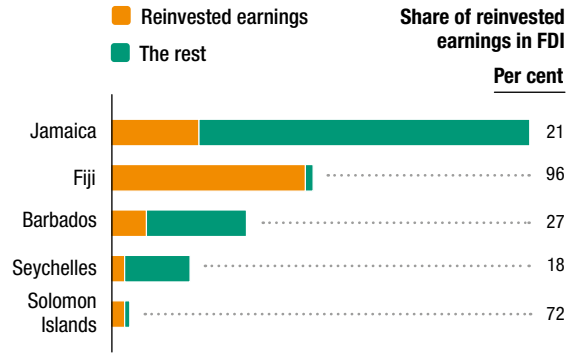
In recent years, dependency on tourism FDI in SIDS has risen at the expense of construction and mining and quarrying projects. Announced greenfield FDI data for 2015–2019 show that travel, tourism and hospitality projects contributed to more than half of the total of new investment announced in SIDS (see table II.6), compared with 16 per cent in the preceding five-year period. The recipients of these projects were predominantly the larger SIDS economies, namely Jamaica (35 per cent of the announced value of all tourism-related projects), the Maldives (15 per cent) and Fiji (10 per cent).[38] In the Maldives, where direct and indirect travel and tourism activities account for two-thirds of GDP,[39] the share of announced greenfield projects in FDI inflows exceeded 80 per cent. The importance of these projects is significant even for a relatively less tourism-dependent economy, such as Jamaica, where tourism-related projects (mostly hotel construction) accounted for 54 per cent of the total value of announced greenfield FDI projects.

The COVID-19 crisis will tighten MNE margins for reinvestment, affecting the short-term prospects for those SIDS in which reinvested earnings constitute an important part of FDI flows. Negative operational results of global MNEs in 2020 will automatically affect FDI in SIDS through reinvested earnings (see chapter I). Host economies such as Fiji and Solomon Islands, with a high dependency on reinvested earnings, will be hit particularly hard (figure II.19). The comparable data for the Bahamas and Mauritius were not available for 2019; however, in both SIDS, reinvested earnings constituted an important part of FDI flows in 2018: 34 per cent in the Bahamas and 60 per cent in Mauritius.

Early key indicators are down but less severely than in other structurally weak economies. Contractions in investment activities in SIDS were moderate in the early phase of the crisis. In announced greenfield FDI, the number of projects was down 18 per cent in the first quarter of 2020 (figure II.20), compared with 27 per cent in LDCs and 55 per cent in LLDCs. The value of greenfield projects announced in SIDS during the first quarter of 2020 were 28 per cent lower than the average quarterly value in 2019 (figure II.21).

The gravity of earnings revisions by global MNEs for the 2020 fiscal year indicates potentially severe downturns in FDI across industries (see chapter I). Outside of tourism-related industries, almost all industries in which certain SIDS depend on foreign capital – such as finance, ICT and renewable energy – will be negatively affected. Compounding the downward pressure on FDI inflows is the high dependency of SIDS on operational FDI activities by investors from the United States and Canada (figure A), and on announced greenfield FDI projects from the United States and Spain, two economies for which a major slump is forecast from the pandemic (see table II.6).

Figure II.19. SIDS: FDI inflows and reinvested earnings, 2019 (Volume and per cent)



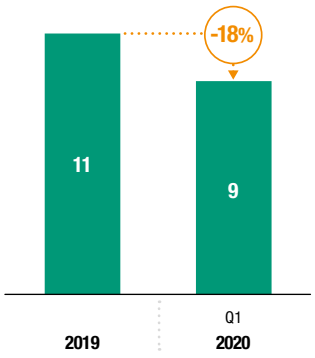
Source: *Source:* UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).
Note: The figure covers only economies that report reinvested earnings separately.

Inflows in 2019

FDI to the 27 SIDS increased in 2019 by 14 per cent, to $4.1 billion, after two years of decline. The top five recipients (*Jamaica*, the *Bahamas*, *the Maldives*, *Mauritius* and *Fiji*) attracted nearly two-thirds of all FDI to this group, but only two (the Maldives and Mauritius) registered higher flows than in 2018. A recovery of FDI after three consecutive years of divestment in resource-based *Trinidad and Tobago* brought aggregate FDI flows to the 10 Caribbean SIDS to a three-year high of $2.3 billion (up by 28 per cent; figure B). FDI in Trinidad and Tobago rose to a five-year high of $230 million, up from -$702 million in 2018. Negative reinvested earnings turned positive for the first time since 2012 (up $616 million from 2018), and an equity investment of $261 million in financial services added to the uptick. FDI flows to Jamaica shrank for a third year to a five-year low of $665 million (down by 14 per cent). FDI in tourism-related projects was insufficient to offset subdued MNE activity across other industries.[40] FDI inflows to the Bahamas, the largest host economy among SIDS, shrank by a third to $637 million, one-fifth of the peak registered in 2014. Investment in hotel projects slowed, and construction projects slated to start in 2019 were forced into a delay by Hurricane Dorian. In *Barbados* FDI fell by 11 per cent to $215 million in 2019.

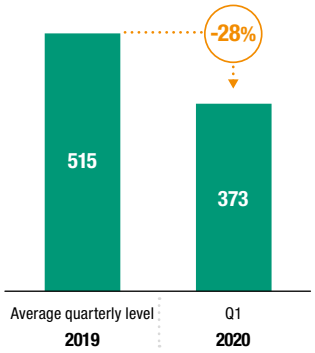
FDI to the five African SIDS increased by more than 20 per cent to $767 million (figure B). FDI inflows to Mauritius picked up to a level similar to that of 2017 ($472 million, up by 27 per cent), with a recovery in investment in real estate projects. FDI from developing economies grew, driven by MNEs from South Africa.[41]

Figure II.20. **SIDS: Average quarterly number of announced greenfield investment projects, 2019 and Q1 2020** (Number)



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

Figure II.21. **SIDS: Value of announced greenfield investment projects, average, 2019 and Q1 2020** (Millions of dollars)



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

Among the 12 SIDS in Asia and Oceania, aggregate FDI declined by 9 per cent (figure B). FDI flows to the Maldives renewed a record level of inflows in 2019 (up by 5 per cent to $565 million), led by tourism, ICT and transport services. FDI in resource-based *Timor-Leste* grew by 56 per cent to a record high ($75 million), due mostly to reinvestment in the services sector. In Fiji, after marking a 10-year high in 2018, FDI shrank by more than 30 per cent to a four-year low of $321 million on the back of a sharp downturn in economic activity.[42]

Cross-border M&A sales fell by 10 per cent to $750 million. Owing to the sales of foreign-owned stakes to domestic investors in Seychelles ($104 million in communication) and Timor-Leste ($650 million in oil and gas), the net sales value of cross-border M&As in SIDS as a whole fell (table A). The number of transactions (20) was the same as the previous year, but 70 per cent of them represented sales of foreign-owned stakes in SIDS to other foreign investors. The net sales value by North American investors rose to $1.4 billion (table B), driven by two deals in financial services in Barbados. The largest number of deals was registered in Mauritius, mostly by investors from the EU, as well as India and other countries in developing Asia; however, their net impact amounted to merely $10 million.

NOTES

[1] GVC-intensive manufacturing industries are industries with a high share of foreign value added in gross exports. They include high-tech (automotive, electronics and machinery and equipment) and low-tech (textiles) industries.

[2] Prices for both energy and non-energy commodities fell in 2019 due to weak demand, according to the World Bank's Commodity Price Index, although the decline was steeper for the former.

[3] GVC forward participation refers to the domestic value added in exports that are subsequently embodied in the exports of other countries. In comparison, GVC backward participation refers to the foreign value added that is embodied in exports of the exporting economy.

[4] The profit repatriation was driven by the change to tax laws that incentivized United States foreign affiliates to move capital to their parents.

[5] Reported by the National Bureau of Statistics, 17 April 2020.

[6] Ministry of Commerce, China, FDI in China for the first quarter, 15 April 2020, http://www.mofcom.gov.cn. The value of foreign investment inflows does not include investment in the financial sector.

[7] Ministry of Trade, Industry and Energy, Republic of Korea, Report of Foreign Direct Investment in Q1,10 April 2020, http://motie.go.kr.

[8] "Nissan alters production amid outbreak", *Bangkok Post*, 4 April 2020.

[9] "Nissan to close Indonesia, Spain auto plants after losses", Fox23 News, 28 May 2020.

[10] "Asia's garment workers hang by a COVID-19 thread", *Asia Times*, 25 March 2020.

[11] The IMF projected GDP growth of 1.9 per cent for India in 2020, compared with -1 per cent for all emerging economies.

[12] They included Alibaba and Ant Financial Group (both China), Naspers (South Africa) and Sequoia Capital (United States), which invested in local digital companies ranging from software development to microfinance and food service (such as Quicko Technosoft Labs, Bundl Technologies, Bounce, Digikredit Finance and Zomato).

[13] Most of the financing of infrastructure development is not FDI, but in the form of debt, grants and public-private partnerships through State-owned enterprises.

[14] Some of the biggest deals include venture capital investments in Indian internet companies One97, Grofers, BrainBees and MakeMyTrip.

[15] Equity and intracompany loans according to the BPM6 method Banco Central do Brasil. This method of reporting FDI differs from UNCTAD's directional reporting method; it gives an indication of the shock.

[16] FDI flows to Mexico are typically the highest in the first trimester when reinvested earnings are registered. Thus the total FDI inflows actually grew by 23 per cent with respect to the average in 2019, driven by a 78 per cent increase of reinvested earnings.

[17] Central Bank of Mexico, Expectations on net inflows, median value (Encuesta sobre las expectativas de los especialistas en economía del sector privado: febrero de 2020 and abril de 2020).

[18] Estimated on the basis of cumulative greenfield projects.

[19] For example, Texhong (Hong Kong, China) put on hold an investment announced last year of $200 million in Nicaragua and is considering exiting the country.

[20] In March, exports of medical supplies from Costa Rica's SEZs increased by 12.8 per cent.

[21] Project Finance International, "Brazil tricky power path forward", *Special Report: Global Energy,* April 2020.

[22] The IMF foresees a contraction by 6.6 per cent in 2020 for Mexico, worse than the projection for Argentina.

[23] "CCI warns of risk of ruining 3 million entrepreneurs due to the virus" (in Russian), RBC News, 21 March 2020.

[24] Radomir Ralev, "Cooper Tire to close temporarily Serbian plant due to coronavirus crisis", SeeNews, 23 March 2020, https://seenews.com/news/cooper-tire-to-close-temporarily-serbian-plant-due-to-coronavirus-crisis-691965; and Radomir Ralev, "Fiat Chrysler Automobiles temporarily closes Serbian factory due to coronavirus pandemic", SeeNews, 16 March 2020, https://seenews.com/news/fiat-chrysler-automobiles-temporarily-closes-serbian-factory-due-to-coronavirus-pandemic-690939.

[25] According to UNCTAD data, more than one-quarter of the value of announced greenfield projects in 2010–2019 (downstream coke and refined petroleum included) and more than 35 per cent of the value of net cross-border M&A purchases in in 2010–2019.

[26] "Russian oil major scraps dividend as industry reels from oil price crash", *The Moscow Times,* 22 April 2020.

[27] Jake Cordell, "Profit slumps herald more trouble ahead for Russia's corporate giants", *The Moscow Times,* 18 May 2020, https://www.themoscowtimes.com/2020/05/18/profit-slumps-herald-more-trouble-ahead-for-russias-corporate-giants-a70304.

[28] "China's North Huajin Chemical to invest $600 mln in construction of a carbide plant in Taraz", AKIPress, 30 May 2020.

[29] "Estimation of FDI in which the ultimate controlling investor is a resident (round tripping)" (in Ukrainian), National Bank of Ukraine, April 2020, https://bank.gov.ua/files/ES/FDI_y.pdf.

[30] For the latest United Nations economic vulnerability and human assets index scores by country, see www.un.org/development/desa/dpad/wp-content/uploads/sites/45/Snapshots2018.pdf. For conceptual information, see www.un.org/development/desa/dpad/least-developed-country-category/evi-indicators-ldc.html.

[31] According to UN DESA (2020b), GDP growth projections for 2020 are -0.3 per cent in LLDCs, -4.7 per cent in SIDS, and -1 per cent in developing and transition economies. Projections by the IMF (2020a) also suggest a relative resilience in low-income developing countries (which include most LDCs): 0.4 per cent growth in GDP for 2020, to be followed by 5.6 per cent growth in 2021, while real GDP in resource- and tourism-dependent countries in Sub-Saharan Africa will contract by 3 to 5 per cent (IMF, 2020b).

[32] "FDI stuck in low gear", *Financial Express,* 19 January 2020.

[33] In response to flooding damages caused by two tropical cyclones and a hydropower dam collapse in 2018, the Government suspended the implementation of all new investment project pending a review of existing ones to prioritize capital investment needs for repairing the damaged infrastructure. See IMF (2019).

[34] None of these transactions was included in the national FDI statistics, which exclude investment activities in oil and gas.

[35] Cecilia Jamasmie, "Rio lowers copper target at Oyu Tolgoi", mining[dot]com, 17 April 2020, https://www.mining.com/rio-lowers-copper-target-flags-further-issues-at-oyu-tolgoi.

[36] The UN classification of SIDS is broader than that of UNCTAD.

[37] UNWTO, "The impact of COVID-19 on international tourism, January-March 2020", 7 May 2020, www.unwto.org.

[38] Other major beneficiaries in relatively smaller host SIDS include Cabo Verde (12 per cent of the value of tourism-related projects in 2015-2019) and Antigua and Barbuda (10 per cent).

[39] Based on figure 4 in UN DESA (2020a).

[40] Bank of Jamaica, Quarterly monetary policy report, December 2019. http://boj.org.jm/uploads/pdf/qmp_report/qmp_report_october_december2019.pdf.

[41] Bank of Mauritius, "Preliminary gross direct investment flows: First three quarters of 2019 (excluding global business sector)", 23 December 2019, www.edbmauritius.org.

[42] "IMF staff completes 2019 Article IV visit to Fiji", IMF Press Release no. 19/457,12 December 2019.

CHAPTER III

RECENT POLICY DEVELOPMENTS AND KEY ISSUES

A. INVESTMENT POLICY RESPONSES TO THE PANDEMIC

Investment policies make an important contribution to tackling the devastating economic and social effects of the COVID-19 pandemic. Numerous countries around the globe have undertaken measures in support of investment or to protect critical domestic industries in the crisis. At the international level, the pandemic will slow the pace of investment treaty-making. At the same time, policy responses taken by governments to address the pandemic and its economic fallout could create friction with existing IIA obligations. Looking ahead, the pandemic is likely to have lasting effects on investment policymaking.

The global spread of COVID-19 is strongly affecting foreign investment. UNCTAD predicts a drastic drop in global foreign direct investment (FDI) flows – by up to 40 per cent – during 2020-2021 (chapter I). A Special Issue of UNCTAD's *Investment Policy Monitor* documents and analyses how investment policies have responded to the crisis.[1] This section summarizes its main content.

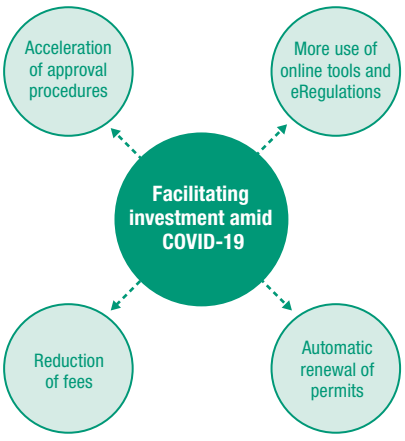
1. Investment policies counter the crisis in numerous ways

Fiscal and financial support for companies and employees are at the core of economic policies implemented in response to the crisis. National and international investment policies can play an important complementary role in various ways, although not all of them can be of immediate effect (table III.1).

a. Investment policies at the national level

(i) Facilitating investment

Figure III.1. Main investment facilitation responses to the pandemic



Source: UNCTAD.

Several countries (e.g. China, Myanmar, Serbia, Thailand) have taken steps to alleviate the administrative burden for firms and to reduce bureaucratic obstacles with the aim of speeding up production processes and delivery of goods during the pandemic. Measures include, for instance, the acceleration of approvals for investments in labour-intensive and infrastructure projects, faster approvals for health care and medical equipment businesses, and the reduction of investment application fees. Other examples are the prolongation of the validity of identity documentation as well as residence and work permits for legally present foreigners until the end of the pandemic, so that there is no need for their renewal (figure III.1).[2]

Furthermore, the pandemic and the resulting closure or disruption of regular governmental services have

Table III.1. Investment policy instruments for responding to the pandemic

Investment policy area	Policy measures (examples)
Policy actions at the national level	
Investment facilitation	• Alleviation of administrative burdens and bureaucratic obstacles for firms • Use of online tools and e-platforms
Investment retention and aftercare by investment promotion agencies (IPAs)	• COVID-19-related information services • Administrative and operational support during the crisis • Move to online services
Investment incentives	• Financial or fiscal incentives to produce COVID-19-related medical equipment • Incentives for conversion of production lines • Incentives for enhancement of contracted economic activities
State participation in crisis-affected industries	• Acquisition of equity in companies, including nationalization
Local small and medium enterprises (SMEs) and supply chains	• Financial or fiscal support for domestic suppliers (such as SMEs)
National security and public health	• Application and potential reinforcement of FDI screening in pandemic-relevant industries
Other State intervention in the health industry	• Mandatory production • Export bans • Import facilitation
Intellectual property (IP)	• General authorization of non-voluntary licensing, to speed up research and development (R&D) • IP holder-specific non-voluntary licensing, to enable imports of medication
Policy actions at the international level	
International support measures for investment	• International pledges in support of cross-border investment
IIAs	• Reform of IIAs in support of public health policies and to minimize investor–State dispute risks

Source: UNCTAD.

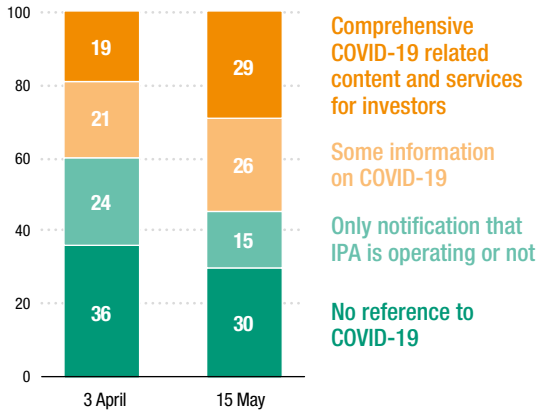
accelerated the use of online tools and e-platforms that enable the continuity of essential services. These solutions are implemented with assistance from international organizations, including UNCTAD through its eRegistrations tool.[3] Several countries (e.g. Guatemala, Lesotho, Mali) have recently used UNCTAD's assistance in this matter.

(ii) Retaining investment and intensifying aftercare by IPAs

The COVID-19 pandemic has created manifold economic, logistical and operational difficulties for foreign companies. Investment facilitation and aftercare measures, including those aimed at investment retention, are an important and immediately effective means to help foreign investors through the crisis.

The response of national investment promotion agencies (IPAs) to the crisis has been mixed. The majority (64 per cent on 3 April 2020) responded rapidly and moved their investor services online, with 19 per cent expanding their online facilitator role. Over one month later, on 15 May, seven out of 10 offered online information and services related to COVID-19. Moreover, an increasing number of agencies (29 per cent) were providing comprehensive COVID-19-related content and services, not only on their websites but also through social media (figure III.2).

Figure III.2. Online reaction by IPAs to the pandemic: type of information added to websites, as of 3 April and 15 May 2020 (Per cent)



Source: UNCTAD.
Note: Data cover 174 IPAs on 3 April and 178 IPAs on 15 May.

There are, however, big regional differences: in early April 2020, four of 10 European IPAs already offered comprehensive pandemic-related content and services online, while in mid-May in the developing world most IPA websites still did not refer to the pandemic or only notified clients of office closures during government lockdowns. In Africa in particular, many IPAs have been struggling. Nearly half (48 per cent on 15 May 2020, compared with 30 per cent globally) had posted online no information related to the pandemic, which is problematic when many investors are desperately looking for information on quarantine measures, conditions and procedures of government business support, supply of essential goods and services, and customs issues.

In the *IPA Observer* of April 2020, UNCTAD compiled current efforts and best practices of IPAs worldwide to respond to the emergency (for selected examples, see box III.1).[4] Additional information can be found in UNCTAD's *Investment Policy Monitor* issued in April 2020.[5]

(iii) Incentivizing investment to enhance production in the health sector

In order to address the adverse impact of the pandemic, several economies have recently adopted policy measures to boost investment in those industries that are crucial to containing the spread of the virus. They provide various incentives to increase research and development (R&D) efforts and expenditures in such fields as medical and pharmaceutical research for developing vaccines and treatments (e.g. Czechia, the Republic of Korea, the European Union (EU)).

Other incentive schemes concern measures to encourage manufacturers to expand or shift production lines to medical equipment and personal protective equipment (PPE) in order to increase the quantity available (e.g. India, State of Tamil Nadu; Italy; the United States).

A third group of incentives aims to enhance contracted economic activities. They include, for example, subsidy programmes for training and capacity-building and reductions in the price of natural gas or electricity for industrial use (e.g. Canada, Province of Quebec; China; Egypt).

Finally, major supply chain disruptions have caused some countries (e.g. Japan) to encourage their companies to divest from host countries that are heavily affected by the pandemic.

(iv) Acquiring shares in crisis-affected companies

Several governments have voiced their readiness to intervene more actively in the market to keep strategic businesses afloat. This includes the options of capitalization, equity investment and even full or partial nationalization. These measures focus particularly on national airlines (box III.2).

(v) Supporting local SMEs in supply chains

In many economies, SMEs are struggling for economic survival and risk losing their backward linkages with foreign investors as the latter hold off on buying parts, components, materials and services from local suppliers or as international value chains are disrupted for other reasons. Other negative effects on SMEs include the potential loss of technology and skill transfers.[6] These effects may create particular challenges in developing countries and affect various industries, such as textiles or mining.

Financial and fiscal aid for SMEs is a core part of most State aid packages related to the pandemic. Packages include, in general, guaranteed recovery of delayed payments, indirect financing to suppliers through their buyers, tax credits and other fiscal benefits to firms, co-financing of development programmes and direct provision of financing

Box III.1. Pandemic-response efforts and best practices by IPAs and government entities charged with investment, selected examples

IPAs and government ministries in charge of investment around the globe have taken rapid actions to adapt their services to investor needs during the pandemic:

Brazil: *APEX-Brasil* is Brazil's trade and investment promotion agency. It has developed a comprehensive platform with tools to support exporters and investors during the COVID-19 crisis. For example, it developed an online market intelligence tool that provides economic and trade updates by sector and has organized a webinar to familiarize users with it. Other useful tools include a model action plan for businesses in crisis management, a support guide for suppliers and checklists for exporters. Recently, APEX-Brasil launched an exclusive area on the platform with pandemic-related information for foreign investors in English. It includes an online survey on how the agency and the federal Government can assist foreign investors in investment facilitation and mitigation of pandemic impacts.

Source: https://portal.apexbrasil.com.br.

Germany: *Germany Trade and Invest* has developed a special pandemic website to assure the investment community that the IPA continues to work on their behalf. The website provides regular updates on matters including financial support for businesses, supply chains and economic developments. It also closely follows German industry-specific developments, highlighting information on sectors where the pandemic has generated increased demand such as digital solutions in education, logistics and health. A series of webinars has been held on topics including the latest pandemic-related regulatory changes and the novel fast track programme for medical apps as the demand for digital solutions in the health care system continues to grow. Recently, a webinar by the IPA's CEO and the Association of German Chambers of Commerce and Industry discussed how companies have managed the crisis and what possible exit scenarios look like.

Source: https://www.gtai.de/gtai-en/invest.

India: The Business Immunity Platform, developed by *Invest India*, is a comprehensive portal devoted to pandemic-related news and tools targeted at the investment community. The platform keeps track of pandemic-related developments, provides the latest information on various central and state government initiatives, has dedicated communication lines for pandemic-related investor queries, monitors the number and nature of queries received and provides IPA expert analysis and market reports. The platform also facilitates strategic collaboration to identify and fill shortages in the supplies required to fight the disease. In addition, through this platform as well as through active social media engagement, Invest India has been channelling feedback from the private sector to the relevant government institutions.

Source: www.investindia.gov.in.

Japan: The *Japan External Trade Organization (JETRO)* is responsible for both outward and inward investment promotion. Throughout the pandemic, it has focused on providing up-to-date information on Japan's policy measures and market environment. In order to understand the needs of investors, the agency established an "Invest in Japan" hotline and conducted an emergency survey to better gauge the impact of the pandemic on foreign-affiliated companies, publishing the results online. JETRO has been active in communicating the needs of its clients to the Government. To prepare the economy for accelerated digitalization, the organization has launched the Digital Transformation Partnership Programme, which fosters open innovation between Japanese and foreign companies.

Source: https://www.jetro.go.jp.

Mauritius: The website of the *Economic Development Board* of Mauritius provides comprehensive and updated pandemic-related information about measures taken by the Government to support businesses and facilitate investment, including the wage support scheme and contact information for import permits and clearances. The site also offers online application forms for government support to enterprises affected by the pandemic and features the Business Support Plan of the Ministry of Finance, Economic Planning and Development.

Source: https://www.edbmauritius.org.

Saudi Arabia: The *Ministry of Investment* of the Kingdom of Saudi Arabia has established a COVID-19 Response Centre. Its website also hosts a "Business Continuity" section that aims to support investors during the pandemic. It includes information about initiatives and services introduced by the Government to support businesses as well as a guidebook and a list of investors' frequently asked questions.

Source: www.misa.gov.sa/en.

United Arab Emirates: The online portal "Stimulating the Business Environment to Address COVID-19 Virus Effects", developed by the *Ministry of Economy,* encompasses a wide range of relevant information for the investor community, including the latest pandemic-related developments, best practices for doing business in the crisis, and analysis and reports on the impact of the pandemic on investment. The Ministry is also conducting a survey of the impact on private sector activities of precautionary measures linked to the crisis.

Source: www.economy.gov.ae.

to local firms. Another measure is the possibility to adopt reduced or flexible working arrangements. Examples are the aid packages of Australia, Brazil, Malaysia, the Netherlands, Saudi Arabia and South Africa.[7]

(vi) Protecting national security and public health through foreign investment screening

The pandemic has resulted in intensified screening of foreign investment for national security reasons as countries strengthen their legal frameworks or introduce new regimes. These measures aim at safeguarding domestic capacities relating to health care, pharmaceuticals, medical supplies and equipment. Consequently, countries either expand their screening mechanisms to cover these sectors or broaden the meaning of national security and public interest to include health emergencies. Furthermore, they employ FDI reviews to protect other critical domestic businesses and technologies that may be particularly vulnerable to hostile foreign takeovers. More specifically, foreign investment screening thresholds have been lowered, and the possibility of initiating ex officio screening procedures has been enhanced (box III.3).

(vii) Intervening in the health industry in other ways

To protect public health and national security during the crisis, some countries have resorted to interventions that specifically target the health industry. These measures include the obligation for private firms to shift production to manufactured goods related to the COVID-19 emergency; the possibility of intervening and temporarily occupying factories, production units and private health care facilities; and the possibility of requisitioning goods related to public health. These types of measures have been adopted, for instance, in Spain, Switzerland and the United States.

Looking beyond investment policies, approximately 50 countries have implemented one or more measures regulating or restricting exports of products or subproducts

Box III.2. State participation in national airlines, country examples

Besides providing loans and State guarantees to struggling domestic air carriers, several governments have acquired shares in these companies or are considering such steps:

- *Italy* is nationalizing Alitalia and has announced a €3 billion injection of capital for the carrier.
- *Germany* has announced the forthcoming nationalization of Condor Airlines and has reached an agreement with Lufthansa on a €9 billion rescue package. The German State will take a 20 per cent stake in Lufthansa (for €300 million) and provide a €5.7 billion non-voting capital contribution, which the company will pay back in whole or in quarterly installments. Non-voting capital can be partially converted into an extra 5 per cent equity in case of payment failure or to allow the Government to block hostile takeovers. Another €3 billion in credit lines will be facilitated by KfW, the State-owned development bank. In line with competition-related conditions set out by the EU Commission, Lufthansa's supervisory board has agreed to forego several take-off and landing slots in two major German hubs. Final shareholder approval of the agreement is expected by 25 June 2020.
- *Norway* has made available State-backed guarantees up to €900 million for Norwegian Air, under condition of a debt-for-equity swap scheme that has already been accepted by the company.
- *Finland* has announced a €600 million recapitalization package for Finnair, which has been approved by the EU Commission. The Finnish State currently holds 55 per cent of the airline's stock.
- The *United States* approved a $25 billion aid package for the aviation industry. Under the bailout conditions, the Government could acquire shares in American Airlines (3 per cent), United Airlines (2.3 per cent), JetBlue (1.3 per cent), Delta Airlines (1 per cent) and Southwest Airlines (0.6 per cent).
- *Brazil's* national development bank is negotiating rescue terms with national airlines Azul and Gol and regional carrier Latam, as well as aircraft manufacturer Embraer. The rescue package for Embraer is expected by July and should reach $600 million. The company has cited China and India as potential new partners for the firm. Aid plans for airlines are under negotiation and could involve shareholding of the bank in the companies.

Source: UNCTAD.

used in the public health response to the pandemic.[8] Such products include medical supplies and other devices, drugs, pharmaceutical ingredients and raw materials for PPE manufacturing.[9] At the same time, several economies (e.g. the EU, the United States) have lifted or reduced import duties on goods needed to combat the effects of the pandemic.

(viii) Instrumentalizing intellectual property

Given the extraordinary situation and the R&D challenges related to COVID-19, some countries (e.g. Canada, Chile, Ecuador, Germany) have implemented measures to encourage the joint use of technologies protected by intellectual property (IP) rights so as to

Box III.3. New FDI screening legislation related to the pandemic, country examples

To protect key domestic industries during the pandemic, several countries have adopted new regulations on FDI screening or reinforced existing laws:

- On 18 March 2020, Royal Decree-Law 8/2020 entered into force in *Spain*. One element of this COVID-19 response policy package is the suspension of the FDI liberalization regime, as the pandemic is seen to threaten both listed and unlisted Spanish companies, including some in strategic sectors. Thus, governmental authorization is now required for a foreign acquisition of 10 per cent or more of stock in certain sectors, including critical infrastructure, critical technologies, media and food security.
- At the regional level, on 25 March 2020, the *European Commission* issued a Guidance to Member States addressing the possibility of non-EU investors attempting to acquire health care capacities or related industries through FDI during the pandemic. The Commission recommended full use of national FDI screening regimes and urged member States that do not have screening regimes to set them up.
- On 29 March 2020, the monetary screening threshold for all foreign investments in *Australia* was temporarily lowered to zero to protect national interests. Consequently, all foreign acquisitions now require prior approval. In addition, the time frame for screening procedures has been extended from 30 days to six months.
- On 8 April 2020, as one of the urgent measures relating to the pandemic, *Italy* expanded the scope of FDI screening by adding finance, credit and insurance to the list of strategic sectors. Furthermore, the screening will temporarily apply to foreign acquisitions from within the EU.
- On 17 April 2020, *India* introduced a requirement for prior governmental approval for all investment originating from countries that share land borders with India as a response to concerns about company vulnerabilities during the pandemic.
- On 18 April 2020, *Canada* announced "enhanced scrutiny" of any FDI in a business that is critical to the pandemic response. This measure was a reaction to "opportunistic investment behaviour" caused by declines in valuations of Canadian businesses as well as by investment of State-owned enterprises that could threaten the country's economic or national security interests. The new policy will apply until the economy recovers from the pandemic.
- On 27 April 2020, *France* added biotechnology to the list of critical sectors in which foreign acquisitions are subject to prior governmental approval. Furthermore, a temporary regime lowering the voting right threshold in listed companies that triggers FDI screening – from 25 per cent to 10 per cent – is to be introduced upon approval from the Conseil d'État.
- On 20 May 2020, *Germany* amended the Foreign Trade and Payments Ordinance, focusing on critical public health sectors. It envisages that foreign acquisitions of 10 per cent stock in German companies developing, manufacturing or producing vaccines, medicines, protective medical equipment and other medical goods for the treatment of highly infectious diseases would require prior governmental authorization.
- On 26 May 2020, Governmental Decree no. 227/2020 entered into force in *Hungary*. It introduced a temporary foreign investment screening mechanism applicable to investors from both inside and outside the EU and will be effective until 31 December 2020. Prior governmental approval is needed in 21 industries, including health care, pharmaceuticals and medical device manufacturing, as well as non-medical industries. Approval will be denied if an investment violates or threatens public security or order, in particular the security of supply of basic social needs.

In addition, other countries are contemplating changing their FDI screening mechanisms in response to the pandemic and related economic challenges. For instance, *Japan* was reported at the end of April 2020 to be planning to amend its list of sectors considered critical to national security by adding the production of vaccines, medicines and advanced medical equipment, such as ventilators. In *Poland*, a bill aimed at introducing a rigid temporal FDI screening regime is being advanced in the Parliament. It is intended to apply to foreign acquisitions (of 20 per cent or more) in public listed companies, companies controlling strategic infrastructure or developing critical IT software, or companies active in 21 industries, including pharmaceuticals, manufacturing of medical devices, food processing and utilities.

Source: UNCTAD.

speed up effective R&D and to facilitate mass production of needed treatments, diagnostics and vaccines. These measures include facilitating the grant of non-voluntary licenses to make use of existing technologies. At the international level, the World Health Organization (WHO) has begun consultation for the creation of a voluntary IP pool to develop products to fight the disease and its spread.[10]

b. Investment policies at the international level

(i) International declarations in support of investment

At the multilateral level, several groupings issued declarations in support of international investment and value chains. These include the G20, the G7, Asia Pacific Economic Cooperation and the Inter-Governmental Authority on Development.

More recently, on 14 May 2020, the trade and investment ministers of the G20 and guest countries issued a statement endorsing the "G20 Actions to Support World Trade and Investment in Response to COVID-19", a list of short-term and long-term collective actions to support the multilateral trading system, build resilience in global supply chains and strengthen international investment (e.g. through sharing best practices on promoting investments, identifying critical medical supplies where investment is needed, encouraging technical assistance and capacity building to developing countries and least developed countries) (box III.4). The statement welcomed the work carried out by UNCTAD and other international organizations in providing in-depth analysis of the impact of COVID-19 on world trade, investment and global supply chains.

In general, these statements aim at minimizing the economic and social damage from the pandemic, restoring global growth, maintaining market stability and strengthening resilience. To this end, announcements have been made of the mobilization of the full range of instruments, including monetary and fiscal measures as well as targeted actions, to support immediately and as much as necessary the workers, companies and industries most affected. The continuity of supply chains has been highlighted as another important challenge.[11]

(ii) International investment agreements

The pandemic will slow down the pace of treaty-making. To date, a number of negotiating rounds for bilateral investment treaties (BITs) and treaties with investment provisions (TIPs) have been cancelled or postponed due to the pandemic.[12] This is in addition to the postponement of a number of high-level bilateral summits that typically address trade and investment agreements.[13] It is likely that 2020 will register the lowest number of IIAs concluded since 1985. Key international meetings dedicated to reform aspects, such as those organized in the Organization for Economic Cooperation and Development, the United Nations Commission on International Trade Law and UNCTAD, are being postponed or are under consideration for postponement.

The pandemic and its mitigation measures are also likely to result in a reassessment by countries of the role of IIAs in national development. Indeed, IIAs can come into play in relation to the policy responses undertaken by governments to address the economic fallout of the pandemic as these measures also affect the operations of foreign investors. Although these measures are implemented for the protection of the public interest and to mitigate the negative impact of the pandemic on the economy, some of them could, depending on the way they are implemented, expose governments to arbitration proceedings initiated by foreign investors under IIAs and/or investor–State contracts.

Box III.4. G20 actions to support investment in response to COVID-19

On 14 May 2020, the G20 trade and investment ministers endorsed, in the Ministerial Statement, the following investment-related actions in response to the pandemic:

- "Recalling the voluntary G20 Guiding Principles for Global Investment Policymaking, share information on actions taken to strengthen international investment for sustainable development
- "Share best practices on promoting investments in sectors related to or impacted by the COVID-19 pandemic
- "Work together to identify key areas, such as critical medical supplies and equipment and sustainable agriculture production, where investment is needed
- "Encourage investment in new capacity for producing medical supplies, medical equipment, and personal protective equipment
- "Encourage government agencies to work with companies and investors in identifying investment opportunities and activities
- "Encourage consultations with the private sector on their needs as necessary, as part of policy making on FDI
- "Encourage cooperation on technical assistance and capacity building provided to developing and least developed countries on investment promotion
- "Call for international organizations to prepare in-depth reports, within their mandates, on the disruption of global value chains caused by the pandemic on [micro and SMEs]
- "Encourage enhancement of communication channels and networks for [micro and SMEs], including through deepened collaboration with the private sector
- "Work together to deliver a free, fair, inclusive, non-discriminatory, transparent, predictable and stable trade and investment environment and to keep [...] markets open"

Source: G20 Trade and Investment Ministerial Meeting, Ministerial Statement, 14 May 2020.

This highlights the need to safeguard sufficient regulatory space in IIAs to protect public health and to minimize the risk of investor–State dispute settlement (ISDS) proceedings, while protecting and promoting international investment for development.

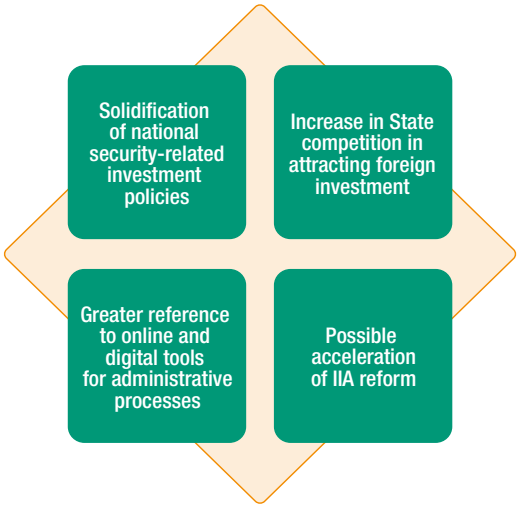
On 6 May 2020, the Columbia Center on Sustainable Investment published a call signed by a number of leaders on human rights and sustainable development for an immediate and complete moratorium on all investor–State arbitration claims by foreign investors against governments using IIAs until the end of the pandemic, as well as a permanent restriction on all arbitration claims related to government measures targeting health, economic and social dimensions of the pandemic and its effects.[14] The signatories also called on governments to agree on principles to ensure that future arbitration cases do not hinder countries' good faith recovery efforts and that any damages awarded in ISDS cases respect the dire financial situation facing governments following the pandemic.

In its *Special Investment Policy Monitor* dedicated to the COVID-19 pandemic (UNCTAD, 2020d), UNCTAD has highlighted the most relevant IIA provisions in the context of the pandemic and made recommendations to shield State measures from a finding of a treaty violation in line with UNCTAD's Investment Policy Framework for Sustainable Development (2015) and UNCTAD's Reform Package for the International Investment Regime (2018). Countries can use UNCTAD's policy tools for Phase 2 of IIA Reform to modernize their old-generation treaties and implement selected reform options.

2. Likely lasting impact of the pandemic on investment policymaking

Looking ahead, the pandemic is likely to have lasting effects on investment policymaking (figure III.3). It may reinforce and solidify the ongoing trend towards more restrictive admission policies for foreign investment in industries considered as being of critical importance for host countries. At the same time, it may result in more competition in attracting investment in other industries, as economies strive to recover from the crisis and re-establish disrupted supply chains. In addition, the crisis may enhance the use of online administrative approval procedures for investors and government staff.

Figure III.3. Main investment policy trends in response to the pandemic



Source: UNCTAD.

It is also expected that the post-pandemic period will witness an acceleration of countries' efforts to reform their IIAs to ensure their right to regulate in the public interest, while maintaining effective levels of investment protection. To support these efforts, UNCTAD will launch the IIA Reform Accelerator in the summer of 2020. The Accelerator will provide an actionable policy tool for economies that wish to expedite the reform of their existing and aging network of IIAs to better respond to today's challenges while maintaining investment protection.

The magnitude of the post-pandemic reconstruction task and the priorities in this process will differ from country to country. However, all governments will face the common challenge of how best to make use of investment policies in bringing their economies back onto a sustainable development path. In addition to national efforts, successful international cooperation will be crucial, especially for the recovery of developing countries, including least developed countries.

B. NATIONAL INVESTMENT POLICIES

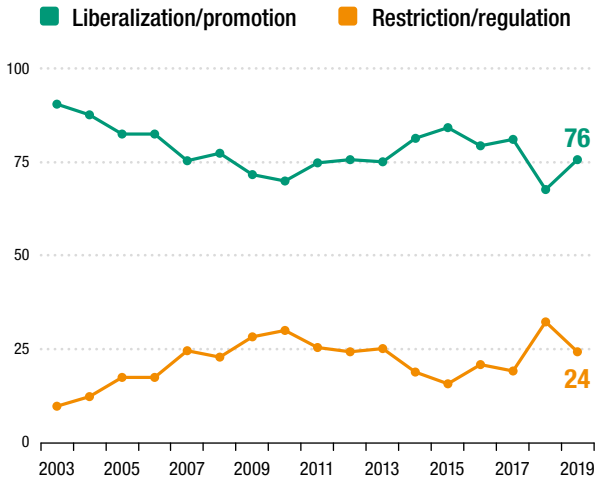
1. Overall trends

In 2019, according to UNCTAD's count, 54 economies introduced 107 new policy measures affecting foreign investment. The number of policy measures continued to decrease for the second consecutive year after the peak in 2017. Of the 107 investment policy measures, 66 liberalized, promoted or facilitated investment, while 21 introduced restrictions or regulations. The remaining 20 measures were of a neutral or indeterminate nature (table III.2). Accordingly, the proportion of liberalization and promotion measures increased to 76 per cent, bouncing back from the dip in 2018 (figure III.4). Thus, the percentage of more restrictive or more regulatory policy measures decreased to 24 per cent.

Even though the proportion of restrictions and regulations declined overall, the policy trend of recent years towards more investment rules related to national security continued in 2019. Most of these measures have been adopted in the developed economies. This trend is expected to accelerate in the wake of the COVID-19 pandemic, which has raised concerns in numerous countries that essential domestic industries may fall prey to foreign takeovers.

At the same time, many countries introduced policy measures in 2019 for liberalizing, promoting or facilitating foreign investment. Steps toward liberalization were made in various industries, including mining, energy, finance, transportation, and telecommunication. In addition, many countries made efforts to simplify or streamline administrative procedures, and some others expanded their investment incentive regimes with a view to attract more foreign investment.

Figure III.4. Changes in national investment policies, 2003–2019 (Per cent)



Source: UNCTAD, Investment Policy Hub.

Table III.2. Changes in national investment policies, 2004–2019 (Number of measures)

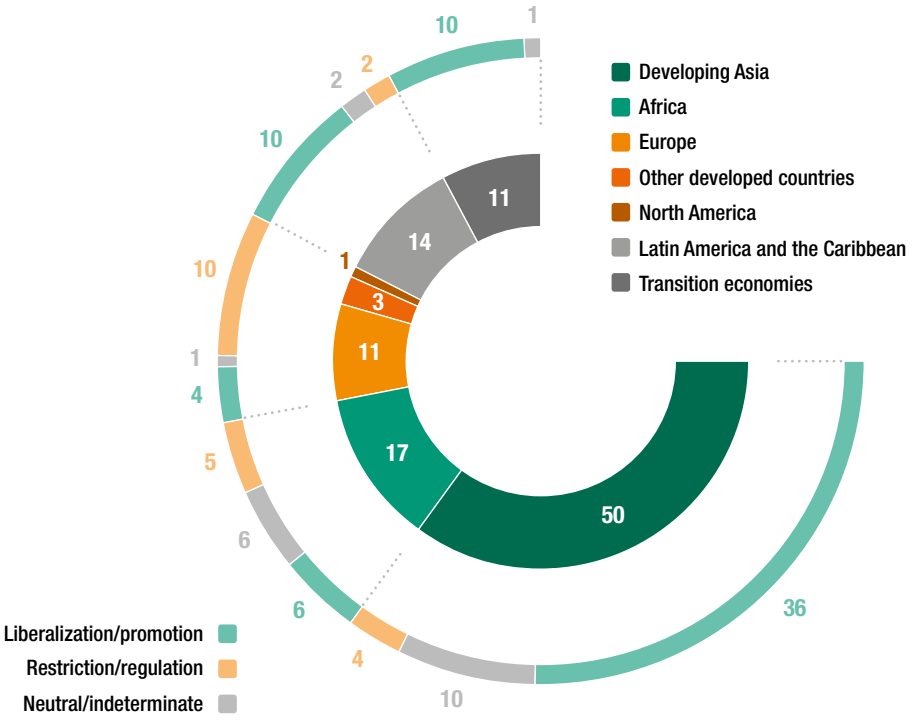
Item	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Number of countries that introduced changes	79	77	70	49	40	46	54	51	57	60	41	49	59	65	55	54
Number of regulatory changes	**164**	**144**	**126**	**79**	**68**	**89**	**116**	**86**	**92**	**87**	**74**	**100**	**125**	**144**	**112**	**107**
Liberalization/promotion	142	118	104	58	51	61	77	62	65	63	52	75	84	98	65	66
Restriction/regulation[a]	20	25	22	19	15	24	33	21	21	21	12	14	22	23	31	21
Neutral/indeterminate	2	1	-	2	2	4	6	3	6	3	10	11	19	23	16	20

Source: UNCTAD, Investment Policy Hub.

[a] "Restriction" means a policy measure that introduces limitations on the establishment of foreign investment; "regulation" means a policy measure that introduces obligations for established investment, be it domestically controlled or foreign-controlled.

In geographical terms, developing countries in Asia continued to take the lead in adopting new investment policy measures and became much more active than in 2018, followed by African countries (figure III.5). The nature of the new measures, however, differed significantly between regions. Fifty-two policy measures adopted in the developing economies were about liberalization, promotion and facilitation of investment, while only 11 related to restrictions or regulations. In contrast, more than half of investment policy measures introduced in developed countries aimed at reinforcing restrictions or regulations.

Figure III.5. **Regional distribution of national investment policy measures in 2019**
(Number of measures)



Source: UNCTAD.

a. National security concerns about foreign investment intensified

The policy trend observed in 2018 towards more investment regulations and restrictions related to national security, particularly in respect of foreign investment in strategic industries and critical infrastructure, continued and intensified in 2019 and in the first months of 2020. Numerous countries, almost all of them developed countries, adopted more stringent screening regimes for foreign investment with the main objective of protecting their national security. A significant number of these changes were made in reaction to the COVID-19 pandemic (section A).

For example,

- The Government of Flanders in *Belgium* established a new mechanism to intervene in foreign acquisitions under certain conditions.
- *France* revised its mechanism for managing acquisition- and ownership-related risks to its essential security interests by strengthening regulations related to governmental injunctions and mitigation measures, among others. It also strengthened

the transparency of the mechanism by implementing parliamentary control and obliging the Government to publish an annual report, including aggregate statistics, about the procedure. Furthermore, later in 2019, it reinforced the screening system by lowering the threshold that triggers mandatory investment reviews for non-EU/EEA investors from 33.33 per cent of the share capital or voting rights of a French entity to 25 per cent and broadened the sectoral scope of the screening mechanism, including numerous key activities. This revision applies to authorization requests submitted as of April 2020.

- *Israel* established an advisory committee to assess the national security implications of foreign investment.
- *Italy* amended its FDI screening regime several times. It added 5G technology to the list of technologies strategic for the national defense and security system; any transaction involving a foreign investor is to be notified in advance. Later in the year, it temporarily strengthened its mechanisms to safeguard essential security interests. Among other fortifications, the changes extended the review period for the exercise of the special powers, broadened the scope of information that investors have to disclose and broadened powers to prohibit a transaction. Towards the end of the year, the Cybernetic National Security Perimeter Law entered into force, tightening once again the FDI screening regime. Many of the aforementioned temporary amendments were maintained and a new screening condition was added. As a result, foreign takeovers are to be evaluated against vulnerabilities that could compromise the integrity and security of networks and data. Also, the sanctions scheme was reinforced with significant administrative fines.
- *Japan* expanded the scope of businesses subject to the foreign investment screening mechanism by adding businesses or expanding the scope of already listed businesses. In addition, the Government further tightened existing rules by lowering from 10 per cent to 1 per cent the stake in Japanese firms listed as relevant to national security in 12 industries for which foreign investors are required to seek prior approval from the Government. This law came into effect on 7 May 2020. In addition, on 8 May 2020, the Ministry of Finance released a list of 518 companies in the 12 industries deemed important to national security. The list allocates 3,800 companies into three categories – those requiring prior notification, those not requiring prior notification and those with exemption in some cases.
- *South Africa* introduced a screening mechanism for foreign investments. The new law requires the establishment of a special committee responsible for assessing whether a merger involving a foreign acquiring firm may have an adverse effect on national security.
- In February 2020, *Romania* empowered its National Agency for Mineral Resources to refuse the award of a petroleum concession agreement to any non-EU entity on the grounds of national security.
- Also in February 2020, the *United States* promulgated an implementing regulation concerning foreign acquisitions that are subject to national security-related reviews. The regulation introduced changes to make the review process more effective and efficient and to strengthen the jurisdiction of the Committee on Foreign Investment in the United States. In addition, in April 2020, the President established the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector.

b. Other new investment regulations cover a broad variety of issues

Several countries, mostly developing countries and emerging economies, introduced other types of investment regulations or restrictions. For example,

- *Argentina* suspended, in January 2020, its existing incentives regime, which aimed at promoting investments that require significant R&D and technological know-how.
- *Egypt* obligated all companies to submit certain information and data to the Government in order to calculate the amount of foreign investment capital.
- *India* introduced several restrictive changes in its FDI policy for e-commerce. The new rules are reported to aim at safeguarding the interests of domestic offline retailers.
- *Nepal* raised the minimum capital requirement for foreign investment to Rs 50 million from Rs 5 million.
- *Nigeria* increased the Government's share of profits from oil activities conducted under production-sharing contracts.
- *Senegal* changed its petroleum code to reinforce the preservation of national interests and local content.

c. Investment promotion and facilitation remain prominent

Investment facilitation and promotion continued to be a substantial part of newly adopted investment policy measures.

(i) Newly adopted promotion measures show great variety

Numerous countries have undertaken new measures to promote inward investment. For example,

- *China* enacted a Foreign Investment Law that aims at improving the transparency of FDI policies and investment protection. The country also liberalized and streamlined the foreign exchange control over cross-border investment and trade. In January 2020, *China* also introduced detailed implementing regulations for the newly enacted law. Among others, *China* emphasized that it would provide equal treatment of domestic and foreign enterprises in the implementing regulations. It also published in January 2020 a set of trial measures to promote foreign investment in the Yangtze River Delta area.
- *Indonesia* amended guidelines and procedures for licensing and facilities under its foreign investment regime.
- *Italy* established the Ionian special economic zone.
- *Kazakhstan* liberalized its arbitration framework, allowing the parties to choose a foreign law in a dispute involving the State and bringing enforcement provisions in line with the New York Convention.
- *Myanmar* established a government body for promoting quality investment and now allows foreign companies and joint ventures to purchase shares on the Yangon Stock Exchange.
- *Oman* promulgated a set of laws governing public-private partnership, privatization and foreign capital investment, with the aim of creating a more favourable regulatory environment for investment.
- The *Philippines* relaxed the mandatory local employment requirement for foreign investors.
- *Qatar* created an investment promotion agency to attract foreign investment.

- *Ukraine* abolished the limit on the repatriation of proceeds from foreign investments.
- The *United Arab Emirates* established the Abu Dhabi Investment Office to increase FDI in the emirate.
- *Uzbekistan* set up a legal framework to regulate public-private partnerships, with fiscal benefits provided for selected private partners, and established a presidential advisory body for investment. In January 2020, it also introduced a multi-tiered mechanism for investor–State dispute settlement and in February 2020, it adopted a law on special economic zones.
- *Viet Nam* clarified the definition of foreign-invested enterprises and abolished the mandatory remittance timeline for unused pre-establishment costs.
- *North Macedonia* adopted a new law in January 2020 to create more favourable conditions for strategic investments.
- *India* clarified in February 2020 that single-brand retailers, owned by foreign companies, can fulfill their local sourcing requirements by procuring goods produced in units based in special economic zones.
- The *Russian Federation* introduced in April 2020 agreements on the protection and promotion of investment as a new investment policy instrument. These agreements, to be concluded between public entities and private investors, are to provide stabilization clauses relating to import customs duties, measures of state support and rules regulating land use, as well as ecological and utilization fees and taxes. Eligible investments need to fulfil certain minimum capital requirements, depending on the sector involved.

(ii) Fiscal incentives remain an important investment promotion tool

Several countries introduced new tax benefits for investors:

- *Algeria* introduced a set of fiscal incentives to attract foreign investment in the oil and gas industry.
- *Cameroon* introduced several tax incentives for the rehabilitation of an economic disaster area.
- *Colombia* established a preferential corporate tax regime for investment projects, which will produce large amounts of taxable income and create a multitude of jobs.
- *Ecuador* provided additional tax incentives for foreign investment.
- *Guatemala* established fiscal incentives for companies operating in its new special economic zones, called special public economic development zones. Among the tax benefits provided are an exemption for 10 years from income tax and a temporary suspension of taxes associated with imports.
- *Indonesia* set out tax incentives for businesses investing in specific industries and provinces.
- *Kenya* revised its taxation system to provide exemptions for investment in various industries.
- *Turkey* revised its investment incentive regimes so as to encourage investment in targeted sectors.
- *Uzbekistan* began to provide subsidies for investors constructing hotels if fulfilling certain requirements.
- *Panama* extended its fiscal incentives for the tourism industry until 2025. In January 2020, it further amended its incentive regime for investment in the tourism industry to promote such investment.
- *Poland* introduced financial incentives aimed at boosting the audiovisual industry.

- The *United States* clarified the tax incentive programme in so-called "Opportunity Zones" which are created by the Tax Cuts and Jobs Act.
- *Azerbaijan* expanded tax incentives for industrial and high-tech parks in January 2020.

(iii) Administrative procedures were streamlined or simplified

Numerous countries facilitated administrative procedures for investors. For instance,

- *Brazil* simplified the entry procedures for foreign financial institutions and foreign investors and abolished the different treatment of foreign and domestic investors in the licensing process.
- *Ecuador* introduced regulations to clarify the Productive Development Law and to simplify environmental rules.
- *India* eased the administrative regulations for foreign investors in certain industries by abolishing the requirement for approval from the Reserve Bank of India under certain conditions. The country also eliminated the approval procedure for foreign companies in defense, telecommunication and private security, among other industries, that wish to open branch offices.
- *Oman* streamlined procedures for initiating foreign investment and provided foreign investors with incentives and guarantees. It also established an investment portal designed to enable local companies to attract foreign investors worldwide.
- *Tunisia* simplified the creation of businesses, facilitated access to finance, promoted PPPs and implemented measures to improve corporate governance.
- *Uganda* strengthened the Uganda Investment Authority, establishing it as a one-stop investment centre.
- *Ukraine* simplified and lowered the costs of the registration procedure for representative offices of foreign business entities.
- In January 2020, *Uzbekistan* created a one-stop shop mechanism to facilitate investment.
- In March 2020, *Australia* revised its regulatory guide to introduce a financial services licensing regime for foreign financial services providers to Australian wholesale clients. This revision also adopted licensing relief for providers of financial fund management services, seeking to attract certain types of professional investors.
- In March 2020, *India* amended its FDI policy on civil aviation, permitting non-resident Indian nationals to own up to 100 per cent of the stakes of Air India under the automatic route. Previously, they were permitted to own only up to 49 per cent.

(iv) FDI liberalization ongoing

Twenty-nine policy measures – about 30 per cent of those introduced in 2019 – concern partial or full liberalization of investment in a variety of industries, including mining, oil and gas, airlines, telecommunication, education and defence. As in previous years, developing economies in Asia were the most active in liberalizing FDI.

- *Bahrain* now allows full foreign ownership in companies involved in oil and gas drilling activities.
- *China* amended its "negative list", relaxing or removing restrictions on foreign investments in several industries and further opening the financial industry to foreign capital. It also allowed Chinese natural persons to establish new foreign-funded enterprises with foreign investors directly.
- *Ethiopia* opened the telecommunication industry to both domestic and foreign investors. In April 2020, it in principle opened up all industries to foreign investment if investors allocate a minimum capital of $200,000 for a single investment project.

This move is intended to improve the investment environment and enhance the competitiveness of the national economy by promoting investments in productive and enabling sectors.

- *Greece* enabled the national natural gas company to spin off into three entities, two of which are to be completely privatized.
- *India* abolished or adjusted the foreign ownership ceilings in several industries. In March 2020, it also opened up the coal mining industry for non-coal companies, which are now allowed to bid for coal mines.
- *Indonesia* established a mechanism to allow foreign bank branches to become Indonesian banks.
- *Malaysia* lowered the threshold for foreign ownership of real estate.
- The *Philippines* allowed foreign higher education institutions to set up educational facilities and liberalized professional services.
- *Qatar* permitted, in principle, 100 per cent foreign ownership in all economic sectors except some businesses such as banking and insurance.
- *Saudi Arabia* now allows foreign companies to list on the Saudi Stock Exchange and has removed the ownership limits for foreign strategic investors. In March 2020, it also approved the listing on the Saudi Stock Exchange of Government assets planned for privatization after an initial public offering.
- *Thailand* abolished three ministerial regulations on minimum capital for foreign companies.
- The *United Arab Emirates* adopted the "Positive List of Activities", identifying 13 industries eligible for up to 100 per cent foreign ownership. In March 2020, it officially issued a detailed list of 122 economic activities in those industries.
- The *United Republic of Tanzania* relaxed the foreign ownership limitation in the mining sector.
- In January 2020, *Viet Nam* raised the foreign ownership cap in domestic airlines.

2. Merger controls affecting foreign investors

In 2019, several host-country governments raised objections against a number of foreign takeover proposals, in particular when they involved the sale of critical or strategic domestic assets to foreign investors. Among the cross-border merger and acquisition (M&A) attempts with a value over $50 million, at least 11 deals were withdrawn for regulatory or political reasons and two more were withdrawn while waiting for governmental approval. The gross value of M&As withdrawn for these reasons was roughly $87.3 billion, equivalent to 47.3 per cent of all such M&As in 2019. This figure is approximately 42 per cent lower than the one reported for 2018 ($154.5 billion) *(WIR19)*. The main businesses in which M&A proposals were withdrawn for regulatory or political reasons were critical industries (e.g. energy, automotive, information technology, logistics, utility services, medical services, financial services and infrastructure business).

Among the 13 withdrawn M&A deals in 2019, three were terminated in industries relevant for national security, two of which were related to attempts by Chinese investors to acquire businesses in key industries such as energy and medical services, in Portugal and Australia. Three more deals affecting a great variety of activities, from groceries and car manufacturing to credit rating services, were discontinued because of the concerns of competition authorities. In addition, five M&As were withdrawn for regulatory reasons, the details of which could not be identified from publicly available sources. Finally, two cases were terminated due to delays in receiving approval from the host-country authorities (table III.3).

Table III.3. Foreign takeovers withdrawn for regulatory or political reasons in 2019
(Illustrative list)

For national security reasons	
China Three Gorges (Europe) SA Portugal–EDP Energias de Portugal SA[a]	On 24 April 2019, shareholders of Energias de Portugal rejected a $10 billion takeover bid by State-owned China Three Gorges because of a regulator requirement that their voting rights be modified. The voting rights reform had been demanded by the Portuguese stock exchange as a condition for its green light to the Chinese offer.
IHS Holding Ltd–Mobile Telecommunications Co Saudi Arabia SJSC[b]	On 25 June 2019, Mobile Telecommunications Co Saudi Arabia announced that it decided not to execute the $672 million sale of its towers to IHS Holding (Mauritius), after receiving a letter from Saudi Arabia's Communications and Information Technology Commission stating that IHS Holding had not met the regulatory requirements and had not obtained the necessary licence for the lease and purchase of the towers.
Jangho Hong Kong Ltd–Healius Ltd[c]	On 16 August 2019, Healius (Australia) dismissed a $2 billion takeover bid by Jangho (China) because the bid raised concerns about the security of Australian Defence Force medical records.
For competition reasons	
Alstom SA–Siemens AG[d]	On 6 February 2019, the $17 billion merger proposal by Alstom (France) to acquire the mobility business of Siemens (Germany) – which aimed at creating a European rail champion – was terminated due to serious competition concerns from the European Commission. According to Commissioner Margrethe Vestager, "without sufficient remedies, this merger would have resulted in higher prices for the signaling systems that keep passengers safe and for the next generations of very high-speed trains".
Experian Plc–ClearScore Technology Ltd[e]	On 27 February 2019, Experian (the world's largest credit data firm, Ireland) and ClearScore (United Kingdom) withdrew from their $364 million merger agreement after the British Competition and Markets Authority demonstrated its reluctance to approve the deal.
J Sainsbury PLC–ASDA Group Ltd[f]	On 25 April 2019, J Sainsbury (United Kingdom) withdrew its $10 billion agreement to acquire the entire share capital of ASDA Group of United Kingdom (subsidiary of Walmart, United States) after the United Kingdom Competition and Markets Authority blocked it nearly a year after the two grocers first agreed to combine, announcing that the merger between the country's second- and third-largest grocers would lead to a substantial lessening of competition in a number of domestic markets and therefore deciding to prohibit the merger in its entirety.
For other regulatory reasons	
Hydro One Ltd–Avista Corp[g]	On 23 January 2019, the State-owned Hydro One (Canada) and Avista (United States) agreed to end their $5 billion merger agreement after the Washington Utilities and Transportation Commission and the Idaho Public Utilities Commission denied approval. According to the Washington Utilities and Transportation Commission, "the proposed merger agreement did not adequately protect Avista or its customers from political and financial risk or provide a net benefit to customers as required by state law."
Harman International Industries Inc–Nuheara Ltd[h]	On 8 July 2019, Harman International Industries (United States) withdrew its $59 million offer for Australian audio device maker Nuheara (Australia) after discovering that the disclosure documents had to be submitted to the Australian Securities Exchange.
Fiat Chrysler Automobiles NV–Regie Nationale Des Usines Renault SA[i]	On 5 June 2019, Fiat Chrysler Automobiles (United Kingdom) withdrew its $40 billion proposal for a merger with Renault (France) after the French Government – its largest shareholder, with a 15 per cent stake – had requested to postpone the vote to a later council.
Abanca Corporación Bancaria SA–Liberbank SA[j]	On 25 February 2019, Abanca Corporación (Spain; subsidiary of Banesco Banco Universal SACA (Bolivarian Republic of Venezuela)) withdrew its $1.9 billion acquisition deal for Liberbank (Spain) after the National Stock Market Commission (Comisión Nacional del Mercado de Valores) barred it from analyzing Liberbank's balance sheet without previously establishing a bid, an action required by the national stock market rules.
Investor Group–PNB Housing Finance Ltd[k]	On 17 May 2019, Punjab National Bank (India) terminated a sale worth $267 million in equity shares of PNB Housing Finance, previously agreed with an investor group composed of General Atlantic Group (United States) and Verde Holdings (United States). The sale would have involved two separate transactions with each buyer. The Punjab National Bank did not conclude the deal as it could not receive proper clearance from India's Central Bank for the transaction involving General Atlantic.

/…

Table III.3. Foreign takeovers withdrawn for regulatory or political reasons in 2019 (Illustrative list) (Concluded)

While waiting for host-country approval	
Tuvalu Sp.z o.o–Serenada and Krokus Shopping Centers[l]	On 4 January 2019, NEPI Rockcastle (Isle of Man) announced the termination of the $546 million acquisition deal between its subsidiary, Tuvalu (Poland), and Serenada and Krokus Shopping Centers (Poland), because certain regulatory approvals and the waiver of the right of first refusal had not been completed by the December 2018 deadline.
Hebsteel Global Holding Pte Ltd–Tata Steel (Thailand) Pcl[m]	On 6 August 2019, Tata Steel (Thailand) decided not to extend the deadline for a $327 million share sale agreement with Hebsteel (Singapore) because Tata Steel had not been able to procure the requisite approvals from the Government, which was one of the key conditions precedent for the proposed deal.

Source: UNCTAD.
[a] https://www.france24.com/en/20190424-energias-de-portugal-shareholders-block-takeover-bid-china-three-gorges.
[b] https://www.commsupdate.com/articles/2019/06/25/zain-ksa-cancels-tower-sale-agreement-with-ihs/.
[c] https://www.smh.com.au/business/companies/no-bid-on-table-healius-dismisses-china-takeover-that-raised-concerns-20190816-p52hss.html.
[d] https://ec.europa.eu/commission/presscorner/detail/en/IP_19_881.
[e] https://www.reuters.com/article/us-clearscore-m-a-experian/experian-clearscore-scrap-merger-plans-idUSKCN1QG1CA; https://www.proactiveinvestors.co.uk/companies/news/215392/experian-abandons-clearscore-deal-after-cma-objections-215392.html.
[f] https://www.marketwatch.com/story/sainsbury-asda-cancel-merger-plans-2019-04-25.
[g] https://www.wsj.com/articles/hydro-one-and-avista-terminate-deal-11548285424; https://www.newswire.ca/news-releases/hydro-one-and-avista-mutually-agree-to-terminate-merger-agreement-822704964.html.
[h] https://hearinghealthmatters.org/hearingnewswatch/2019/samsung-failed-takeover-bid-nuheara-hearables.
[i] https://www.ft.com/content/ba034774-87e1-11e9-97ea-05ac2431f453.
[j] https://www.reuters.com/article/liberbank-ma-abanca/spains-abanca-drops-takeover-bid-for-liberbank-idUSL5N20L25Z.
[k] https://indianexpress.com/article/business/economy/punjab-national-bank-pnb-varde-holdings-general-atlantic-5731937.
[l] https://www.spglobal.com/marketintelligence/en/news-insights/trending/GtlNn2CToc_Ywu61h2BdnA2; https://www.sharenet.co.za/v3/sens_display.php?tdate=20190104171500&seq=25.
[m] https://www.set.or.th/set/newsdetails.do?newsId=15650461926990&language=en&country=US; https://www.bangkokpost.com/business/1623734/tata-steel-to-cut-southeast-asia-footprint.

In the first four months of 2020, at least three M&A deals were terminated because of the concerns of competition authorities (table III.4). The total value of these deals amounted to $1.6 billion.

Table III.4. Foreign takeovers withdrawn for regulatory or political reasons in 2020, January–April (Illustrative list)

For competition reasons	
Aurobindo Pharma USA Inc–Sandoz Inc (United States) (genetic oral solids and dermatology businesses)[a]	On 2 April 2020, Aurobindo (United States; subsidiary of Aurobindo Pharma Ltd (India)) announced its mutual agreement with Sandoz (United States; subsidiary of Novartis AG (Switzerland)) to terminate the $1 billion plan to buy the United States generic oral solids and dermatology businesses from Sandoz because approval for the transaction from the United States Federal Trade Commission was not obtained within anticipated timelines.
Ethicon Inc–Takeda Pharmaceutical Co Ltd (TachoSil business)[b]	On 10 April 2020, Johnson & Johnson (United States), parent company of Ethicon (United States), announced that Ethicon and Takeda (Japan) mutually decided to terminate the $400 million transaction of Takeda's TachoSil business after EU antitrust regulators and the United States Federal Trade Commission expressed significant concerns about potential anticompetitive effects.
Prosafe SE–Floatel International Ltd[c]	On 13 February 2020, Prosafe (Cyprus) and Floatel International (Bermuda) declared their mutual agreement to terminate the plan to achieve a $199 million merger between the two companies after the Competition and Markets Authority of the United Kingdom raised serious concerns about competition.

Source: UNCTAD.
[a] https://www.pharmalive.com/after-failing-to-gain-ftc-approval-sandoz-and-aurobindo-call-off-1-billion-deal.
[b] https://www.reuters.com/article/us-tachosil-m-a-johnson-johnson/johnson-johnson-abandons-deal-for-takedas-tachosil-surgical-patch-idUSKCN21S1XG.
[c] https://www.energylivenews.com/2020/02/13/prosafe-and-floatel-merger-falls-through.

C. INTERNATIONAL INVESTMENT POLICIES

1. Trends in IIAs: new treaties and other policy developments

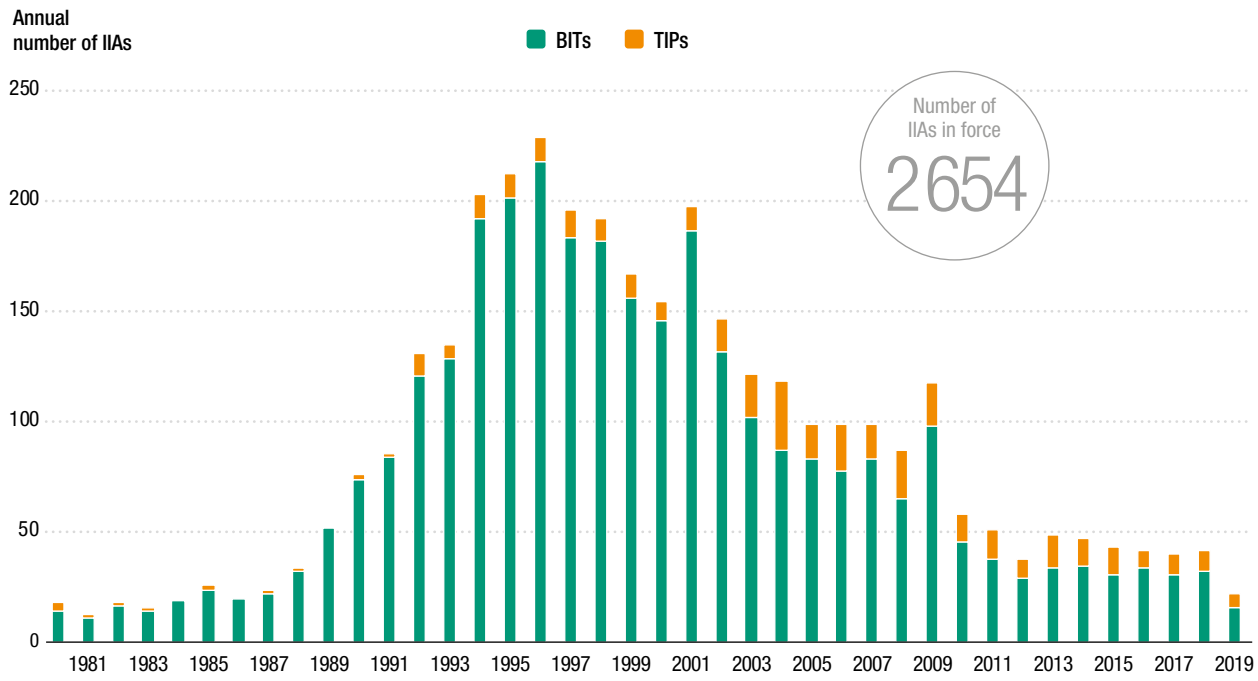
In 2019 and 2020, several significant developments affected the international investment policy landscape. They include notably an agreement by EU member States to terminate intra-EU BITs, as well as Brexit and the entry into force of the agreement establishing the African Continental Free Trade Area (AfCFTA). Although the approaches to these developments differed, some of them reflect aspects of IIA reform.

a. Developments in the conclusion of IIAs

In 2019, countries concluded 22 IIAs and at least 34 IIA terminations entered into effect. This brought the total number of treaties to 3,284 by year-end. As in 2017, the number of effective treaty terminations exceeded the number of new treaty conclusions.

In 2019, countries concluded at least 22 IIAs: 16 BITs and six TIPs. The most active economies were Australia, Brazil and the United Arab Emirates, each with three new IIAs. This brought the size of the IIA universe to 3,284 (2,895 BITs and 389 TIPs).[15] In addition, at least 12 IIAs entered into force in 2019, bringing the total to at least 2,654 IIAs by the end of the year (figure III.6).

Figure III.6. Number of IIAs signed, 1980–2019



Source: UNCTAD, IIA Navigator.
Note: This includes treaties (i) unilaterally denounced, (ii) terminated by consent, (iii) replaced by a new treaty and (iv) expired automatically.

At the same time, the number of IIA terminations continued to increase: In 2019, at least 34 terminations entered into effect ("effective terminations"), of which 22 were unilateral terminations, six were terminated by consent, four were replacements (through the entry into force of a newer treaty) and two expired. Particularly active in terminating treaties was Poland, with 17 BITs terminated; it was followed by India, with seven. For the second time since 2017, the number of IIA terminations in a year exceeded the number of treaty conclusions. By the end of the year, the total number of effective terminations reached 349.

The five TIPs concluded in 2019 for which texts are available can be grouped into two categories.

1. Four agreements with obligations commonly found in BITs, including substantive standards of investment protection and ISDS:

- Armenia–Singapore Agreement on Trade in Services and Investment Agreement
- Australia–Indonesia Comprehensive Economic Partnership Agreement (CEPA)
- Australia–Hong Kong, China Investment Agreement
- EU–Viet Nam Investment Protection Agreement

2. One agreement with limited investment provisions (e.g. national treatment with regard to commercial presence or the right of establishment of companies) or provisions on free movement of capital relating to direct investments:

- Caribbean Forum (CARIFORUM) States–United Kingdom Economic Partnership Agreement (EPA)

b. Developments at the regional level

Significant developments have taken place in almost all regions and continue to shape the international investment regime.

African Continental Free Trade Area: On 30 May 2019, the AfCFTA entered into force for the 24 countries that had deposited their instruments of ratification. As of 6 May 2020, 30 countries had ratified it. The operational phase of the agreement was launched during a high-level summit of the African Union in Niamey, Niger, on 7 July 2019. Phase I, which focuses primarily on areas such as trade in goods and services as well as dispute settlement, is in the process of being completed, although negotiations on key elements such as rules of origin and tariff concessions are ongoing. Prior to the COVID-19 pandemic, trading under the AfCFTA was slated to begin on 1 July 2020. Negotiations on the protocols on investment, competition and intellectual property rights, which constitute Phase II of the process, were expected to be completed in December 2020. In terms of content, the protocol on investment is likely to draw on the Pan-African Investment Code, which was finalized in 2015. The resulting draft legal texts are to be submitted to the January 2021 session of the African Union Assembly for adoption. The investment protocol of the AfCFTA is expected to take into account the key development objectives of African countries in order to formulate provisions that will support the promotion and facilitation of sustainable investment.

Brexit and the transition period: On 31 January 2020, the United Kingdom's withdrawal from the EU officially came into effect. The Withdrawal Agreement concluded between the EU and the United Kingdom provides for an 11-month transition period, from 1 February 2020 to 31 December 2020, during which the United Kingdom will continue to apply EU trade policy and will continue to be covered and bound by trade agreements between the EU and third countries. The EU is in the process of notifying third countries of this period. During the transition period, the United Kingdom will be able to negotiate

and sign trade agreements; however, they will be able to enter into force only at the end of the transition period. After the transition period, EU trade agreements will cease to apply to the United Kingdom.

To prepare for the end of the transition period, the United Kingdom has continued to conclude so-called "rollover" or continuity agreements, to replicate the effects of the current agreements and prevent disruption of trade relationships with relevant third countries as a result of Brexit. As of 4 February 2020, the country had concluded 20 continuity agreements that together cover 49 partner countries.[16] In addition, it is engaged in ongoing discussions with 16 countries.[17] The pact with the CARIFORUM States contains a chapter on commercial presence (not confined to the services sector), whereas the agreement with the Eastern and Southern Africa (ESA) States includes provisions on investment-related cooperation, including in specific areas such as industrial development, SMEs, mining and tourism. None of the continuity agreements contain rules on investment protection; the latter remain confined to the United Kingdom's BITs.

EU agreement for the termination of intra-EU BITs: Following the interpretive declarations of EU member States in January 2019 on the legal consequences of the judgment of the Court of Justice of the EU in the *Achmea case* and on investment protection in the EU, on 24 October 2019 they reached a deal on the text of a plurilateral agreement for the termination of intra-EU BITs, although a small minority of member States was not able to endorse it. On 5 May 2020, 23 member States[18] signed the agreement for the termination of intra-EU BITs in order to implement the ruling in the *Achmea case,* which found that investor–State arbitration clauses in intra-EU BITs are incompatible with EU law. The agreement contains one annex with a list of about 125 intra-EU BITs currently in force that will be terminated upon entry into force of the agreement for the relevant member States and clarifies that their sunset clauses will also be terminated. A second annex lists 11 already terminated intra-EU BITs whose sunset clauses will also cease to produce legal effect upon entry into force of the agreement for the relevant member States. The agreement does not cover intra-EU proceedings under the Energy Charter Treaty (ECT). It indicates that the EU as a group and the member States will address this matter at a later stage.

EU–Mercosur Trade Agreement: On 28 June 2019, the EU and the Mercosur States[19] reached a political agreement for a comprehensive trade agreement. The trade agreement is part of a wider association agreement between the two regions. The agreement will contain a chapter on trade in services and establishment (including mode 3, commercial presence of services trade) but will not have a chapter on investment. Other notable provisions of the envisaged agreement include chapters on environmental protection and labour conditions, e-commerce, SMEs and the involvement of civil society.

Joint D-8 Organization for Economic Cooperation – UNCTAD Guiding Principles for Investment Policymaking: In January 2020, members of the D-8 Organization for Economic Cooperation (Bangladesh, Egypt, Nigeria, Indonesia, the Islamic Republic of Iran, Malaysia, Pakistan, and Turkey) endorsed a set of Guiding Principles for Investment Policymaking jointly developed with UNCTAD. The Principles were developed in line with the recommendations of the UNCTAD-D-8 Expert Meeting on "International Investment Policy Reform for Sustainable Development", held in Istanbul, Turkey in September 2019, which "called on UNCTAD and the D-8 organization to develop non-binding development-oriented guiding principles for investment policymaking for D-8 countries". The Principles provide guidance for investment policymaking with a view to promoting inclusive economic growth and sustainable development; promoting coherence in national and international investment policymaking; fostering an open, transparent and conducive global policy environment for investment; and aligning investment promotion and facilitation policies with sustainable development goals. A number of economies, economic groupings and regional

Box III.5. Guiding Principles on Investment Policymaking

Several economies, economic groupings and regional organizations have adopted non-binding principles for investment policymaking aimed at guiding the development of national and international investment policies. The principles are typically informed by the Core Principles set out in UNCTAD's Investment Policy Framework for Sustainable Development (UNCTAD, 2015). Examples of guiding principles elaborated by countries and organizations in collaboration or jointly with UNCTAD include the following:

- *G20 Guiding Principles for Global Investment Policymaking.* In September 2016, G20 leaders endorsed the guiding principles of the Hangzhou Summit. Drawing on the UNCTAD Policy Framework, the G20 Principles constituted the first time that multilateral consensus on investment matters had been reached between a varied group of developed, developing and transition economies.
- *Joint African, Caribbean and Pacific Group of States (ACP) – UNCTAD Guiding Principles for Investment Policymaking.* In June 2017, the ACP Committee of Ambassadors approved these principles, which were jointly developed by UNCTAD and the ACP Secretariat. The non-binding principles reflect ACP countries' specificities and priorities for investment policymaking, building on key ACP policy documents and the UNCTAD Policy Framework.
- *Joint D-8 Organization for Economic Cooperation – UNCTAD Guiding Principles for Investment Policymaking.* In January 2020, country members of the D-8 endorsed a set of guiding principles developed in line with the recommendations of the UNCTAD–D-8 Expert Meeting in September 2019 and on the basis of existing key D-8 declarations.
- *Organization of Islamic Cooperation Guiding Principles for Investment Policymaking.* In 2018, high-level experts of the member States agreed on 10 principles in line with the OIC Action Programme (OIC-2025) and the UNCTAD Policy Framework.
- *Saudi Arabia Guiding Principles for Investment Policymaking.* In 2019, Saudi Arabia adopted a set of seven guiding principles elaborated in line with its Vision 2030 agenda and the UNCTAD Policy Framework.

Source: UNCTAD.

organizations have adopted similar principles for investment policymaking to guide the development of national and international investment policies (box III.5).

Modernization of the Energy Charter Treaty: On 6 November 2019, the highest decision-making body of the International Energy Charter, the Energy Charter Conference, adopted a decision on the procedural issues and timeline for negotiations for the modernization of the ECT. Some of the previously approved topics that will be addressed in the negotiations for modernization include the definition of investment, the right to regulate, the most-favoured-nation clause, the definition of indirect expropriation, sustainable development and corporate social responsibility. The Modernization Group of the Energy Charter Conference held its first meeting on 12 December 2019, in Brussels. Before the pandemic, this meeting was to be followed by negotiating sessions and a stocktaking meeting of the Conference in 2020.

Ratification of the United States–Mexico–Canada Agreement: In June 2019, the Mexican Senate approved the implementing legislation for the United States–Mexico–Canada Agreement (USMCA), making Mexico the first country to ratify the agreement. Following the approval of the USMCA, in December 2019, by the United States House of Representatives, on 29 January 2020 the agreement was signed into law by the President, marking the United States' effective ratification of the new agreement. Canada ratified the USMCA on 13 March 2020. The agreement is set to enter into force on 1 July 2020. Among the major changes brought about by the new agreement are the revised ISDS provisions, which limit the application of ISDS exclusively to investor–State disputes between the United States and Mexico and narrow the claims that investors can bring under that provision.

Regional Comprehensive Economic Partnership: The 3rd Regional Comprehensive Economic Partnership Summit was held in November 2019, in Bangkok, Thailand, bringing together the leaders of the 16 participating countries[20] to review developments in the negotiations. Fifteen participating countries have concluded text-based negotiations. The proposed agreement will comprise 20 chapters, including one on investment. The latter will, reportedly, not provide for ISDS; instead, the participating countries agreed to address it in the future. India appears to have disengaged from the negotiations until

a satisfactory resolution is found for significant outstanding issues. The other participating countries have reaffirmed their commitment to continue working with India on these issues. Before the outbreak of COVID-19, the agreement had been set to be finalized for signature by the participating countries in 2020.

2. Trends in ISDS: new cases and outcomes

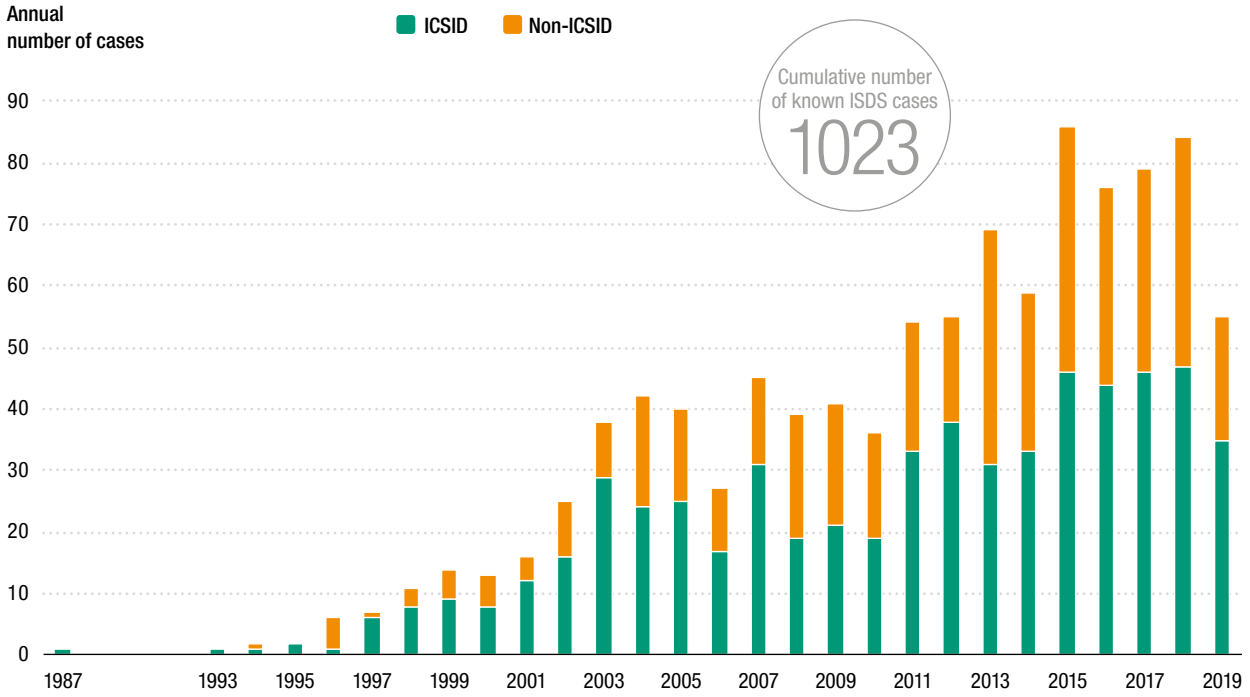
The total ISDS case count had reached over 1,000 by the end of 2019, with at least 55 new arbitrations initiated in 2019. Most investment arbitrations were brought under IIAs signed in the 1990s or earlier.

a. New cases initiated in 2019

The number of new ISDS cases remained high but below the average of the past five years. In 2019, at least 55 new treaty-based ISDS cases were initiated, all under old-generation treaties signed before 2012.

In 2019, investors initiated 55 publicly known ISDS cases pursuant to IIAs (figure III.7), the lowest number in the preceding five years. On the basis of newly revealed information, the number of known cases for 2018 was adjusted to 84. As of 1 January 2020, the total number of publicly known ISDS claims had reached 1,023. As some arbitrations can be kept confidential, the actual number of disputes filed in 2019 and previous years is likely to be higher. To date, 120 countries and one economic grouping are known to have been respondents to one or more ISDS claims.

Figure III.7. Trends in known treaty-based ISDS cases, 1987–2019



Source: UNCTAD, ISDS Navigator.
Note: Information has been compiled from public sources, including specialized reporting services. UNCTAD's statistics do not cover investor–State cases that are based exclusively on investment contracts (State contracts) or national investment laws, or cases in which a party has signaled its intention to submit a claim to ISDS but has not commenced the arbitration. Annual and cumulative case numbers are continually adjusted as a result of verification processes and may not match exactly case numbers reported in previous years.

(i) Respondent States

The new ISDS cases in 2019 were initiated against 36 countries and one economic grouping (the EU). Colombia, Mexico, Peru and Spain were the most frequent respondents, with three known cases each. Three economies – the EU,[21] Nepal and Sierra Leone – faced their first known ISDS claims. As in previous years, the majority of new cases (80 per cent) were brought against developing countries and transition economies.

(ii) Claimant home States

Developed-country investors brought most – about 70 per cent – of the 55 known cases in 2019. The highest numbers of cases were brought by investors from the United Kingdom and the United States, with seven cases each.

(iii) Intra-EU disputes

About 15 per cent of the 55 known cases filed in 2019 were intra-EU disputes (seven cases), slightly below the historical average of 20 per cent. Five of these seven disputes were brought on the basis of the ECT; the remaining two invoked intra-EU BITs.

The overall number of known arbitrations initiated by an investor from one EU member State against another totalled 188 at the end of 2019. It remains to be seen whether recent EU-level developments related to intra-EU BITs and the ECT will greatly reduce or eventually eliminate new treaty-based intra-EU disputes.

(iv) Applicable investment treaties

About 70 per cent of investment arbitrations in 2019 were brought under BITs and TIPs signed in the 1990s or earlier. The remaining cases were based on treaties signed between 2000 and 2011. The ECT (1994) was the IIA invoked most frequently in 2019, with seven cases, followed by the North American Free Trade Agreement (NAFTA (1992)) with three cases. Looking at the overall trend, about 20 per cent of the 1,023 known cases have invoked the ECT (128 cases) or NAFTA (67 cases).

b. ISDS outcomes

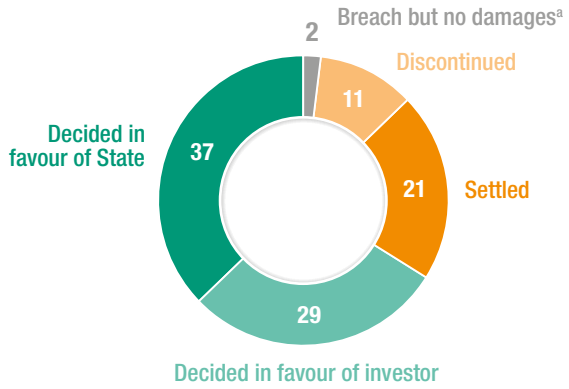
Of the public arbitral decisions rendered in 2019, more than half of the decisions on jurisdictional issues were rendered in favour of the State, whereas those on the merits more frequently ended in favour of the investor.

(i) Decisions and outcomes in 2019

In 2019, ISDS tribunals rendered at least 71 substantive decisions in investor–State disputes, 39 of which were in the public domain at the time of writing. More than half of the public decisions on jurisdictional issues were decided in favour of the State, whereas on the merits more decisions were decided in favour of the investor.

- Fourteen decisions (including rulings on preliminary objections) principally addressed jurisdictional issues, with five upholding the tribunal's jurisdiction and nine declining jurisdiction.
- Twenty-five decisions on the merits were rendered, with 14 accepting at least some investor claims and 11 dismissing all the claims. In the decisions holding the State liable, tribunals most frequently found breaches of the fair and equitable treatment (FET) provision. The amounts awarded ranged from less than 10 million ($7.9 million in *Magyar Farming and others v. Hungary)* to several billions ($4 billion in *Tethyan Copper v. Pakistan* and $8.4 billion in *ConocoPhillips v. Venezuela*).

Figure III.8. Results of concluded cases, 1987–2019 (Per cent)



Source: UNCTAD, ISDS Navigator.
[a] Decided in favour of neither party (liability found but no damages awarded).

In addition, four publicly known decisions were rendered in annulment proceedings at the International Centre for Settlement of Investment Disputes (ICSID). Ad hoc committees of ICSID rejected the applications for annulment in all four cases.

(ii) Overall outcomes

By the end of 2019, at least 674 ISDS proceedings had been concluded. The relative share of case outcomes changed only slightly from that in previous years (figure III.8).

3. Taking stock of IIA reform

Through its policy recommendations compiled in the Investment Policy Framework for Sustainable Development (*WIR12*, updated in 2015) and in the Road Map for IIA Reform (*WIR15*), subsequently included in the comprehensive, consolidated Reform Package for the International Investment Regime (UNCTAD, 2018b), UNCTAD identified five action areas: safeguarding the right to regulate, while providing protection; reforming investment dispute settlement; promoting and facilitating investment; ensuring responsible investment; and enhancing systemic consistency. This section reviews the extent to which recent treaties use reform features in their substantive and procedural clauses.

a. Treaties concluded in 2019: key features of substantive clauses

The reform of the IIA regime is well underway and is visible in the modernized provisions of the IIAs concluded in 2019.

IIAs concluded in 2019 continued to feature heavily reform-oriented clauses: nearly all new IIAs with texts available (table III.5) – that is, 14 of 15 – contain at least seven reform features; 12 of 15 contain at least eight reform features; and ten of 15 include at least nine reform features. The preservation of States' regulatory space remains the most predominant area of reform; other areas that continued to be the subject of heightened reform include investment dispute settlement and sustainable development. Investment promotion and/or facilitation is another area that saw increased attention.

Preservation of regulatory space. Elements aimed at safeguarding States' policy space continued to abound in IIAs concluded in 2019. Of the 15 treaties reviewed, nine include general exceptions (e.g. for the protection of human health or the conservation of exhaustible natural resources); 12 incorporate limitations to the treaty scope (e.g. by excluding certain types of assets from the definition of investment); 14 circumscribe the FET obligation and clarify or omit indirect expropriation; and all 15 provide for detailed exceptions from the free-transfer-of-funds obligation. In addition, provisions with the potential to increase the exposure of States to arbitration claims (such as umbrella clauses) are omitted in 13 IIAs.

Sustainable development orientation. Provisions relating to the promotion of sustainable development permeate the 15 IIAs concluded in 2019 for which texts are available. Eleven of them make reference to the protection of health and safety, labour rights,

and environment or sustainable development, while nine provide for general exceptions. More than half (eight) include provisions for the promotion of corporate and social responsibility, and only four explicitly recognize that parties should not relax health, safety or environmental standards to attract investment. As observed in recent years, the inclusion of specific proactive provisions on investment promotion and/or facilitation continues to rise, with 12 of the agreements in 2019 featuring such provisions.

Investment dispute settlement. Fourteen of the 15 IIAs concluded in 2019 feature at least one type of limitation to ISDS, and at least three omit ISDS (see next subsection).

A few provisions found in some of the IIAs or treaty models concluded in 2019 are worth mentioning for their innovative features:

- Specifying that a required economic contribution to the host State economy – itself not an unusual practice in the definition of investment – be made towards sustainable development and providing indicators for measuring such a contribution (Morocco model BIT).
- Clarifying in the national treatment and most-favoured-nation provisions that one of the elements to take into consideration when determining the existence of like circumstances is whether a treatment distinguishes between investors or investments on the basis of legitimate public welfare objectives (Australia–Indonesia CEPA, Brazil–United Arab Emirates BIT).
- Clarifying that measures undertaken for the protection of a State's essential security interests, whether before or after the commencement of arbitral proceedings, shall be non-justiciable (India–Kyrgyzstan BIT).
- Allowing for the termination of the treaty at any time after its entry into force, subject to survival clauses where applicable (Australia–Hong Kong, China Investment Agreement, Australia–Indonesia CEPA, Brazil–Ecuador BIT, Brazil–United Arab Emirates BIT, EU–Viet Nam Investment Protection Agreement, India–Kyrgyzstan BIT).

Other novel provisions can be found in the 2020 Brazil–India BIT (e.g. allowing the parties to adopt or maintain affirmative action measures towards vulnerable groups, prohibiting the parties from subjecting investments to measures that constitute targeted discrimination based on race, gender or religious beliefs).

Since 2012, over 75 countries and REIOs benefited from UNCTAD support for the development of new model BITs and IIA reviews (*WIR19*). To support and accelerate IIA reform, UNCTAD will launch its IIA Reform Accelerator in the summer of 2020. The Accelerator will provide a concrete policy tool with actionable recommendations to assist economies in reforming their IIA regimes in line with sustainable development objectives.

b. Treaties concluded in 2019: ISDS reform approaches

As investor–State arbitration remains at the core of broader IIA reform actions, countries continued to implement many ISDS reform elements in IIAs signed in 2019, using four principal reform approaches: (i) no ISDS, (ii) a standing ISDS tribunal, (iii) limited ISDS and (iv) improved ISDS procedures.

In *WIR19*, UNCTAD identified the principal approaches to ISDS emerging from recent IIAs. Countries continued implementing four ISDS reform approaches in IIAs signed in 2019 (table III.6):

(i) No ISDS: The treaty does not entitle investors to refer their disputes with the host State to international arbitration (either ISDS is not covered at all or it is subject to the State's right to give or withhold arbitration consent for each specific dispute, in the form of the so-called "case-by-case consent") (three IIAs entirely omit ISDS).

(ii) *Standing ISDS tribunal:* The system of ad hoc investor–State arbitration and party appointments is replaced with a standing court-like tribunal (including an appellate level), with members appointed by contracting parties for a fixed term (one IIA).

(iii) *Limited ISDS:* Approaches may involve a requirement to exhaust local judicial remedies (or to litigate in local courts for a prolonged period) before turning to arbitration, the narrowing of the scope of ISDS subject matter (e.g. limiting treaty provisions that are subject to ISDS, excluding policy areas from the ISDS scope) and/or the setting of a time limit for submitting ISDS claims (11 IIAs).

(iv) *Improved ISDS procedures:* The treaty preserves the system of investor–State arbitration but with certain important modifications. Among other goals, such modifications may aim at increasing State control over the proceedings, opening proceedings to the public and third parties, enhancing the suitability and impartiality of arbitrators, improving the efficiency of proceedings, or limiting the remedial powers of ISDS tribunals (nine IIAs).

For 2019, the most frequently used approaches were "limited ISDS" and "improved ISDS procedures", often in combination.

Some of the reform approaches have more far-reaching implications than others. The extent of reform engagement within each approach can also vary (significantly) from treaty to treaty. For example, "limited ISDS" covers a very broad array of options, which may range from a treaty that requires exhaustion of local remedies to a treaty that sets a three-year time limit for submitting claims.

Fourteen of the 15 IIAs reviewed for 2019 contain at least one ISDS reform element, and many contain several (table III.6). One of the 15 IIAs reviewed contains no ISDS reform elements. The unreformed ISDS mechanism, which preserves the basic ISDS design typically usedin old-generation IIAs, is characterized by broad scope and lack of procedural improvements.

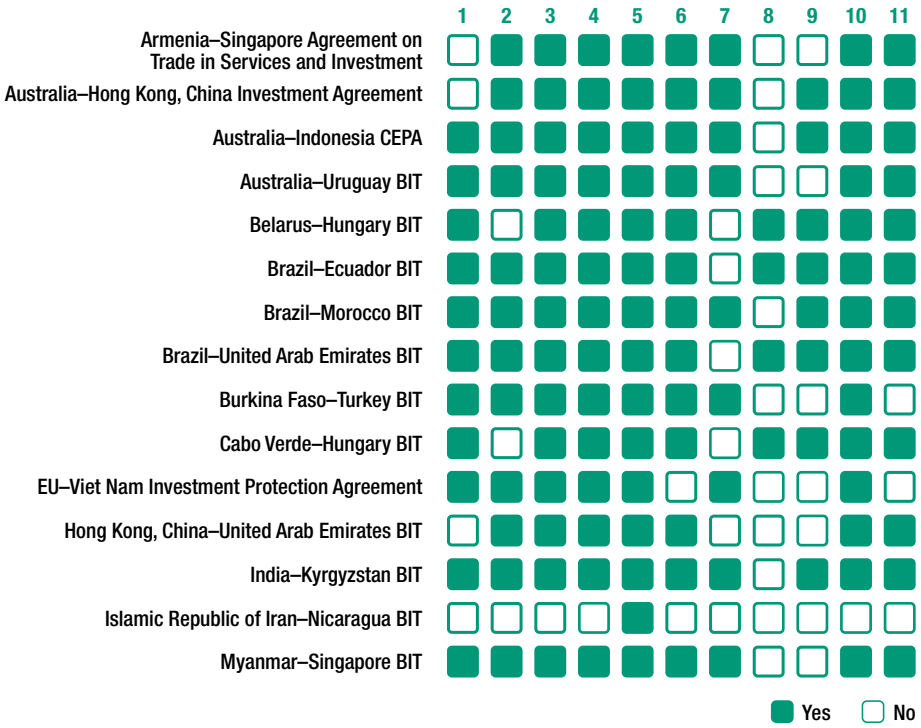
Most of the ISDS reform elements in recent IIAs (table III.6) resonate with the options identified by UNCTAD in the Investment Policy Framework for Sustainable Development (*WIR12*, updated in 2015) and in the Road Map for IIA Reform (*WIR15*), subsequently included in UNCTAD's comprehensive, consolidated Reform Package for the International Investment Regime (UNCTAD, 2018b).

In addition, IIAs signed in 2019 include several innovative ISDS reform features that have rarely been encountered in earlier IIAs and/or that break new ground:

- Excluding ISDS claims in relation to public health measures (Australia–Indonesia CEPA)
- Granting the respondent State the possibility to request mandatory conciliation before the investor can proceed to arbitration (Australia–Indonesia CEPA)
- Excluding jurisdiction over claims where the investment was acquired by an entity for the main purpose of submitting a claim, known as time-sensitive restructuring (EU–Viet Nam Investment Protection Agreement)

Alongside ISDS-specific reform elements, many IIAs reviewed also include important modifications to other treaty components that have implications for ISDS reform (e.g. refined treaty scope, clarified substantive provisions and added exceptions). ISDS reform is also being pursued at the regional, cross-regional and multilateral levels (at the United Nations Commission on International Trade Law and ICSID, among other institutions).

Table III.5. Reform-oriented provisions in IIAs concluded in 2019



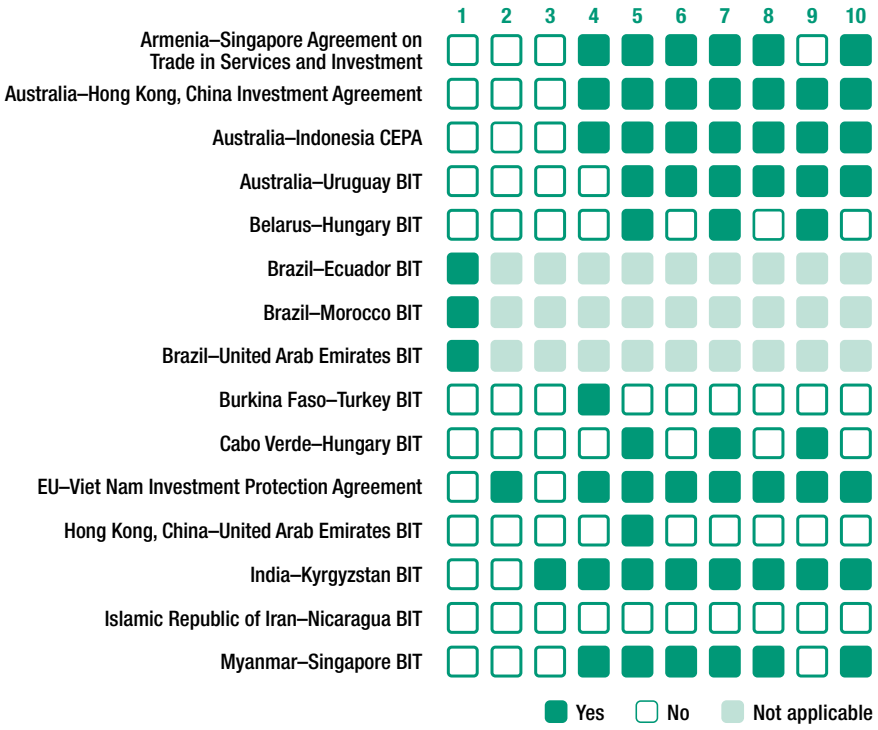
Selected aspects of IIAs

The scope and depth of commitments in each provision varies from one IIA to another.

1. References to the protection of health and safety, labour rights, environment or sustainable development in the treaty preamble
2. Refined definition of investment (e.g. reference to characteristics of investment; exclusion of portfolio investment, sovereign debt obligations or claims to money arising solely from commercial contracts)
3. Circumscribed FET (in accordance with customary international law, equated to the minimum standard of treatment of aliens under customary international law or clarified with a list of State obligations), or FET omitted
4. Clarification of what does and does not constitute an indirect expropriation, or indirect expropriation omitted
5. Detailed exceptions from the free-transfer-of-funds obligation, including for balance-of-payments difficulties and/or enforcement of national laws
6. Omission of the so-called "umbrella" clause
7. General exceptions, e.g. for the protection of human, animal or plant life or health; or the conservation of exhaustible natural resources
8. Explicit recognition in the treaty text that parties should not relax health, safety or environmental standards to attract investment
9. Promotion of corporate and social responsibility standards by incorporating a separate provision into the IIA or as a general reference in the treaty preamble
10. Limiting access to ISDS (e.g. limiting treaty provisions subject to ISDS, excluding policy areas from ISDS, limiting time period to submit claims, omitting the ISDS mechanism)
11. Specific proactive provisions on investment promotion and/or facilitation (e.g. facilitating the entry and sojourn of personnel, furthering transparency of relevant laws and regulations, enhancing exchange of information on investment opportunities)

Source: UNCTAD.
Note: On the basis of 15 IIAs concluded in 2019 for which texts are available, not including "framework agreements" that lack substantive investment provisions.

Table III.6. ISDS reform elements in IIAs concluded in 2019



Selected aspects of IIAs

The scope and depth of commitments in each provision varies from one IIA to another.

I. No ISDS

1 Omitting ISDS (e.g. in favour of domestic courts and/or State–State dispute settlement)

II. Standing ISDS tribunal

2 Replacing the system of ad hoc arbitrations and party-appointed arbitrators with a standing court-like tribunal (including an appellate level) consisting of adjudicators with fixed terms

III. Limited ISDS

3 Requiring investors to pursue local remedies (for 18 months or more) or to exhaust local remedies before turning to arbitration

4 Limiting treaty provisions subject to ISDS and/or excluding certain policy areas from ISDS

5 Setting a time limit for submitting ISDS claims (limitations period)

IV. Improved ISDS procedures

6 Enhancing the State role in ISDS: binding joint interpretations, renvoi for joint determination, non-disputing party participation, review of draft arbitral award, submission of counterclaims

7 Enhancing the suitability and impartiality of arbitrators or adjudicators: rules on qualifications, code of conduct, rules on conflicts of interest; "double hatting" prohibition

8 Enhancing the efficiency of dispute settlement: early dismissal of frivolous claims, consolidation of claims, time limit on maximum duration of proceedings, voluntary alternative dispute resolution procedures

9 Opening ISDS proceedings to the public and third parties: transparency rules, amicus curiae participation

10 Limiting remedial powers of tribunals: legal remedies, types of damages

Source: UNCTAD.
Note: On the basis of 15 IIAs concluded in 2019 for which texts are available, not including "framework agreements" that lack substantive investment provisions.

NOTES

[1] UNCTAD, Investment Policy Monitor, Special Issue No. 4, May 2020.

[2] www.pravno-informacioni-sistem.rs/SlGlasnikPortal/eli/rep/sgrs/vlada/odluka/2020/41/1/reg.

[3] https://unctad.org/en/PublicationsLibrary/diae2020infd1_en.pdf.

[4] UNCTAD, IPA Observer, Special Issue No. 8, April 2020.

[5] UNCTAD, Investment Policy Monitor, No. 23, April 2020.

[6] UNCTAD, Creating Business Linkages – A Policy Perspective, 2010, https://unctad.org/en/Docs/diaeed20091_en.pdf.

[7] OECD, "SME Policy Responses", https://read.oecd-ilibrary.org/view/?ref=119_119680-di6h3qgi4x&title=Covid-19_SME_Policy_Responses; SME South Africa, "COVID-19: Payment Relief and Other Government and Private Sector Interventions for SMEs", https://smesouthafrica.co.za/the-small-business-covid-19-survival-guide-where-to-get-help/; KPMG, "Saudi Arabia, Government and Institution Measures in Response to COVID-19", https://home.kpmg/xx/en/home/insights/2020/04/saudi-arabia-government-and-institution-measures-in-response-to-covid.html.

[8] Including the 27 member States of the EU as well as the United Kingdom.

[9] WTO, "Annex of COVID-19-related trade measures", https://www.wto.org/english/tratop_e/covid19_e/covid_measures_e.pdf.

[10] WHO, "WHO director-general endorses a voluntary intellectual property pool to develop Covid-19 products", 6 April 2020.

[11] For more information, see UNCTAD, Investment Policy Monitor, No. 23, April 2020, and UNCTAD, Investment Policy Monitor, Special Issue No. 4, May 2020.

[12] Examples include the postponement of negotiations for a Brazil–Nigeria BIT; delays for the negotiations of the new investment protocol of the African Continental Free Trade Area and the postponement of the EU–United Kingdom Free Trade Agreement.

[13] See, for example, the postponement of the EU–India Summit, which was scheduled to take place on 13 March 2020, and the EU–China Summit, which was scheduled for the end of March 2020.

[14] The full text is available at http://ccsi.columbia.edu/2020/05/05/isds-moratorium-during-covid-19.

[15] The total number of IIAs is revised in an ongoing manner as a result of retroactive adjustments to UNCTAD's IIA Navigator.

[16] These are agreements with the Andean Countries, the CARIFORUM States, Central America, Chile, the ESA States, the Faroe Islands, Georgia, Iceland and Norway, Israel, Jordan, Kosovo, Lebanon, Liechtenstein, Morocco, the Pacific States, the Republic of Korea, the Southern Africa Customs Union and Mozambique, the State of Palestine, Switzerland and Tunisia. The concluded agreements are not homogenous: 14 of them incorporate by reference the provisions of the relevant pre-existing EU agreements, listing only the required amendments. The remaining six treaties – with the CARIFORUM States, the ESA States, Georgia, the Pacific States (Fiji and Papua New Guinea), the Southern Africa Customs Union and Mozambique, and the Republic of Korea – set out their provisions in full.

[17] These are Albania, Algeria, Bosnia and Herzegovina, Cameroon, Canada, Côte d'Ivoire, Egypt, Ghana, Kenya, Mexico, the Republic of Moldova, Montenegro, North Macedonia, Serbia, Singapore and Ukraine.

[18] These are Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia and Spain.

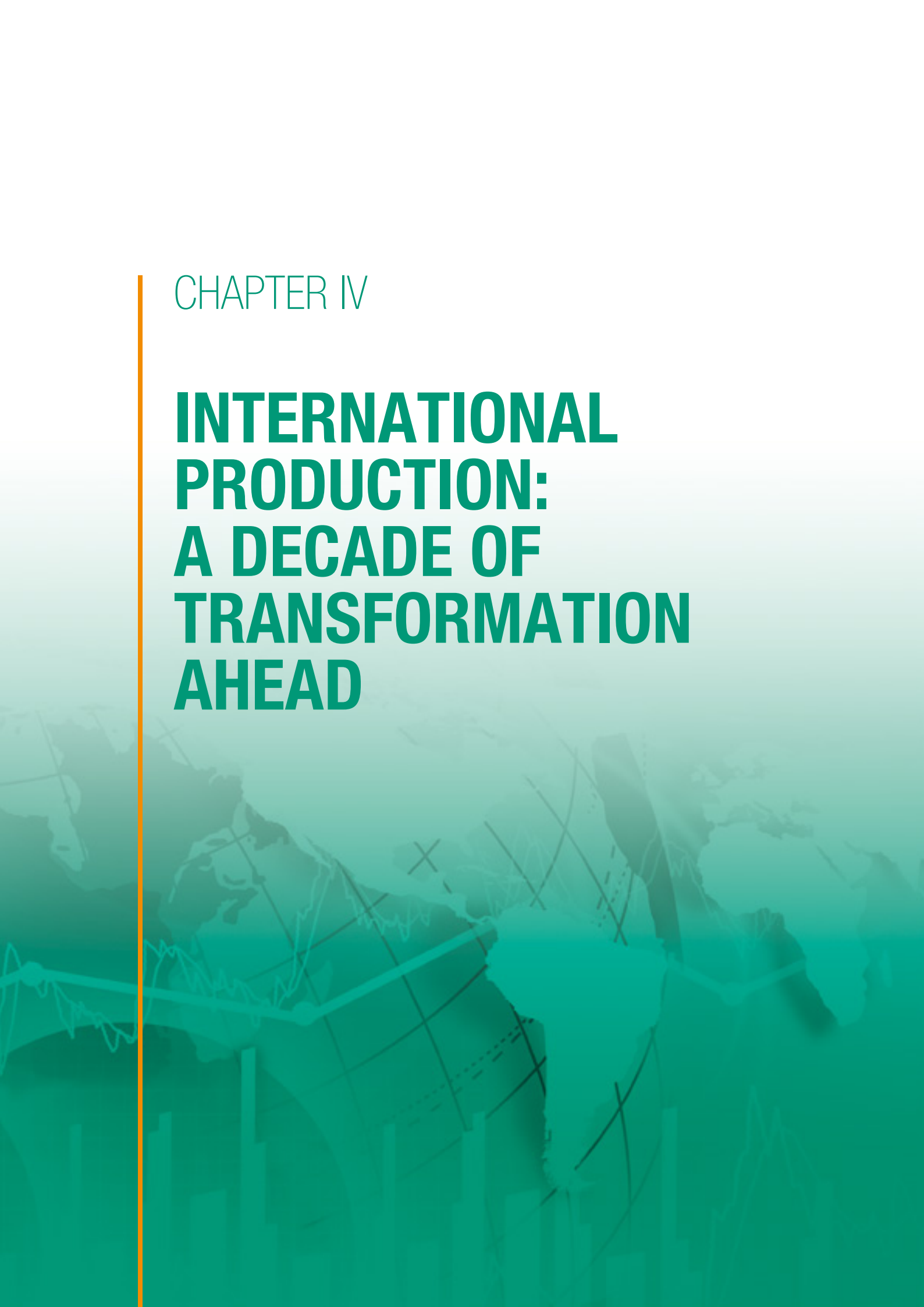
[19] Mercosur is the Southern Common Market, made up of Argentina, Brazil, Paraguay, Uruguay and the Bolivarian Republic of Venezuela (whose membership has been suspended since 1 December 2016).

[20] These are Australia, Brunei Darussalam, Cambodia, China, India, Indonesia, Japan, the Republic of Korea, the Lao People's Democratic Republic, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, Thailand and Viet Nam.

[21] Nord Stream 2 AG (Switzerland), a subsidiary of Gazprom (Russian Federation), initiated an arbitration against the EU under the ECT on 26 September 2019 related to the EU Gas Directive amendment of 2019; see https://investmentpolicy.unctad.org/investment-dispute-settlement/cases/1008/nord-stream-2-v-eu.

CHAPTER IV

INTERNATIONAL PRODUCTION: A DECADE OF TRANSFORMATION AHEAD



INTRODUCTION: INTERNATIONAL PRODUCTION IN A PERFECT STORM

At the start of a new decade, the global system of international production is experiencing a perfect storm, with the crisis caused by the COVID-19 pandemic arriving on top of existing challenges arising from the new industrial revolution (NIR), growing economic nationalism and the sustainability imperative.

This year's *World Investment Report (WIR)* comes in the midst of a global crisis. The coronavirus pandemic has forced governments around the world to implement strict measures to limit the spread of the virus, ranging from social distancing and closures of public spaces and offices to complete lockdowns. These measures have resulted in production stoppages and severe supply chain disruptions in most sectors, virtually complete closures of entire industries, and unprecedented demand shocks in almost all economies. The immediate impact on international production and cross-border investment has been severe, with delayed implementation of investment projects and the shelving of new projects, as well as the drying up of foreign affiliate earnings of which normally a significant share is reinvested in host countries. Longer term, the need for multinational enterprises (MNEs) to create more resilient supply chains, combined with greater pressure from governments and the public to increase national or regional autonomy in productive capacity, especially of essential (e.g. health care related) goods and services, will have a lasting effect on global production networks.

However, COVID-19 is not the only gamechanger for international production. International trade, investment and global value chains (GVCs) were already entering a period of transformation as a result of several "megatrends". These megatrends emerged and gradually increased in intensity over the course of the last decade, contributing to the slowdown of international production. The megatrends driving the transformation of international production can be grouped under three main themes:

- *Technology trends and the NIR.* The application of new technologies in the supply chains of global MNEs has far-reaching consequences for the configuration of international production networks. This has already raised important concerns for policymakers, with the realization that growth will depend on promoting investment in new sectors and that structural transformation through the build-up of the manufacturing sector is becoming more difficult.
- *Global economic governance trends.* Fragmentation in international economic policymaking and especially in trade and investment policy is reflected in a shift away from multilateral cooperation towards regional and bilateral solutions and increased protectionism. It is compounded by systemic competition between economic powers, as well as by a general shift in national economic policymaking in many countries towards more regulation and intervention.

- *Sustainable development trends.* The implementation of a broad range of sustainability measures, including climate change adaptation and mitigation measures, in the global operations of MNEs and differential speeds in the adoption and implementation of rules, regulations and practices aimed at sustainability will have important implications for international production networks. The need to channel investment to the Sustainable Development Goals (SDGs) will also affect patterns of foreign direct investment (FDI).

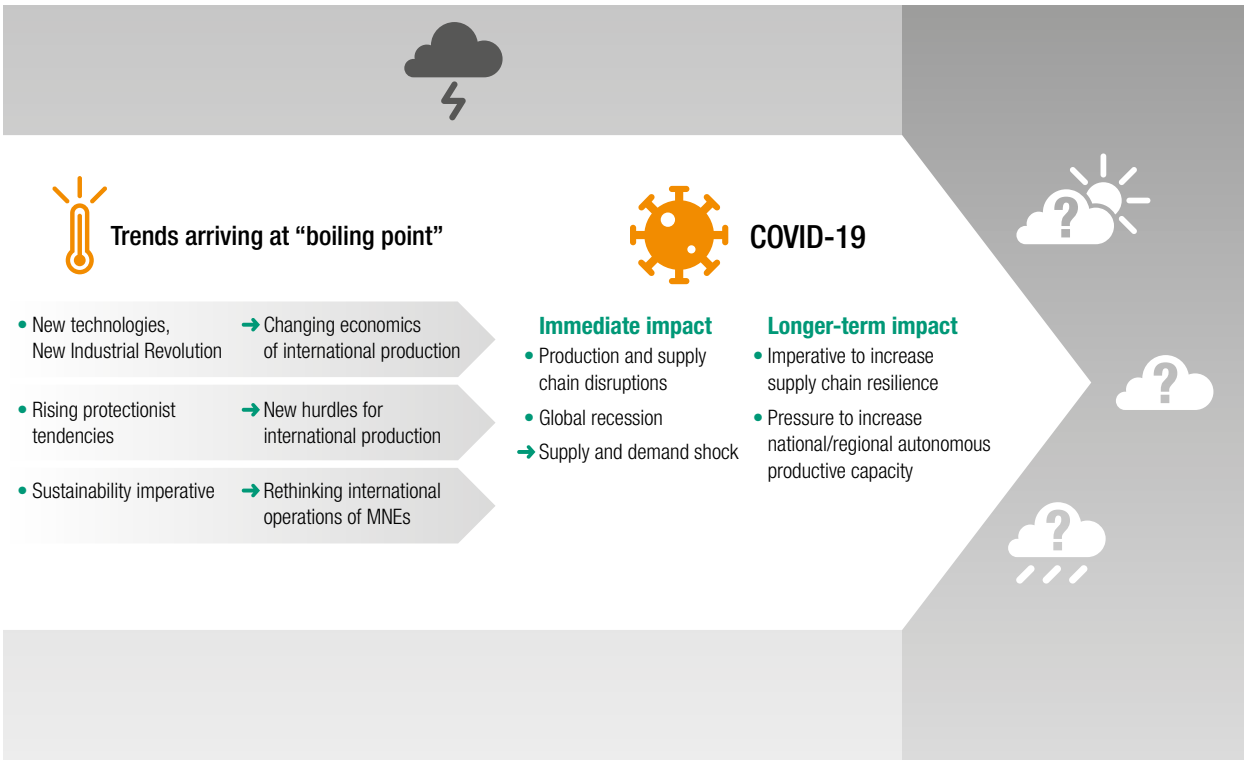
While the COVID-19-induced crisis is certainly a major challenge for international production on its own, it may also represent a tipping point, accelerating the effects of pre-existing megatrends. At the start of the new decade, due to the combined effect of the pandemic and existing trends reaching their boiling point, the system of international production finds itself in a "perfect storm" (figure IV.1). The decade to 2030 is likely to prove a decade of transformation.

* * *

This chapter aims to assess the possible directions that the global system of international production could take over the next decade to 2030 and discusses the implications for policymakers worldwide, and especially those in developing countries. To do so, the chapter takes stock of three decades of monitoring international production through the lens of FDI and GVCs, highlights the drivers and consequences of the slowdown in the last decade, and describes possible trajectories for the next 10 years as a function of major global trends causing a "secular change" in international production, all in the context of the additional pressures that the pandemic and its aftermath will bring.

To develop the international production trajectories for the next decade, this chapter examines the likely impact of each major trend on the length and level of fragmentation

Figure IV.1. International production in a "perfect storm"



Source: UNCTAD.

in GVCs, the distribution of value added and the governance of GVCs – all dimensions that affect future patterns of cross-border investment. It looks at different impacts by industry, with a special focus on those industries that are most relevant for the growth prospects of developing and transition economies. And it discusses the policy implications of a new era of international production with regard to the role of FDI in industrial policies, national policy measures aimed at promoting and facilitating investment, and options at the international level to maintain a policy environment conducive to productive cross-border investment in sustainable development.

The structure of the chapter is as follows:

- Section A provides a succinct overview of three decades of international production, focusing on the main drivers and determinants of the first two decades of growth and the factors behind the last decade of stagnation. It argues that, even before COVID-19, the system of international production was reaching an inflection point.
- Section B paints a broad-brush picture of the international production configurations of major sectors and industries today, as a starting point for the development of possible future trajectories.
- Section C describes the megatrends that will affect international production in the decade to 2030 and their expected impact on international production configurations.
- Section D presents several possible trajectories that the system of international production could follow.
- Section E draws the conclusions for national and international investment-development policymakers.

A. THE RUN-UP: 30 YEARS OF INTERNATIONAL PRODUCTION

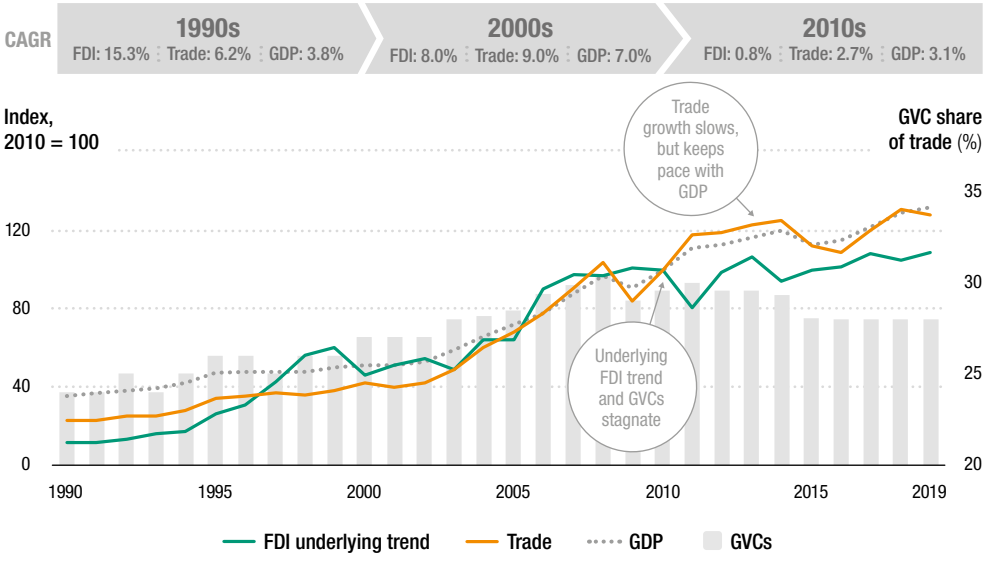
1. Two decades of growth followed by one of stagnation

The WIR has monitored FDI and the activities of MNEs for 30 years, during which international production saw two decades of rapid growth followed by one of stagnation.

Over the three decades of its existence, the *WIR* has documented trends in FDI, the activities of MNEs, and their impact on development. The first reports in the early 1990s described how the global presence of MNEs had evolved from relatively simple cross-border structures predominantly motivated by the search for natural resources and international markets only a few decades earlier to more complex international production networks built to exploit differences in labour costs and productivity. This process accelerated in the 1990s and into the 2000s, enabled by advances in technology that allowed the fine-slicing of production processes and better communication in complex cross-border supply chains, supported by the liberalization of trade and investment policies and the spread of export-oriented industrial policies, and spurred on by competition – both between firms in order to survive in globalized markets and between economies aiming to attract investment for development.

The first two decades of the report thus coincided with rapid growth in international production (figure IV.2), a 10-fold increase in the global stock of FDI and a five-fold increase

Figure IV.2. **FDI, trade, GDP and GVC trends, 1990–2019**
(FDI, trade and GDP indexed, 2010 = 100; GVCs, per cent)



Source: UNCTAD.
Note: Trade is global exports of goods and services. GVC share of trade is proxied by the share of foreign value added in exports, based on the UNCTAD-Eora GVC database (see Casella et al., 2019). The underlying FDI trend is an UNCTAD indicator capturing the long-term dynamics of FDI by netting out fluctuations driven by one-off transactions and volatile financial flows.

in global trade – much of it intra-firm trade between affiliates of the same MNE and trade within supply chains coordinated by MNEs. Early *WIR*s focused on the implications of the growth of international production, for example for employment and competition policies, and on the development impact and potential opportunities for export-led growth, linkages and domestic enterprise development.

In the 2000s, the *WIR* documented a series of fundamental shifts in the nature of international production (table IV.1). Patterns of FDI changed, with emerging markets becoming not only increasingly important recipients of FDI, but gradually also outward investors. The composition changed, with services playing an ever more important role, both through the internationalization of services industries and through the servicification of manufacturing activities. And the modalities through which MNEs expanded abroad changed, with mergers and acquisitions (M&As) playing a major role, and with corporate structures becoming highly complex.

After the global financial crisis, and especially after 2010, the growth momentum of international production stalled. This was first reflected in trade: worldwide exports of goods and services, which had grown at more than double the rate of GDP for decades, slowed down significantly relative to economic growth. The same development in investment remained obscured for some time by the expanding financial component of FDI. Nevertheless, the *WIR* observed early on that stagnation in cross-border investment in productive capacity was a key driver of the trade slowdown. Subsequent reports, exploiting new data on value added in trade, documenting investment flows net of conduits and offshore financial centres, and developing an underlying investment trend net of

Table IV.1. Evolution of international production since 1990

						CAGR (%)		
	1990	2000	2007 (pre-crisis peak)	2010	2019	1990s	2000–2007 (pre-crisis)	2008–2019 (post-crisis)
FDI inflows ($ billions)	205	1 356	1 891	1 365	1 540	20.8	4.9	0.4
FDI inward stock ($ billions)	2 196	7 377	18 634	19 751	36 470	11.6	13.5	8.4
Income on inward FDI ($ billions)	82	347	1 260	1 393	1 953	15.5	20.2	4.5
Rate of return on inward FDI (%)	3.7	4.7	7	7.1	6.7	..	..	..
Cross-border M&As value ($ billions)	98	959	1 032	347	483	25.6	1.0	-2.2
M&As to FDI ratio (%)	47.9	70.7	54.5	25.3	31.3	..	..	..
Geographical spread of inward FDI stock (number of countries that together account for 90 per cent of inward FDI stock)	23	31	37	40	40	..	..	..
Sales of foreign affiliates ($ billions)	7 136	11 859	26 394	23 392	31 288	5.2	12.4	1.8
Value added (product) of foreign affiliates ($ billions)	1 335	3 059	6 132	6 509	8 000	8.7	10.4	2.0
Total assets of foreign affiliates ($ billions)	6 202	22 761	74 504	82 588	112 111	13.9	18.4	4.5
Employment by foreign affiliates (thousands)	28 558	50 088	65 041	57 590	82 360	5.8	3.8	3.2
Memorandum								
GDP ($ billions)	23 719	33 845	47 571	66 062	87 127	3.6	5.9	2.9
Gross fixed capital formation ($ billions)	5 811	7 920	11 092	15 329	21 992	3.1	8.4	3.3
Royalties and license fee receipts ($ billions)	31	89	152	230	391	11.1	12.4	5.4

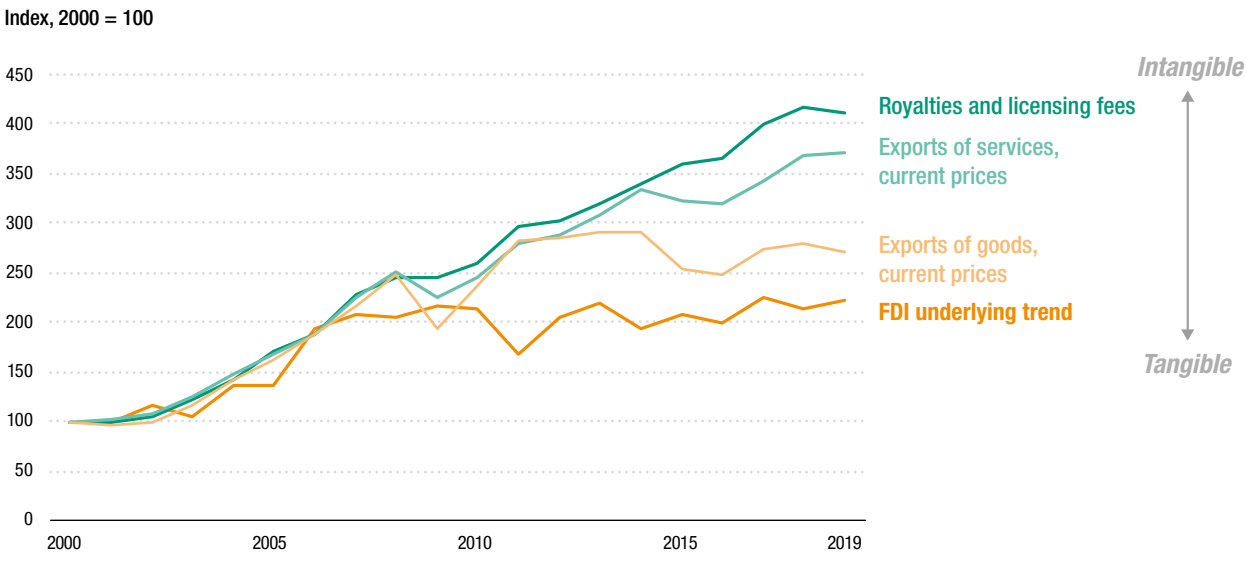
Source: UNCTAD. GDP and gross fixed capital formation data from IMF (2020).

the effects of volatile financial flows and M&As, clearly showed the relationship between the lack of growth in global (real) FDI, GVCs and trade.[1] The loss of momentum in international production did not necessarily decrease the interdependence between countries, as use of intermediate inputs, especially from China, continued to increase (Baldwin and Freeman, 2020). The geographical concentration in the production of certain critical supplies added to the exposure of international production to systemic risks – as laid bare during the COVID-19 crisis.

The causes for the investment stagnation were explored in-depth in several *WIR*s. For one, the overseas operations of MNEs became ever more intangible and less dependent on investment in physical assets (figure IV.3). Non-equity modes (NEMs) became firmly established, between arm's-length trade and FDI, as a governance mechanism in international production. NEMs allowed MNEs to access overseas markets through contracts, rather than FDI, while still exercising a significant degree of control over operations. Tech MNEs also became increasingly important. These firms can reach markets worldwide through digital channels and without the need for a significant physical presence. The number of asset-light tech MNEs in the *WIR*'s annual ranking of the 100 largest MNEs increased from four in 2010 to 15 by the end of the decade. In contrast, manufacturing investment declined. The value of greenfield cross-border investment projects in manufacturing industries was structurally lower (by 20-25 per cent) than in the previous decade, even in Asia, the only region still showing significant growth in overall FDI inflows.

Policy factors were also identified as culprits. The monitoring of national investment policy measures in the *WIR* showed a gradually increasing share of restrictive and regulatory measures, as opposed to measures aimed at liberalizing or promoting FDI. The fragmented nature of the international investment policy regime and the relatively weak impetus it gave to investment facilitation also led to several *WIR*s focusing on policy options for its reform, including through an Investment Policy Framework for Sustainable Development, an international investment agreements (IIA) Reform Package, and an Investment Facilitation Action Menu.

Figure IV.3. Indicators of international production by tangibility, 2000–2019 (Indexed, 2000 = 100)



Source: UNCTAD.

Table IV.2. The growth and slowdown of international production: key factors

1990–2010: Drivers of growth	2010s: Causes of the slowdown
Liberalization and export-led growth policies	Return of protectionism and policy uncertainty
Factor cost differentials and declining trade costs	Gradual decline in the return on FDI
Technological advances acting as enablers	Digital technologies favouring asset-light forms of international production

Source: UNCTAD.

Summarizing, analyses in various *WIR*s showed that the same factors that propelled the early growth of international production, namely policies (a wave of liberalization and export-led growth policies), economics (e.g. declining costs of trade) and technology (advances allowing the fine-slicing of production processes and coordination in complex cross-border supply chains) started pushing in the opposite direction, with a return of protectionist tendencies, a gradual decline in the return on FDI over the decade, and increasing technology-enabled asset lightness (table IV.2).

The implications for development of the slowdown in investment and international production have naturally been the key concern in the *WIR*. Foreign investment remains a key source of capital for developing countries. The least developed countries (LDCs), which confront severe structural impediments to development, are especially dependent on cross-border flows to inject capital in productive capacity and on the routes to international markets that affiliates of MNEs can provide. Their share of global FDI has remained stuck below 2 per cent, and their prospects for a step-change in investment attraction against a backdrop of global stagnation are slim. Looking beyond the group of LDCs, many other developing and transition economies still rely on FDI and participation in GVCs for industrial upgrading and growth. A survey of industrial policies adopted over the last 10 years in more than 100 countries showed that the vast majority of them aim to attract international investors in priority sectors through changes in investment laws, facilitation measures, incentives schemes and special economic zones *(WIR18* and *WIR19)*.

2. 2020: a crossroads for international production

The 2010s were the quiet before the storm. The changes in the economics of international production, the policy environment and technology trends observed in the last decade are only the beginning: the start of the new decade represents a critical inflection point in all three areas.

The rapid growth of international production until about 2010 was driven by the underlying economics, the supportive policy environment, and enabling technological developments. Changes in direction in the same three factors caused the stagnation in international production in the 2010s.

Looking ahead, the trio of technology, policy and economic considerations continues to be a helpful guide to structure the analysis of expected trends. Only the relative importance of the factors, their intensity and their detailed composition is likely to change. However, all three have arrived at critical inflection points that could fundamentally alter the configuration of international production over the next decade.

In *technology*, the spread of digital technologies in products and production over the past decade has led to a boom in trade in services, an explosion of intangibles in GVCs and a meteoric rise of digital and tech firms among the largest MNEs worldwide. But, as argued in *WIR17*, asset-light forms of international investment are just beginning to emerge and the full-scale digital transformation of the supply chains of firms that were not "born digital" (especially in manufacturing) is only at the start. Digital MNEs have grown partly in addition to, partly at the cost of, but mostly separate from traditional MNEs. And the digitalization of the supply chains of those traditional MNEs has in large part been bolted on to their existing international production configurations. Where products are designed, where parts are manufactured, and where they are assembled has, for most industries and most firms, not yet fundamentally changed.

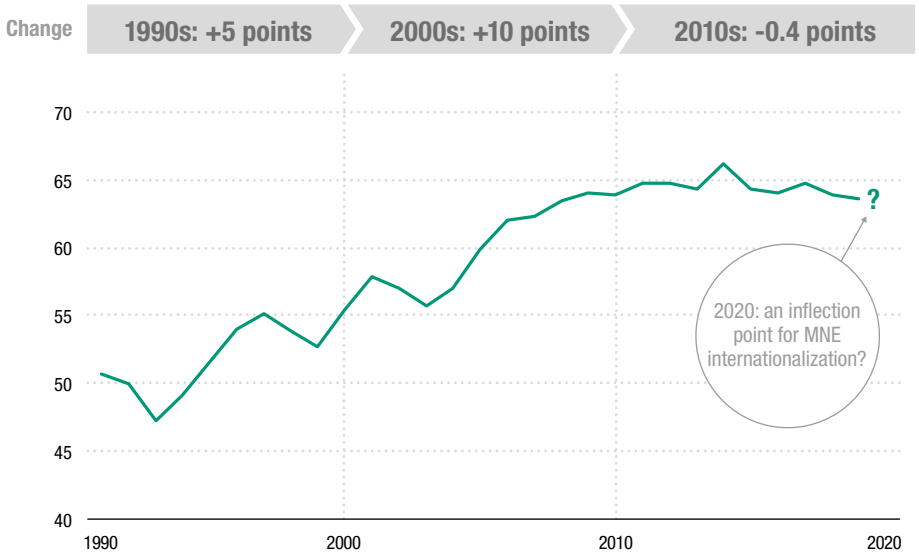
Looking at the *policy* environment and at international economic governance, the decade since the global financial crisis has seen the pendulum swing from liberal trade and investment policies toward more interventionism in national economic policies and a return of protectionism. The latter, however, really started to take effect only in the second half of the decade; in the first half, governments showed restraint and willingness to cooperate in order to restore economic stability and safeguard the recovery. While protectionist policies – tariff and non-tariff measures in trade, and restrictive measures on foreign investment – have certainly had their effect and contributed to the slowdown and stagnation of international production in after 2010, they have not yet resulted in a fundamental reconfiguration of international production networks. As trade patterns are easier to shift for firms operating international production networks, especially in nimble value chains with relatively low-capital investment in manufacturing operations, some trade diversion is evident. However, there has been no significant increase in levels of divestment, and reshoring is still only an emerging trend. A key factor to consider is that international commitments regarding interventions in national economies and restrictions on cross-border trade have so far acted as a constraint on the actions of governments; as this constraint loosens, it is likely that the impact on international production configurations will be more fundamental.

As to the *economics* of international production, reduced arbitrage opportunities on labour costs (and, perhaps, an emerging trend towards reduced arbitrage opportunities in tax) have already led to a gradual decrease in returns on foreign investment and contributed to the slowdown in international production during the last decade. However, this promises to be only the beginning of a change in the economics of international production. Sustainability concerns, especially, will affect the business case for complex international production networks and reshape global supply chains. Climate-change-induced extreme weather events are leading many MNEs to re-examine their supply chain resilience. Carbon emission targets announced by numerous governments and the associated implementation plans, including carbon border levies, promise to drastically alter MNE cost calculations about levels of technology employed in production, transportation, as well as regulatory and compliance issues. Many of these schemes imply a significant shift in the coming decade, coinciding with the last decade for the implementation of the SDGs.

The crisis caused by the pandemic has thus arrived at a time when the major driving forces of international production were all nearing critical inflection points. The pandemic has already significantly affected the production networks and supply chains of MNEs across many industries. As the outbreak began, bottlenecks in GVCs immediately emerged. The 1,000 largest global MNEs and their suppliers own more than 12,000 facilities (factories, warehouses and other operations) in the areas first hit by mobility restrictions (Hubei in China, Italy and the Republic of Korea). The longer-term policy reaction to the pandemic and the drive for greater supply chain resilience will accelerate existing trends in international production.

Over the last three decades MNEs have become ever more international, with steady increases in their shares of assets, sales and employees overseas (as measured by the Transnationality Index, or TNI) (figure IV.4). The second half of the last decade saw the TNI of UNCTAD's top 100 MNEs plateauing. There is a real possibility that a retrenchment lies ahead.

Figure IV.4. Transnationality Index of top 100 global MNEs, by decade



Source: UNCTAD.
Note: UNCTAD's Transnationality Index is the average of the ratios of foreign to total assets, sales and employment.

B. THE CONFIGURATION OF INTERNATIONAL PRODUCTION TODAY

International production networks can be described along three key dimensions: the degree of fragmentation and the length of value chains (short to long), the geographical spread of value added (concentrated to distributed), and the governance choices of MNEs that determine the prevalence of arm's-length trade, NEMs and FDI. Several archetypical configurations can be identified for the industries that account for the lion's share of global trade and investment.

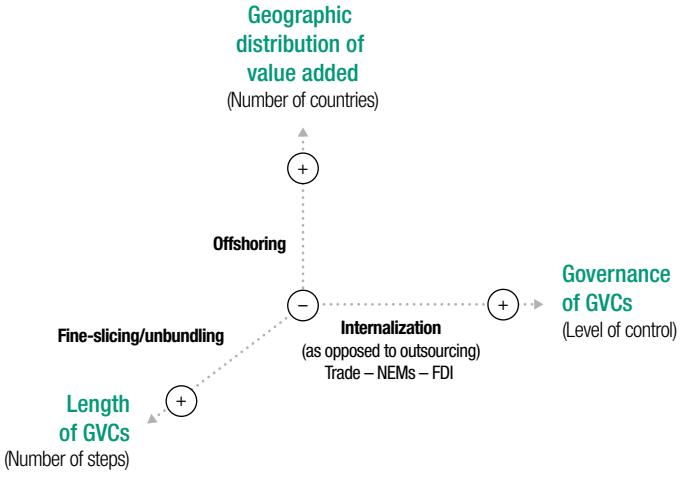
1. Key dimensions of international production

The term "international production" refers to the global production networks of MNEs that generate and coordinate GVC trade. While GVCs are often described primarily in trade terms, they are very much a function of the activities of MNEs. MNEs are the lead firms coordinating GVCs, with cross-border trade of inputs and outputs taking place between their affiliates, contractual partners and arm's-length suppliers. International production by MNEs accounts for a significant share of the global economy. Some 80 per cent of global trade is linked to the international production networks of MNEs *(WIR13)*. The combined value added generated by MNEs in their home countries and foreign affiliates amounts to about a quarter of global GDP and about a third of private sector output.

International production is not uniformly important across industries, and the configuration of international production systems varies greatly. The evolution of international production over three decades discussed in the previous section is the story of how MNEs and their networks of foreign affiliates, partners and suppliers have shaped the governance and coordination of GVCs and driven global patterns of investment in productive assets, generation of value added and trade.

International production configurations can be described along several dimensions; key dimensions are the length of value chains, the geographical spread of value added, and governance (figure IV.5). In considering the length or degree of fragmentation of value chains, the term "value chain" can be a misnomer – many production processes are "spiders" rather than "snakes", with intermediate inputs or components coming from many directions to be integrated or assembled into final products. The degree of fragmentation determines the extent to which a given value chain allows vertical

Figure IV.5. Key dimensions of international production



Source: UNCTAD.

specialization, the spatial separation of individual nodes or tasks in the process, and the exploitation of factor cost differentials across locations. Vertical specialization in value chains is a central concept in GVC analysis, and it has underpinned export-oriented development strategies promoting efficiency-seeking FDI in many countries.

The length of GVCs depends on many factors (table IV.3). A fundamental determinant is the degree of modularity of production processes in a particular industry, or the extent to which production processes can be sliced up into distinct and discrete steps. The productivity advantages that can accrue through specialization in specific tasks (economies of specialization) or through the concentration of similar and complementary tasks (economies of scale) also lead to longer value chains. Production modularity and economies of specialization and scale have led, for example, to the multi-tiered supplier structure in the automotive industry. Industries with high innovation intensity and product differentiation or customization needs tend to have shorter value chains.

Table IV.3. Key determinants of GVC length, geographical distribution and governance

Determinant	Impact	Relationship L	Relationship GD	Relationship GC
Arbitrage opportunities (labour costs, regulatory, tax)	Differences in labour costs are at the origin of efficiency-seeking investment and international production networks; other arbitrage opportunities also drive more complexity in international networks.	+	+	
Concentration of supply, demand and/or know-how and technology	Geographical dispersion of upstream and downstream segments of value chains and knowledge-intensive segments is determined by locations of demand, critical supply sources and technology/talent.		−	
Trade costs	Higher trade costs, including tariffs and costs of administrative procedures, make up a higher share of the costs of products/components that cross borders multiple times. They primarily affect the length of value chains, as well as geographical distribution of value added.	−	−	
Transportation costs	Transportation costs influence the sourcing and location decisions of firms. They will affect both the physical length of value chains and the geographical spread.	−	−	
Transaction costs (between actors in supply chains)	Transaction costs, including the difficulty of transmitting information or product specifications, quality control, and risk management, determine the degree to which lead firms resort to outsourcing, and the number of steps in value chains.	−		+
Modularity of the production process	The degree to which production can be broken up in discrete tasks is a driver (and prerequisite) for the degree of fragmentation and thus the length of value chains.	+	+	
Gains from specialization	The gains from specialization in tasks along the value chain are a key driver of fragmentation, closely linked with economies of scale at task level.	+		
Economies of scale	Economies of scale at value chain task level are equivalent to a gain from specialization and lead to more fragmentation; economies of scale in integrated production processes can have the opposite effect.	+/−	−	
Innovation/intellectual property intensity	Higher intellectual property intensity tends to lead to more closely controlled, internalized value chains, closer to home. Control through NEMs may be preferred over FDI where product/process specifications are easily codified and transmitted.	−	−	+
Degree of product differentiation/customization	The need for customization tends to lead to more decentralized value addition, i.e. higher geographical spread.	−	+	+/−

Source: UNCTAD.

Note: Columns on the right denote a positive/negative relationship between the determinants and value chain length (L), geographic distribution (GD), and governance and control (GC); for the latter, the relationship is interpreted as being towards more control through NEMs or internalization (i.e. governance through ownership).

Longer value chains or more fragmented production processes make it possible to distribute value addition across more locations. Length is therefore connected to the second dimension, the geographical distribution of value added. However, the two are not strictly correlated. Highly fragmented production processes, such as in the textiles, electronics or automotive industries – considered typical GVC industries – often still concentrate the bulk of value added in few locations, with many labour-intensive tasks in low-cost locations capturing relatively little value. A higher degree of geographical distribution of value added often occurs in shorter value chains, with MNEs replicating production processes across locations through market-seeking investment. The length of GVCs, their geographical distribution and the interaction between the two dimensions are important elements in the analysis of GVCs (Kano et al., 2020). The "smile curve" concept of value chains addresses the two dimensions, postulating a GVC structure where high value added knowledge- and intellectual-property-intensive tasks concentrate at the extremes of the curve, and low value added manufacturing and assembly tasks in the middle (Mudambi, 2007; 2008).

The factors that determine the geographical distribution of value added include, for example, trade and transportation costs, which are an economic disincentive for the wider dispersion of value added activities. In contrast, opportunities to capitalize on labor cost differentials and tax or regulatory arbitrage can drive the geographical distribution of value added. The degree of concentration of resources required for production in an industry and the concentration of demand for its products are other factors influencing the geographical spread of activities.

The length of value chains and their geographical distribution in and by themselves do not explain the degree to which MNEs internalize value added and access overseas resources, productive capacity and markets through arm's-length trade or through FDI. That depends on the degree of control they choose to exercise over (segments of) the GVC – their GVC governance choices. Governance and coordination of GVCs can be described along a spectrum from low levels of control over external suppliers of a given value chain input to full control through internalization (i.e. carrying out a given value chain task within majority-owned foreign affiliates). Studies[2] looking at the future of trade have mostly taken a GVC perspective limited to the two dimensions of value chain fragmentation and geographic distribution. Yet the governance dimension is necessary to take into account the role of MNEs in coordinating GVCs and thus to add the investment perspective.

The governance dimension is not a binary choice between trade and FDI (Gereffi et al., 2005). Intermediate levels of control over external suppliers in international production processes can be exercised through various levers, including contracts, licenses and franchising forms. Such non-equity (or non-ownership) modes of international production (NEMs) are widely used in most industries – e.g. contract manufacturing in electronics, production under license in pharmaceuticals, international franchising in consumer goods and retail – as they allow MNEs to outsource non-core parts of the value chain, concentrate on higher value added activities, and access low-cost providers benefiting from specialization and economies of scale *(WIR11)*. Although NEMs began in the low value added manufacturing and assembly segments of the value chain, they are common across upstream and downstream segments covering services tasks such as contract research and development (R&D), back-office and customer services.

Decisions by MNEs on how to coordinate and control activities within their international production networks depend on several industry-specific factors. The relative importance of intellectual property has important implications for governance choices, with a higher propensity for the internalization of intellectual-property-intensive activities in GVCs, such as fundamental R&D or the production of active ingredients in the pharmaceuticals industry.

Table IV.4. Dimensions and indicators of international production

Dimension	Indicator	Description
Length/fragmentation of value chains	**Steps**	The number of production stages involved in a specific GVC. The index used in this chapter is equal to 1 when there is a single production stage for the end industry and increases with the number of cross-border intermediate production stages involving the same or other industries.
	Distance	The average linear distance covered in completing the international production process in a GVC, from the initial to the final stage.
Geographical distribution of value added	**Degree of concentration**	The distribution of value added in GVCs across countries. The degree is measured in this chapter by the number of countries that account for 80 per cent of global value added in gross exports of an industry, and/or by the number of countries that account for at least 0.5 per cent of global value added in gross exports of an industry.
	Contribution spread	The number of countries for which a given GVC constitutes an important part of the economy. The threshold used in this chapter is at least 5 per cent of a country's GDP being accounted for by a specific GVC.
Governance/ internalization of value chains	**Relative FDI intensity**	The ratio of the share of FDI of an industry in total FDI to the share of trade of that industry in total trade. Provides an indication of the degree to which an industry relies on internalized production (by MNEs through foreign affiliates) versus trade (both arm's-length and through NEMs of production).
	NEM intensity	The degree to which MNEs in an industry enhance control over GVCs through non-equity modes of international production. The indicator used in this chapter is a qualitative measure (scale 1-5) based on the methodology developed in *WIR11*.

Source: UNCTAD.

Governance modalities are also affected by the complexity of specifications required to produce goods and services, the extent to which such information can be transmitted efficiently (i.e. the feasibility of codifying information and applying technical standards), the capabilities of external suppliers to meet technical product requirements and the enforceability of contracts with suppliers (Benito et al., 2019; Narula et al., 2019).

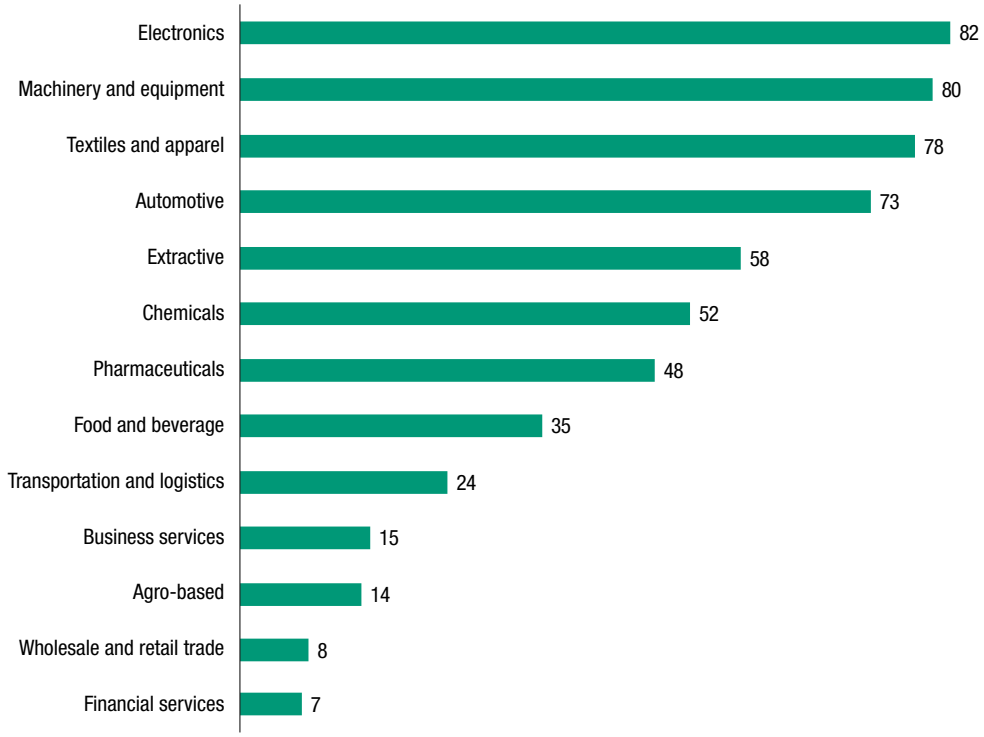
There are numerous approaches to measuring the length of value chains and the geographical distribution of value added and to describing positions on the spectrum of value chain governance options (table IV.4).

2. Industry profiles and archetypes

There is significant variation in the degree of internationalization of industries. Measured by export intensity (exports as a share of total industry output), typical GVC industries, such as electronics, automotive and machinery, rank at the top and industries that typically produce for domestic markets, such as agriculture as well as wholesale and retail, rank at the bottom (figure IV.6).

This chapter primarily takes an industry and economic activity perspective, as opposed to the product perspective of trade and GVC analysis. The industry perspective is ultimately more relevant for investment and investment policy. However, the two perspectives are intertwined: an industry combines multiple GVCs (e.g. the electronics industry produces many different products, each with variations in their value chain), and one GVC spans multiple industries (e.g. the full GVC for cars extends beyond the automotive industry to include extractive industries as well as metals and rubber products upstream and the retail

Figure IV.6. **Degree of internationalization of selected industries**
(Gross exports as a share of output, per cent)



Source: UNCTAD analysis based on Eora26 database.

industry downstream). Most activities in the primary and services sectors are commonly labeled industries (e.g. the oil and gas industry, the finance industry), while in GVC analysis they are regarded as value chain segments.

The high degree of internationalization of the typical GVC industries, as measured by gross exports, is partly driven by double counting of value added in GVCs *(WIR13)*. End products in the electronics industry crossing a border contain many components that have already crossed borders, often more than once, before being assembled. From an investment perspective, some of the industries that appear less internationalized when measured by exports may be as important as the typical GVC industries. For example, business services and chemicals are among the largest industries when measured by FDI stock. From the perspective of international production – the combination of FDI, the activities of MNEs and trade in GVCs – the industries listed in table IV.5a, which exclude the mostly domestic services sectors, can be considered a representative sample.

Table IV.5a provides data on the three dimensions of length, geographical spread and governance across industries, spanning the primary, manufacturing and services sectors, ranging from low-tech to innovation-intensive and including both capital- and labour-intensive industries. The data represent broad industry averages and, by necessity, embody a certain degree of abstraction. They are also affected by the fact that some industries are truncated value chain segments. For example, oil as a commodity traverses three industries analyzed in this report, starting from extractive industries, being processed as part of the chemicals industry, and finally reaching the consumer through the retail industry. Taking an industry perspective also presents challenges in the comparability of some indicators. For example, trade data are not fully compatible with FDI data because the former are product focused while the latter are derived primarily using an activity approach.

Table IV.5a. Key dimensions of international production

	Length/fragmentation of value chains		Geographical distribution of value added			Governance of value chains	
	Steps	Distance	Concentration		Contribution	FDI intensity	NEM intensity
Sector/industry	Number	Km	Number of countries accounting for 80% of value added in gross exports	Number of countries accounting for >0.5% of value added in gross exports	Share of countries in which contribution is >5% of GDP (%)	Share in FDI to share in trade	Prevalence of NEMs on 1-5 scale
Primary							
Agro-based	1.9	1 484	29	34	30	0.2	3
Extractive	1.5	1 402	22	37	12	2.0	2
Manufacturing							
Food and beverage	2.4	1 971	23	35	24	1.4	3
Textiles and apparel	2.6	2 278	20	31	6	0.1	5
Pharmaceuticals	1.8	2 433	21	30	4	2.2	4
Chemicals	2.4	2 911	21	37	36	0.9	2
Automotive	2.8	2 789	12	22	6	0.5	2
Machinery and equipment	2.5	2 457	16	32	37	0.4	4
Electronics	2.6	2 990	14	30	37	0.2	4
Services							
Wholesale and retail trade	1.7	1 083	16	27	55	1.1	2
Transportation and logistics	1.9	1 935	28	41	18	0.8	4
Financial services	1.7	858	18	36	84		1
Business services	1.5	1 203	16	35	82	1.3	1
Median	***1.9***	***1 971***	***18***	***34***	***30***	***0.8***	***3***

Sources: Length from Miroudot and Nordström (2015). Geographical distribution based on UNCTAD analysis using Eora26 database. Share in FDI to share in trade ratio based on UNCTAD calculations using UN-Comtrade and UNCTAD data. NEM intensity based on UNCTAD methodology developed in *WIR11*.
Note: For indicator explanations, see table IV.4.

This issue of data incomparability is more acute in specific industries. For example, trade in financial services encompasses mainly banking and insurance, but investment data for this industry are significantly broader, including finance-related inflows in regional headquarters, back-office functions and financial holdings of MNEs across several industries. These caveats notwithstanding, the indicators discussed subsequently offer important insights into key international production dimensions of different industries and are critical for constructing possible trajectories for the coming years.

The indicators on the length of value chains show the extent to which factors such as modularity, economies of scale and specialization, and innovation intensity can affect the fragmentation of international production across industries. The automotive industry displays the longest value chain length, with the highest proportion of foreign value added and a typical organization of production in a multi-tiered structure led by an original equipment manufacturer (OEM) with several layers of suppliers. The pharmaceutical industry, in comparison, has a shorter value chain, with few steps, if any, between high value added upstream activities and the production and packaging of medication close to markets.

Each industry has unique structural characteristics driving its configuration, such as resource needs, relative capital and technology intensity, and tradability of products and services. In addition, policy frameworks, including rules governing investment and trade, intellectual property rights, and soft standards on social and environmental issues, affect each industry differently. As a result, there is also significant variance in the geographical distribution of value added across selected industries. The agro-based industry, for example, is characterized by low capital and technology intensity, high tradability and facilitative policy frameworks. It is thus one of the most geographically dispersed industries across all indicators. In contrast, on account of higher technological barriers to entry and

Table IV.5b. Key dimensions of international production, memorandum items

Sector/industry	FDI		Trade		GVC intensity		Top 100 MNEs	
	Stock ($ billions)	Share of total (%)	Gross exports ($ billions)	Share of total (%)	FVA as share of exports (%)	GVC trade as share of total trade (%)	Number from industry	Average TNI (%)
Primary								
Agro-based	89	0.5	522	2.3	12	34	0	62
Extractive	1 963	9.7	1 106	4.8	7	48	6	68
Manufacturing								
Food and beverage	1 213	6.0	979	4.3	22	34	6	83
Textiles and apparel	39	0.2	730	3.2	25	40	1	78
Pharmaceuticals	1 178	5.8	585	2.5	26	34	11	67
Chemicals	1 607	8.0	2 138	9.3	31	56	13	62
Automotive	668	3.3	1 454	6.3	34	48	12	63
Machinery and equipment	460	2.3	1 416	6.2	30	48	2	62
Electronics	592	2.9	2 791	12.1	30	50	10	68
Services								
Wholesale and retail trade	2 788	13.8	1 796	7.8	10	38	6	60
Transportation and logistics	741	3.7	1 059	4.6	17	38	2	69
Financial services			445	1.9	7	34	0	11
Business services	4 119	20.4	3 596	15.6	7	34	15	63

Sources: Gross exports data from UN Comtrade. FVA as a share of exports based on UNCTAD analysis using Eora26 database. GVC-related trade proxied by proportion of exports that cross more than one border and based on UNCTAD analysis using Eora26 database; for industries without direct corresponding industry in the database, calculations are based on aggregation, disaggregation or expert assessments. Representation in top 100 MNEs from UNCTAD Top 100 MNE database (see chapter I).

Note: FVA = foreign value added. FDI stock data for finance not comparable due to accounting issues and thus removed from total FDI stock data for industry share calculations.

stringent intellectual property standards, the electronics industry has a significantly lower geographical concentration, with only 14 countries contributing to 80 per cent of value added in global exports. There are also notable differences in these industries with regard to the relative importance of each industry in national economies, which indicates the degree of opportunity for additional countries to increase their participation. The chemicals industry contributes at least 5 per cent of GDP in 36 per cent of countries in the world whereas the much more concentrated automotive industry contributes that amount in only 6 per cent of countries. The opportunity for countries to participate in chemicals GVCs is thus higher because of the pre-existing domestic production capacity.

The length and geographic spread of value chains is also a function of whether production networks are global or regional in nature. Previous analysis of value added in trade has shown that value chains are often more regional than global *(WIR13)*. In the last few years, the regional nature of value chains has intensified even further in East Asia and North America, although it has lessened in Europe (Miroudot and Nordström, 2019; Santos-Paulino et al., 2019). For some industries, a high share of regional value chains means that production stages are concentrated within a region while producing for global markets (e.g. in the electronics industry). Other industries have an equally fragmented value chain, with most production stages concentrated within a regional structure and producing mostly for the region (e.g. in the automotive industry). The result, in the latter case, is that value added is more distributed because of the replication of value chain structures.

Differences in prevalent governance modalities across industries are equally significant. The relative importance of intellectual property and capital intensity translates into much higher degrees of internalization through FDI, e.g. in the pharmaceutical industry, while economies of specialization and scale, the possibility to codify knowledge and product

specifications, and transaction costs determine the relative usage of NEMs as opposed to arm's-length trade – which is highest in textiles and apparel and common in electronics, machinery and automotive. The FDI intensity indicator shows that the textiles and apparel value chain has very low levels of FDI stock in comparison to the importance of the industry in international trade. A large part of the textiles and apparel GVC relies on outsourcing to contractors in locations with low labour costs. The industry makes extensive use of NEMs because textiles and apparel are not especially intellectual-property-intensive and rely mostly on easily transmittable product designs – notwithstanding the intra-industry differences, with the textiles segment more capital intense and concentrated, and the apparel segment more dispersed. This is in stark contrast to the pharmaceutical GVC, which has the diametrically opposite requirements of the textile and apparel industry in terms of precise quality controls, high importance of intellectual property and reliance on tacit knowledge. As a result, production networks in the pharmaceutical GVC are driven to a significantly higher degree by FDI than by trade. Broadly, as a general trend, the governance modalities are gradually skewed towards FDI rather than trade in industries that are more innovation- and technology-intensive.

The indicators of length, geographic distribution and governance choices discussed here ultimately drive the global trends of GVCs, trade and FDI that are presented in table IV.5b. However, there are myriad other factors involved, which necessitates a nuanced approach to analyzing these links. The relative positioning in GVCs of individual industries has important implications. For example, agro-based and extractive industries are more upstream; they have low foreign value added in exports despite having high levels of both trade- and GVC-related trade. Services industries, including business services, financial services and transport and logistics, serve as inputs into GVCs of other industries. Their FDI levels are inflated by overseas services activities dispersed across all industries. FDI in financial services, especially, encompasses investment in the finance functions of MNEs in all industries, not just those in banking and insurance services. FDI in retail and trade is further skewed by real estate values, a factor less relevant in other industries.

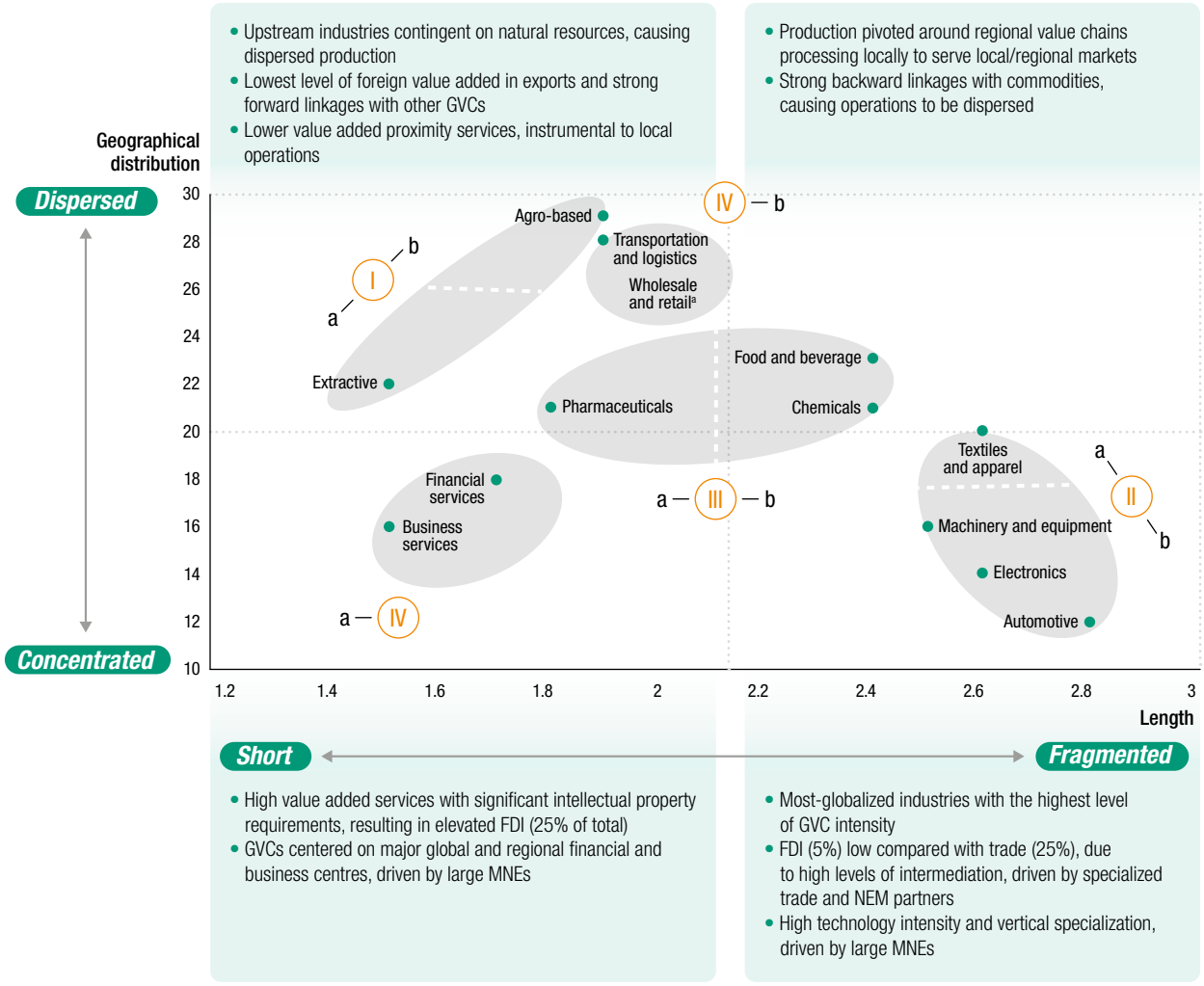
Despite the nuances and caveats discussed here, it is possible to distinguish several industry groupings based on common patterns in their configuration of international production, i.e. the length and geographic spread of value chains and governance modalities, yielding archetypical configurations (table IV.6). Archetypical international production configurations hide significant differences within industries, depending on market segments, value chain segments and individual firm strategies, but they share some common characteristics (figure IV.7).

Table IV.6. Archetypical international production configurations

Archetypes	Selected industries	Length/ fragmentation	Geographical distribution of value added	Governance (FDI intensity)
Primary industries				
Capital intensive	Extractive	Short	Concentrated	High
Less capital intensive	Agro-based	Short	Distributed	Low
GVC-intensive industries				
High-tech	Automotive, machinery and equipment, electronics	Long/fragmented	Concentrated	Low
Low-tech	Textiles and apparel	Long/fragmented	Distributed	Low
Geographically distributed industries				
Regional processing	Chemicals, food and beverage	Long/fragmented	Distributed	High
Global hub and spokes	Pharmaceuticals	Short	Distributed	High
Services industries connected to GVCs				
Lower value added	Transport and logistics, wholesale and retail	Short	Distributed	Low
Higher value added	Financial services, business services	Short	Concentrated	High

Source: UNCTAD.

Figure IV.7. Length and geographical distribution of international production and key archetypes



Source: UNCTAD.

[a] The positioning of the wholesale and retail industry relative to the dimension of "Geographical distribution" is indicative of the expected distribution of operations of international wholesalers and retailers. It does not reflect the value reported in table IV.5a, which is characterized by a more narrow scope.

I- Primary industries	II- GVC-intensive	III- Geographically distributed	IV- Services industries connected to GVCs
a: Capital intensive	a: Low-tech	a: Global hub and spokes	a: Higher value added
b: Less capital intensive	b: High-tech	b: Regional processing	b: Lower value added

C. MEGATRENDS AFFECTING INTERNATIONAL PRODUCTION

Megatrends driving the transformation of international production can be grouped under three main themes: technology trends and the NIR, global economic governance trends, and sustainable development trends. Many different developments occur in each of these areas. This section will focus on those trends that are expected to have the most significant impact on international production configurations (table IV.7).

1. Technology and the NIR

Three key technology trends of the NIR will shape international production going forward: robotics- and artificial intelligence (AI)-enabled automation, enhanced supply chain digitalization and additive manufacturing (3D printing). Each of these technologies will have distinct effects on the length, geographical distribution and governance of GVCs. Each technology, depending on industry-specific deployment, will flatten, squeeze or bend the "smile curve" of international production in its own way.

a. Key NIR technologies transforming international production

Technological changes are transforming the way goods and services are produced, paving the way to the NIR (UNCTAD, 2018a), also called the fourth industrial revolution or Industry 4.0 (Schwab, 2016). The notion of the NIR originally applies to manufacturing, but it can be extended to cover technological transformation in services.

Table IV.7. Megatrends shaping the future of international production

	Trends	Key elements
Technology/ New Industrial Revolution	• Advanced robotics and AI • Digitalization in the supply chain • Additive manufacturing (3D printing)	• Industrial automation, AI-enabled systems ("white collar" robots) • Platforms, cloud, IoT, blockchain • Distributed manufacturing, mass customization, commodification of production
Policy and economic governance	• More interventionism in national policies • More protectionism in trade and investment • More regional, bilateral and ad hoc economic cooperation	• Industrial policies, competition policy, fiscal policy • Tariffs and non-tariff measures, shielding of strategic/sensitive industries • Trade deals among select groups and on common-ground issues
Sustainability	• Sustainability policies and regulations • Market-driven changes in products and processes • Physical supply chain impacts	• Major green plans (and varying implementation timelines), carbon border adjustments • Increased reputational risks and demand for sustainably produced goods and services • Supply chain resilience measures, changing sources of agricultural inputs

Source: UNCTAD.

The set of technologies driving the NIR includes robotics, the internet of things (IoT), 3D printing, cloud computing and several others. These technologies can be grouped in various ways for analytical purposes, but the key feature of the NIR is the integration and interaction between technologies.

To address the impact on the future of international production, this section discusses three broad categories: digitalization, automation and 3D printing.[3] This classification leverages the two major forces driving the NIR: the use of digital technologies in production processes (digitalization) on the one hand, and the employment of machines to replace physical labour (automation) on the other. While in the NIR digitalization and automation work synergistically to disrupt traditional patterns of production, their impact on international production may differ, and even push in opposite directions (van Tulder et al., 2018). 3D printing is an example of synergy between digitalization and automation that has specific implications for international production. NIR technologies are heterogeneous in terms of technological scope, adoption across industries and technical and market maturity (table IV.8).

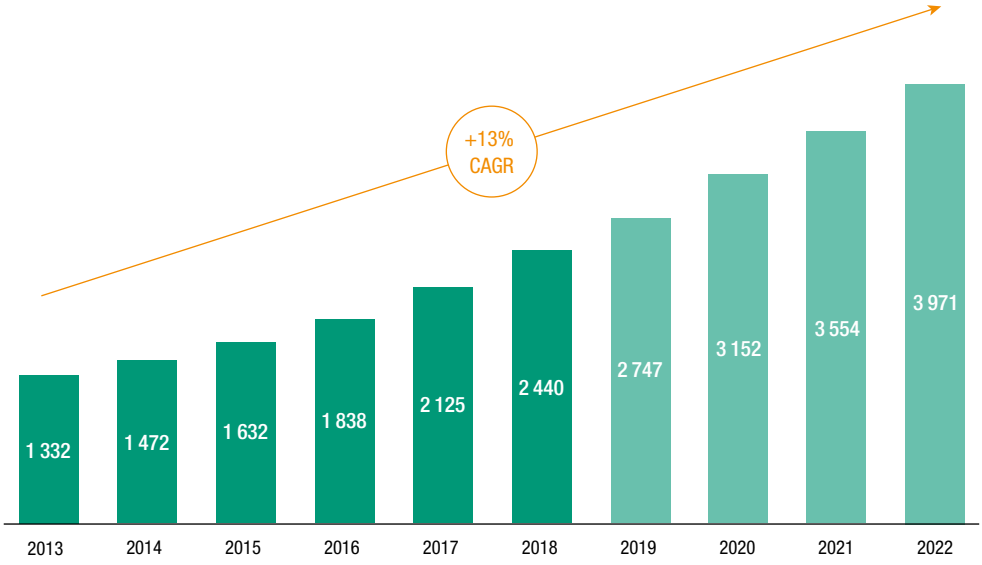
Digitalization covers the frontier of internet-based technologies: the Internet of Things (IoT), the cloud, augmented and virtual reality (AR and VR), and platform-based technologies, including e-commerce, fintech and blockchain (UNCTAD, 2019a). Big Data analytics are also instrumental in and enabled by digitalization. Although widely applied to all industries, these technologies are intrinsically linked with services; they actually provide intangible services. When employed in manufacturing, they boost the service component of manufacturing, a process known as servicification of manufacturing. All together digital technologies are a prominent component of the NIR. However, the individual technologies stand at different stages of development and business penetration. Whereas the IoT is already widely adopted – its deployment in the automotive industry is expected to reach a value up to $750 billion annually by 2025 – blockchain applications are still limited.

Table IV.8. High-level classification of NIR technologies

	Industry focus	Prospects
Digitalization: • IoT • Cloud • Artificial reality and virtual reality • Platforms (blockchain, e-commerce, fintech) • Big Data analytics	Applied to **all industries**	The combined market of the IoT (IoT and analytics revenues) **more than doubling in five years,** from $240 billion in 2017 to $520 billion in 2021.
	Focus on **data** and **intangible services;** servicification of manufacturing	
Automation: • Advanced industrial robotics • AI-enabled robotics	Mainly **manufacturing and low-value services**	Stock of **industrial robots tripling in 10 years,** from 1.3 million in 2013 to 4.0 million in 2022.
	Application to higher-value services at the early stage, with potential for future growth	Stock of professional service robots **nearly quadrupling in four years,** from 270,000 units in 2018 to 1 million units in 2022 (mainly logistical and medical robots).
3D printing	**Niche manufacturing** products (rubber and plastics products, specific components)	The market size of **additive manufacturing growing 10 times in 10 years** from $5 billion in 2015 to $50 billion in 2025, up to over $350 billion in 2035 (CAGR 2015-2035: > 20%).
	Application to mainstream industries (food, pharmaceuticals, textiles, electronics) very limited, with potential for future growth	

Source: Figures on IoT from Bain & Company (2018); on industrial and service robots from the International Federation of Robotics (2019a; b); on additive manufacturing from The Boston Consulting Group (2017).

Figure IV.8. **Operational stock of industrial robots, 2013–2018 and 2019–2022 forecast** (Thousands of units and compound annual growth rate)



Source: International Federation of Robotics.

The total spending for blockchain applications in Europe in 2018 was estimated at only $400 million, with an expected increase in 2022 of up to $3.5 billion.

Automation relies on the use of advanced robots, the new generation of industrial machines. Application of robotics to manufacturing, including some low value added services such as transportation and logistics, is very different from its application to services (Baldwin, 2019). Advanced industrial robots employed in manufacturing essentially require mechanical and computing power; within the framework of the NIR, this basic setting may be augmented by digital technologies to make operations as connected as possible. The penetration of advanced industrial robots is already very large in some industries – such as automotive or electronics – and it is expected to grow further quickly (figure IV.8). The application of robotics to medium- and high-value services instead involves the use of AI-enabled and intelligent robots. The replacement of human labour with intelligent robots in services is still at a very early stage but growing quickly. The stock of professional services robots – mainly logistical and medical robots – is expected to grow from 270,000 units in 2018 to a million units in 2022 (International Federation of Robotics, 2019b). Over the next 10 years, there will be further progress towards "white collar" robots but, overall, services will be less exposed to automation than manufacturing will.

3D printing is the technology to manufacture a solid object from a digital design. It works by adding layers of material to construct an object ("additive manufacturing"). There is a significant variety of 3D printers, from low-cost, open-source printers for private or small-scale production to high-end, patented machines for industrial-scale printing. Currently, 3D printing is used to produce a limited set of products, including some rubber and plastic products, non-metallic mineral products and components. The nature of the industrial process, particularly the type of input material, represents a constraint on application. Natural materials such as solid wood, cork, leather, natural textiles, paper and tobacco products are largely unsuitable as filament for 3D printing. Also, in some industries such as food products, pharmaceuticals, electronics and textiles, although there are no technological constraints, the use of 3D printing is currently still limited due to considerations of economic feasibility.

b. How technologies reshape international production configurations

The three technology trends each affect international production configurations in specific ways (table IV.9). They do so through the determinants of the length, geographical distribution and governance of value chains (see table IV.3).

(i) Digitalization and international production

The application of digital technologies results in more integrated production processes, a reduction in governance and transaction costs, more effective coordination of complex value chains and improved bottom-up access to GVCs for small and medium enterprise (SME) suppliers. For example, IoT-enabled connected machines enable better capacity planning and assessment of the usage and functionality of products. It provides large amounts of real-time data ("Big Data") from smart products to inform and optimize the production process. Big Data analytics, enhanced by cloud storage and computing, can leverage external sources of information. The development of powerful AI-based predictive techniques enables better planning and management of dispersed operations, reducing uncertainty and risks.

E-commerce platforms and online marketplaces make market transactions easier and more transparent. On the supply side, companies purchase material inputs and services more efficiently. More suppliers can access GVCs, including small suppliers and suppliers from geographically peripheral areas. Downstream, the commercialization of products can reach remote markets without a physical presence. Extended disintermediation reduces transaction costs and value leakage along the value chain *(WIR17)*. Digital payments and fintech favor smoother and safer cross-border transactions and financing.

Digital technologies are also instrumental in the rise of the service content of manufacturing. On the one hand, the IoT and Big Data can increase the service content used in the manufacturing of the final product (embodied services). On the other, new services are added to the final product, generally with a major digital component (embedded services). Both these effects greatly increase the share of services in trade and GVCs.

The impact of advanced ICT is not confined to the coordination of physical machines and operations in manufacturing processes but also involves human tasks and services.

Table IV.9. Technology trends and determinants of international production

	Impact on determinants of GVC length, geographic distribution and governance
Digitalization in the supply chain	• Lower governance and transaction costs in dealing with external partners in supply chains supports *modularity* • Improved coordination and control of dispersed supply chains reduces *transaction costs and risks* • Increased importance of customer data and product customization s*hifts value to the end of the chain*
Advanced robotics and AI	• Cheaper industrial and AI-driven robots reduce the need to exploit *arbitrage opportunities on labour costs* for both manufacturing and services • High capital costs of robots increase *economies of scale and concentration* • Higher *IP intensity* in the production process favours internalization
Additive manufacturing (3D printing)	• End-to-end (indivisible) production process reduces *modularity* • Replication in multiple locations allows *geographic dispersion*, proximity to market and high degrees of product *customization* • Reduced *IP intensity* of production, *concentration of IP value* in design

Source: UNCTAD.

Advances in teleconferencing, as well as in virtual and augmented reality, make teleworking an increasingly viable option, accelerating the physical separation between service labour and service activities (Baldwin, 2019). Cloud storage and computing make it possible to carry out complex, data-intensive tasks from standard personal computers, while improvements in translation software largely overcome language barriers.

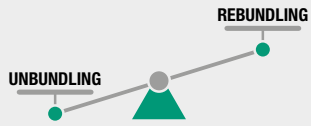
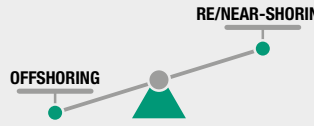
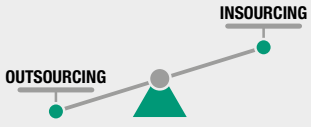
Unbundling, offshoring and servicification lead to a bigger role for external providers, operating either at arm's length or under a NEM arrangement (table IV.10). Lower transaction costs increasingly shift the balance towards outsourcing in MNEs' decisions to "make or buy" (Elia et al., 2019).

Digitally enhanced GVCs strengthen the role of large digital MNEs – the major global platform providers – in providing the enabling infrastructure *(WIR17)*. Digitally enhanced international production networks tend to concentrate more value in a few developed economies, particularly in the United States, and exhibit a distinctly "asset-light" international footprint (Bolwijn et al., 2018; Casella and Formenti, 2018).

Digitalization not only affects the length, geographic distribution and governance of the value chain, but also reshapes its value added configuration (figure IV.9). Digital technologies, such as the IoT and Big Data, emphasize the importance of intangibles in the value chain, particularly R&D and innovation on the upstream side and market data and intelligence downstream, shifting value added towards the extremes of the smile curve (Garay-Rondero et al., 2019). The concurrent commodification of lower value added services and the servicification of manufacturing contribute to flatten the central part of the curve.

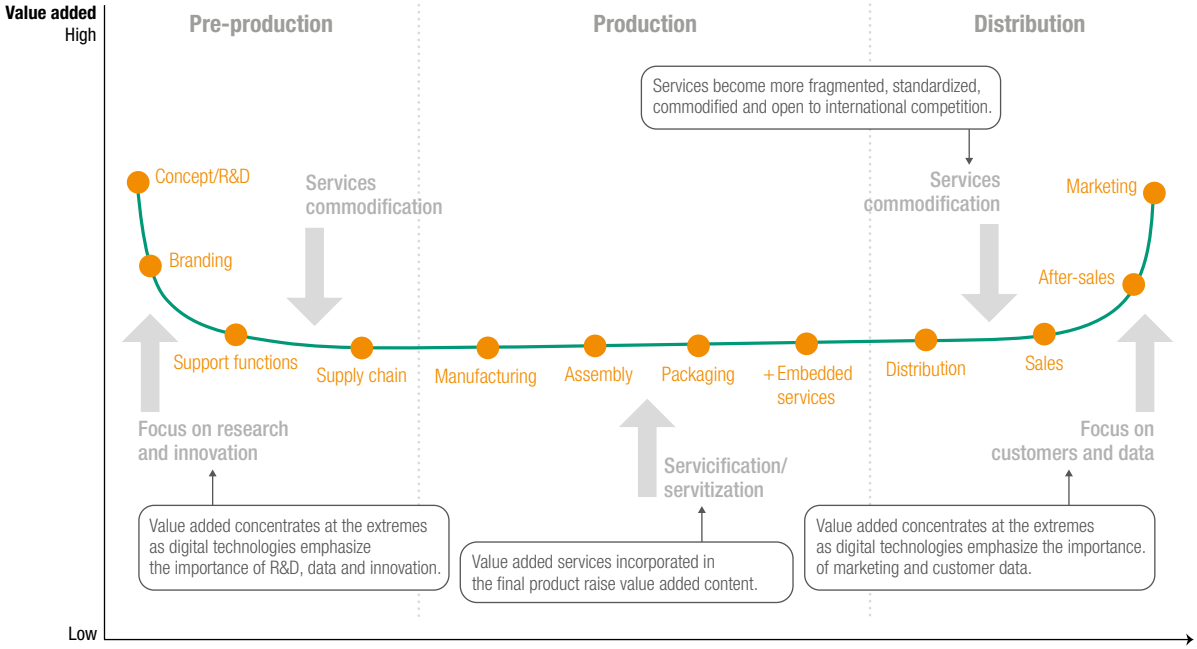
The resulting model is highly polarized between a niche of high value added knowledge- and data-intensive services, typically internalized and retained onshore by the lead MNE, and many fragmented, offshored and outsourced low value added activities. This configuration has critical development implications. Although digitalization can work as a vehicle for inclusiveness, for example by allowing broader access to GVCs for developing-country suppliers, it also tends to exacerbate the value added gap between countries at different stages in the GVC development ladder, making upgrading and catching-up more challenging (*WIR13;* UNCTAD, 2019a).

Table IV.10. Digitalization in the supply chain: international production impact

Binary trends	Description	Impact on key indicators
	• Digital technologies favour servicification and introduce new mechanisms for coordination and control in fragmented supply chains	FDI (=) GVC trade (=) Trade in goods (=) Trade in services (+)
	• New digital technologies favour faster, more effective and safer (e.g. through blockchain) remote communication, coordination and control	
	• Services increasingly outsourced to NEMs and third-party providers; role of third parties in production also increases due to servicification	

Source: UNCTAD.

Figure IV.9. Impact of digitalization on value added



Source: UNCTAD.
Note: Servicification is intended as carrying out manufacturing as a service, in a contract manufacturing relationship. Servitization is intended as the incorporation of embedded services in products.

(ii) Automation and international production

MNEs, mainly from developed economies, have offshored many production processes over the last 30 years to exploit differences in labour costs. Labour cost arbitrage has been one of the major forces, if not the major force, shaping modern patterns of international production and GVCs.

The increasing availability of cheaper industrial robots has the potential to revert this trend. It will reduce, potentially dramatically, the competitive advantage of low-cost manufacturing hubs in developing countries. This effect, coupled with the increase in the cost of labour in emerging markets and rising geopolitical risks, may trigger a wave of reshoring of manufacturing activities (table IV.11).

Several considerations put the reshoring trend in some perspective. First, automation is not going to affect all manufacturing industries equally. The use of industrial robots is still confined to few industries, such as automotive and electronics. For these industries, the two key dimensions of technical feasibility and economic feasibility point toward increasing adoption of robots (UNCTAD, 2017). In other industries, such as textiles and apparel, robots are not yet taking hold because the employment of human labour is still economically more convenient than robotization and the technical feasibility of robots handling soft materials is only just emerging. By 2030, it is expected that more advanced, efficient and productive robots will improve the technical and economic feasibility of robotization across the board. Still, the employment of robots, and related to that, the opportunities for reshoring will remain highly heterogeneous across industries and activities.

Second, the link between automation and reshoring mainly builds on the expectation that as labour costs become less important as a share of total costs, MNEs will automatically reshore production in search of the technologies and skills needed to support robotization.

Table IV.11. Automation in the supply chain: international production impact

Binary trends	Description	Impact on key indicators
UNBUNDLING – REBUNDLING	• Advanced industrial robots can perform complex integrated sequential tasks, generally leading to a rebundling of previously separated steps	FDI (–) GVC trade (–) Trade in goods (–) Trade in services (=)
OFFSHORING – RE/NEAR-SHORING	• Robots reduce the need for MNEs to exploit arbitrage opportunities based on labour costs, leading to reshoring of manufacturing operations from developing to developed and higher-income emerging economies	
OUTSOURCING – INSOURCING	• High capital investment requirements and reshoring are likely to reduce the role of smaller third-party suppliers in favour of more direct governance by MNEs	

Source: UNCTAD.

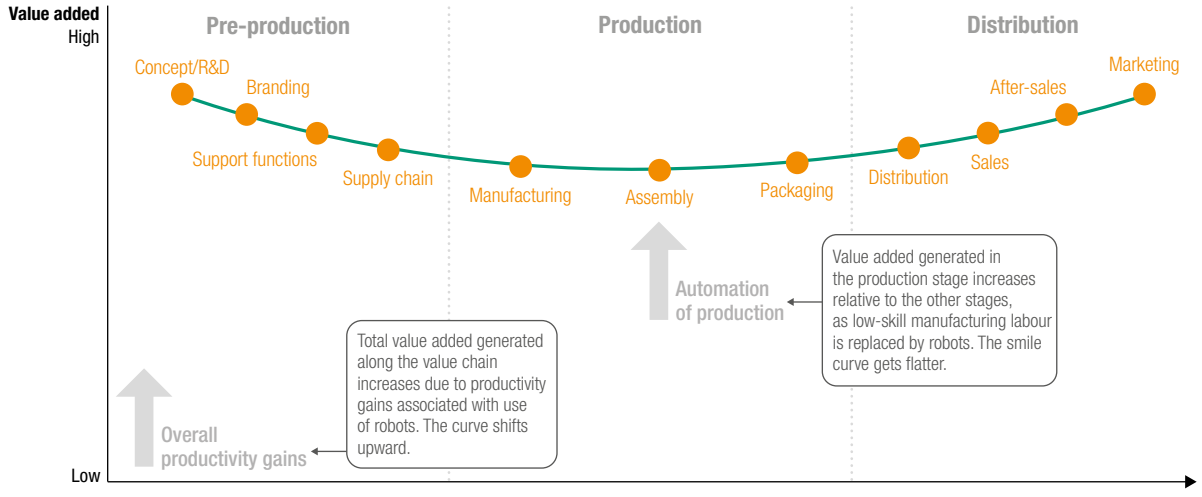
This is not the only possible scenario. Several large manufacturing hubs, for example India, Brazil and Mexico, in addition to China, already have a significant stock of industrial robots (Hallward-Driemeier and Nayyar, 2017). MNEs with local production in these countries may decide to stay, to benefit from the available skills base and to minimize disruptions.

These arguments explain why, to date, technologically driven reshoring has been quite limited (De Backer et al., 2016). Over the next 10 years it seems likely that the trend towards reshoring will intensify, but it will not affect all industries and countries equally.

The impact on development of reshoring is not as clear-cut as it appears. Productivity gains generated by automation in developed economies can increase the demand for intermediate inputs, many of which would continue to be sourced from less developed countries (Antràs, 2019).

Reshoring is by far the most relevant effect of automation on international production and GVCs. But automation will have an impact on the length and governance of GVCs as well

Figure IV.10. Impact of automation on value added



Source: UNCTAD.

(Artuc et al., 2018). Advanced industrial robotics make it possible to perform complex sequences of tasks, generally leading to a rebundling of steps. In terms of governance, while robots become relatively cheaper, they still require significant capital investment. Capital investment, together with reshoring, is likely to reduce the role of smaller third-party suppliers in favour of more direct governance by MNEs (Narula, 2019). Stronger MNE control driven by reshoring, however, does not generally translate into more FDI as it would instead involve a stronger presence in home countries.

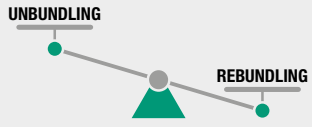
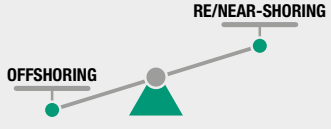
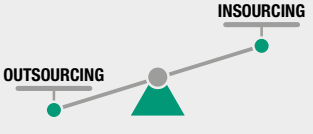
In addition to the reshoring and rebundling of activities, automation affects the distribution of value added across the value chain (figure IV.10). Value added in the manufacturing stage increases as robots replace low-skill manufacturing labour; the smile curve gets flatter. Furthermore, the productivity gains associated with the use of robots shift the entire curve upward.

(iii) 3D printing and international production

3D printing is potentially one of the most revolutionizing technologies for global value chains (Laplume et al., 2016; Buonafede et al., 2018). The main limit to the disruptive power of 3D printing is its technical and economic feasibility; unlike digitalization and automation, which are expected to affect all industries to some degree, 3D printing in 2030 is likely to be still confined to selected industries or niche segments within industries. Where applicable, it has the potential to reshape GVCs, changing their geographic span and distribution (Laplume et al., 2016; Rehnberg and Ponte, 2018). GVC-intensive industries organized in long, vertically disintegrated value chains for which additive manufacturing would imply the rebundling of many steps, such as footwear, may undergo dramatic changes. For other industries, like pharmaceuticals, which already rely on shorter and more distributed production networks, the transition will be smoother but still significant.

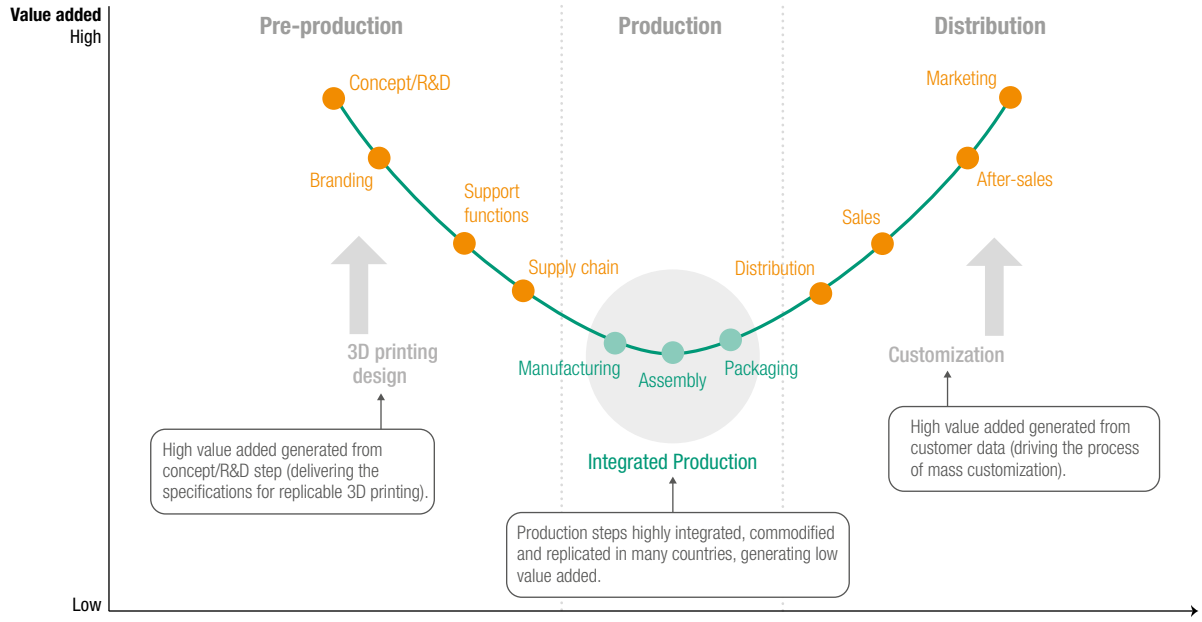
Overall 3D printing points to a configuration of international production characterized by small-scale, localized production. This takes place through the simultaneous effects of rebundling and offshoring (table IV.12). The convergence of rebundling and offshoring marks a paradigm shift in international production, which historically has been based on the dichotomy between unbundling and offshoring on the one hand and rebundling and reshoring on the other.

Table IV.12. 3D printing in the supply chain: international production impact

Binary trends	Description	Impact on key indicators
	• 3D printing technologies imply inseparability, resulting in a rebundling of manufacturing stages	FDI (−) GVC trade (−) Trade in goods (−) Trade in services (+)
	• 3D printers enable distributed manufacturing with significantly increased geographic dispersion of activities (but not necessarily value added)	
	• Actual operations of distributed manufacturing sites and supporting services can be outsourced	

Source: UNCTAD.

Figure IV.11. Impact of 3D printing on value added



Source: UNCTAD.

Rebundling follows mainly from a technology constraint. 3D printing implies technological inseparability. The concept of additive manufacturing requires performing all manufacturing steps from the raw material to the end-product in one step. The impact on the length of value chains depends on the printed product – whether it is the final good or some intermediate input into a longer value chain. In both instances, 3D printing leads to a shortening of the value chain (Buonafede et al., 2018). In this context, rebundling does not involve only manufacturing stages but also parts of lower value added services, such as the stages related to the supply chain, distribution and sales.

Offshoring is the second main aspect of the 3D printing transformation of GVCs because the printers enable distributed manufacturing with a significant increase in geographic dispersion. The distributed production model originates from the disruption of two key pillars of recent patterns of international production: labour cost arbitrage and economies of scale.

3D printing is a special instance of automation. Similar to robotics, it reduces the labour component in production. By freeing international production decisions from labour cost considerations (efficiency-seeking), it favours internationalization strategies based on proximity to market (market-seeking). The transition from efficiency-seeking and vertically specialized to distributed market-seeking value chains is also favoured by relatively limited capital cost differentials across countries (Laplume et al., 2016). Overall, the weight of factor cost differentials in internationalization decisions becomes smaller.

3D printing enables the shift from mass production and economies of scale to *mass-customization*. In 3D printing, value added stems from the design/programming phase – delivering the specifications for replicable 3D printing – and the customer-related activities, addressing the clients' needs (figure IV.11). The manufacturing step tends to be a highly commodified, low value added activity replicated in many countries. Relatively low-cost standard 3D printers make the creation of small batches economically feasible, lowering the minimum requirements for efficient technical scales. At the same time, 3D printing makes it possible to produce a significant variety of product at no additional marginal cost – a technological breakthrough compared to traditional manufacturing. The focus and source of value switches then from economies of scale to economies of scope.

The 3D printing model is compatible with a governance structure characterized by outsourcing and dispersed, bottom-up governance. While 3D printing technology is generally data- and intellectual-property-intensive, potentially resulting in strong MNE control at the extremes of the smile curve, the central bulk of the supply chain – the actual operation of the 3D printers and the services directly instrumental to production – are liable to be locally outsourced in a distributed production setting. Household 3D printing and local 3D printing shops are examples of this trend.

Distributed manufacturing is probably the most interesting outcome of 3D printing but certainly not the only feasible one. 3D printing can also lead to rebundling and reshoring. For example, the production of hearing aids – a segment where the adoption of 3D printing is ubiquitous – has become concentrated in a few high-income countries (Switzerland, Singapore and Denmark) and some emerging hubs (China and Mexico) (Freund et al., 2018). The choice to concentrate as opposed to distribute depends on several factors. In the case of hearing aids, major drivers include the availability of skilled labour, the high cost of specialized 3D printers, the possibility of remote customization and the ability to make small volumes and minimize the impact of trade costs.

2. Policy, sustainability and COVID-19

The pace and extent of adoption of the key technologies that will reshape international production will depend in large part on the policy environment for trade and investment, which is trending towards more interventionism, rising protectionism and a shift away from multilateral to regional and bilateral policy frameworks. They will also depend on sustainability concerns affecting the economics of international production, including differences in approach between countries and regions on emission targets and environment, social and governance (ESG) standards, market-driven changes in products and processes, and supply chain resilience measures.

a. Policy and economic governance trends

There has been a tangible shift in the last few years from a laissez faire economic approach in many economies to an increasingly interventionist role for the State. The rate of adoption of both formal industrial policies and individual policy measures aimed at stimulating industrial sectors has accelerated markedly. Over the past decade, at least 110 countries have issued industrial policy statements or explicit policy frameworks for industrial development. Governments are using targeted industrial policies not only for economic development and job creation, but also to respond to myriad contemporary challenges, such as regional development and poverty reduction, participating in the technology revolution or in GVCs, and achieving sustainability goals *(WIR18, WIR19)*.

Industrial policies have become commonplace among not only developing but also developed countries. Policies to push productivity growth in sectors key to industrial development – manufacturing first and foremost, but also adjunct services and supporting infrastructure – are widely considered indispensable to generate economic growth and jobs. Developing countries are often motivated by concerns of premature deindustrialization. In contrast, developed countries are adopting measures aimed at rebuilding their manufacturing base (incentives, subsidies, public investment in advanced manufacturing to increase internal production capacity) and at strategic positioning in advanced technology areas. Special economic zones (SEZs), an industrial policy tool that relies on the attraction of FDI, continue to proliferate and diversify around the world (Narula and Zhan, 2019).

There are now more than 5,400 SEZs across nearly 150 economies, up from 4,000 in 2015, and hundreds more are in the planning stage. They are both a response to and a cause of increasing competition for FDI between countries and regions *(WIR19)*.

Moreover, industrial policies are increasingly targeting industries considered strategic not only for job creation and long-term economic growth and development prospects, but also for (broadly interpreted) national security reasons. The strategic importance of the pharmaceutical and medical equipment industries, for example, with their reliance on cutting-edge research and innovation, could see progressively more countries enacting policies to develop national productive capacity.

Interventionist policies are increasingly aimed at promoting value addition in targeted sectors of international production. Modern industrial policies often support concentration and clustering of know-how and technology in capital- and innovation-intensive industries, so as to competitively integrate modular value chains to enhance value capture. For example, in recent years there has been explosive growth in high-tech SEZs *(WIR19)*. Some countries actively target transfer of technology and upgrading of domestic manufacturing capacity through trade and investment facilitation programmes. In the European Union (EU), a $7 billion plan was launched in 2017 to produce electric vehicle (EV) batteries jointly by German and French firms on the model of Airbus, including through $1.5 billion of public subsidies targeting this strategically important industry. This approach to capturing a share of the international production pie, especially in strategically important and technology-intensive industries, will tend to support a trend towards a few large clusters where technology and know-how for the most valuable GVCs are concentrated. The trend is not exclusive to developed regions. Some clusters already exist in Asia, e.g. electronic components, batteries, semiconductors and display panels in China and the Republic of Korea, and IT services in India. Developed economies and emerging markets are thus no longer catching up, but instead are simultaneously vying for global leadership in high-tech and strategic GVCs.

The increase in interventionism in national policies has gone hand in hand with more protectionism in trade and investment around the world. Trade tensions are already reshaping the international production landscape. An increasing number of countries are taking a more critical stance towards foreign investment.

New investment restrictions or regulations in the last few years often reflect concerns about national security and foreign ownership of high-tech firms, strategic assets, land or natural resources. Several countries have heightened scrutiny of foreign takeovers or are considering new investment screening procedures. National security arguments are now widely used to safeguard national interests, core technologies and know-how, which are considered paramount for national competitiveness. In the coming years, intellectual property in certain industries, such as financial services, telecommunication, electronics, bio-tech and even agriculture, is likely be guarded ever more rigorously, potentially resulting in new investment restrictions. The recent adoption by the EU of the Directive on Cross-Border Mobility, which expands the screening of takeovers, is part of a broader trend. Some countries have also tightened investment regulations and introduced temporary measures to prevent foreign takeovers during the COVID-19 crisis (see chapter III).

A policy trend likely to accelerate in the coming years is the intensification of regional, bilateral and ad hoc economic integration efforts at the cost of broader multilateral cooperation. In recent years, multilateral rule-making on trade and trade-related issues has been elusive (table IV.13).

Table IV.13. Evolution of the policy environment for international production

Year	Key events	Evolution
2008	**Global Financial Crisis** • First G20 Leaders' Summit, in the United States, reaffirms commitments to an open multilateral regime • Negotiation of comprehensive Trans-Pacific Partnership (TPP) starts between 12 countries including the United States, Mexico, Canada, Japan and other Asia-Pacific nations • *Number of SEZs established worldwide reaches 3,500 in 135 economies*	After the crisis, G20 countries signaled willingness to keep the international trading system open…
2009	• Signings of international investment agreeements reach their highest annual number in the two decades between 2000 and 2019	
2010	• *54 countries introduce 116 changes to their investment policies, including 33 restrictive measures – the largest number in a decade*	… however, the need to intervene in national economies increased at the same time and…
2012	• ASEAN initiates the Regional Comprehensive Economic Partnership (RCEP) negotiations with Australia, China, Japan, New Zealand, the Republic of Korea and India	
2013	• At WTO Bali Ministerial Conference, Trade Facilitation Agreement negotiation concludes, and negotiations on Trade in Services Agreement (TiSA) launch • The EU and the United States start negotiation of the Transatlantic Trade and Investment Partnership (TTIP)	
2015	• **UN launches the Sustainable Development Goals – 2030 Development Agenda**	
2016	• The United Kingdom votes to leave the EU • The G20 agrees on the Guiding Principles for Global Investment Policymaking • Negotiations of the TTIP, Environmental Goods Agreement and TiSA are suspended	...gradually support for multilateral approaches in rulemaking diminished, resulting in more plurilateral and regional initiatives…
2017	• The United States withdraws from the TPP, starts renegotiating the North America Free Trade Agreement and launches domestic tax reform to encourage MNEs to invest at home • China and the United States conduct a "100-day trade talk" to reduce the United States' trade deficit with China • At 11th WTO Ministerial Conference, some members agree to advance discussions on e-commerce, investment facilitation and micro, small and medium enterprises • Number of countries adopting industrial development strategies since 2012 reaches more than 80	
2018	• The United States and China mutually raise trade tariffs in three rounds before agreeing a 90-day halt to new tariffs in December • The TPP agreement is signed between 11 countries – without the United States • The United States, Mexico and Canada reach a new agreement (the USMCA), replacing NAFTA • 31 restrictive measures are introduced in national investment policies worldwide, the largest number since 2010, as countries including Australia, the United States, the United Kingdom, Germany and France establish investment screening mechanisms in "national security-related" industries • The African Continental Free Trade Agreement is signed by 44 of 55 members of African Union	… and in heightened trade tensions and a more critical stance towards FDI.
2019	• The EU establishes the first EU-wide framework for screening foreign investment into the Union, allowing the European Commission to issue opinions when an investment is considered as a threat to the interest of the whole EU • China and the United States impose new tariffs on goods exports, ranging from 5 to 25 per cent • 147 economies are managing at least 5,400 SEZs worldwide, an increase of almost 2,000 in a decade, with 500 more in the pipeline • The RCEP negotiation concludes without India • The WTO Appellate Body is rendered inoperational, with only one judge left in office • The EU and the United Kingdom agree on the latter's withdrawal agreement	
2020	**COVID-19**	

Source: UNCTAD.

The void is being filled by regional and megaregional trade and investment agreements. Prospective agreements could establish some of the world's biggest free trade zones. These include the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, the Regional Comprehensive Economic Partnership and the African Continental Free Trade Area Agreement.

The pandemic could accelerate the trend towards regionalism. The crisis has underscored the dangers of relying on any one country for inputs or final products. Countries will put a premium on the diversification of trading partners, and MNEs will look to regionalize supply chains. Ongoing accession processes could see a boost in interest, and new regional groupings may emerge.

The three major global governance policy trends – increased interventionism in national policies, heightened protectionism in international trade and investment, and more fragmentation in economic cooperation – all put additional stress on the system of international production. This will affect the key dimensions of international production configurations (table IV.14).

Protectionism disproportionally affects vertically specialized GVC industries such as automotive and electronics. Higher trade costs resulting from tariffs and costs of border procedures make up a higher share of the costs of intermediate and final products that cross borders multiple times (Hoekman, 2015). They affect the length of value chains, as well as the geographical distribution of value added (table IV.15).

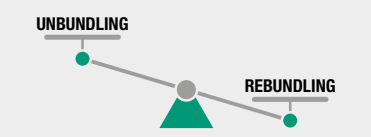
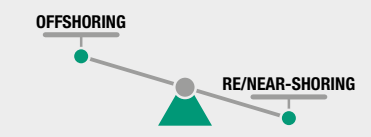
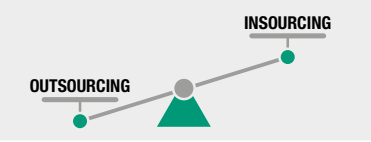
Investment protectionism does the same. Policy measures in the areas of intellectual property and R&D, as well as data protection, are increasingly used to secure competitive advantages. Such measures affect the length of value chains and the geographical spread of value added, along with the insourcing of production. Intellectual property protection and other behind-the-border strategic measures favour countries with strong innovation and R&D systems and high-skilled labour. Systemic competition and the risk of fragmentation of technology standards are important, as they can lead to parallel development of more regional or trading-bloc-based value chains.

Table IV.14. Policy/economic governance trends and determinants of international production

	Impacts on determinants of GVC length, geographical distribution and governance
More interventionism in national policies	• New industrial policies: – support *concentration and clustering of know-how and technology* in capital and innovation intense-industries – integrate *modular* value chains to enhance value capture – counteract *arbitrage opportunities*
More protectionism in trade and investment	• Increased *cost of cross-border trade* discourages fragmented and geographically dispersed value chains • High-tech *intellectual-property-intense* products/sectors face increasing scrutiny and barriers to trade and investment
More regional, bilateral and ad hoc economic cooperation	• *Trade-cost reductions* on preferential basis within regions/groups • Enhances market size; limits exploitation of *economies of scale* to regional confines

Source: UNCTAD.

Table IV.15. Policy/economic governance trends: international production impact

Binary trends	Description	Impact on key indicators
	• Pushback on globalized supply chains, policy measures counter arbitrage opportunities and favour more integrated production to increase value capture	FDI (−) GVC trade (−) Trade in goods (−) Trade in services (+/−)
	• Policy direction less favourable to specialization or focus on specific activities within GVCs, more horizontal FDI, reshoring and regional consolidation of GVC stages (e.g. in capital-intensive industries)	
	• Both policy measures and policy uncertainty will increasingly favour outsourcing of international operations	

Source: UNCTAD.

b. Sustainability trends

Concerns about the social and environmental impact of the international operations of MNEs and their supply chains have been an important feature of the debate on GVCs and international production for decades (see, e.g., *WIR99* and *WIR11*).[4] Gradually, increased regulation, pressure by civil society and improvements in the monitoring of social and environmental impact and ESG reporting have influenced the way MNEs operate abroad and affected, to some extent, international production configurations.

The impact, to date, has largely been limited to the governance dimension of international production configurations – and less so on the degree of fragmentation and geographical distribution. While all sustainability concerns and ESG issues – including social impact, labour standards, gender equality and many others – will continue to influence the behaviour and governance choices of MNEs, it is especially the environmental pillar that looks set to drive broader changes in international production configurations.

Recent climate change policies and green deals now being adopted in major constituencies and trading blocs will have a much more fundamental impact on the way goods and services are produced (table IV.16). These policies are no longer grand plans or statements of intent. Courts in several countries have started to force governments to obey their own air quality laws or to enforce their emission targets.

If such climate change policies were adopted uniformly around the world, the effect on international production and GVCs would already be significant, due to increased transportation costs and shifts in locational advantages as a result of, for example, variations between countries and regions in the availability of renewable energy. However, there are significant differences between climate change policies, emissions targets and their timelines across countries and regions. Those differences are likely to result in new barriers to trade in the form of carbon border adjustments.

New pressures on international production systems will come not only from policies and regulation, but also from the market (table IV.17). Consumer preferences for responsibly produced goods and services in mature markets have long outgrown their niche status. Such preferences are now gradually spreading to emerging markets. Consumer pressure and reputational risks are important drivers for MNEs to adopt mitigation measures.

Table IV.16. Evolution of policy environment for corporate responsibility

Year	Key events	Evolution
2008	**Global Financial Crisis** • Financial crisis accelerates inequality • British Columbia (Canada) becomes the first jurisdiction in North America to introduce a carbon tax	Crises arising from corporate practices relating to environmental, social and governance issues…
2010	• BP Deepwater Horizon oil spill results in record fines and litigation; stock price plunges and CEO is replaced • Women's Empowerment Principles (WEPs) is launched to guide business action for gender equality in the workplace • Launch of the ISO 26000 standard provides MNEs with a standardized definition for social responsibility	
2011	• UN Guiding Principles on Business and Human Rights explicitly addresses the obligations of MNEs to respect human rights • Occupy Wall Street movement brings the issue of inequality into political discourse around the world	…lead to pressure on MNEs to engage in socially and environmentally responsible behaviour throughout their GVCs…
2012	• Hurricane Sandy hits New York City, causing $70 billion in damage; *Bloomberg Businessweek* publishes headline "It's Global Warming, Stupid" • UN Principles for Sustainable Insurance launches with 30 leading insurance companies, representing over 10 per cent of global premium volume	
2013	• Rana Plaza disaster in Bangladesh exposes the unsafe working conditions of garment workers (especially women); major apparel brands increase efforts to improve labour practices in supply chain	
2014	• Singapore Transboundary Haze Pollution Act allows the Government to criminalize companies in or outside of Singapore for environmental pollution	
2015	• **UN launches the Sustainable Development Goals – 2030 Development Agenda** including for the first time the role of business in achieving the global development agenda • UK Modern Slavery Act requires MNEs to report modern slavery risks in their supply chains • COP21 – Paris climate agreement sets global targets of keeping temperature rises well below 2°C • Beijing+20 Global Leaders' Meeting on Gender Equality and Women's Empowerment commits to end discrimination against women by 2030	…fueling the creation of new multilateral and multi-stakeholder approaches to corporate sustainability…
2016	• UN-supported Principles for Responsible Investment marks 10th anniversary with over 1,500 signatories with over $60 trillion in assets under management	
2017	• Network for Greening the Financial System launches with eight central bankers; by 2020 it includes 65 central banks on five continents	
2018	• Mandatory gender pay gap reporting starts in France, Germany and the United Kingdom • Colombian youth file a climate change lawsuit demanding that the Government stop deforestation to protect their rights to a healthy environment and life, the first such case in Latin America	
2019	• EU anti-tax avoidance directive takes effect against aggressive tax planning by MNEs • Principles for Responsible Banking launched launches with UNEP and 130 banks from 49 countries, with over $47 trillion in assets under management • UN Sustainable Stock Exchanges (SSE) initiative marks 10th anniversary with more than 90 stock exchanges as members • Business Roundtable declares the purpose of the corporation is to serve stakeholders rather than shareholders • Dutch Supreme Court rules that the Government must do more to protect its citizens against climate change; legal actions over climate change brought since 1990 reach more than 1,300	…which are consistently increasing in scope (issues and industries covered) *depth* (companies and other stakeholders involved) and *focus* (level of detail of management tools, auditing practices and reporting standards).
2020	• Final report of EU taxonomy on sustainability launches • Blackrock letter to CEOs recognizes climate change as major investor risk • WEPs celebrates 10th anniversary with over 3,000 company signatories • UN Global Compact celebrates 20th anniversary with over 14,000 signatories • United Kingdom court rules that a third Heathrow runway is illegal because it is inconsistent with the country's commitments under the Paris Agreement	

Source: UNCTAD.

Table IV.17. Sustainability trends and determinants of international production

	Impact on determinants of GVC length, geographical distribution and governance
Sustainability policies and regulations	• Differential speeds of implementation of sustainability/green plans necessitate carbon border adjustments, increasing *trade costs* and counteracting *arbitrage opportunities* • Carbon pricing policies and green deals increase *transportation costs* • Sustainability policies reinforce protectionism and regionalism trends
Market-driven changes in products and processes	• Reputational profile, ESG performance and exposure to climate-related risks are increasingly considered material business risks, adding to supply chain *transaction costs* • Need for supply chain monitoring and traceability increases *transaction costs* • Market scrutiny reduces bandwidth to exploit *arbitrage opportunities* on labour costs, regulation and tax
Physical supply chain impacts	• Need for supply chain resilience and diversification of sources reduces *concentration of supply* • Changes in on infrastructure and transport routes could affect *transportation costs*

Source: UNCTAD.

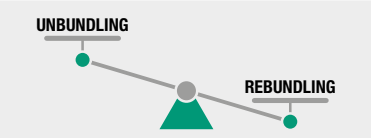
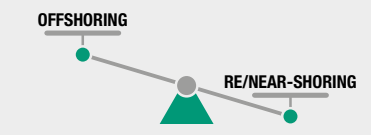
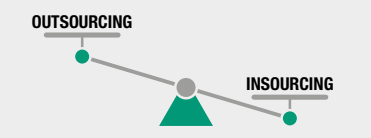
For several industries, mitigation and adaptation can represent new business opportunities, including the agricultural, consulting, water and insurance sectors. This can drive previously predominantly domestic industries to expand internationally.

Another important market pressure on MNE-governed international production systems is likely to come from financial markets. Companies already face increasing pressures from investors, banks, insurers and financial market regulators to address climate risks. Financial markets not only take into consideration potential liabilities and reputational risks related to the social and environmental performance of companies, they increasingly assess long-term risks associated with climate change, even beyond the direct operational performance of firms. The number of stock markets with mandatory sustainability reporting is expanding rapidly, up from 2 to 24 in the past decade.[5] Financial disclosure rules in several markets already require listed companies to disclose the physical risks from climate change when these risks impact a company's financial situation. The risk of stranded assets in the oil industry is an example. Pressure to mitigate supply chain risks across typical GVC industries from increased frequency of extreme weather events is becoming an important driver of change in international production configurations.

The physical impact of climate change on international production will also become increasingly important. Climate change will affect trade flows and specialization. Shifts in weather patterns, floods, forced changes in soil usage, damage to infrastructure and new transportation routes can cause changes in economic competitiveness and in comparative advantage at the industry level. Supply, transport and distribution chains will become more vulnerable to disruptions due to climate change. According to the IPCC (2014), climate change will affect all forms of transport relevant for international trade, including seaborne transportation, land-based transport modes, and aviation. Maritime shipping, which accounts for about 80 per cent of global trade by volume, could experience negative consequences, for instance from more frequent port closures due to extreme weather events.

The impacts of climate change for individual industries will be unequal, with the most significant impacts affecting those industries dependent on natural capital (e.g. agriculture, fishing, forestry) or vulnerable to extreme weather events (e.g. shipping, travel, energy).

Table IV.18. Sustainability trends: international production impact

Binary trends	Description	Impact on key indicators
	• Physical climate change impacts lead to horizontal diversification rather than vertical effects • Physical shortening of supply chains driven by increased trade and transport costs, but not necessarily less fragmented	FDI (+/–) GVC trade (+/–) Trade in goods (–) Trade in services (+)
	• Reshoring and regional consolidation driven by differential speeds of implementation of green plans and consequent border adjustments, reinforcing ongoing trends in the trade-investment policy environment	
	• Need for greater control over supply chains shifts use from arm's-length to NEMs, and from high-transaction-cost NEMs to insourcing	

Source: UNCTAD.

Furthermore, industries will be most affected in developing countries, which have less economic, institutional and technical capacity to cope with and adapt to climate change (World Bank, 2012). These impacts are likely to lead to periodic trade disruptions, which can in turn be an important driver of change in the design of global value chains. Efforts to increase supply chain resilience have already led typical GVC industries to build a degree of redundancy into their supply chains, after floods in northern Thailand in November 2011 caused severe disruption to global production chains. At the time, more than 400 MNEs were forced to suspend production due to disrupted supplier links.[6]

The economic consequences of climate change will be unevenly distributed and especially important in Africa and Asia, which combine increasing trade dependency with significant expected damages from climate change. The effects are particularly large for the regions that specialize in food and agricultural products. Countries that have larger domestic markets and more diversified trade patterns can absorb climate shocks better than countries that are more specialized.

* * *

The megatrends discussed in this section are a selection of trends that are expected to have the most significant impact on international production. They are not exhaustive. Moreover, they are not stand-alone trends. It is their combined impact that matters. For example, sustainability trends are reinforcing the development and application of energy-efficient technologies and causing a shift to EVs that will have important implications for international production in the automotive industry. Policy measures driven by sustainability concerns, such as regional green deals and carbon-border adjustments, even if they do not qualify as protectionism, will nevertheless add to existing pressures in international economic governance towards regional and national trade and investment policy perspectives. These policy trends (systemic competition and increased trade barriers) could in turn cause fragmentation in technology standards that could change the way digitalization, automation and additive manufacturing affect international production.

Looking at the link between sustainability concerns and international economic governance issues, social and environmental standards move increasingly to the fore in international trade and investment agreements. Sustainability conditionality for trade will increasingly become a driver of change in international production configurations. For example, the EU recently concluded a deal with Bangladesh to grant better access in exchange

for measures favouring safety regulations and human rights at work. The 2019 trade agreement between the EU and MERCOSUR includes several commitments related to sustainable development, including commitments to comply with the Paris climate agreement and to prevent deforestation. The European Green Deal, published by the European Commission in December 2019, outlines commitments to sustainability in trade policy, aiming to strengthen the mainstreaming of social and environmental concerns in EU trade agreements. If social and environmental conditionality becomes the norm and is applied on criteria such as carbon emissions, biodiversity and ecosystem preservation, the impact on international production and GVCs will be significant. The global trade regime allows governments to adopt measures to address environmental concerns linked to trade, provided these measures are not used as a 'front' to hinder free trade. The WTO is tasked to ensure that such environmental safeguards are not used to undertake trade protectionist measures.

The combined impact of sustainability trends and new technologies is equally important for the future of international production. Technological breakthroughs could support the development of circular economy concepts in production processes, aiming to eradicate waste and reduce the overall consumption of raw materials during production systematically rather than through incremental efficiency gains. This implies the recycling, upcycling or reuse, or composting or consumption of all material inputs and outputs, requiring coordination across the supply chain and favouring co-location and integration of economic activities within and across GVCs.

New technologies also allow hitherto predominantly domestic industries to internationalize, expanding the scope of international production. Some of these industries directly address sustainability concerns or respond to investment demand related to the achievement of the SDGs. For example, FDI in the health care services industry is growing in emerging markets, with digital technologies an important driving force *(AIR19)*.

D. POSSIBLE TRAJECTORIES FOR INTERNATIONAL PRODUCTION

The effects on international production of the technology, policy and sustainability trends are multi-faceted. They are at times mutually reinforcing, they occasionally push in opposite directions, and they will play out differently across industries and geographies. Depending on the starting point of individual industries – their archetypical international production configurations – they will tend to favour various trajectories, ranging from reshoring to diversification of GVCs, and from regionalization to replication and granularly distributed production.

As laid out in the preceding sections, international production is expected to undergo dramatic transformation over the coming years, enabled by technological change, driven by the changing economics of international production that those technologies will imply, and shaped by the interaction between policy and sustainability trends and the pandemic shock. The transformation could take many directions, but it is possible to crystalize several likely trajectories for international production going forward.

Despite the slowdown of international production since the global financial crisis, the three decades of international production described in section A have shown a trend in a single direction, from less to more. This looks set to change. The following sections present four possible trajectories for international production configurations for the decade to 2030. They all point to a retreat of international production to various degrees. Three trajectories – reshoring, regionalization and replication – all involve some form of pull-back of GVCs. The fourth, diversification, projects further growth, but with a lower geographical distribution of value added (greater concentration) and downward pressure on investment in physical productive assets.

The trajectories described here follow logically from the analysis of technology, policy and sustainability trends described in the previous section. They are not mutually exclusive. All four trajectories will materialize to varying degrees, with different propensities across industries.

1. Reshoring

In this trajectory, the most defining elements of modern GVCs – the fragmentation of tasks (unbundling) and geographic dispersion (offshoring) – are challenged. The direction is towards a simplification of the production process and the use of onshore or nearshore operations. Lower fragmentation and geographic dispersion, and more capital-intensive operations, will generally favour a return to more direct control by MNEs of their remaining overseas operations (insourcing). This model thus reverts the historical trends of international production: from unbundling to rebundling, from offshoring to reshoring and from outsourcing to insourcing.

Advanced robotics-driven automation plays a key role in this trajectory. By reducing the relevance of labour cost arbitrage opportunities, it disarms the most powerful driver of task

fragmentation and offshoring to low-cost locations. Automation makes reshoring a business-sustainable option for many MNEs. Reshored activities can also be re-bundled as robots simultaneously enable the integration of production steps. Activities would be concentrated in manufacturing hubs, leveraging economies of scale. The trend in governance turns from outsourcing to insourcing to sustain the higher capital and knowledge investments required for accelerated automation. The resulting trajectory leads towards a high-tech version of global production networks prior to the explosion of GVCs, with MNEs producing close to home through highly integrated, internalized operations and exporting final goods to foreign markets.

In the manufacturing sector, this trajectory is primarily relevant for higher-technology, GVC-intensive industries, a heterogeneous group including the machinery and equipment, electronics, and automotive industries (box IV.1). A degree of retrenchment of international production in these industries seems inevitable, with mounting pressure for shorter and more sustainable value chains and more diversified and flexible production systems. The choice to reshore depends on the economic profitability of automation and cost-benefit considerations taking into account diverse factors, including quality, supply security, protection of intellectual property rights, distance from customers, reputational and political risks, and many others. In these industries the economic viability of automation is already established and confirmed by the large and growing role of robots. As the price of robots decreases further over the next 10 years, the synergy between automation and reshoring will be the major driver of GVC patterns. The scenario is different for lower-tech industries, such as textiles and apparel, where labour cost differentials are still key competitive factors.

Some high-tech industries are likely to see further protectionist pressures, either because they provide essential goods – such as medical equipment, as exemplified during the COVID-19 crisis – or because they are considered strategically important from an economic or a technological perspective (for example, automotive and electronics).

Other manufacturing industries, such as regional processing industries, have more limited scope for reshoring. Reshoring, like offshoring, requires operational mobility, and these industries tend to have structural ties to locations, for access either to raw materials (for processing industries) or to market specificities (for pharmaceuticals).

Some reshoring can also be expected in services, particularly lower value added services, such as parts of retail and wholesale value chains and transportation and logistics value chains.

Table IV.19. Reshoring

International production impact	• Shorter, less fragmented value chains • Rebundling of supply chain and production stages • More concentrated value added • Less offshoring, less outsourcing
Key drivers	• Technology (automation, robots) • Policy environment (including push for higher degree of self-reliance post-pandemic, push for build-up and protection of strategic industrial capacity)
Prevalent industries	• Higher-technology GVC-intensive industries
Results	• Lower FDI, divestment and relocation • Possible initial increase in FDI by NEM partners in home markets • Lower GVC trade

Source: UNCTAD.

Box IV.1 The shift to EVs could shrink automotive production networks

The automotive industry is likely to see significant change in the years to 2030 in production, investment and GVCs, driven by technology, economic governance, new product demand and sustainability regulations. The latter look set to cause major change in the industry this decade, with several countries having established objectives to phase out internal combustion engine cars by 2030, and many others offering purchase incentives for electric vehicles (EVs).

Today, the industry is highly GVC intensive, with complex networks of OEMs and multiple layers of suppliers operating in many locations. The shift to EVs could cause a consolidation and restructuring of international production networks.

Total capital expenditures in the industry are projected to increase over the decade to 2030 due to development needs for EVs, mobility solutions, new component requirements and infrastructure needs associated with EVs. However, the share of FDI in total investment will be under significant pressure. Today, 15 economies are major automotive hubs, accounting for 88 per cent of global production in 2018. Production and value added are expected to become even more concentrated, because of platform sharing and especially the shift to EVs with far fewer components and shorter value chains. The drivetrain for an average internal combustion engine has more than 2,000 moving parts, while EVs have 20, with value added concentrated in few parts – a major component of EVs is the battery, which accounts for about 40 per cent of total cost. As a consequence, EV supply chains involve far fewer suppliers. For example, Tesla has only about 300 suppliers located in a few countries, against thousands of suppliers worldwide for most traditional car manufacturers (box table IV.1.1). Higher concentration of value added around battery producers and software providers will also reduce geographic spread.

While many countries today have a slice of the global automotive value chain, the opportunity to capture value in future could be lower, especially for developing countries that are not integrated in higher-technology and digital GVCs. However, new opportunities could emerge to attract investment in complementary or adjacent economic activities, and in infrastructure for EVs.

Box table IV.1.1. Global supply chains of automotive OEMs

Tesla	BMW	Toyota	Nissan	Audi
• 300 suppliers (Model S) • Production in few countries (e.g. United States, China, Germany) • Few key suppliers in batteries and key system parts	• 4,500 suppliers • Production locations in 50 countries • Suppliers account for 70 per cent value added	• Production locations in 28 countries • Suppliers account for 65 per cent of value added	• 5,000 suppliers • Sunderland (United Kingdom) plant: 224 suppliers in 22 countries	• 1,000+ suppliers • Production plants in 18 locations in 13 countries

Source: UNCTAD, based on company websites.

Although the physical deployment of these services requires a presence in foreign markets, that presence may become lighter because of digitalization – enabling central coordination of tasks – and because of automation eroding labour cost advantages. The most notable case is the growth of e-commerce, resulting in major centralization of sales and marketing activities.

The trend towards reshoring may receive a boost from the post-pandemic imperative of mitigating supply chain risks. The political and public mood could see a degree of reshoring as healthy. The push to ensure the national or regional supply capacity of intermediate goods for local production and final goods for consumption, especially strategic goods and services, is likely to increase, with a change in tone from a protectionist narrative to a risk management perspective.

The pandemic could also be a catalyst, because MNEs will aim to benefit from state support programmes and fiscal stimulus packages. Within the expansionary fiscal policies following the crisis, incentives for reshoring of activities may become common, as well as incentives to rely on a local supplier base.

2. Diversification

The main alternative to reshoring is diversification and redundancy – a trajectory that leverages GVCs, rather than dismantling them, to build resilience. As concentration of production and supply chain dependence are the main issues, companies and countries may find diversifying internationally more effective than reshoring (and de facto re-concentrating domestically). This means giving up some scale economies by involving more locations and suppliers in the value chain.

Digitalization of the supply chain is pivotal to the process of diversification, as much as automation is the technological trigger of reshoring. Firms in many GVCs will have the opportunity to maintain and potentially extend their complex network of international operations, by leveraging digital technologies to improve coordination and control. These dynamics will take place within a hybrid, highly fragmented environment where manufacturing activities are increasingly integrated with digital services (servicification of manufacturing). Diversified, servicified and digitally enhanced GVCs represent an Industry 4.0 version of the traditional GVC, in substantial continuity with the historical, expansive trend of international production.

Digitalization allows MNEs to extract further efficiencies from international production networks, by reducing governance and transaction costs and enhancing centralized coordination and control. Although digital platforms could improve bottom-up access to and participation in GVCs by third-party suppliers, value added could become even more concentrated geographically, and parts of value added across manufacturing and services industries could shift towards fewer large digital MNEs (for a detailed discussion on the concentration of digital platforms and its policy implications, see UNCTAD, 2019a).

Applications of digital technologies to foster international diversification and build supply chain resilience include real-time visibility into the availability of raw materials and finished goods; enhanced control over processes, people and assets, including the tracking of external suppliers down to the bottom of the supply chain; use of AI and machine learning to constantly re-assess and re-plan activities, ensuring more timely responses to shocks and discontinuities relative to traditional business planning techniques based on historical data; and the use of mobile technology and augmented/virtual reality to enhance flexible working arrangements.

The trend towards diversification will be more pronounced in industries that have significant economic benefits to capture from complexity and fragmentation of GVCs.

Table IV.20. Diversification

International production impact	• Continued fragmentation of supply chains • Increased platform-based supply chain governance • Increased offshoring and outsourcing of services • More concentrated value added
Key drivers	• Technology (digitalization, platforms, AI, blockchain) • Sustainability trends (including push for supply chain risk management post-pandemic, supply chain monitoring capacity)
Prevalent industries	• Services, GVC-intensive industries
Results	• Lower FDI in physical productive assets, more intangibles • Increased trade in services and data flows

Source: UNCTAD.

At the top of the list are GVC-intensive industries, unbundling and offshoring being at the core of their value proposition. For the higher-technology industries in this set, automation is expected to lead to some reshoring of production, but cross-border supply chains will remain complex and, in any event, are not easy to reconfigure in the short term. Lower-tech industries, such as textiles and apparel, are less likely to undergo a robot-led transformation, at least in the short to medium term. The number of robots in this industry is still the lowest in manufacturing, for reasons of both economic and technical feasibility. As additional low-cost countries aim to increase their participation in GVCs, the economic benefits to be captured from labour cost differentials will remain significant. Reshoring will thus not be the dominant trajectory. These industries are likely to maintain their complex and articulated network of international operations for some time, leveraging digital technologies to increase diversification while enhancing coordination and control.

In addition to low-tech GVC-intensive industries, international diversification enabled by digital technologies will also affect service industries, particularly higher value added services. For these tasks, ranging from professional and business services to finance, engineering and marketing activities, AI-based automation is still at the early stage of development. Conversely, the broad application of enhanced digital technologies could make these industries the new frontier of offshoring driven by labour cost arbitrage (Baldwin, 2019). High and medium value added services, traditionally highly centralized, will be increasingly delivered offshore through teleworking. Teleworking opportunities are being enhanced by advanced digital communication tools, including teleconferencing, augmented reality, virtual reality and 5G. Cloud storage and computing make it possible to perform complex tasks remotely, while improvements in translation software will facilitate communication. In addition to technological enablers, better education and technical skills in developing countries are providing a growing pool of qualified workers. In financial services, digital

Box IV.2 Fintech is changing international production configurations in financial services

More than one-third of global FDI stock is in financial services. This makes it the biggest industry in FDI (although the large share is inflated by finance functions of MNEs across all other sectors, classified as FDI in the finance sector). Banking is the biggest subsector in financial services, followed by insurance.

The international production configuration of the global banking industry has undergone significant change over the past decade, driven by new prudential regulations after the global financial crisis and significant retrenchment as developed-country, and especially European, banks pulled back from overseas activities. The new decade promises further change, driven by technology trends.

Digital technologies in the finance sector (fintech), including new payment gateways, services with blockchain technology and Big Data-driven intelligence, are driving the financial industry to become hypermodular and introducing hypercustomization and hyperlocalization of services.

Hyper-modularity is already exerting a significant impact on international production configurations. It involves the breaking up of financial services traditionally served by a single bank, analogous to the earlier fine-slicing of production processes in manufacturing. Services from credit scoring, deposits and loans, and payments and transfers to investment and advisory are now provided by many fintech companies as technology has lowered the operational cost of such functions. In addition, fintech companies are often better connected to other digital ecosystems, such as e-commerce and data analytic applications. Many big banks are transitioning to fintech, and many non-financial technology firms are entering the market.

Hyper-customization, often enabled by Big Data-driven intelligence, allows service providers to offer a more tailored service. This can accelerate the inclusion of the unbanked and SMEs along GVCs.

Parts of financial services once reliant on labour-intensive operations (such as customer service) are gradually introducing AI-based systems (such as chatbots). Higher degrees of automation will favour information technology (IT) hubs nearby, rather than cost-competitive but farther away services or hubs. European banks are likely to favour nearshoring in parts of the region where local IT talent is abundant. This could affect investment in traditional hubs for IT and business process outsourcing in developing regions.

Source: UNCTAD.

technologies (fintech) will lead to an increasingly fragmented, dispersed and diversified delivery model (box IV.2). Few highly strategic, intellectual-property- or data-intensive services are likely to be spared this process, for strategic and security reasons.

3. Regionalization

Regional value chains apply the standard model of fragmented and vertically specialized value chains at the regional or local level. The regionalization of value chains can be the result of either a pull-back from GVCs (with global MNEs replicating value chains at the regional level) or the growth of international production on a regional basis (with MNEs structuring their operations near-shore). The shift from global to regional brings the extremes of the value chains geographically closer. At the same time, the geographical distribution of value added would tend to increase.

Digitalization plays a major role in facilitating the coordination of regional value chains. In the case of centrally coordinated regional value chains, the replication of entire chains regionally implies a significant increase in complexity, with a need for both vertical and horizontal coordination of international production. Digital development, including not only digital technologies but also digital infrastructure, especially in developing economies, will serve as a key enabler of regional value chains.

Regional processing industries that have a strong upstream link with local sources of raw materials, such as the food and beverage industry and the chemical industry, already exhibit an international production configuration consistent with organization through regional value chains, characterized by fragmented value chains replicated across many locations (high geographic dispersion). A likely trajectory for these industries is to further consolidate their regional footprints. The food and beverage industry, for example, not only relies on perishable raw materials that make physical proximity between sourcing and consumption a competitive factor, but also is characterized downstream by regional market segmentation and a premium for localized production.

In principle, GVC-intensive industries can also replicate their model at the regional level. This is already happening to same extent, for example in the automotive industry. The growth of a market for inexpensive consumer products in developing countries – such as in electronics or textiles – will also push regional value chains in these industries. Barriers to the development of regional value chains in traditional GVC-intensive industries include the persistence of economies of scale and high capital costs of machinery, as well as labour cost differentials and the need for specialized labour or suppliers.

Table IV.21. Regionalization

International production impact	• Shorter physical supply chains, but not less fragmented • More geographically distributed value added
Key drivers	• Policy environment (regional economic cooperation, need for regional self-reliance post-pandemic, build-up and protection of industrial capacity) • Sustainability trends (push for supply chain resilience) • Technology (digitally enabled)
Prevalent industries	• Regional processing industries, GVC-intensive industries, primary sector
Results	• More intraregional FDI, relocations • More intraregional trade

Source: UNCTAD.

Some of these factors, especially those related to labour costs, could become less important in time, paving the way for the mainstreaming of regional value chains in GVC-intensive industries.

A form of regionalization could affect primary industries, where advanced economies, heavily reliant on the offshore supply of commodities, could intensify efforts to reduce dependence (box IV.3). This already applies to the energy sector but could extend, for example, to agriculture, where the trend towards more sustainable local and regional sourcing is likely to accelerate.

The momentum for value chain regionalization is high and likely to grow further over the coming years, including through progress on several regional integration initiatives. Also, in the aftermath of the pandemic, many countries could come to see regionalism as a realistic and valid alternative to globalism for building a degree of local self-reliance and resilience.

The policy trend towards regionalization of international production is fueled on the one hand by considerations of regional strategic autonomy – mainly in developed regions – and on the other hand by regional development objectives in less developed economies. From the perspective of the latter, regional value chains break dependency from developed markets, capital and technologies, stimulating the process of local development; they allow higher participation in value chains; they foster internal specialization and industrial diversification within the region and open opportunities for structural transformation and value chain upgrading.

However, regional value chains are not easy to establish. For a region to attract or develop an entire value chain is more difficult than for a country to attract investment in a task or industry segment where it has a competitive advantage. Regional value chains require regional coordination and conducive systemic conditions. While the political momentum for a shift to regionalism is mature, the implementation will not be immediate.

Box IV.3 Capex and FDI under pressure in the oil and gas industry

The oil and gas industry is among the hardest hit by the COVID-19 crisis because of the double shock of plummeting demand and a precipitous drop in prices (into negative territory for the first time). However, structural changes in the industry were already well underway prior to the pandemic. The effects of the shift away from oil, driven by sustainability objectives and clean energy policies, and the impact of policies aimed at diversification and domestic production to reduce strategic reliance on major oil producers had already been visible in international production configurations and global investment flows in the industry for some time (*WIR16*). With rising concerns about stranded assets, capital expenditures (capex) by major oil MNEs have fallen substantially since 2013. The five largest (ExxonMobil, Chevron, Total, Shell and BP) nearly halved their new investment. In 2020, oil companies have responded to falling prices by announcing further large cuts to their spending on new production capacity; capex this year is expected to be 20-35 per cent lower than planned.

Global FDI stock in the extraction of oil and gas peaked in 2013 at $490 billion and has declined since, to $264 billion in 2018. Investment in oil production is traditionally concentrated, as it is tied to resource endowments and the availability of hard infrastructure for transportation, storage and refining processes. Pipelines, refineries, transport service and storage are concentrated around a relatively few geographical hubs. However, the nature of cross-border investment in the industry is changing. A global policy push to transition towards cleaner energy is directing MNEs to channel more investment into natural gas and renewables, and into technology and infrastructure to serve the EV market (e.g. charging stations in the downstream retail businesses of oil majors). More investment is also expected to go towards carbon neutrality projects (e.g. energy-efficiency services, carbon capture). As renewables are less tied to geography, this will drive a shift towards less concentrated and regional or local investment in energy generation.

The trend towards shifting capex from oil to alternative energy is also driven by financial investors divesting away from oil to support climate change mitigation. For instance, Norway's sovereign wealth fund announced that it will divest companies dedicated solely to oil and gas exploration and production, pulling out almost $6 billion from some 95 companies. The Rockefeller Family Fund similarly disposed of its holdings of ExxonMobil.

Source: UNCTAD.

The sustainability dimension adds to the policy context to prepare the ground for consolidation of regional value chains. The most obvious benefit of regional value chains is to reduce distances, decreasing the environmental impact of long-distance transportation of intermediate and final goods.

4. Replication

Replication is characterized by distributed manufacturing close to the point of consumption and supported by new production technologies – distributed manufacturing is generally associated with the application of additive manufacturing or 3D printing. Manufacturing models enabling replication range from networks centrally coordinated by MNEs to the bottom-up atomization of production whereby every firm or even household independently produces what is needed. The former is an international production trajectory; the latter is almost the antithesis of international production.

Centrally coordinated distributed manufacturing is characterized by short value chains, with manufacturing production steps bundled together and replicated in many locations. Consequently, geographic dispersion of economic activities is high, with concentration of high-value activities in few locations but broad participation in the manufacturing process. Governance is likely to be polarized, with ambiguous overall impact on FDI intensity: stronger control from MNEs of the value-adding design and coordination phase and significant opportunities for local outsourcing of the highly commodified, replicated manufacturing steps.

Distributed manufacturing should not be wholly equated with 3D printing. It is more generally enabled by synergies between automation and digitalization. Automation makes it possible to routinely reproduce the same production process in many locations with minimal labour absorption and minimal marginal costs, while digitalization favours efficient central coordination of the network. 3D printing is itself a technology combining automation and digitalization.

The replication trajectory is not applicable across all industries. Among the four trajectories of international production, it is in perspective the least likely to lend itself to broad application across industries. In addition to constraints to applications of 3D printing related to raw materials, more broadly it demands specific business conditions. First, the production process needs to be relatively simple. As manufacturing complexity increases,

Table IV.22. Replication

International production impact	• Shorter, less fragmented value chains, rebundling of production stages • Higher geographical distribution of activities, but more concentrated value added • Increased outsourcing
Key drivers	• Technology (automation and digitalization, 3D printing) • Policy environment (including push for production capacity of critical supplies post-pandemic)
Prevalent industries	• Hub and spoke industries, regional processing industries
Results	• Lower FDI • Increased trade in services, intangibles, data flows and payments of royalties and licensing fees • Lower GVC trade

Source: UNCTAD.

Box IV.4 COVID-19 and international production in health care industries

The pandemic has put a spotlight on bottlenecks in the international supply chains of health care equipment and medicines. MNEs in health care industries have not only faced the same short-term supply chain disruptions as other industries, but have also been affected by emergency policy measures of national governments, including restrictive trade measures, tightened investment regulations and general requisition measures to meet national needs (box table IV.4.1).

In response, MNEs in health care industries have taken exceptional measures to increase production capacity and source through alternative channels, and have entered into strategic partnerships with governments and other MNEs – including manufacturers in other industries – to produce critical equipment and medicines. However, a number of supply chain weaknesses have emerged. Philips (Netherlands) has manufacturing facilities for sophisticated electronic health care equipment in 30 locations spread evenly across Asia, Europe and North America, but it produces respirators – the key equipment required for hospitals during the crisis – in only one, in the United States. The requisitioning by United States authorities of all production, mooted at one point, would have made it impossible to meet demand and even to satisfy pre-existing orders in other markets.

Serious questions have also been raised in the pharmaceutical industry, which for some common but important active ingredients relies on manufacturing facilities and suppliers concentrated in only one or two countries (mostly India and China). The location of logistics and warehousing operations, the "plumbing" in international production networks, has also caused unexpected consequences, for example, when orders of face masks produced in China and destined for Italy and Spain were temporarily held up by authorities in a distribution center of the Swedish health care firm Mölnlycke in Lyon, France.

Although current measures still focus on alleviating the short-term disruptions and meeting the surge in demand, MNEs in health care industries will face pressure to adjust their global production networks in the coming years. They are likely to opt for greater geographical diversification and other strategies to make their supply chains more resilient, leading to degrees of slack and redundancy (risk management measures) as well as replication, with production of similar equipment across all major trading blocks.

Box table IV.4.1. Selected emergency policy measures affecting health care industry supply chains

Category	Economy	Measure
General	Spain	Requisition measures on private health care production and materials such as face masks and tests
	France	Requisition measures on respiratory protection masks
	United States	Defense Production Act to compel production and supply of ventilators and respiratory protection masks
Investment measures	European Union	Guidance concerning FDI and free movement of capital from third countries, and the protection of Europe's strategic assets
	Australia	Investment review to protect national interest and local assets from acquisition
Trade measures	India	Export ban on ventilators and sanitizers, and restricted export of some active pharmaceutical ingredients
	Germany	Temporary export ban on medical equipment, lifted shortly after
	European Union	Export authorization requirement on personal protective equipment (PPE) and medical equipment outside the region
	Poland	Export restriction of medicinal products and medical equipment
	Russian Federation	Export ban on 17 types of medical equipment, PPE included
	South Africa	Export ban of critical medicines, face masks and hand sanitizer
	Switzerland	Export restriction on PPE and essential medical goods

Source: UNCTAD, based on various sources.

Source: UNCTAD, based on various sources.

the cost of automation becomes unsustainable for replication at large scale. The second important element is the opportunity to capture significant market-specific advantages through customization.

The pharmaceutical industry is an often-used example *(WIR17)*. The industry is characterized by centralized R&D, production in major hubs and networks of market-seeking, distribution-oriented FDI; these features result in the "hub and spokes" configuration, with few locations generating the majority of value added and a large number of countries of final distribution contributing a small but non-negligible share. The rapidly evolving pharmaceutical and biotechnology landscape is driving greater product variety, shorter product life cycles and smaller drug volumes. Future pharmaceutical supply chains are expected to involve new production models that manufacture medications to order, closer to the point of consumption, often with a degree of customization to local markets or even the medical needs of individual patients. This requires more widely distributed micro-factories. The pandemic is expected to increase attention to 3D printing as a means to secure decentralized, reliable and flexible supplies of critical goods. Resorting to 3D printing of medicines, clinical masks or ventilators has proven to be a realistic option to prevent dramatic shortages of drugs and medical equipment in future (box IV.4).

Beyond pharmaceuticals, distributed manufacturing may have applications in customized segments of (otherwise) mass industries such as apparel or food that are characterized by limited production complexity. Heavy industries or industries characterized by significant technical complexity are unlikely to be structurally affected by the distributed manufacturing model apart from specific components used as inputs.

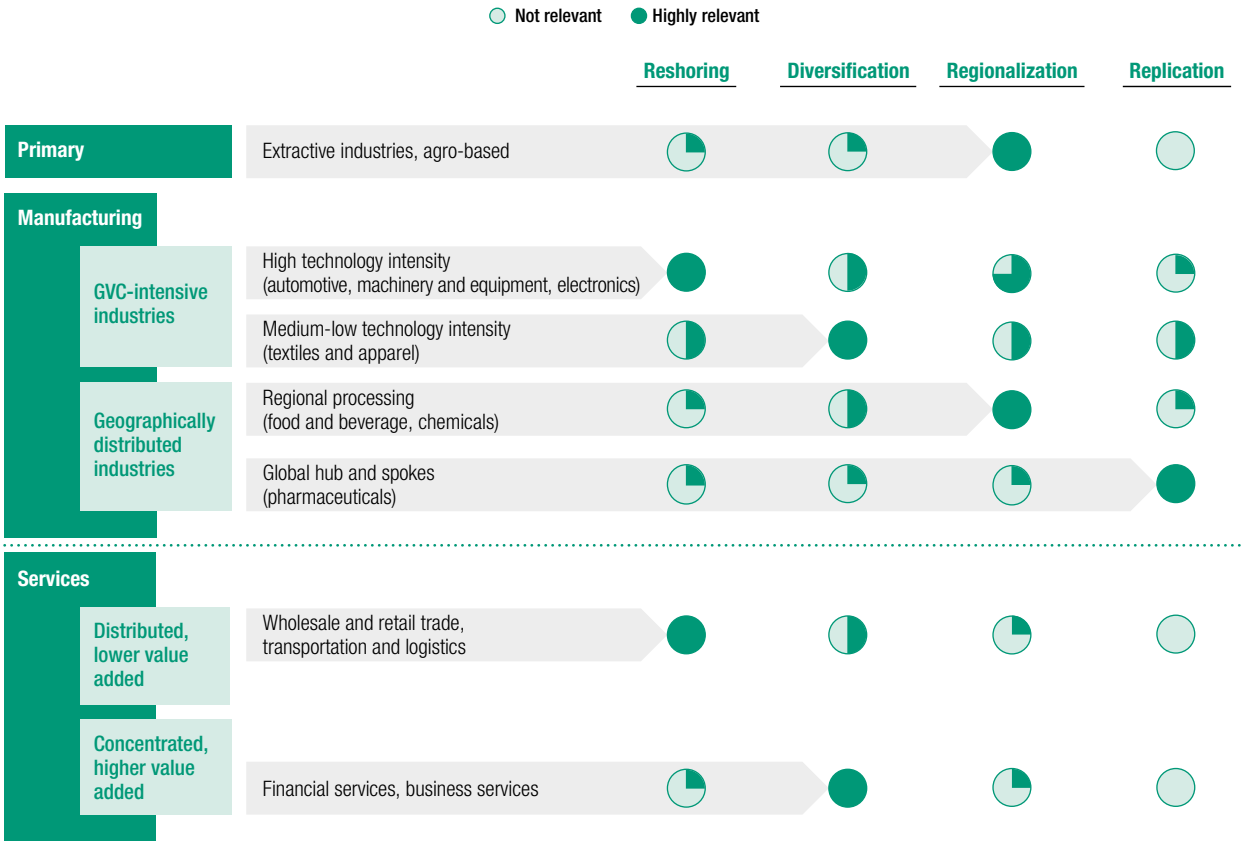
Although the notion of increased national self-sufficiency in strategic industries is going to come to the fore in post-pandemic policymaking, distributed manufacturing will hardly thrive in a protectionist policy environment. The bulk of distributed manufacturing is likely be established through FDI or contract manufacturing under centralized MNE coordination. For example, in the pharmaceutical industry, although physical production is generally light, the amount of knowledge, technology and investment that feeds into R&D requires scale. The same argument applies for most biomedical devices, with some notable exceptions, such as clinical masks, where great product simplicity allows easy reproduction through basic 3D printing processes. In this respect, centrally coordinated distributed manufacturing is one of the most globalized models, implying a network of "light" production facilities under "heavy", centralized, cross-border coordination. With 3D printing for example, while trade of physical goods across borders is minimized, the flow of data, services and intangibles increases.

* * *

Notwithstanding the probable impact that technology trends, the policy environment and the global sustainability imperative will have on international production in this new decade, significant uncertainty on the time horizon as well as the degree and scope of the transformation remains. The vulnerability of the global economy to a black swan event of the magnitude of the pandemic demands caution when analyzing any scenario for the evolution of international production, the activities of MNEs and foreign investment.

The three megatrends discussed in this chapter – technology, policy and economic governance, and sustainability – and the resulting possible trajectories of international production will not unfold in a linear manner. They remain liable to being shaped by global political developments; thus, there will be significant differences in their impact across industries and regions (figure IV.12). To start with technology, although its effect on GVCs across all industries is undeniable, there are fundamental questions about whether the impact will be transformational or incremental. For example, despite the expectations surrounding additive manufacturing, the total market value is still rather low.

Figure IV.12. The relevance of different trajectories, by industry



Source: UNCTAD.

Even with the swift projected growth rate, by 2030 only a fraction of gross output in GVC industries would be accounted for by additive manufacturing. Similarly, there is significant uncertainty about the scale of automation and robotization of GVCs by 2030. Another caveat is that even if rapid technology advances enhance the possibilities of automation in GVCs, this does not necessarily imply that building the supporting infrastructure and ensuring the requisite technical capacity to automate will be economically more advantageous than conventional means of production.

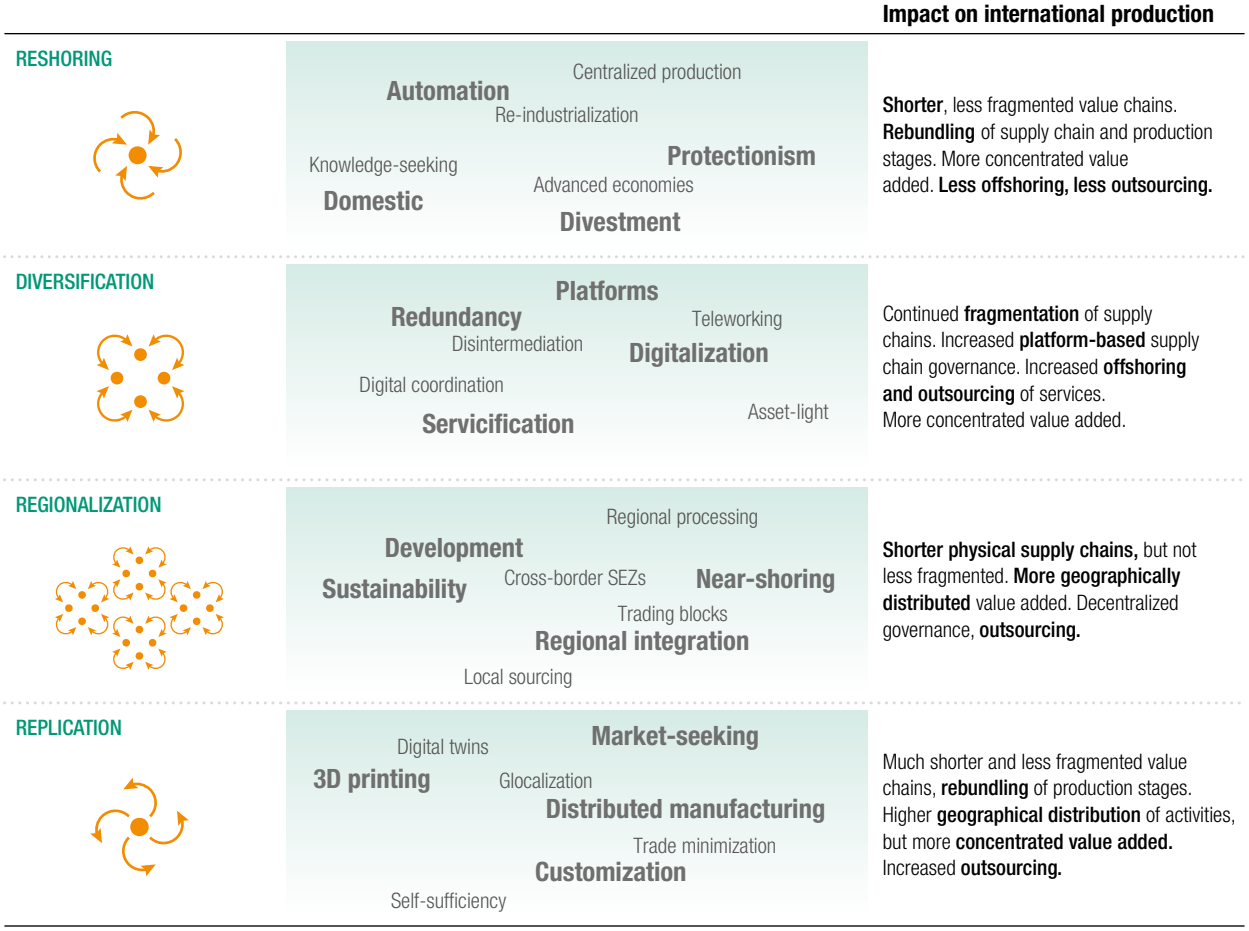
How the sustainability imperative will affect international production by 2030 is also contingent on an array of factors. The United States' notice in 2019 of its intention to withdraw from the Paris Agreement on Climate Change Mitigation underscores the fragility of the global framework underpinning sustainability policies and regulations. Similarly, there is a concern that market-driven changes in products and processes due to reputational risks could be side-stepped by firms through greenwashing. The absence of enforceable global standards on the labeling of products and processes, as well as the variation in reporting mechanisms of the environmental impacts of firms, further raises the possibility that sustainability plans will not be implemented fast enough to have a transformational impact on international production this decade.

Adding further complexity to the uncertain equation of the degree to which the three megatrends will affect international production by 2030 are the interlinkages between them. Technology and sustainability trends depend on policy developments. Policy measures themselves are contingent upon both political outcomes in major economies as well as the state of international cooperation. An emerging trend in the last

decade was the incorporation of targeted environmental standards in both bilateral trade agreements as well as in the more recent wave of megaregional treaties. The Trans-Pacific Partnership, for instance, incorporated a dedicated chapter on a range of environmental issues, including enforcement of environmental laws, cooperation in capacity building for environmental protection and the promotion of mutually supporting trade and environment policies. Similarly, during negotiations for the Trans-Atlantic Trade and Investment Partnership, the EU proposed that the United Nations Framework Agreement on Climate Change underpin its environmental protection aspects. However, the roadblocks to the implementation of these agreements as originally envisaged underscore the difficulty in arriving at enforceable environmental standards, not only for member States but also for MNEs operating abroad, through bilateral and regional economic cooperation.

The COVID-19 pandemic may also render the future of multilateral cooperation uncertain. Once the dust settles, it could well result in renewed realization of the importance of international cooperation not only to prevent future global health calamities, but also to alleviate the economic and social ramifications. This, in turn, could act as a forceful enabler for international production, especially if it comes in the form of coordinated fiscal measures and industrial policies at the global and regional levels to support export-oriented GVCs and if it removes impediments to internationally traded goods and services. Summing up, the trends and trajectories projected in this chapter provide a broad indication for the directions that international production may take in the decade to 2030 (figure IV.13).

Figure IV.13. Elements of trajectories and impacts on international production



Source: UNCTAD.

E. A DECADE OF TRANSFORMATION AHEAD: POLICY IMPLICATIONS

1. Reconfiguration of international production

Although the expected transformation of international production is not unidirectional, overall the trends show a system under severe pressure with heightened risks of a retreat of GVCs, giving way to regional value chains and reshoring, and declining cross-border investment in productive assets. Given the importance of international production for post-pandemic recovery, for economic growth and job creation, and for the development prospects of lower-income countries, policymakers need to promote a trade and investment policy environment that is conducive to a gradual adjustment of international production networks to the new realities.

Global supply chains have been hit hard during the COVID-19 crisis. To limit the damage – and the depth of the recession the world is entering – it is of vital importance to get them started again as soon as possible after the pandemic is under control. However, international production is not only affected by the immediate impact of the COVID-19 crisis. The coming years – and the decade to 2030 – will see more fundamental changes to the system of international production. The slowdown of trade and investment over the last decade was a harbinger of a decade of transformation ahead. This chapter has shown how international production is affected by megatrends in three areas – technology, economic governance, and sustainability – each of which has complex policy implications on its own.

The *NIR and the digital economy* are changing traditional investment drivers and determinants. They increase the weight of intangibles and services in global value creation and place new demands on host-country supply chain partners and technological infrastructure. The adoption of digital technologies in MNEs across industries is rapidly changing patterns of international production, because it allows MNEs to reach overseas markets with a much lighter international asset footprint *(WIR17)*. New technologies force policymakers to respond to shifting patterns of international investment and to changing investment determinants. Attracting international investment in a digital economy that relies less on some factors, such as low-cost labour, and more on others, such as infrastructure, skills and low-cost energy, requires different competitive advantages.

The changes over the last decade in *international economic governance* and in policy attitudes towards international trade and investment have also forced a rethink among investment and development policymakers around the world. They have led to a trade and investment policy paradox. On the one hand, barriers to trade have increased, inward investment has become subject to greater scrutiny, and outward investment is discouraged in some countries. On the other hand, competition for trade and investment has also

increased, with more than 100 countries adopting new trade- and investment-dependent industrial policies over the decade *(WIR18)* and an explosion in the number of SEZs. Modern industrial policies are increasingly diverse and complex, including myriad objectives, such as development of the knowledge economy, competitive positioning in industries deemed crucial for future growth (e.g. robotics, bio-tech), and build-up of sectors important for sustainable development (e.g. renewable energy, agri-food, water management).

The latter aspect shows the increased emphasis on the *sustainable development agenda* in investment policies. Sustainability also increasingly drives MNE strategic decisions and operations. The approach that governments take in industrial and investment policies reflects this, as does the value proposition that implementing institutions such as investment promotion agencies and SEZs market to investors. In industrial development strategies and in most SEZs, laxer social and environmental rules or controls are no longer considered a competitive advantage to attract investment *(WIR19)*. And services related to sustainability, such as quality health services, waste management standards and renewable energy sources will become increasingly important.

Thus, each of the three megatrend areas individually has fundamental implications for investment-development policymakers. The same is true for the crisis caused by COVID-19, which is expected to lead to a push for greater supply chain resilience and a higher degree of autonomy in the production of critical supplies.

However, it is important for policymakers to consider *the combined and cumulative effects* of all the trends and the current crisis. Policies in response to COVID-19 can precipitate changes that were already in the making. For example, the introduction of robotics in certain industries may be technologically possible but held back by considerations of economic feasibility. If new resilience requirements or trade barriers change the cost calculation, this can tip the scales.

Overall, it is clear that international production, and especially cross-border investment in productive assets, will come under severe pressure. In some industries this may become a decade of transformation; in others it will look like a retreat. There are significant risks attached to the possible further slowdown or even reversal of international production.

First, an abrupt or forced retreat will make the recovery more difficult. A downturn in international production adds a protracted supply shock to the demand shock, slowing down the recovery. It also deepens the crisis in economies least equipped to deal with it. In the immediate aftermath of the global financial crisis, leading economies concluded that it was important to avoid a knee-jerk reaction towards economic nationalism to safeguard the fragile recovery at the time. In fact, it was the international sector – GVC-intensive industries – that led the recovery.

Second, longer term, it will harm the development prospects of lower-income countries. International production has been a driver of growth for decades and has contributed to lifting millions out of poverty. The development strategies of many of the poorest countries explicitly rely on opportunities to attract FDI and to participate in GVCs; a retreat of international production would make their development ladder more rickety.

Third, a retreat of international production could have many side effects on prices, competition and innovation. Important gains of international production in an open trade and investment system have been, for example, the steep drop in the cost of equipment for the generation of renewable energy and for broadband networks, enabling massive investment in projects to boost clean power and bridge the digital divide. Innovation in vital areas such as biotech and fintech, relevant for health, food security and access-to-finance SDGs, depends on competition in global markets.

Hence, while a policy push towards a degree of self-sufficiency in the production of vital goods, more general pressure for a wider distribution of industrial manufacturing capacity globally, and calls for a partial decoupling of supply chains from factory Asia are likely to grow stronger, policymakers should be aware of the risks involved. These risks are compounded by the fact that reconfiguring supply chains for firms, and re-industrialization for economies, are lengthy and complex processes.

That said, the transformation of international production is inevitable. Policy action to make international production more sustainable – which could go hand-in-hand with measures to mitigate the effects of the pandemic and limit future risks – is both necessary and urgent. The policy debate at the international level should not be about saving international production networks, but about making them more sustainable while preserving their development benefits.

The wishlist of improvements for the system of international production was already long: more value capture in host countries, more productive investment and less financial and intangible flows, less tax avoidance, more equitable distributive effects, better ESG impacts, a greater contribution to technological and capacity development, and many others that have been discussed in past issues of the *WIR*.

The culmination of the three megatrends discussed in this chapter combined with the COVID-19 crisis adds three further design criteria for the future of international production: (1) more resilient supply chains that are (2) less prone to spreading crises and less contagious, in both physical terms (pandemics) and financial terms (spreading economic crises), and (3) a lower propensity towards geographical concentration of industrial capacity that increases strategic reliance and de-industrialization around the world.

2. Meeting the challenges and capturing the opportunities

The diverse impacts of the megatrends that will play out over the decade to 2030 imply a shrinking pool of investment in physical assets, pressure on value capture from GVC activities, and changes in drivers and determinants of international production that will often negatively affect the chances of developing economies to attract MNEs' operations. But the transformation is not without new opportunities. In fact, they are plenty, arising from the build-up of new regional value chains and small distributed manufacturing activities, and from the diversification of value chains for redundancy and resilience.

The industry-specific trajectories that international production will take over the decade to 2030, discussed in section D, all have different implications for investment-development policymakers (table IV.23). The push for reshoring will cause a shock for economies that depend on export-led growth and GVC participation. Diversification and digitalization will imply a challenge to value capture in GVCs but will also lead to new opportunities to participate in them. Regionalization will make cooperation with neighbours on industrial development, trade and investment of critical importance. And replication will change the model of investment promotion focused solely on large-scale industrial activities.

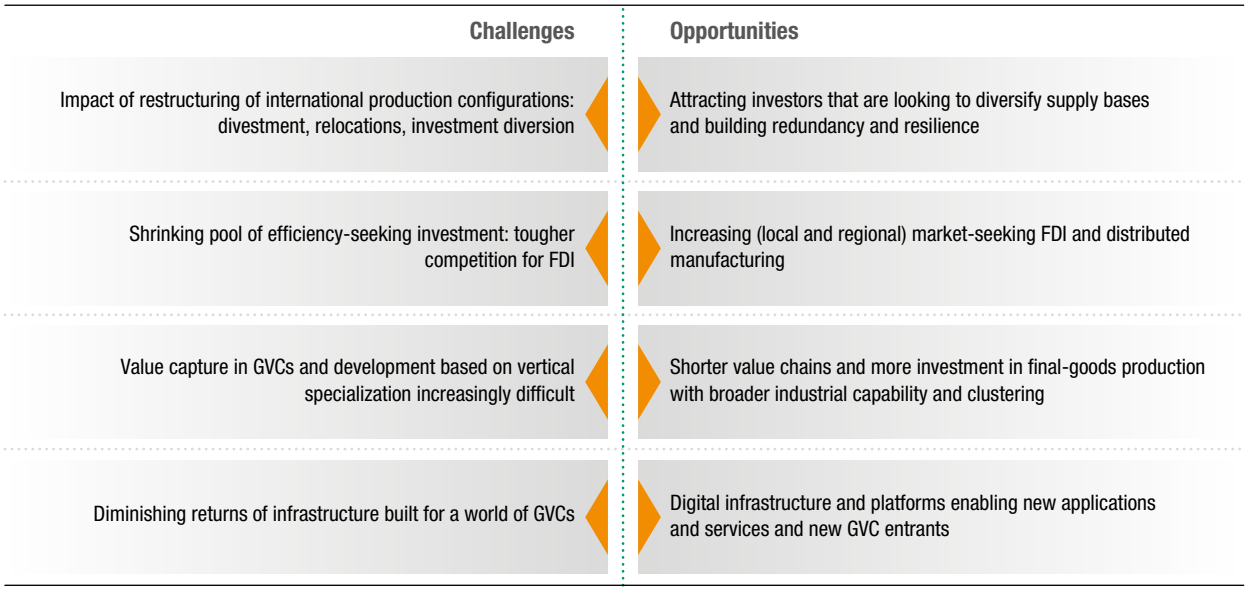
The various nuances in the different trajectories notwithstanding, the overall directional trend in international production points towards shorter value chains, greater concentration of value added and declining international investment in productive assets. As much as international policy efforts can do to maintain a favourable environment for cross-border trade and investment, national policymakers still need to prepare. But policymakers do not just have to prepare for a downturn in international production, they also need to be ready to capture opportunities arising from the transformation (figure IV.14).

Table IV.23. Key investment-development implications of different trajectories for host economies

Reshoring	• Possible shock of restructuring, including divestment, relocation; investment diversion • Shrinking pool of efficiency-seeking FDI • Need to re-industrialize or cope with (premature) de-industrialization • Access to and upgrading along the GVC development ladder becomes more difficult
Diversification	• Broader opportunity to participate in GVCs, but loosely governed, platform-based and asset-light • Acceleration of the shift to intangibles and services-based GVCs • Concentration of value, value capture in host countries becomes more difficult • Quality of hard and soft digital infrastructure drives GVC participation
Regionalization	• Shift from global efficiency-seeking investment to regional market-seeking investment • Shift from investment in dispersed vertical GVC segments to investment in broader industrial bases and clusters • Nearshoring replicates restructuring effects of reshoring (but softens others) • Regional economic cooperation, industrial policy and investment promotion indispensable to build regional value chains
Replication	• Shift from investment in large-scale industrial activity to small-scale distributed manufacturing • Local manufacturing base and producer services a prerequisite to attract final stages of GVCs • Increased outsourcing to local producers and service providers, value capture and technology dissemination not guaranteed • Greater need for cost-effective physical supporting infrastructure and quality digital infrastructure (hard and soft)

Source: UNCTAD.

Figure IV.14. Challenges and opportunities arising from the transformation of international production



Source: UNCTAD.

The challenges are especially acute from the perspective of developing countries. Their development and industrialization strategies often depend to a significant degree on attracting FDI, increasing participation in GVCs, and gradual technological and value added upgrading. However, more advanced economies are also affected by some of the same challenges. Selective reindustrialization will take time. There is no guarantee of success because skills and supplier bases are not always present; high expectations for the number of jobs to be brought back are unlikely to be met; and costs will be significant, including both investment costs associated with restructuring and with capital-intensive production, and economic costs – including higher prices. The cost considerations, in particular, add significant uncertainty about the ultimate direction and speed of the transformation. For example, the cost of diversification to achieve the desired increase in supply chain resilience has yet to be calculated and will not be the same for all industries and firms.

Although the challenges for investment-development policymakers are daunting, the opportunities are also important. To start with, each of the trends that drive the transformation brings its own opportunities:

- *The NIR and the development of the digital economy* – improved access to markets for SMEs in developing countries; building up new economic activities in app development, local content development or digital services for export; and leapfrogging in industries ranging from telecommunication to financial services (*WIR17;* UNCTAD, 2019).
- *Policy and economic governance trends* – pushing for barrier-hopping investment and capturing diverted investment; promoting intraregional investment that benefits from regional trading blocks and nearshoring.
- *Sustainability trends* – attracting investment in new sustainability-related products and services and promoting investment projects in infrastructure, renewables and other SDG-relevant sectors (*WIR14,* and chapter V of this report).

The opportunities specifically associated with the transformation of international production as a result of the combination of all these trends in addition to the impact of the crisis caused by COVID-19 include short- to medium-term possibilities – such as positioning for the promotion of resilience-seeking investment – and longer-term prospects that will require a shift in development strategy and industrial policy as well as regional cooperation in trade and investment policy. The opportunities imply a paradigm shift in investment for development (figure IV.15).

The difficulty from a development perspective is that the challenges and opportunities will not present themselves symmetrically across groups of economies at different income levels and at different stages of development. The shrinking pool of efficiency-seeking investment will make it more difficult for countries in the early stages of development to increase participation in GVCs. Those same countries will find it equally difficult to benefit from a larger pool of market-seeking investment, which will favour larger middle-income and high-income countries. Low-income countries could face increased risks of an absolute decline in FDI and reduced participation in global production networks. For them, regional economic cooperation and being part of a larger integrated market becomes even more important.

At any stage of development, countries' development strategy and industrial policy can no longer rely to the same degree on a narrow mix of export-oriented investment. Investment promotion strategies need to adapt to the transformation and re-assess their industry focus and targeting approach (box IV.5). Important investment policy instruments, such as incentives and SEZs, need to cope with a shrinking pool of industrial investment. For SEZs, in particular, that makes it even more important than before to avoid over-investing in large-scale facilities for industry and to focus on lean development (*WIR19*).

Figure IV.15. The transformation of international production and the investment-development path

From	To
• Export-oriented	• Export "plus plus" – Plus production for local markets – Plus infrastructure development
• Efficiency-seeking investment	• (Regional) Market-seeking investment
• Targeting GVC segments/tasks	• Building diversified industrial clusters
• Prioritizing large-scale industrial investors	• Competition for diversified investments based on flexibility and resilience
• Cost-based competition for single-location investors	• Room for small-scale manufacturing facilities and servicess
• "Big infrastructure"	• "Lean infrastructure" – digital and sustainable

Source: UNCTAD.

Box IV.5 The transformation of international production: rethinking investment promotion strategies

The transformation of international production has important implications for investment promotion strategies. Investment authorities, SEZ authorities and investment promotion agencies should consider the following strategic responses:

- Assess likely trajectories of industries and GVC segments in the existing FDI profile.
- Assess retention options for economic activities at risk of reshoring or relocation.
- Assess opportunities to promote locations as nearshore or regional supply chain flexibility and resilience bases.
- Review the investor targeting approach, its dependence on vertical specialization and the potential need to shift towards more diversified industrial clustering and (regional) market-seeking investment.
- Consider opportunities to engage in or enhance cooperation with investment promotion agencies in the region to promote multi-country industrial clusters and regional cross-border SEZs.
- Consider diversifying SEZ offerings: not just large-scale, export-oriented, industrial investment, but a range of types extending down to facilities for small-scale manufacturing (e.g. maker spaces) and collaborative services environments.
- Enhance capabilities to promote investment in infrastructure and domestic services; enhance cooperation with PPP units to promote project-finance FDI in synergy with public investment (including in SDG-relevant sectors, renewables, agriculture and health).

Source: UNCTAD.

Policymakers in developing countries, at all levels of development, need to consider the implications of the transformation of international production for their investment policy framework. A new framework, fit for the decade of transformation, should incorporate four key elements (table IV.24):

1. Embarking on a **new investment-development path.** Shifting strategic policy direction from a GVC-driven, segment-targeted export orientation towards RVC (regional value chain)-based export expansion, with domestic industrial clustering to build linkages and resilience. In following the new path, countries should balance modern (open) industrial development policies (*WIR18*) with built-in national economic security and resilience mechanisms.
2. Developing a **new ecosystem.** Promoting a business environment attractive to new investment activities and conducive to technology dissemination and sustainable development. An important component of the new ecosystem should be the modernization of infrastructure for digital, physical and institutional connectivity at regional and subregional levels.
3. Building **dynamic productive capacity.** Shifting the focus from narrow specialization to the expansion of the manufacturing base. Strengthening industrial clustering (including cooperatives of micro and SMEs for scale and scope of production) and retooling SEZs and science parks are viable approaches that match with MNE regionalization and diversification strategies. Such approaches can also help low-income countries to foster a resilient and inclusive economy by crowding in domestic micro and SMEs and facilitating backward linkages.
4. Formulating a **new investment promotion strategy.** Adapting investment promotion and facilitation to the new investment-development path. This includes resetting priorities for investment promotion, targeting diverse investment activities and business functions, and facilitating green and digital investors, as well as impact investors, to promote investment in the SDGs.

Overall, the trends that will drive the transformation of international production, in particular the NIR and the sustainability imperative, and the need for MNEs to restructure for resilience in the short term and the transformation trajectories in the longer term, will offer a myriad of investment opportunities for developing countries. To seize these opportunities, formulating the right policy mix at the right time matters.

* * *

The trends and trajectories presented in this chapter are subject to many degrees of uncertainty. The business response is a first unknown. Resilience is now the new imperative, but where MNEs will decide to reposition on the efficiency-resilience spectrum remains to be seen. It will depend on the costs, on the pressure for short-term results to guarantee survival and on political incentives. It also depends on their corporate structure and governance, as well as on their business model in different industries. The same resilience-building technology may be available in some industries and not in others, or at completely different costs in different countries and regions at different development levels.

Future policy developments are also unpredictable. For now, the pandemic appears to accelerate the trend towards more economic nationalism, but the need to repair the economic damage might yet reverse the trend and lead towards more cooperation. Similarly, sustainability trends will continue evolving across different dimensions of international production. The pandemic appears to be generating increased sustainability momentum in some countries but this may not be the case in others. Furthermore, the pressure to restart economies may lead to delays in the implementation of sustainability plans.

Table IV.24. Investment-development ecosystem in a new era of international production

New investment development path	Building a new ecosystem	Building dynamic domestic productive capacity	New investment promotion strategy
New strategic orientation • Old path – Export-led growth and transformation, GVC segment/niche targeting approach to integrating into the global economy based on cost efficiency, which creates silos in the host economy • New path – Technology and sustainability driven productive capacity building through industrial clustering, at national and regional or sub-regional level	**National enabling framework** • Macroeconomic policy appropriate for a new international production system • Strengthen national technology and innovation systems in line with NIR and digitalization • Policy package for SDGs including sustainability and inclusiveness	**Build production capability** • Expanding domestic productive capacity and re-engineering domestic industrial base • Establishing SEZ platforms for industrial clustering • Building joint cross-border industrial parks on regional industrial cooperation basis	**Towards a new approach** • Reorienting: from global efficency-seeking FDI to regional and subregional production-related FDI • Targeting: from specific value segment to industrial clusters promotion for diversification-related FDI • Adding: technology applications promotion and facilitating firm-level strategic alliance with MNEs
Industrial transformation • Diversifying: creating and attracting new industrial development activities, particularly related to new technology and sustainable development • Deepening: clustering through upstream and downstream extension and linkages to crowd in MSMEs • Upgrading: product, process and function through greening and digitalizing	**International enabling framework** • Regional and bilateral treaties to promote and facilitate trade, investment and technology flows • Regional cooperation and geo-economic positioning • Regional framework for industrial collaboration	**Nurture technological capabilities** • Promoting adoption of digital applications • Continuous human resources and skills development in sync with technological evolution • Technology alliance through cross-border collaborative arrangements; and partnerships of firms and research institutions	**Link investment to sustainable development** • Partnering between FDI and public investment in SDGs such as agriculture, health, education and digital infrastructure • Promoting impact investment • Incubating social entrepreneurship
Balance between openness and resilience • Open industrial development policy • Mindful of the need for job creation and inclusive growth • Protect national economic security and build resilience	**Modernize infrastructure** • Investing in regional infrastructure, particularly transport, logistics and high-speed Internet connectivity • Digitalizing manufacturing facilities • Upgrading producer services, e.g. regional marketing network, trade corridors	**Support emerging industrial sectors** • Coordinate the manufacturing policy environment with policies for services, data flows and other intangibles to promote emerging industrial sectors • Enforce strong and adaptive intellectual property regimes	**Reorient investment institutions** • Establishing agencies with both investment and technology facilitation functions • Promoting synergies between SEZs and IPAs • Prioritizing investment in SDG sectors, including by developing bankable projects

Source: UNCTAD.

Over the coming years, as developments in these areas materialize, it will be important to regularly monitor and reassess the trajectories presented in this report, and their implications. Some trajectories or combinations of trajectories will prevail over others. They may result in different international production configurations across industries.

The impact on individual economies and groups of economies will vary. This report aims to provide a broad enough analytical framework to encompass the most likely directions and to address the range of policy options available to navigate the decade of transformation ahead.

Notwithstanding the high degree of uncertainty and the range of possible trajectories for international production, the general direction of travel seems clear. GVCs, trade and investment are heading for a period of turbulence that will present ample challenges and opportunities for developing countries.

For the past three decades international production and the promotion of export-oriented manufacturing investment have been the pillars of the development and industrialization strategies of most developing countries. Efficiency-seeking and resource-seeking investment will remain important, but the pool of such investment is shrinking. This calls for a degree of rebalancing towards growth based on domestic and regional demand and on services.

The large amounts of capital looking for investment opportunities available in global markets do not look for investment projects in manufacturing, but for value-creating projects in infrastructure, agriculture and services. Some services that have always been predominantly domestic are internationalizing, such as health care, just as traditional international production industries are retreating or restructuring. That creates new opportunities for promoting investment in new areas.

Promoting investment in infrastructure and services implies marketing new sectors (especially those that are relevant for the SDGs), targeting a different type of finance (project finance rather than traditional FDI) and targeting a different type of investor (institutional investors rather than MNEs) operating in a different policy ecosystem (financial market standards and regulations).

Investment in the green economy and the blue economy, as well as in infrastructure and domestic services, presents great potential for contributing to achieving the Sustainable Development Goals (SDGs). Chapter V – a new chapter in this report – looks specifically at trends in investment in the SDGs.

NOTES

[1] The same conclusions are drawn in Miroudot and Nordstrom (2019).

[2] For example: *The Future of GVCs* (OECD, 2017); *Reshaping Global Value: Technology, Climate, Trade - Global Value Chains under Pressure* (World Economic Forum, 2019).

[3] A similar classification has been used by others to analyze the impact of Industry 4.0 (Hallward-Driemeier and Nayyar, 2017).

[4] For further summaries of the longstanding debate on ESG issues in the international operations of MNEs, see also Narula, 2019; Narula and Van der Straaten, 2020; and Van der Straten et al., 2020.

[5] Database of the Sustainable Stock Exchanges (SSE) Initiative.

[6] For example, floods affected electronics component manufacturer ROHM and Co, causing production delays in Honda plants in the United States and the United Kingdom. Computer hard drives from Seagate were in short supply, affecting global manufacturers such as Acer. Sony's NEX-7 camera suffered a launch delay because of the flooding.

CHAPTER V

INVESTING IN THE SDGs

INTRODUCTION

UNCTAD first estimated investment requirements for achieving the Sustainable Development Goals (SDGs) in its *2014 World Investment Report (WIR14)*, as an input to their formulation. UNCTAD assessed total investment needs and projected the annual investment gap for developing countries at $2.5 trillion between 2015 and 2030 for 10 sectors that, together, encompass all 17 SDGs. The SDG-relevant investment sectors covered basic infrastructure (roads, rail and ports; power stations; telecommunication; water and sanitation), food security (agriculture and rural development), climate change mitigation and adaptation, health and education. The report highlighted the need for private investment, including international investment, to supplement public and domestic investment in order to bridge the financing gap. In the report, UNCTAD also proposed a package of transformative actions to mobilize and channel private investment towards the SDGs and ensure their positive impact on sustainable development.

In September 2019, five years after its initial assessment, UNCTAD launched the *SDG Investment Trends Monitor* to provide an overview of trends in financing and investment performance in each of the 10 SDG sectors. The monitor responds to the Addis Ababa Action Agenda calling for high-quality disaggregated data and monitoring as inputs for evidence-based decision-making to support the SDGs.

After deliberating the findings of the SDG Investment Trends Monitor, the General Assembly in December 2019 adopted a resolution on "Promoting investments for sustainable development" (A/RES/74/199), requesting that UNCTAD inform its next session "on the gaps and challenges faced and the progress made in promoting investments for sustainable development as well as concrete recommendations for the advancement of investment for the implementation of the 2030 Agenda" (para 31). This chapter of the WIR responds to this call, including an appraisal of the impact of the COVID-19 pandemic.

Section A reviews investment trends in developing countries in 10 key SDG sectors, including FDI and project finance. Section B provides an overview of global sustainability finance. Section C presents trends in environmental, social and governance (ESG) and SDG integration, and an analysis of gender reporting and policies in the world's 5,000 largest companies, an important aspect of ESG integration. Section D presents the key findings of the first-ever global overview of the state of national and international investment policies in relation to the SDGs. The concluding section proposes a set of policy actions aimed at spurring further private sector investment in the SDGs at the dawn of the "decade of action and delivery".

A. TRENDS IN SDG INVESTMENT IN DEVELOPING ECONOMIES

Global SDG investment shows some progress but remains far from the target to meet the $2.5 trillion annual financing gap for developing countries. Signs of progress in SDG investment are evident in six sectors: transport infrastructure, telecommunication, food and agriculture, climate change mitigation, ecosystems and biodiversity, and health. Investment appears stagnant in education and in water and sanitation. Across the board, growth falls short of the level required to make a significant dent in the investment gap.

a. Highlights of SDG investment trends

On the basis of multiple sources and types of finance, the *SDG Investment Trends Monitor 2019* portrayed a mixed picture of both investment trends and monitoring capacities across the 10 SDG-relevant sectors in developing economies between 2014 and 2019 (table V.1). Signs of increasing investment are evident across six sectors – transport infrastructure, telecommunication, food and agriculture, climate change mitigation, ecosystems and biodiversity, and health. Whereas in some sectors – for example, power as well as food and agriculture – this increase is underpinned by elevated levels of private investment, public financing is the main driver in other sectors, for example transport infrastructure and health.

However, irrespective of whether public and private sources are leading to higher investment levels, growth in investment is falling short of the requirements originally projected in *WIR14* across almost all sectors. Even in sectors where new investment initiatives and innovative financing mechanisms appear to be ascending (e.g. climate change mitigation and health), the order of magnitude is not yet in the range that would make a significant dent in the estimated investment gaps. In contrast to those that are benefiting from increased investment levels, other important sectors including education and water and sanitation have registered declining or at best stagnant levels of investment. Although the education sector has benefited from new sources of financing, such as impact investment and private philanthropy, the volume of investment from these sources has been insufficient to offset downward pressures elsewhere. Progress in the least developed countries (LDCs) has been slow, and their investment needs remain high across all SDG sectors.

Limited data availability and poor data quality significantly inhibit the ability to assess developing-economy investment trends in all SDG sectors. Although some sectors such as power and telecommunication have comparatively strong data sets, all sectors would benefit from more high-quality, disaggregated and robust investment monitoring. The *SDG Investment Trends Monitor 2019* also identified additional priority sectors for investment monitoring going forward, such as gender equality and affordable housing. Overall, the current trends confirm that the transition towards sustainable-development-oriented investment in developing economies is so far not happening at the necessary scale and pace. Addressing these challenges demands transformative initiatives and a big push to mobilize and channel investment towards the SDGs.

Table V.1. Summary of SDG investment gaps and directional trends

Main investment requirements	Most relevant SDGs	UNCTAD estimated annual investment gaps (Billion of dollars)	Overall SDG investment trends	International private sector investment trends
POWER (excl. renewables) Investment in generation, transmission and distribution of electricity		370–690		
TRANSPORT INFRASTRUCTURE Investment in roads, airports, ports and rail		50–470		
TELECOMMUNICATIONS Investment in infrastructure (fixed lines, mobile and internet)		70–240		
WATER, SANITATION AND HYGIENE (WASH) Provision of water and sanitation to industry and households		260		
FOOD AND AGRICULTURE Investment in agriculture, research, rural development, etc.		260		
CLIMATE CHANGE MITIGATION Investment in relevant infrastructure, renewable energy generation, research and deployment of climate-friendly technologies, etc.		380–680		
CLIMATE CHANGE ADAPTATION Investment to cope with impact of climate change in agriculture, infrastructure, water management, coastal zones, etc.		60–100		N.D.
ECOSYSTEMS AND BIODIVERSITY Investment in conservation and safeguarding ecosystems, marine resource management, sustainable forestry, etc.		N.D.		N.D.
HEALTH Investment in infrastructure, e.g. new hospitals, and R&D on vaccines and medicines		140		
EDUCATION Infrastructural investment, e.g. new schools		250		

Source: UNCTAD.

Notes: The estimated investment gaps are based on *World Investment Report 2014*. The overall trend assessments for the SDG investment areas are from UNCTAD's *SDG Investment Trends Monitor 2019* and based on available data covering all types of investment and financing, including domestic and cross-border, public and private, and finance mobilization (in addition to capital expenditures). The assessment based on FDI, greenfield and project finance is a specific feature of WIR using the latest data generated for this year's report. For data sources see chapters I and II and the annexes to the report.

b. Greenfield investment, FDI and project finance in SDG-relevant sectors

In addition to the results on the full spectrum of SDG investment as reported in the *SDG Investment Trends Monitor*, this report provides an update specifically on international private sector sources of investment in SDG sectors, based on FDI, greenfield projects and project finance data. Although there are variations across the different data sources, the overarching trend shows stagnant or declining private sector investment in the SDGs (table V.1). The power, renewable energy and transport infrastructure sectors draw the majority of investment in developing economies, often led by a few large economies. Overall, the levels of SDG investment are insufficient to close the investment gap, even in countries and sectors with improving trends. Although the full range of sources of finance for investment in SDGs (domestic and international, public and private) is significantly broader than what is reported here, the downward or at the very least tepid trends in foreign private investment is a significant cause for concern.

(i) Greenfield foreign investment

Capital spending announcements for greenfield FDI project in eight sectors for which data are available amounted to $134 billion on average annually during 2015-2019, marking an increase of 18 per cent from 2010-2014 (table V.2). However, this increase was due largely to heightened investment levels in the first two years of the SDG framework (2015 and 2016). In the subsequent three years, foreign investment in greenfield projects has stagnated at pre-SDG levels (figure V.1). LDCs accounted for approximately one-tenth of announced investment – an increase of 30 per cent, to almost $15 billion, in the 2015-2019 period, spread across all sectors but telecommunication and health.

Overall, the increase in the value of announced projects was driven by robust growth in the traditional power sector (85 per cent) and in renewable energy projects (70 per cent). The number of renewable energy projects almost doubled over the period. Using the announced investment in renewable energy projects as a proxy for investment in climate change mitigation (table V.2), an encouraging indicator is that in the 2015-2019 period, there were almost three new renewable energy projects for each new project in the traditional power sector.

In contrast to the power sector, the value of announced projects in telecommunication dropped by approximately 50 per cent in 2015-2019 from the preceding five-year average. The sharp drop in telecommunication greenfield projects was largely due to saturation in profitable global markets, with major spending on new networks already having been completed in the 2010-2014 period. However, greenfield investment in telecommunication is expected to increase in the medium term due to the dissemination of 5G technology across both developed and developing economies. There are also growing numbers of ambitious private initiatives by major technology companies for global internet connectivity through the use of satellites, drones and other emerging technologies, the scaling-up of which may increase levels of investment.

Greenfield project announcements in transport services decreased by 5 per cent to an average of $22.2 billion annually in 2015-2019 (figure V.1). Although overall levels of investment in transport services are significantly higher, the value of announced greenfield projects is comparatively lower because this sector continues to rely largely on public investment.

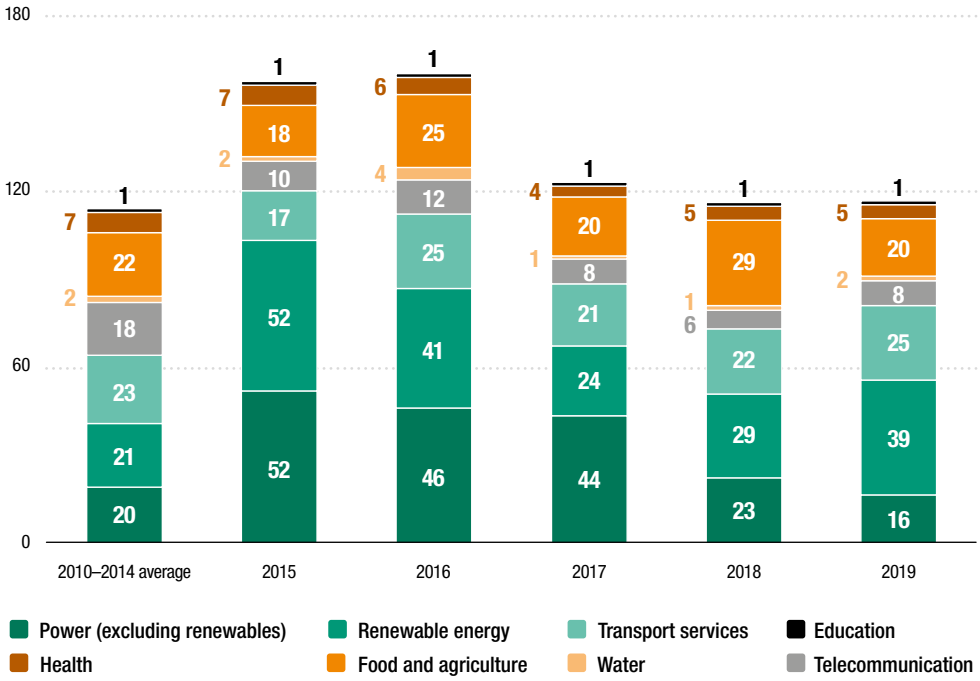
Average annual greenfield project announcements in food and agriculture remained almost unchanged in the 2015-2019 period, close to $22 billion. Similarly, announcements for projects in water and sanitation stayed almost unchanged, at $2 billion. In contrast, greenfield

Table V.2. Value and number of announced greenfield projects in SDG sectors, five-year average, 2010–2019 (Billion of dollars and per cent)

	Developing economies			Of which: LDCs		
	Average ($ billions)		Change (%)	Average ($ billions)		Change (%)
	2010–2014	2015–2019		2010–2014	2015–2019	
Total	**113.9**	**134.4**	**18**	**11.5**	**14.9**	**30**
Number of projects	***1 313.2***	***1 251.6***	***-5***	***111.2***	***108.8***	***-2***
Power (excluding renewables)	19.5	36.2	85	4.8	5.4	12
Number of projects	*58.0*	*54.6*	*-6*	*6.0*	*8.0*	*33*
Transport services	23.3	22.2	-5	1.6	2.2	41
Number of projects	*305.2*	*254.2*	*-17*	*26.0*	*27.4*	*5*
Telecommunications	17.8	8.9	-50	1.3	0.9	-31
Number of projects	*165.6*	*103.2*	*-38*	*23.0*	*11.8*	*-49*
Water. sanitation and hygiene	2.1	2.0	-7	0.0	0.0	162
Number of projects	*14.4*	*14.8*	*3*	*0.6*	*0.6*	*0*
Food and agriculture	22.1	22.3	1	1.5	3.7	146
Number of projects	*410.8*	*398.4*	*-3*	*37.4*	*34.4*	*-8*
Climate change mitigation	21.5	36.9	72	1.9	2.3	22
Number of projects	*100.2*	*182.0*	*82*	*6.0*	*11.6*	*93*
Climate change adaptation	..	..		..	..	
Ecosystem and biodiversity	..	..		..	..	
Health	6.6	5.2	-22	0.4	0.4	-1
Number of projects	*188.0*	*180.2*	*-4*	*9.8*	*9.8*	*0*
Education	1.0	0.8	-16	0.0	0.1	126
Number of projects	*71.0*	*64.2*	*-10*	*2.4*	*5.2*	*117*

Source: UNCTAD, based on Financial Times Ltd, fDi Markets (www.fdimarkets.com. The database covers 138 economies (including 45 LDCs).

Figure V.1. Announced greenfield FDI projects in developing economies, estimated capital spending by SDG sector (Billions of dollars)



Source: UNCTAD based on Financial Times Ltd, fDi Markets (www.fDiMarkets.com).

project announcements in education decreased by about 18 per cent, from $1 billion to $0.8 billion, in the period. The low value of greenfield projects in education is explained by the fact that investment in this sector largely comes from other sources of cross-border financing, mainly official development assistance rather than private investment. A possible source of concern is the 22 per cent decrease in the value of announced greenfield projects in the health sector – from an annual average of nearly $7 billion in the 2010-2014 period to $5 billion in 2015-2019.

(ii) Foreign direct investment

The trends in FDI inflows in developing economies based on balance-of-payments data largely mirrors the assessment from the greenfield project data. The largest increase in FDI in absolute terms was in the power sector, akin to trends observed in greenfield investment (table V.3). However, the overall level of growth in realized FDI in 2015-2018 (5 per cent, to $71 billion) is comparatively modest relative to that in announced greenfield investment. Declining FDI in the health care sector corroborates the trend observed in greenfield project data. However, in some regions, such as in ASEAN countries, private sector flows in health care are growing and becoming increasingly important for different segments of the healthcare value chain (*AIR 2019*). Moreover, considering that public investment is still the major source of financing in the health sector and the likely increase in both national and international flows due to the COVID-19 pandemic, it is expected that higher investment will be realized at least in the next few years. In LDCs, despite the increase in FDI across sectors, the values are still a fraction of investment needs and insufficient for meaningful progress towards the SDGs.

(iii) Project finance

Project finance, i.e. funding in the form of non-recourse or limited-recourse financial structures for permanent infrastructure or public services projects, is also an important indicator for investment in sustainable development. Project finance entails both national and cross-border funding for public and private projects as well those implemented through public-private partnerships (PPPs). Total project finance in SDG-related sectors in developing economies in the last five years amounted to an annual average of $418 billion, down by 32 per cent from the period 2010-2014. The number of projects nevertheless grew by more than 40 per cent, from 478 to 676 (table V.4), of which more than one-third were financed or started. This translated into 230 projects under implementation, with a

Table V.3. FDI in SDG sectors, five-year average, 2010–2018 (Billion of dollars and per cent)

	Developing economies				Of which: LDCs			
	Number of economies	Average ($ billions)		Change (%)	Number of economies	Average ($ billions)		Change (%)
		2010–2014	2015–2018			2010–2014	2015–2018	
Power	39	14.1	21.3	51	6	0.8	0.8	4
Transport services	36	17.8	17.8	0.04	7	0.4	1.3	217
Telecommunication	16	9.1	12.0	32	1	0.3	0.4	20
Water, sanitation and hygiene	10	0.3	0.7	113	-	-	-	
Food and agriculture	38	22.7	16.3	-28	7	0.5	0.8	42
Climate change mitigation	..	..	..		..	..	..	
Climate change adaptation	..	..	..		..	..	..	
Ecosystem and biodiversity	..	..	..		..	..	..	
Health	21	2.5	2.0	-20	3	0.002	0.006	140
Education	14	0.8	0.7	-13	2	0.002	0.005	191

Source: UNCTAD.
Note: The latest year available is 2018. The number of economies represent those making full or partial data available for both periods.

Table V.4. Value and number of project finance in SDG sectors, five-year average, 2010–2019 (Billion of dollars and per cent)

	Developing economies			Of which: LDCs		
	Anounced projects, average ($ billions)		Change (%)	Anounced projects, average ($ billions)		Change (%)
	2010–2014	2015–2019		2010–2014	2015–2019	
Total	**616.1**	**417.7**	**-32**	**41.7**	**33.5**	**-20**
Number of projects	***478***	***676***	***42***	***40***	***79***	***99***
Power (excluding renewable energy)	162.8	73.4	-55	6.7	9.5	41
Number of projects	*144*	*117*	*-19*	*13*	*18*	*37*
Climate change mitigation	117.3	125.7	7	11.5	13.0	13
Number of projects	*80*	*334*	*318*	*15*	*39*	*170*
Transport services	310.2	191.6	-38	23.0	9.9	-57
Number of projects	*209*	*178*	*-15*	*10*	*18*	*88*
Telecommunication	8.0	4.0	-50	0.3	0.5	85
Number of projects	*10*	*8*	*-22*	*1*	*1*	*-29*
Water and sewerage	17.8	23.0	29	0.2	0.6	142
Number of projects	*35*	*41*	*17*	*1*	*2*	*200*

Source: UNCTAD. See Chapter I for full data description.
Note: Includes both cross-border and domestic projects, and all public or all private projects. For further details, see Chapter I. Climate change mitigation is estimated with data from the renewable energy sector.

value of $148 billion. The share of projects announced in LDCs rose from 8 per cent to 12 per cent during 2015-2019, but the value of financed or started projects targeting LDCs remained negligible.

Across sectors, investment in financed or started projects retreated substantially, except in renewable energy, where the number of projects grew by a third (table V.4). Transport infrastructure remained the sector with the largest investment ($61 billion in the 2015-2019 period, 40 per cent lower than in the 2010-2014 period). Although the number of projects announced in water, sanitation and hygiene increased by 17 per cent, the number of projects financed or started dropped by 3 per cent, leading to a 44 per cent fall in the value of investment. In LDCs, investment in started or financed projects increased markedly in traditional power.

* * *

The COVID-19 pandemic not only may entail a temporary shock but could have a substantial impact on SDG investment given the reduction in cross-border capital flows to developing countries. Fragile health care systems in developing countries could come under additional stress due to the pandemic, considering the indications of declining investment in the years leading up to this crisis. There is a risk that progress made in SDG investment in the last few years could be undone.

Despite the observed trends, investment in sectors such as public health and digital infrastructure could be boosted in the immediate and mid-term future. The higher expected levels of spending and investment are likely to come from both national and international, as well as public and private sources. For example, the European Investment Bank recently announced a partnership with the World Health Organization (WHO) to reinforce support for immediate pandemic-response needs. The initiative will also develop targeted financing to enhance health investment and help in building resilient health systems and primary health care services in low- and middle-income countries around the world. Similarly, the WHO's Access to COVID-19 Tools (ACT) Accelerator Global Response Framework raised $8 billion for the collaborative development and universal deployment of diagnostics, treatments and vaccines against the coronavirus. UNCTAD will work with partners and Member States to assess financing needs deriving from the pandemic as the global crisis abates and exit options become clearer.

B. SUSTAINABLE FINANCE

1. Sustainability-dedicated financial products

Capital markets that are aligned with sustainable development can be instrumental in filling the financing gap for the SDGs. The past decade has witnessed a surge of sustainability-themed financial products in variety, number and assets. The current global efforts to fight the pandemic are boosting the growth of sustainability financing, particularly in social and sustainability bonds. UNCTAD estimates that the total value of private sustainability-oriented bonds and funds is now between $1.2 trillion and $1.3 trillion. Greater integration of sustainability into the global capital market is being supported by the proliferation of sustainability-themed indices.

Sustainable investment has a long-standing provenance, the scope of which can cover everything from socially responsible investing to the more recent integration of ESG criteria in investment decisions. The strategies adopted by the investment industry also vary in the extent to which they embrace sustainability and responsible investment criteria (GSIA, 2018). The lack of consistent definitions makes it difficult to estimate the global asset size of sustainability-aligned investment. According to the IMF's 2019 Global Financial Sustainability Report, estimates of the global assets of sustainability investment as of 2018 range from $3 trillion (JP Morgan, 2019) to $30.7 trillion (GSIA, 2018).

For the analytical purpose of this report, UNCTAD groups the variety of sustainable investments into two groups according to the ways and means of their contributions to sustainable development, i.e. sustainability-dedicated investment and responsible investment (figure V.2).

Sustainability-dedicated investment refers to investment funds targeting ESG or SDG-related themes or sectors, such as clean energy, clean technology, sustainable agriculture and food security. UNCTAD estimates that sustainability-dedicated investment today could be in the range of $1.2-1.3 trillion. It consists mainly of green bonds (nearly $260 billion), sustainability-themed equity funds (about $900 billion) and social bonds ($50 billion), plus COVID-19 response bonds ($55 billion). Impact investing also falls into this category. However, because of the large overlap between impact investing and sustainability-themed bonds and funds (green bonds and a large part of sustainable funds are also categorized as impact investing), the value of impact investing is not added to the value of sustainability-dedicated investment so as to avoid double-counting. Given that more than 90 per cent of sustainability funds are concentrated in developed countries (see discussion later), sustainability financing largely bypasses developing countries, in particular the LDCs.

Responsible investment refers to general investment funds that behave responsibly in their investing strategies and operations, through due diligence such as negative/exclusionary screening, ESG integration, norms-based screening, best-in-class screening, and corporate engagement and shareholder actions. This type of investment is expected to be conducted in a sustainable-development-responsible manner, but not directly targeting ESG and SDG-related areas. The total amount of such funds could be of the magnitude of $29 trillion.[1]

Figure V.2. Sustainability investing

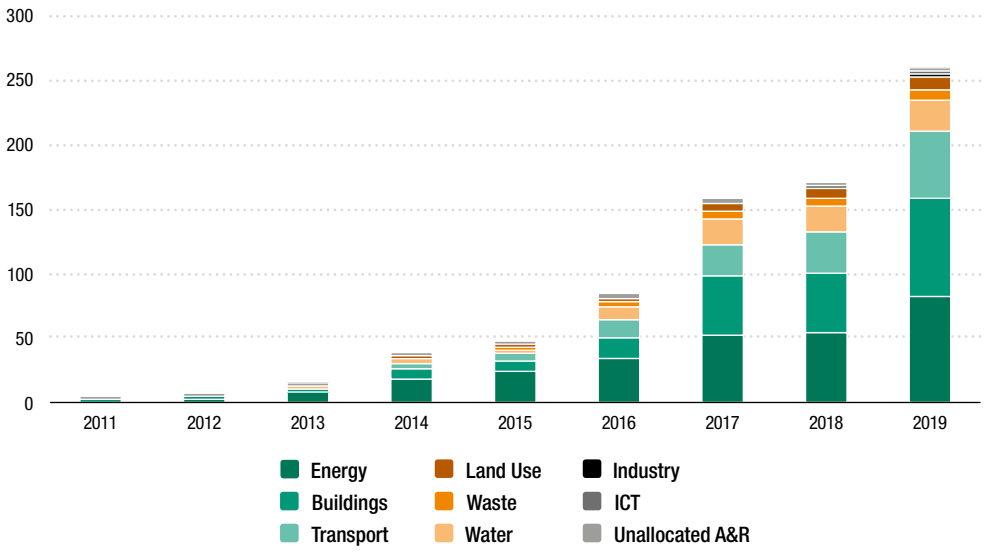
	Sustainability-dedicated investment		Responsible investment			
	Impact investing	**Sustainability themed**	**Positive or best-in-class screening**	**Norms-based screening**	**ESG integration & engagement**	**Negative screening**
Key features	Investment with an intention to generate positive, measuarable social and environmental impact alongside a financial return	Investment in themes or assets constructed around the SDGs (e.g. green bonds, sustainability-themed funds)	Selecting best performing companies across industries in terms of sustainability performance	Screening against minimum standards of business practice based on international norms (e.g. UN, ILO)	Integrating ESG factors in investment decisions to better manage risk and enhance financial returns	Excluding activities or industries with clearly defined negative impacts from an investment portfolio
Return expectations	Social return & submarket/market financial return	Financial market rate & social, environmental impact	Financial market rate focused			
Market size	**$1.2 - $1.3 trillion**		**$29 trillion**			

Source: UNCTAD, adapted from *Financing for Sustainable Development Report 2020.*
Note: Market size data are UNCTAD's calculation based on Morningstar, the Climate Bonds Initiative and GSIA.

a. Green bonds

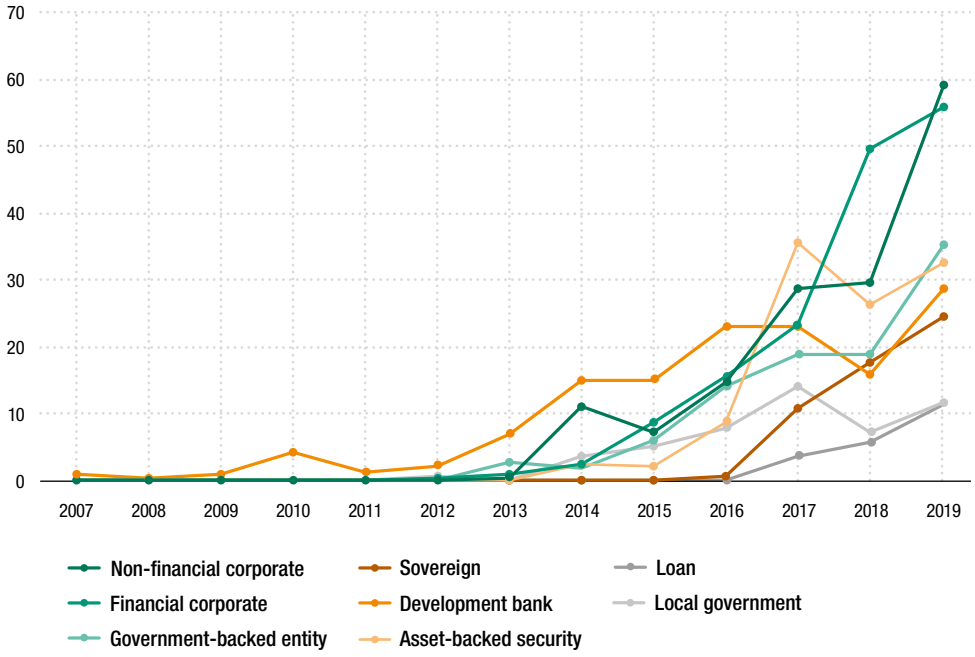
Green bonds are meant to promote investment in climate action (SDG 13), affordable and clean energy (SDG 7), and sustainable cities and communities (SDG 11). The global green bond market saw rapid growth in 2019, to nearly $260 billion, a 51 per cent year-on-year increase. The proceeds of green bonds are primarily used in three sectors (energy, buildings and transport), all of them also seeing significant year-on-year growth (figure V.3).

Figure V.3. Green bond market size and industries financed, 2014–2018
(Billions of dollars)



Source: Climate Bonds Initiative.

Figure V.4. Green bond market by type of issuer (Billions of dollars)



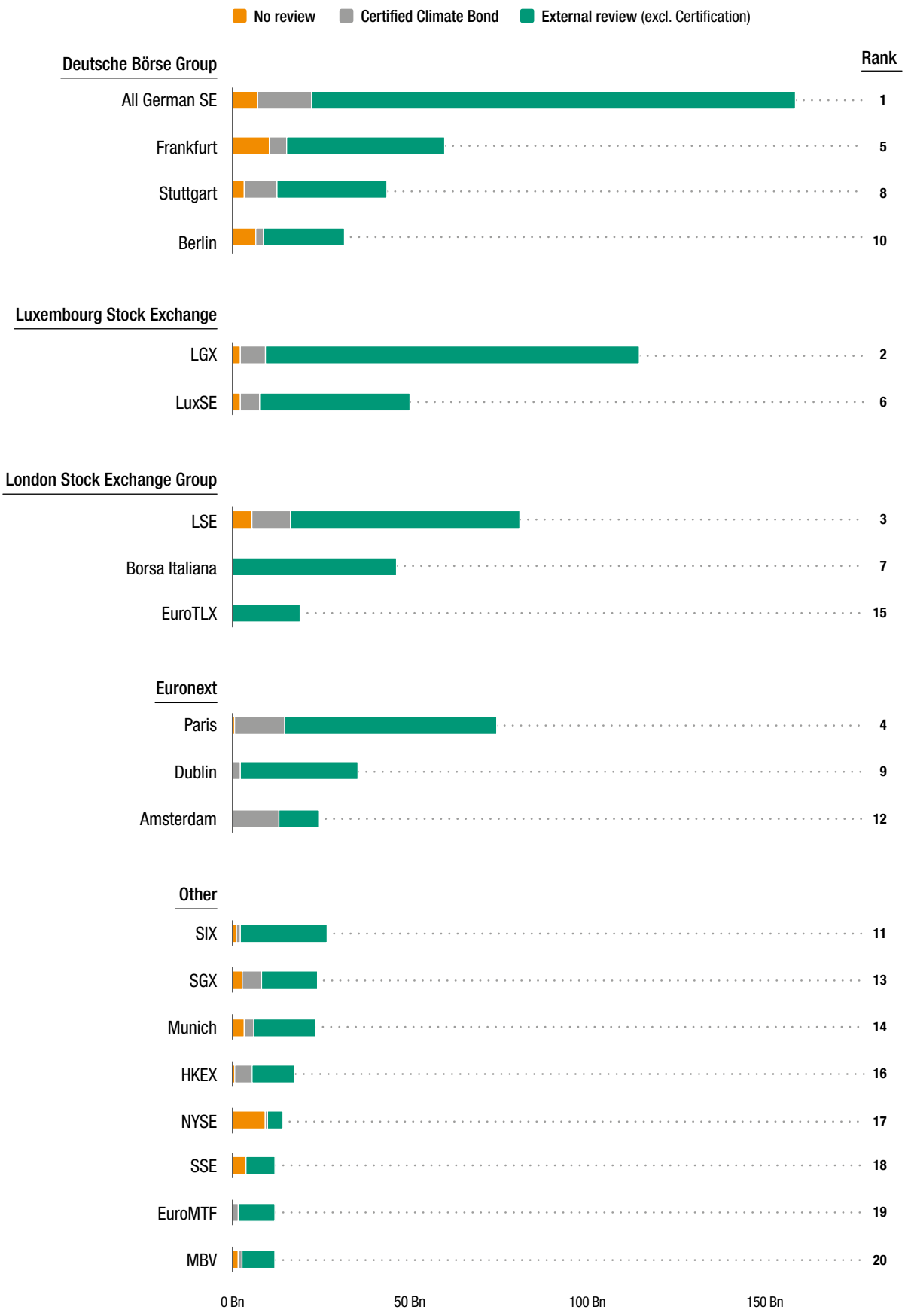
Source: Climate Bonds Initiative.

Financial and non-financial corporates are the dominant issuers of green bonds, with particularly rapid growth in the value of green bonds issued by non-financial corporates in the last year (figure V.4). Together they issued nearly $115 billion in green bonds in 2019, compared with the total of $100 billion issued by public sector entities. Development banks were early adopters of green bonds, issuing nearly $29 billion of them in 2019, although government-backed entities were the largest single type of public sector issuer in 2019, with $35 billion in green bonds.

Stock exchanges continue to be active in facilitating and promoting trade in green bonds (figure V.5). European exchanges have taken the lead in this area, with the All German Exchange being the largest platform for trading green bonds in 2019. It was followed by the Luxembourg Green Exchange and exchanges in France and the United Kingdom; exchanges in China and Singapore also feature in the top 20 largest exchanges for green bonds. An important way for stock exchanges to support green bond markets is through dedicated green bond segments, which increase product visibility for investors.

Dedicated green bond segments first appeared in 2015, with the stock exchanges of London, Luxembourg, Oslo and Stockholm being early adopters. These green bond segments have proven popular: the number of exchanges offering specific green bond segments has more than doubled over the last two years.[2] Although not all exchanges that list green bonds have specific segments, research from the Climate Bonds Initiative (2020) suggests that green bond segments help support the visibility, integrity and perception of green bonds, and facilitate investor access to credible green bonds. Exchanges in every region now offer green bond segments; however, they are particularly prevalent in Europe and in Central and South America. Recent growth has concentrated outside of these regions, with the Shenzhen, Bombay and Indonesia stock exchanges all launching green bond segments in the last two years.

Figure V.5. Green Bond Trading Venue League Table, 2015–2019 (Top 20 stock exchanges and platforms)

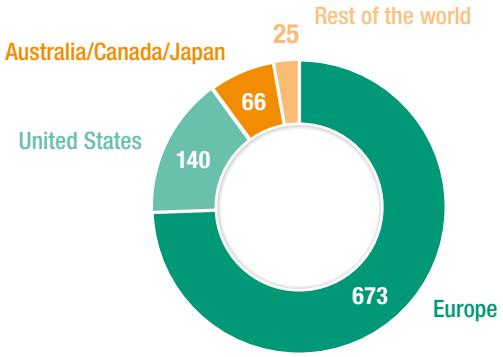


Source: Climate Bonds Initiative.

b. Sustainable funds

A notable development of responsible investing is the rapid expansion of sustainable funds – mutual funds and exchange-traded funds (ETFs) that use ESG criteria as a key part of their security selection and portfolio construction process and/or indicate that they pursue a sustainability-related theme or seek a measurable positive impact alongside financial returns. A large part of sustainable funds can be categorized as sustainability-dedicated investments (including impact investment). Such funds offer institutional and retail investors an important mass market vehicle for investing in sustainability, driving responsible business behaviour. Meanwhile, they tend to offer market-level, if not better, returns and demonstrate lower downside risks (Morgan Stanley, 2019), which explains the rapid rise of sustainable funds in recent years.

Figure V.6. Regional distribution of sustainable funds by assets under management
(Billions of dollars)



Source: UNCTAD, based on Morningstar and national responsible investment associations.

According to UNCTAD's estimates, there are close to 3,100 sustainable funds worldwide, with assets under management amounting to about $900 billion at the end of 2019 (figure V.6). As developed countries represent a larger investor base, it is not surprising that more than 90 per cent of such funds are established there.

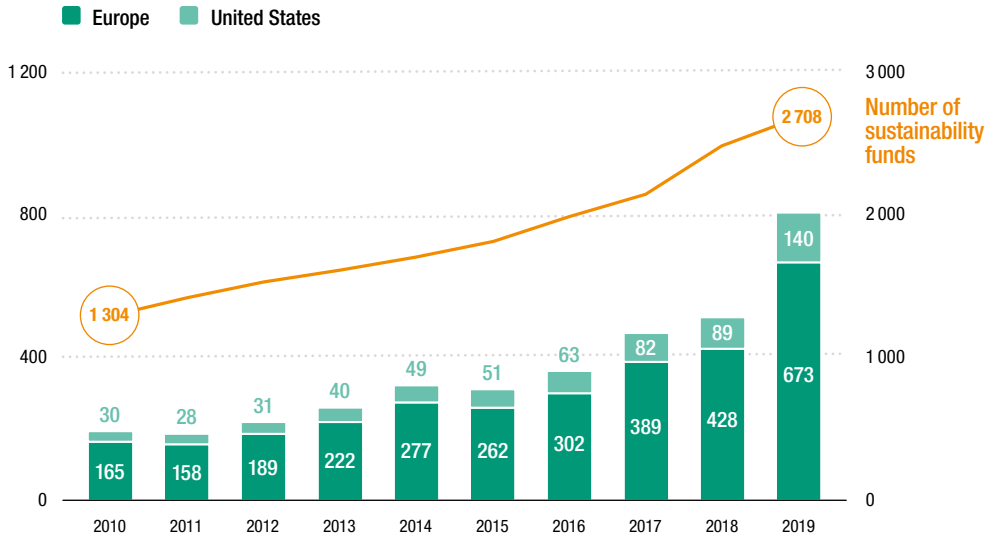
From 2010 to 2019, the number of sustainable funds in Europe and the United States, the two largest markets for sustainable investment, rose from 1,304 to 2,708, with assets under management growing from $195 billion to $813 billion (figure V.7). Net flows to sustainable funds in the two markets surged from $8 billion in 2010 to $141 billion in 2019.[3] A similar trend can be observed in Australia, Canada and Japan, but their market size remains relatively small, with 189 ESG funds altogether as of 2019.

Europe is the largest market for sustainable funds, in terms of both number and assets under management, reflecting the growing number of investors who prioritize sustainability themes in their investment strategies (Invesco, 2019). European institutional investors, particularly public pension funds, sovereign wealth funds and insurance funds, increasingly pursue an investment strategy that is in line with their sustainability mandates (Morningstar, 2018). Meanwhile, several European countries, such as France and the Netherlands, have tightened their financial regulations following the introduction of the European Union's (EU's) Markets in Financial Instruments Directive II in January 2018 and other new EU-wide initiatives and policy measures. These rules impose greater disclosure requirements related to sustainable investments and sustainability risks, as well as mandatory climate-related reporting that has promoted greater transparency and forced many investors to pay closer attention to sustainability topics in their investment decisions.

Sustainable funds in developing economies remain a relatively new phenomenon. In China, the largest developing-economy host, there are 95 sustainable funds, with assets under management of nearly $7 billion as of 2019. Most of them were created in the last five years.[4] ESG funds also have become more attractive in developing markets such as Brazil, Singapore and South Africa in recent years, albeit from a relatively low level.

The surge of sustainable funds reflects the accelerated adoption of sustainability by the investment community. Many investors increasingly view the adherence of investment vehicles to sustainability criteria as a must-have rather than a nice-to-have (BNP Paribas,

Figure V.7. **Sustainable funds: number and assets under management, Europe and the United States** (Number of funds and billions of dollars)



Source: UNCTAD based on Morningstar.

2019). A broader investor base has started focusing on a wider range of long-term risks, giving rise to increased awareness about sustainable investing (Morningstar, 2018). These trends have been supported by index and fund providers responding to the rising level of demand for sustainable investing. The proliferation of these indices prompted the development of ESG mutual funds and ETFs by providing indispensable benchmarks or references.

In addition to having a responsible investment dimension, sustainable funds can also be adapted for SDG-oriented investment, with some funds specifically dedicated to the SDGs. For example, all the ESG ETFs (see box V.1) with a thematic strategy in 2019 (54 in total, about 20 per cent of all ESG ETFs) target a specific SDG, with the majority focusing on climate action (SDG 13), gender equality (SDG 5), and affordable and clean energy (SDG 7).[5] These funds have channelled much-needed investment into a wide range of sectors that are critical for the achievement of the SDGs.

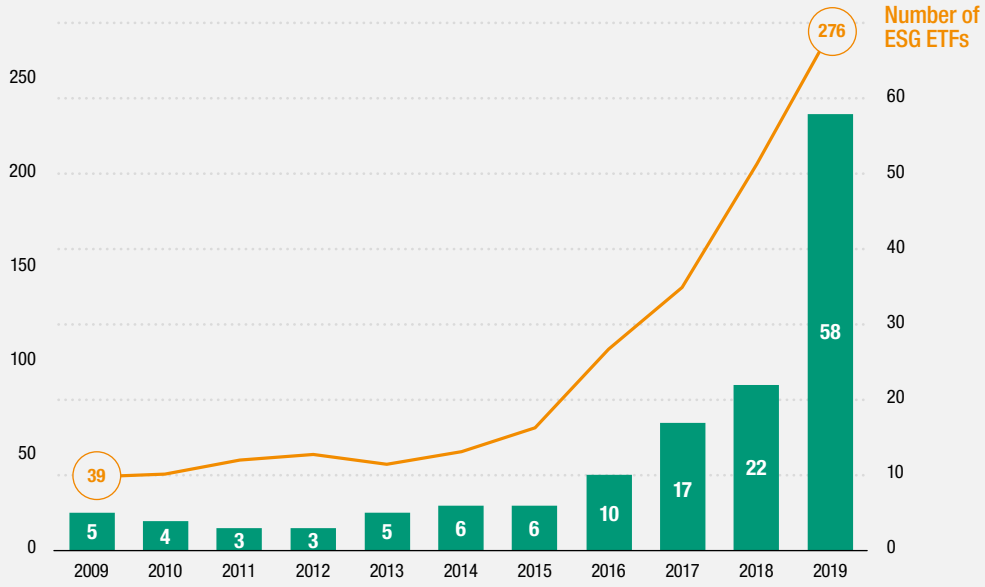
Despite their growth in recent years, the share of ESG funds in the public fund market remains small, at less than 2 per cent in terms of assets under management.[6] Both supply and demand need to rise in order for sustainable funds to achieve their full potential as a tool for sustainable investing. In this aspect, institutional investors such as pension funds and sovereign wealth funds, that by nature are long-term investors (with long-term liabilities), can play a leading role.

Box V.1 ESG ETFs: a potential tool to finance sustainable development

An important development in sustainable funds in recent years is the rapid rise of exchange-traded funds (ETFs) based on ESG criteria, reflecting the accelerating move from active to passive investment strategies. The number of ESG ETFs has increased from 39 in 2009 to 276 at the end of 2019 (box figure V.1.1). Their growth has accelerated since 2015, with a net increase of 211 ESG ETFs in four years (corresponding to 76 per cent of all ESG ETFs).

Similarly, the assets under management of ESG ETFs have grown significantly. From 2015 to 2019, they increased by nearly 10-fold, from $6 billion to $58 billion. This can be mainly explained by large positive net inflows during those years – a trend that has held since 2014 and is especially dominant in Europe. Net inflows reached a record high of $22 billion in 2019. Europe and the United States accounted for 56 per cent and 41 per cent of total assets under management of ESG ETFs respectively; such funds are largely absent in developing economies. Despite the impressive growth in recent years, ESG ETFs account for only 5 per cent of the ETF universe in number and 1.2 per cent in assets under management.[a]

Box figure V.1.1. ESG ETFs: number and assets under management, 2009-2019 (Number of funds and billions of dollars)



Source: UNCTAD, based on ETFGI.

In terms of the mechanism by which their underlying assets are chosen, the ESG integration strategies of ESG ETFs have moved from simple exclusionary approaches in the early years to more sophisticated ones. These include general integration of ESG criteria, as well as best-in-class (often characterized by positive screening of assets) and thematic investments. Their sustainability also tends to improve along with increased sophistication, from exclusion to thematic investment (UNCTAD, 2020f). ESG ETFs with a thematic strategy are usually dedicated to specific SDGs such as climate change, gender equality and clean energy.

Source: UNCTAD.

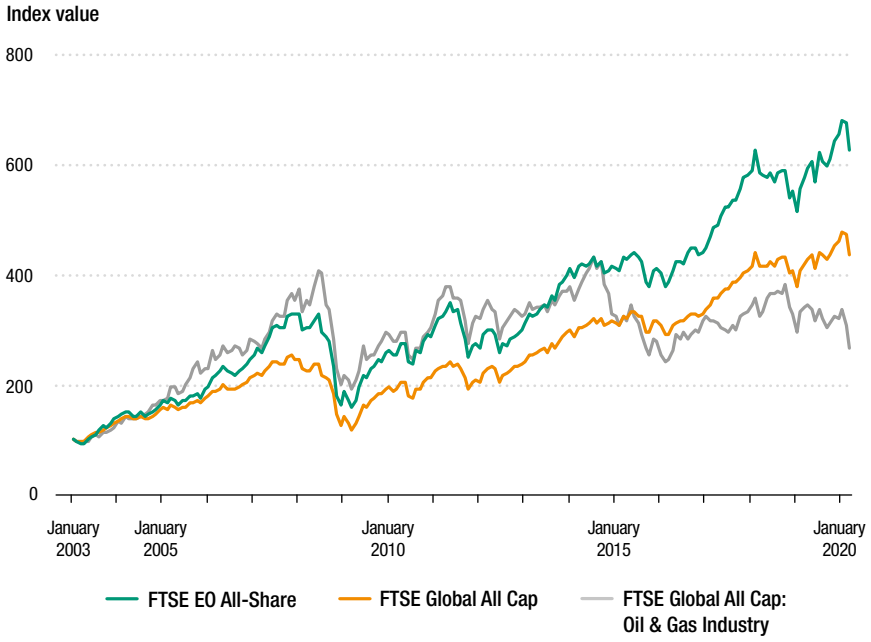
[a] UNCTAD's calculation, based on TrackInsight data.

c. Sustainability equity indices

ESG-themed equity indices are another tool for promoting investment in the SDGs. Investment services firms such as Dow Jones, FTSE Russell, MSCI, Standard & Poor's, Stoxx and Thomson Reuters have created indices to facilitate investment in companies that demonstrate good ESG practices that contribute to the achievement of the SDGs. Sustainability equity index data are also reinforcing the view of many investors that sustainability issues are material to the performance of industries in the long run.

An example is FTSE Russell's Environmental Opportunities index, which measures the performance of global companies that have significant involvement (at least 20 per cent of their business) in environmental business activities, including renewable and alternative energy, energy efficiency, water technology, and waste and pollution control. Since its inception nearly 20 years ago, the index has consistently outperformed its benchmark global all-companies index (figure V.8). Since the launch of the SDGs in 2015, the environmental opportunities index has significantly outperformed not only its benchmark global all-companies index, but especially the fossil fuels index. The index's consistent outperformance indicates that investors are recognizing the materiality of sustainability in the new policy context established by the SDGs. Investors also appear to be leaning away from oil and gas equities amid fears of stranded assets, as the global policy landscape on climate change demands a reduction in the use of fossil fuels.

Figure V.8. FTSE funds performance: Environmental Opportunities versus others, 2003–2020 (Billions of dollars)



Source: FTSE-Russell.

2. Financial market response to the COVID-19 crisis

The global effort to fight the pandemic is boosting the growth of sustainable finance, particularly in social and sustainability bonds. COVID-19 response bonds have been rapidly deployed to fund crisis relief and recovery; the value of such bonds issued in the first quarter 2020 already exceeds the total value of social and sustainability bonds issued in all of 2019. Stock exchanges are facilitating the fast-growing market in COVID-19 response bonds by waiving listing fees and are assisting listed companies, especially small and medium enterprises (SMEs), by providing fee relief and introducing flexibility in rules.

a. The emergence of COVID-19 response bonds

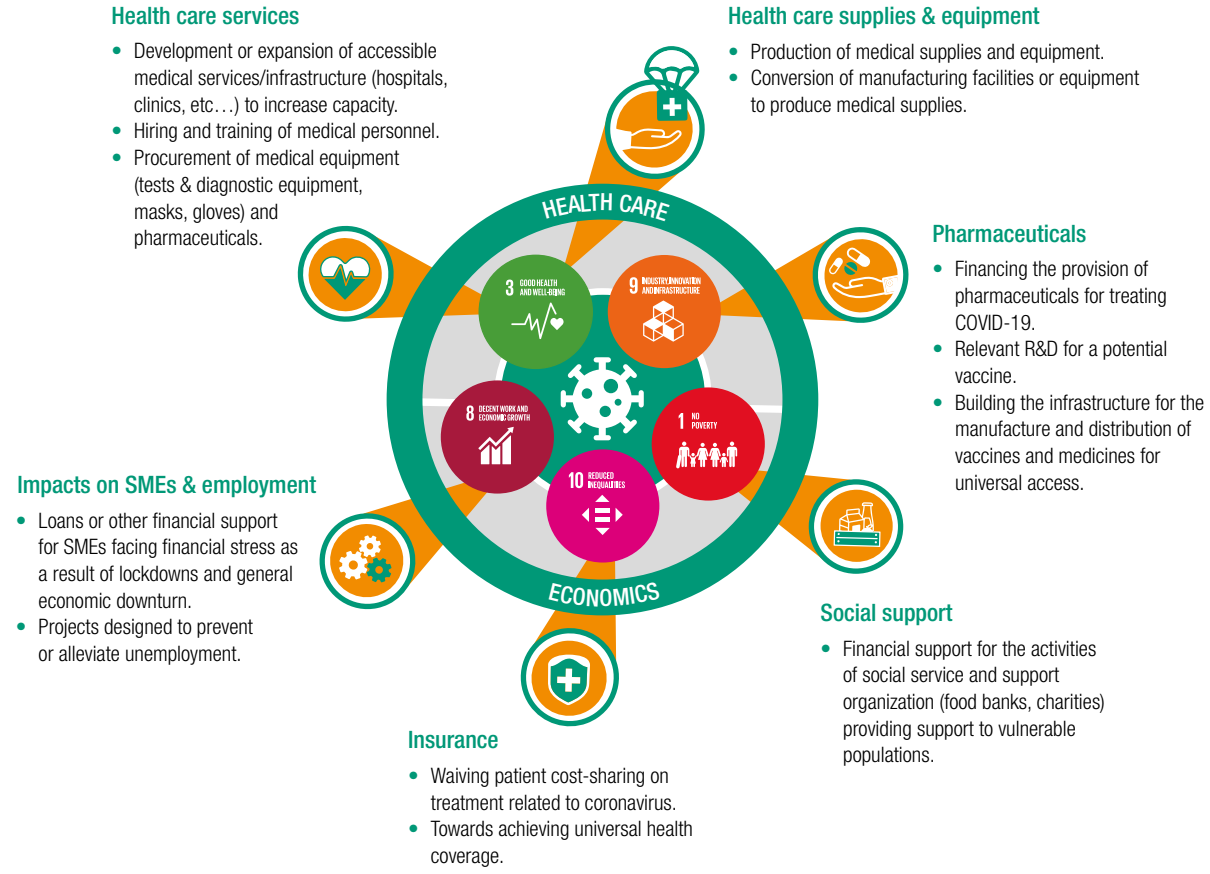
The pandemic has expedited the issuance of bonds focused on relief issues and SDG 3 (Good health and wellbeing) as well as other SDGs (figure V.9), reaching a total value of $55 billion by mid-April 2020 – already surpassing the value of all social bonds issued in 2019. These COVID-19 response bonds fund a range of activities, from supporting the transition of production lines to health care materials, to providing bridging finance for SMEs struggling with the effects of national lockdowns, to raising money for the development and distribution of a COVID-19 vaccine, along the lines of the "vaccine bond" first issued in 2006 by the International Financing Facility for Immunization.

COVID-19 response bonds include two of the largest dollar-denominated social bond transactions in international capital markets to date: the issuances of a $3 billion African Development Bank bond and an $8 billion World Bank bond. The Inter-American Development Bank's sustainable development bond, issued in April 2020 – its largest-ever public bond issuance – aims to raise awareness about SDG 3, with the proceeds being used to tackle the unemployment effects of the pandemic through mechanisms such as SME financing and microfinance.

In Europe, COVID-19 response bonds have been proposed in various formats to help countries keep borrowing costs low during the crisis, including reframing green bonds to ensure the post-pandemic economic reconstruction in Europe supports the carbon neutrality targets of the EU's Green Deal. A number of the supranational banks covering Europe, including the European Investment Bank, Nordic Investment Bank and Council of Europe Development Bank, have issued social or sustainability bonds to contribute specifically to the immediate mitigation of the virus's impacts. National development banks in Europe have also been active; for instance Caffil of France issuing a $1.1 billion bond. It is the first social bond issuance in Europe to dedicate its proceeds exclusively to financing public hospitals. The COVID-19-related bonds are proving popular with investors: the $1.1 billion social inclusion bond sale by the Council of Europe Development Bank in March 2020 was four times oversubscribed, for example.

In Asia, Kookmin Bank issued the first Korean COVID-19 response bond (a $500 million social bond) in April 2020. Companies in China have issued more than $2 billion in virus-control bonds, with a third of the funds going towards mitigating the effects of the pandemic.[7] Chinese regulators have fast-tracked the approval process for these bonds, and the proceeds are generally used to produce and sell items that help combat the virus, such as medical supplies, medicines or disinfectants.

Figure V.9. COVID-19 pandemic response bonds (use of proceeds)



Source: UNCTAD, based on Sustainalytics and IFC.

b. Frameworks underpinning COVID-19 response bonds

The response to the pandemic by the bond market has been remarkably rapid, a feat which can be attributed to the well-established market for sustainable debt. The three major sustainable debt products available are green, social and sustainable bonds (table V.5), each of which is based on a set of principles or guidelines issued by the International Capital Market Association (ICMA).

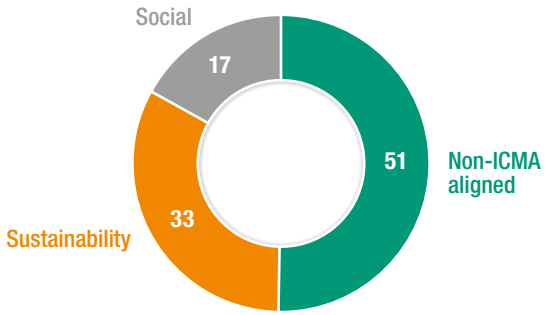
Table V.5. Sustainability bonds by type

Bond type	For investment in	ICMA instruments	2019 market size ($ billions)
Green	Projects with environmental benefits, such as tackling climate change through renewable energy	Green Bond Principles	257
Social	Projects with positive social outcomes such as health, wellbeing and poverty reduction	Social Bond Principles	13
Sustainable	Projects that combine financing for both green and social outcomes	Sustainability Bond Guidelines	40

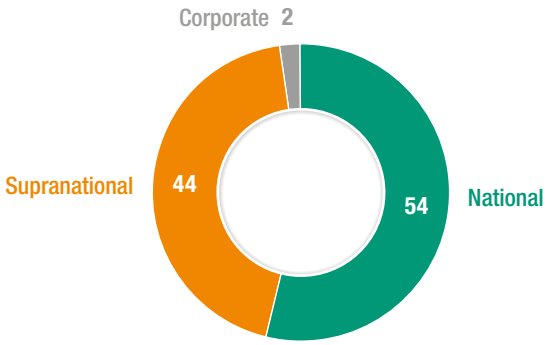
Source: UNCTAD.

Figure V.10. COVID-19 response bonds by ICMA instrument and issuer (Per cent)

a. By ICMA instrument



b. By issuer type



Source: UNCTAD.

As the pandemic unfolded, the ICMA made clear that existing guidance for social and sustainability bonds was immediately applicable to COVID-19 response bonds. The International Finance Corporation[8] and the ICMA[9] have both issued guidelines for appropriate use of proceeds of COVID-19 response bonds, with the ICMA underscoring that bond proceeds should try to target specifically vulnerable groups affected by the pandemic, but can also be aimed at general medical research, investment in medical equipment and schemes to mitigate the growing unemployment that the crisis has triggered.

c. COVID-19 response bonds by type and issuer

By May 2020, national and supranational organizations and corporates had issued 27 COVID-19 response bonds valued at more than $55 billion (figure V.10). About half of the bonds issued to date are aligned with an ICMA instrument (either social or sustainability bonds); given the urgency of raising capital, some issuers did not follow the necessary procedure for the bond to be considered a social or sustainability bond under ICMA rules.

d. Stock exchange responses to the pandemic

• Waiving fees for COVID-19 response bonds

Stock exchanges have supported and encouraged the rapid roll-out of many of the newly issued COVID-19 response bonds by waiving listing fees for these instruments. The London, Luxembourg and Nasdaq Nordic stock exchanges have all waived fees for bonds for which the use of proceeds aligns with mitigating the effects of the pandemic. On the London Stock Exchange, fees are waived for bonds that fund essential services such as health care and sanitation, support employment or are linked with relevant SDGs. The bonds must also meet the eligibility criteria for the sustainable bond segment of the exchange. The Luxembourg Stock Exchange is waiving the listing fees for social and sustainable debt instruments that are identified as COVID-19 response bonds, whereas eligible bonds listed on the Nasdaq Nordic exchanges must explicitly and exclusively finance projects that alleviate the negative economic and health effects of the pandemic.

- **Providing fee relief and rule flexibility for listed companies**

Recognizing the disruption and costs that the pandemic and associated lockdowns have imposed on companies, many stock exchanges have also provided relief and loosened rules for their listed companies. As companies face disrupted supply chains, restricted workforces and other challenges amid the pandemic, stock exchanges have also extended deadlines for normal processes such as submission of annual reports and other documents.

* * *

The incorporation of ESG factors into capital market activities and financial instruments has become a mainstream practice in recent years and is playing an important role in contributing to the achievement of the SDGs. ESG products are expanding in both size and scope. The use of social and sustainability bonds in response to the COVID-19 crisis has increased focus on the potential applications of these financial instruments and has elevated their status and scale closer to that of green bonds. When the pandemic subsides, the remarkable momentum that has built up behind social bonds and the lessons learned regarding their issuance and use of proceeds should be channelled to focus on financing other SDGs.

Meanwhile, the surge in sustainable funds, including mutual funds and ETFs, is making the equity market more aligned with sustainable development. Over the next 10 years, the "decade of delivery" for the SDGs, capital markets can be expected to further develop and strengthen their sustainability-related activities. It would not be surprising if global funds for financing sustainable development doubled their value by 2030. Nevertheless, the challenges for financing sustainable development go well beyond the mobilization of the funds. The key is how to effectively use the funds for SDGs, including channelling the funds to the SDG sectors and generating impact on the ground to alleviate poverty in low-income countries. In this respect, identifying innovative ways and means for the development and promotion of SDG pipeline projects and improving the quality and credibility of sustainability-themed financial products are essential.

The pandemic once again proves that failure to act on sustainability can be costly in every aspect, and the prompt response of the capital markets to the urgent need to fight the pandemic has demonstrated the importance of sustainability financing in addressing global challenges. Therefore, any plan to recover from the pandemic should take sustainability into full account – sustainability is not only the solution, but also offers opportunities for investment and growth. This is true for both governments and the private sector.

C. SUSTAINABLE STOCK EXCHANGES AND ESG INTEGRATION

Progress on investing in the SDGs is not just about mobilizing funds and channelling them to priority sectors in developing countries, especially the LDCs. It is also about integrating good environmental, social and governance (ESG) practices in business operations to ensure positive investment impact. Stock exchanges provide a platform for sustainable finance and guidance for corporate governance. Companies and institutional investors acknowledge the need to align investment and business decisions with positive SDG outcomes. The SDGs are increasingly becoming a focus of investor interest and company reporting for impact, including with respect to gender equality. A key challenge is the quality of disclosure and harmonization of reporting standards.

1. The role of stock exchanges and regulators

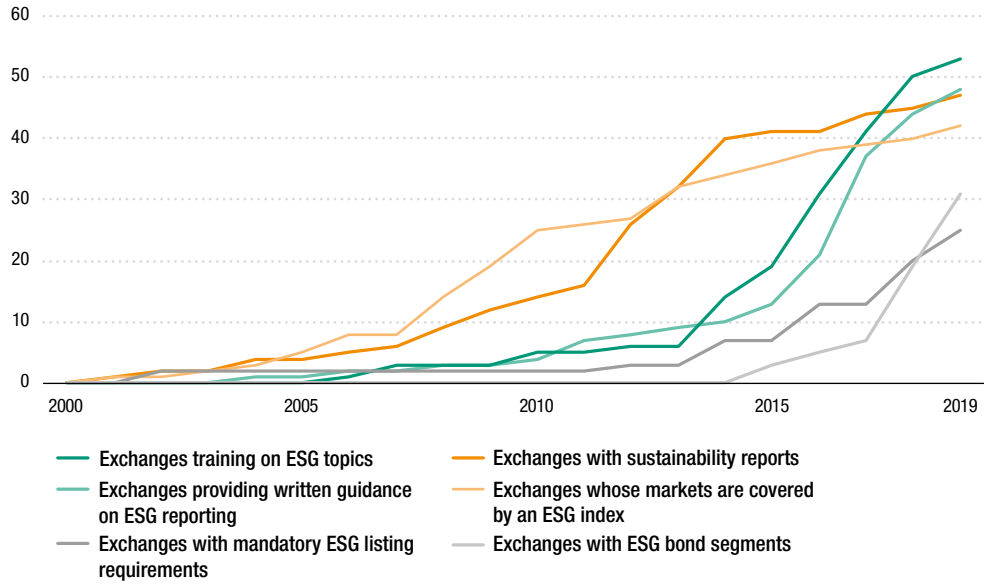
Stock exchanges and securities regulators play an important role shaping the ESG practices of many of the world's largest MNEs and aligning capital markets with sustainable development considerations. For the first time, more than half the world's exchanges (54) now provide guidance to issuers on sustainability reporting, and a third now offer green bond trading segments, up by 12 from last year. The International Organization of Securities Commissions (IOSCO) has stepped up its efforts to lead the global endeavour to address issues of sustainable finance.

a. Sustainable stock exchanges

Stock exchanges have an important role to play in promoting sustainability in the capital market. According to the United Nations Sustainable Stock Exchanges (SSE) initiative, which maintains a database of the sustainability activities and mechanisms of 102 stock exchanges around the world, the last decade has witnessed a sharp increase across a range of sustainability mechanisms undertaken by exchanges, covering sustainability reporting, training and regulations as well as the development of relevant tools and platforms for the development and transaction of sustainability-themed financial products (figure V.11).

Training on ESG remains the most popular activity, with over half of the stock exchanges offering at least one training course or workshop. Exchanges also promote ESG disclosure (SDG 12.6); half of the SSE's member exchanges (48) had published guidance on disclosing ESG information as of the end of 2019. The most dramatic increase is in the number of stock exchanges that have dedicated sustainability bond segments, primarily green bond segments (SDG 13); 12 exchanges opened such segments in 2019, taking the total to 31. The number of exchanges covered by mandatory rules on ESG disclosure (SDG 12.6), currently 24, has more than doubled in the past five years.

Figure V.11. Stock exchange trends (Number of exchanges)



Source: UNCTAD, SSE database.

Stock exchanges are increasingly realizing that promoting investment in the SDGs within their markets requires integrating ESG factors into their own operations (box V.2). More and more exchanges are leading by example on SDG 12.6 by publishing annual sustainability reports: 47 stock exchanges produced a report in 2019, more than triple the number that did so in 2010.

In an effort to contribute to the mainstream adoption of sustainability reporting (SDG 12.6) and in line with increasing demand from investors and securities regulators, stock exchanges also provide capacity-building on sustainability reporting issues. The SSE has supported exchanges in developing ESG disclosure guidance since 2015, when only 13 exchanges provided any form of ESG guidance. This number had quadrupled to 54 in early 2020, with 82 per cent of the newly published guidance referencing the SSE and half explicitly mentioning the SSE Model Guidance as a template.

b. Securities regulators

Securities regulators and their associations are also gearing up regulations and guidance on ESG integration. The work is critical in contributing to SDG 12.6, which calls for all large companies to report on sustainability issues. In early 2020, the International Organization of Securities Commissions established the Board-level Task Force on Sustainable Finance to issue official recommendations on sustainability-related disclosures by issuers, asset managers and rating agencies, and to tackle the lack of consistency and comparability on this topic between securities markets.

Comparability and transparency are also promoted by the recently launched SSE interactive Securities Regulators Database, which provides examples of how securities regulators are already contributing to the SDGs. These examples can be filtered by the 10 action areas found in the SSE's Action Plan for securities regulators which is the central guidance of the SSE publication, *How securities regulators can support the Sustainable Development Goals*.

Box V.2 SSE-WFE guidance on embedding sustainability

In response to a demand from exchanges for additional guidance on embedding sustainability, the SSE partnered with the World Federation of Exchanges (WFE) to help exchanges manage the inward-facing aspects of sustainability. The resulting guidance aims to help exchanges support their outward-facing efforts while also building resilience in the context of their business operations. The guidance, *How exchanges can embed sustainability into their business operations*, was launched in September 2019 at the SSE 10-year anniversary event. It provides stock exchange leaders with a blueprint for action, including four focus action areas and four fundamental considerations. Its creation benefitted from the inputs of an advisory group of more than 50 experts, including representatives from stock exchanges, investors, standards setters and technical experts.

The four focus actions areas:

- *ESG impact:* Manage the impacts of exchange operations by setting priorities, developing management systems and monitoring progress.
- *Business strategy:* Integrate sustainability into an exchange's core strategic planning by identifying relevant sustainability trends and evaluating their impacts.
- *Dedicated resources:* Dedicate resources or a team to manage the exchange's sustainability work through integrating sustainability across exchange functions and building a culture of sustainability awareness.
- *Governance and risk management:* Reflect sustainability in governance and risk management with demonstrated commitment from the top and structures and practices enabling the integration of sustainability.

They are supported by the four fundamental considerations: *materiality, stakeholder engagement, capacity-building and reporting.*

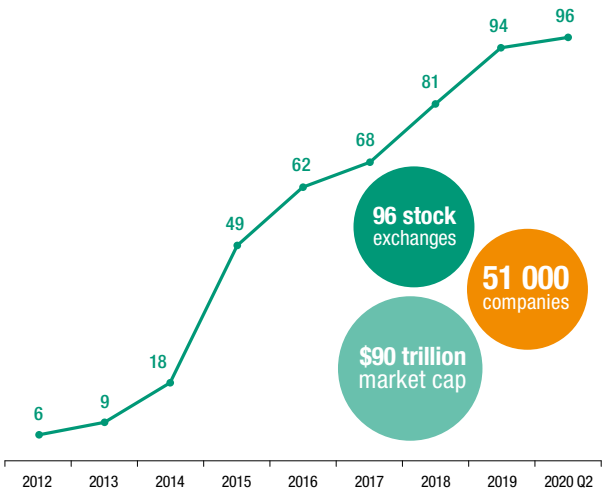
Source: UNCTAD.

c. Sustainable Stock Exchanges initiative

The United Nations SSE is a UN Partnership Programme that works with stock exchanges around the world to promote the SDGs. In particular the SSE focuses its activities on gender equality (SDG 5.5), SME financing (SDG 8.3), security market regulation (SDG 10.5), sustainability reporting (SDG 12.6), green finance (SDG 13.3) and partnerships for sustainable capital markets (SDG 17). The SSE counts 96 stock exchanges as members as of Q1 2020. The membership is diverse, including all of the world's major exchanges and many smaller exchanges from developing countries. Together these exchanges list more than 51,500 companies, representing a combined market capitalization of nearly $90 trillion (figure V.12).

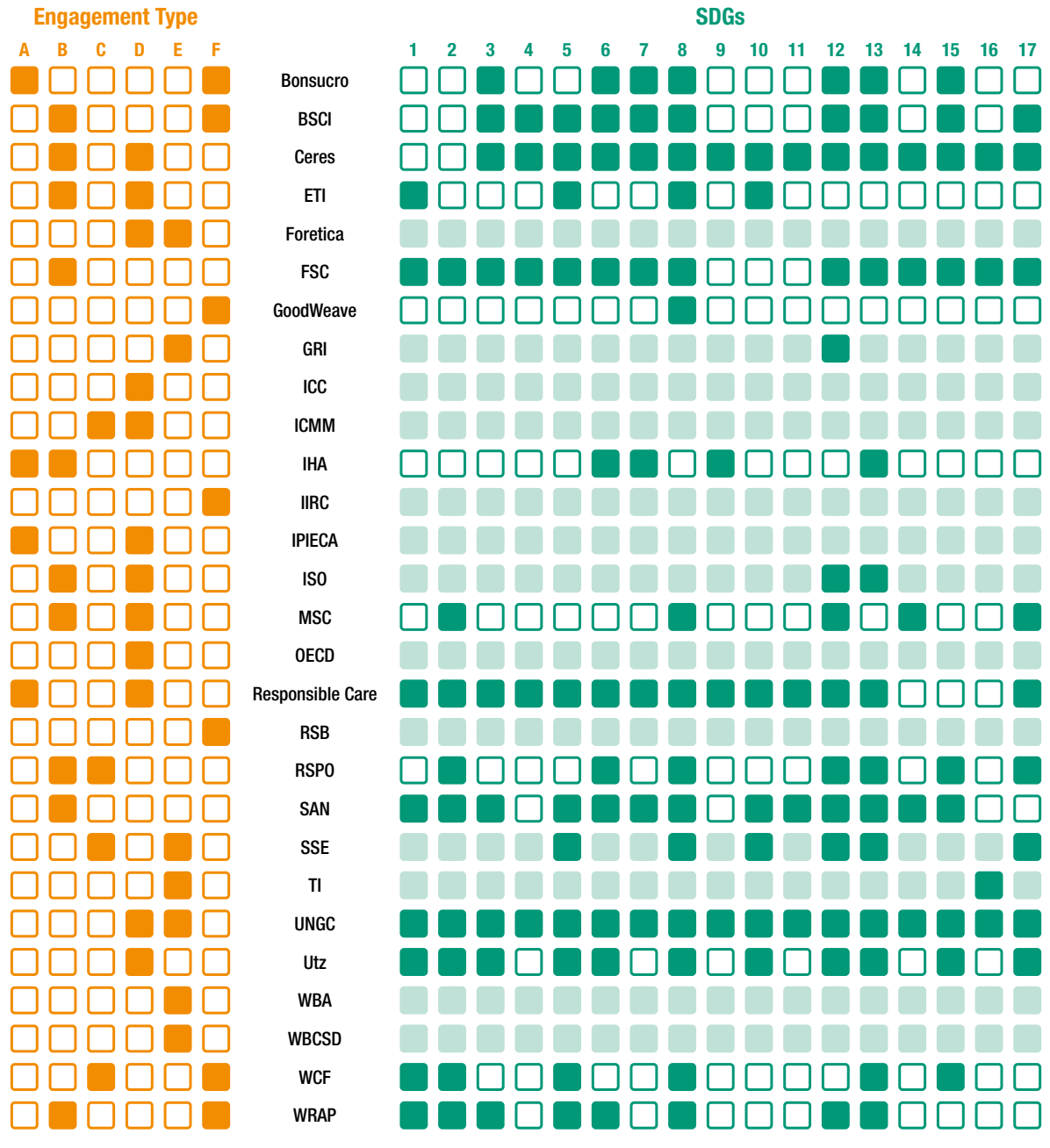
In 2019 the SSE celebrated its tenth anniversary, as part of which it released an impact report looking at the progress made over the past decade. The result of this work is the transformation of sustainable finance in capital markets from niche to mainstream, with practices such as sustainability reporting and training on ESG now considered the norm. The past decade has seen sustainable finance incorporated by two of the most important international organizations for stock exchanges and securities regulators: the WFE (which set up its Sustainability Working Group in 2014) and IOSCO (which set up its Sustainable Finance Network in 2019). During this time, stock exchanges have made significant advances in several areas relating to the promotion of investment in the SDGs.

Figure V.12. SSE initiative members, 2012-2020 Q2 (Number of stock exchanges)



Source: UNCTAD, SSE database.

Figure V.13. Types of engagement with SDGs by CSR initiatives and SDGs prioritized



Source: UNCTAD.

Key

- A Mapping to industry
- B Mapping to road map/pathway
- C SDGs framing vision and/or impacts
- D Report/study on SDGs
- E Specialized tools or services
- F Referenced on website

Acronyms

BSCI	Business and Social Compliance Initiative
ETI	Ethical Trading Initiative
FSC	Forest Stewardship Council
GRI	Global Reporting Initiative
ICC	International Chamber of Commerce
ICMM	International Council of Metals and Mining
IHA	International Hydropower Association
IIRC	International Integrated Reporting Council
IPIECA	International Petroleum Industry Environmental Conservation Association
ISO	International Organisation for Standardization
MSC	Marine Stewardship Council
OECD	Organisation for Economic Co-operation and Development
RSB	Roundtable on Sustainable Biomaterials
RSPO	Roundtable on Sustainable Palm Oil
SAN	Sustainable Agriculture Network
SSE	UN Sustainable Stock Exchanges initiative
TI	Transparency International
UNGC	United Nations Global Compact
WBA	World Benchmarking Alliance
WBCSD	World Business Council for Sustainable Development
WCF	World Cocoa Foundation
WRAP	Worldwide Responsible Accredited Production

2. SDG integration in CSR initiatives

The SDGs have become the universally accepted benchmark for sustainability impact and are increasingly integrated into corporate sustainability policies and reporting.

Corporate social responsibility (CSR) initiatives in the private and public sector have overwhelmingly aligned with the SDGs as the universally accepted vision for sustainable development by mapping and integrating them. This is a testament to the strength of the SDGs to shape the global discourse on corporate sustainability, but as the world enters the decade of delivery these initiatives are at a critical inflection point for action. They must now ramp up the implementation and measurement of contributions to the SDGs, which must be supported by comprehensive reporting (figure V.13).

• Mapping the SDGs

Mapping of the SDGs to the work of an organization is one of the most popular ways in which the SDGs have been integrated into CSR initiatives and shows how effective they have been at aligning CSR initiatives in a common vision. The SDGs have been mapped across industry value chains by organizations such as Bonsucro, an international not-for-profit, multi-stakeholder governance group established in 2008, and the International Petroleum Industry Environmental Conservation Association, an association of the oil and gas industry. They have also been mapped onto initiatives' road maps, pathways and codes of conduct, such as the Ethical Trading Initiative's base code.[10] Initiatives such as Transparency International have identified one SDG or target that specifically pertains to their work. Others, such as the World Cocoa Foundation, have used all or selected SDGs to frame their visions and missions.[11]

• Core offerings

Another approach for CSR initiatives has been to adapt or reframe their core offerings around the SDGs. The World Business Council for Sustainable Development and the Organization for Economic Cooperation and Development MNE Guidelines both created programme areas focused on the SDGs, and the World Benchmarking Alliance created SDG benchmarks to encourage a race to the top in sustainable corporate behaviour.[12] Initiatives such as the Forest and Marine Stewardship Councils position the certifications they provide as a key tool to achieve the SDGs.[13] The International Organisation for Standardisation (ISO) has integrated the SDGs by assessing how the ISO 26000 standard (social responsibility) contributes to the goals.[14] The UN Global Compact (UNGC) is supporting the SDGs with a portfolio of Action Platforms, built on the 10 Principles of the UNGC, to help companies navigate the various ways they can contribute to the SDGs.

• Corporate sustainability reporting standards

To take private sector contribution to the SDGs to the next level of implementation and delivery will require enhanced measurement and reporting by MNEs. The Global Reporting Initiative, producer of the world's most widely adopted sustainability reporting standard, mapped the SDGs to its reporting standard in the SDG Compass, as well as providing an inventory that maps business indicators to SDG targets.[15] It has also published three SDG reporting tools to help companies incorporate SDG reporting into their practices, as well as recommendations for national policymakers on using corporate reporting to strengthen the SDGs.[16] In 2019, UNCTAD published the Guidance on Core Indicators (box V.3) as a framework for corporate reporting on their contribution towards the attainment of the SDGs.

Box V.3 Guidance on Core Indicators for entity reporting on the contribution towards the attainment of the Sustainable Development Goals

UNCTAD's Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting issued Guidance on Core Indicators (GCI) for entity reporting on the contribution towards the attainment of the SDGs (UNCTAD, 2019b) in June 2019. The objective is to facilitate harmonization of reporting by enterprises on their contributions towards achievement of the SDGs by providing practical information on how the Core Indicators could be measured in a consistent manner and in alignment with countries' needs. The 33 indicators in the GCI cover economic, environmental, social, and institutional aspects of the performance of reporting entities (box figure V.3.1).

Box figure V.3.1. Key areas addressed by the Core Indicators in the Guidance

Economic area

- Revenue
- Value added (gross value added)
- Net value-added (NVA)
- Taxes and other payments to the Government
- Green investment
- Community investment
- Total expenditures on research and development
- Percentage of local procurement

Social area

- Proportion of women in managerial positions
- Average hours of training per year per employee
- Expenditure on employee training per year/ employee
- Employee wages and benefits as a proportion of revenue, with breakdown by employment type and gender
- Expenditure on employee health and safety as a proportion of revenue
- Frequency/incident rates of occupational injuries
- Percentage of employees covered by collective agreements

GCI core indicators

Environmental area

- Water recycling and reuse
- Water use efficiency
- Water stress
- Reduction of waste generation
- Waste reused, remanufactured and recycled
- Hazardous waste
- Greenhouse gas emissions scope 1
- Greenhouse gas emission scope 2
- Renewable energy, etc.

Institutional area

- Number of board meetings and attendance rate
- Number and percentage of female board members
- Board members by agqe range
- Number of meetings of audit committee and attendance rate
- Total compensation per board member
- Amount of fines paid or payable due to settlements
- Average number of hours of training on anti-corruption issues, per year per employee

Source: UNCTAD.

To validate the approach, in 2019, UNCTAD conducted selected case studies on the application of the GCI for companies in multiple countries, representing different regions and industries. The case studies revealed that sustainability and the SDG reporting issues are still a very new area for companies and highlighted a variety of challenges. Many case studies underscored an urgent need for training, including to explain the importance and benefits of the required SDGs disclosures. Particular challenges were mentioned with regard to the data collection process of environmental indicators. To facilitate the GCI implementation, UNCTAD developed a training manual in 2019.

In promoting the quality, comparability and usefulness of SDGs reporting by companies, UNCTAD has continued fostering partnerships with key players in the sustainability reporting area, including the International Integrated Reporting Council, the WBCSD, the Sustainability Accounting Standards Board, the Global Reporting Initiative and other UN entities such as UNDESA, UNEP and the UNGC. Recently, the Family Business Network selected the GCI as a basis for its companies to report on their contribution to the SDGs.

Source: UNCTAD.

3. Reporting on gender by MNEs

Globally, 70 per cent of the world's largest MNEs report on gender equality. More than 80 per cent of these MNEs report having a diversity policy. However, women's representation remains unequal at every level. Although regulation and investor pressure have supported better representation, implementation of gender equality policies remains weak. The analysis also reveals that the largest MNEs still have some way to go to improve reporting on gender, better facilitate the integration of women in the workplace and increase gender equality.

A key objective of integrating ESG considerations in financial markets and products is to influence companies to improve their ESG performance. One important ESG aspect is gender equality, an important SDG goal. Looking at the adoption of good gender practices among firms is an important measure of success and focusing on MNEs has the added benefit of gauging the effect on international investment, as they are the vehicles for FDI.

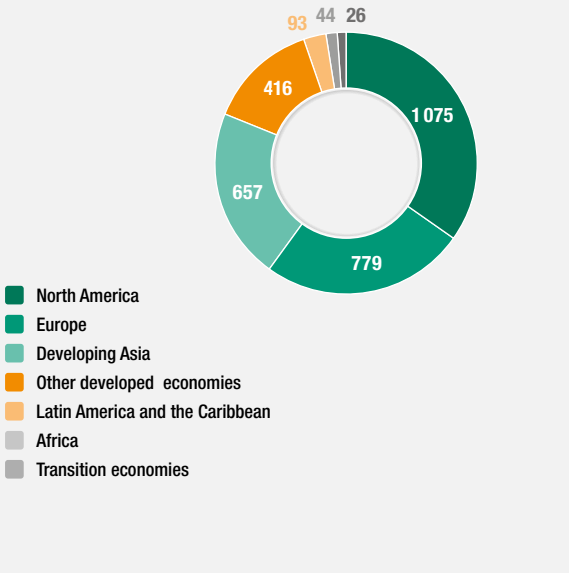
This section looks at how gender issues are integrated and reported by the 5,000 largest companies (box V.4), focusing on two areas. First, diversity: companies' gender equality performance in terms of the share of women employees, women managers, and women on the board. Second, opportunity: what policies are in place to support workers on issues of work-life balance, including flexible working arrangements and childcare services, which are particularly important to ensure equal opportunity in the workplace.

Box V.4 Reporting on gender: data and methodology

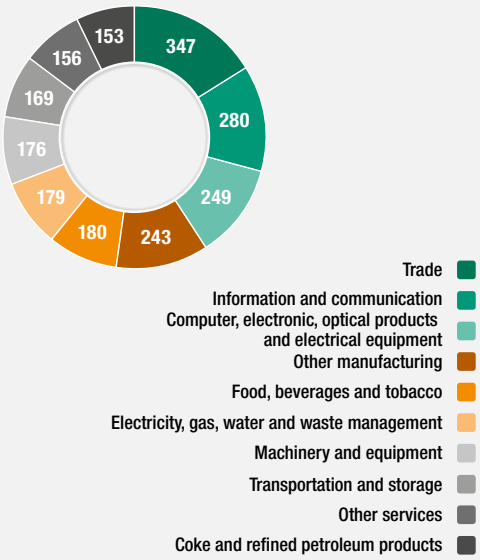
The data set used in this section is a sample of the 5,000 largest global MNEs by revenue in 2018, prepared by UNCTAD and based on data from Refinitiv. To avoid overlaps in reporting and policies, any affiliates of the those MNEs that were also large enough to be included in the sample were removed, leaving a set of 4,439 companies. Of these, 1,336 companies did not report on gender, leaving a final sample of reporting companies of 3,103 MNEs (box figure V.4.1). ESG data refer to MNEs' 2018 CSR data because companies' fiscal year-ends vary across countries, and many companies still take more than 12 months after their fiscal year-end to disclose their sustainability data.

Box figure V.4.1 Composition of the sample (Number of companies)

a. Region

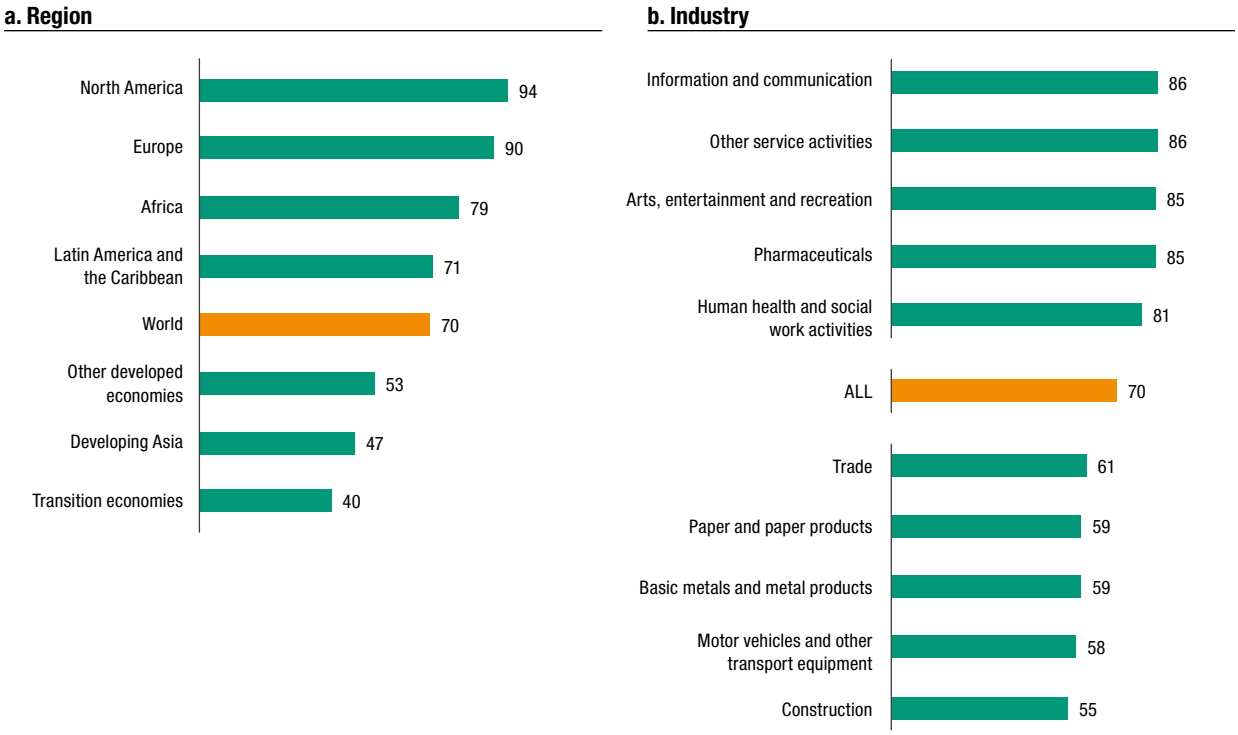


b. Industry



Source: UNCTAD.
Note: The top 10 industries of the total number of reporting companies (n = 3,103) represent 69 per cent of all companies in the sample. Other services activities include Life Sciences, Tools & Services, Commercial Services & Supplies, Marine and Diversified Consumer Services. Other manufacturing includes Building Products, Construction Materials, Containers & Packaging, Household Durables, Household Products, Personal Products, Biotechnology and Industrial Conglomerates.

Figure V.14. Gender reporting rates, by region and top five and bottom five industries, 2018 (Per cent)



Source: UNCTAD.
Note: Share of companies reporting on gender (n = 3,103) out of all companies indata set (n = 4,439).

a. Reporting on gender by the largest MNEs

As of 2018, 70 per cent of the largest global MNEs report on gender, with wide differences by region and industry (figure V.14). Reporting rates are influenced by culture and local attention to gender issues, by the visibility and size of companies, by the importance of gender issues for investors and other stakeholders, and by disclosure requirements imposed by stock markets. Although reporting on gender and other ESG metrics is more advanced in developed economies, Africa stands out in this regard, with almost four out of five firms in the sample reporting on gender.[17] Similarly, among developed countries Japanese firms have until recently been less active in reporting on gender (*WIR18*). The top five industries with the highest rates of reporting on gender include ICT, pharmaceuticals and several services industries. The bottom five industries reflect traditional areas of male-dominated work, such as construction, and certain areas of manufacturing.

b. Representation of women at different levels of MNEs

At the global level, the reported share of women employees in the largest multinational firms is 17 per cent, with 9 per cent at the managerial level, and a larger share (18 per cent) at the board level (table V.6). There are significant differences across regions, reflecting cultural differences and differences in industry weights. Differences between industries typically reflect the nature of their activity, for example, the level of interaction with customers (female voices are preferred for call centres) or historical gender roles (women in care work). Industries with the highest share of women employees tend to reflect this relationship, with services industries and light manufacturing at the top of the list (table V.7). These industries also tend to have larger shares of women managers and women on the board.

At the board level, women's representation is higher in Europe, North America and Africa, all above 20 per cent. This is largely the result of regulations, such as in the EU and South Africa, as well as company policies and investor pressure in those regions. For the top 100 MNEs, earlier UNCTAD research revealed that at the end of 2017 women held an average of 22 per cent of board seats and five of the top 100 corporations had a female CEO. Globally, only 3 to 4 per cent of all CEOs are women. Regulations on the presence of women on company boards explain the lower variance across industries for this last ratio.

At the industry level, women's representation reflects the employment structure of MNEs in those industries: for example, textiles, clothing and leather; human health and social work; and accommodation and food service activities have the highest shares of women employees, together with business activities.

Table V.6. Women's representation at different levels of MNEs, by region, 2018 (Per cent)

Region	Women employees	Women managers	Women on board
World	**17**	**9**	**18**
Europe	28	18	28
North America	10	6	21
Other developed economies	15	8	10
Developing Asia	15	6	9
Latin America and the Caribbean	19	11	7
Africa	28	20	21
Transition economies	32	12	11

Source: UNCTAD.

Table V.7. Women's representation at different levels of MNEs, by top 5/bottom 5 industries, 2018 (Per cent)

Industry	Women employees	Women managers	Women on board
ALL	**17**	**9**	**18**
Top 5			
Textiles, clothing and leather	38	18	24
Business activities	30	15	27
Human health and social work activities	28	16	24
Accommodation and food service activities	28	17	25
Pharmaceuticals, medicinal chemicals and botanical products	27	16	20
Bottom 5			
Paper and paper products	12	8	15
Construction	11	6	16
Motor vehicles and other transport equipment	10	6	16
Basic metals and metal products	10	6	16
Machinery and equipment	8	4	16

Source: UNCTAD.

c. Company policies on diversity and gender

Globally, roughly four out of five reporting companies have published a diversity policy (table V.8). However, the existence of a policy on diversity does not imply that it is implemented effectively, nor that it brings any positive benefit. A possible proxy for the degree of implementation of policies on diversity is the presence of flexible working arrangements and the provision of childcare services, which might positively benefit women, facilitate their integration in the labour market and reduce inequalities. At the global level, the shares of companies reporting policies on flexible work and childcare are far lower than the shares of those with diversity policies, suggesting that implementation of gender equality policies is weak. However, the implementation of policies on flexible work and the provision of childcare are economically costly, which may explain differences across regions. For example, only 5 per cent of companies in the sample from Africa have annual revenues over $10 billion (compared with 26 per cent in Europe), which can explain their lower implementation rate.

Variations in the implementation of flexible working hours across industries reflect the different nature of work, with services companies showing more adaptability to changing schedules (table V.9). In contrast, the offer of childcare services is likely related to the size of the main office/establishment and the number of female employees.

Table V.8. Policies on diversity, flexible work and childcare services, by region, 2018 (Per cent)

Region	Diversity policy	Flexible working	Childcare services
World	**82**	**34**	**22**
Europe	92	47	23
North America	86	22	13
Other developed economies	83	71	44
Developing Asia	63	17	24
Latin America and the Caribbean	73	23	16
Africa	84	16	7
Transition economies	85	12	15

Source: UNCTAD.

Table V.9. Policies on diversity, flexible work and childcare, by industry, 2018 (Per cent)

Industry	Diversity policy	Flexible working	Childcare services
ALL	**82**	**34**	**22**
Top 5			
Financial and insurance activities	100	33	33
Accommodation and food service activities	89	40	21
Human health and social work activities	88	38	31
Business activities	86	45	5
Other service activities	86	24	13
Bottom 5			
Manufacture of chemicals and chemical products	78	25	22
Motor vehicles and other transport equipment	77	33	19
Information and communication	75	22	14
Coke and refined petroleum products	73	30	12
Machinery and equipment	59	24	10

Source: UNCTAD.

* * *

The challenges for sustainability financing go beyond the mobilization of funds. The key is to reorient more funds towards the SDGs. This also requires the integration of good ESG practices in business operations. Although the SDGs have become the universally accepted benchmark for sustainability impact and are now integrated into the world's largest CSR initiatives, more work is required on standards and criteria, including reporting standards, to bring more transparency and coherence to sustainability.

This work includes reporting and benchmarking on gender and diversity more broadly, so that policymakers, investors and other stakeholders can have a more comprehensive picture of company policies and performance on gender equality, and can measure progress towards the achievement of SDG 5. Improved reporting also has an effect on investor decisions, especially institutional investors such as pension funds, which are increasingly taking into consideration ESG performance, including on gender, at every stage of their portfolio and project selection.[18] However, there is still a long way to go to achieve gender equality in the world's largest MNEs and to implement policies that can support this task.

Regulation has been important in driving changes in women's employment and integration in labour markets and MNEs. Even though no legislative requirement is established for the private sector, capital market authorities are increasingly encouraging corporates to implement gender equality policies.[19] Of equal importance has been the influence of companies and their shareholders, who demand change in the governance of MNEs and their employment and gender policies along the entirety of their supply and production chains, as well as by other routes for corporate governance spillovers (box V.5). More efforts will be needed to implement regulations and company policies on gender equality, including flexible work, childcare services and parental leave, as well as in other areas such as equal pay and promotional opportunities. In these ways, MNEs can be drivers of policy change on gender equality (UNCTAD, forthcoming) and lead global efforts to improve women's employment opportunities and representation, supporting the integration of women in the global economy.

Box V.5 The international transmission of gender policies and practices: the role of MNEs

Foreign investment is an important conduit for promoting gender equality in host countries. UNCTAD's forthcoming policy report, *The International Transmission of Gender Policies and Practices: the Role of Multinational Enterprises*, presents policy recommendations backed by micro-evidence on the ability of MNEs to foster the empowerment of women.[a] A well-established literature documents the knowledge and productivity spillovers of FDI. But the report is the first to conceptualize and analyse possible mechanisms for transferring gender practices. The work presents evidence for Brazil, Costa Rica, Bangladesh, Viet Nam and South Africa, throwing light on the role of international production networks in shaping host countries' gender-related norms and values across developing countries.

The report analyses several channels for the transmission of gender policies and practices to host economies, including these:

- *Supply chain relations:* MNEs can impose labour standards on their suppliers, including gender equality goals, that go beyond their own foreign affiliates' gender policies, akin to industrial standards.
- *Staff mobility:* Women workers learn their value while employed at MNEs and then transfer this knowledge, the acquired skills, as well as their wage and professional position as they transition from multinationals to domestic firms.
- *Technology:* Upgrades introduced by MNEs can generate welfare gains in terms of skill upgrading and job opportunities for women. Technology is associated with a shift towards cognitive tasks and away from manual tasks, and this impact is reinforced with increases in foreign investment. Moreover, in technologically advanced areas or industries, an increase in FDI might lead to employment opportunities for women.

However, as in the case of general productivity spillovers, transfers of social and cultural norms do not happen automatically and need to be facilitated by host countries. Policies have a role to play in ensuring that investment can act as a catalyst for women's empowerment through employment and non-discriminatory practices.

Source: UNCTAD.

[a] The report will be launched at the World Investment Forum in Abu Dhabi in December 2020. In parallel, a Special Issue of Transnational Corporations on multinational firms and gender equality will be published in December 2020.

D. GLOBAL INVESTMENT POLICY DEVELOPMENTS RELATED TO THE SDGs

This section is divided into three subsections. The first presents the findings of an analysis of 128 national SDG development strategies, plans and programmes (as presented in countries' Voluntary National Reviews) and the degree to which they contain an investment dimension. The second provides an overview of investment policy instruments at the national and international levels and the degree to which they contain an SDG dimension, including a first-ever global review of close to 180 laws and regulations in UNCTAD's database of national investment laws and regulations. These two data sets represent the "stock" of the regulatory framework for SDG investments. The third subsection reports specifically on investment policy developments since the adoption of the SDGs in 2015, representing the "flow" of new investment policy measures enacted as a result of the ascendency of the SDGs as a political commitment.

1. National strategies for promoting the SDGs

National sustainable development strategies often highlight the need for additional financial resources and a lack of domestic capacity to meet the SDGs. However, concrete action plans for attracting more investment in the SDGs are mostly absent.

Most countries around the globe have adopted new or revised existing national strategies on how to promote and implement the SDGs and on what priorities to set in this process. These strategies often take the form of a national development plan into which the SDGs are integrated.

In voluntary national reviews (box V.6) conducted since 2016 concerning their national road maps towards the SDGs, UN Member States have elaborated on their SDG strategies and – besides presenting past achievements and setting future policy priorities – identified major challenges for achieving the Goals.[20]

Box V.6 Voluntary national reviews and SDG strategies

The 2030 Agenda for Sustainable Development encourages UN Member States to conduct regular and inclusive reviews of progress relating to achieving the SDGs through a mechanism called voluntary national reviews. They facilitate experience sharing; inform on successes, challenges and lessons learned; and report on major national-level actions. During 2016-2019, more than 150 UN Member States have filed voluntary national reviews. UNCTAD has reviewed 128 of them.

For several reasons, the results from the voluntary national reviews need to be interpreted with caution. First, they do not all have the same scope. Whereas some reviews cover all SDGs, others pick up only some of them and remain silent on the rest. Second, the reviews differ substantially in content. Whereas some reviews provide detailed information about individual SDGs, others provide only a short overview about the main issues. Third, differences also exist concerning potential future policy actions. Whereas several reviews describe specific steps for realizing the SDGs, others are limited to some general observations.

Source: UNCTAD, based on UN DESA, Compilation of executive summaries concerning voluntary national reviews 2017-2019.

Although national SDG strategies clearly recognize capital needs, insufficient domestic capacities and missing partnerships as major policy challenges, many remain vague or completely silent on how to promote investment into SDG sectors. To the extent that SDG strategies deal with the issue at all, they tend to refer in relatively general terms to the need to attract more investment, mobilize capital or seek innovative financing (box V.7). A *comprehensive investment action plan* that would cover all aspects of investment promotion for the SDGs, including an assessment of the amount of required capital and an identification of the policy instruments chosen for promoting investment in the SDGs is absent from all the strategies that were examined for this report. An exception is the EU Commission, which has presented a specific investment plan as part of its Green Deal, being discussed in 2020 by EU member States.[21]

Box V.7 Elements of investment promotion plans in national SDG strategies (examples)

Several countries address investment-related policy issues in their national sustainable development strategies and highlight various challenges:

Improving the business climate

- Improve the regulatory and legal framework for FDI.
- Simplify procedures to obtain business licenses and permits

Strengthening domestic resource mobilization

- Improve domestic capacity for collection of tax and other revenues.
- Encourage remittances and contributions of diaspora in providing resources for sustainable development.
- Prepare for a decline in official development assistance due to attainment of middle-income status or expected graduation to middle-income status.

Improving SDG-related financing

- Advance financial market reform. Expand access to finance, including for MSMEs.
- Promote innovative instruments, such as green and social bonds, for financing the SDGs. Enhance the mobilization of resources for "climate-smart" investment.
- Support start-ups and entrepreneurship through business development services and funding, especially for youth.

Promoting partnerships, including PPPs

- Create a conducive environment for partnerships, from the development of legal and institutional instruments to relevant awareness raising and domestic capacity-building activities. Start partnership campaigns, forums and meetings. Strengthen the transparency and efficiency of PPP legal frameworks. Develop guidelines for multi-stakeholder partnerships to implement the SDGs.
- Promote SDG-related partnerships, which pool valuable knowledge, expertise, technology and financial resources from partners. Establish domestic PPP cells to foster partnerships across central and local governments and private participants. Partner with universities and other learning institutions to support the SDGs. Promote partnerships with the UNGC and promote CSR therein.
- Form partnerships in line with national priorities. Encourage PPPs in diverse SDG-related sectors, such as renewable energy, housing, infrastructure, agriculture and technology.
- Ensure that partnerships are efficient and have impact at the community level. Ensure long-term stakeholder commitments, sustained funding, ongoing resourcing and consistency of personnel. Monitor and evaluate the effectiveness of partnerships.

Promoting innovation and technology transfer

- Improve domestic science, technology, engineering and mathematics skills. Promote investment in research and development and create centres (e.g. techno-parks, science parks) for the development of advanced science and technology, cultivating entrepreneurship and increasing employment opportunities.
- Promote transformative technological innovations to further the SDGs. Adapt existing technologies to the national and regional realities.
- Promote concerted actions to accelerate international transfer of technology. Improve knowledge-sharing on mutually agreed terms and the distribution of environmentally friendly technologies. Adhere to the global Technology Facilitation Mechanism to enhance scientific cooperation and reduce the technology gap between developed and developing economies.

Fostering CSR

- Encourage private sector commitments to doing business sustainably and responsibly. Promote sustainability reporting guidelines and frameworks. Establish CEO advisory groups on the SDGs.
- Incite business to take the lead in creating SDG-related initiatives and to take CSR to the next level.
- Certificate good business practices against gender discrimination, safety and health at work, and other concerns.
- Implement the UN Guiding Principles on Business and Human Rights.

Source: UNCTAD, based on voluntary national reviews of UN Member States concerning SDG achievements.

The UN is working towards helping countries to mainstream SDGs in their national development strategies, identify financing needs associated with achieving the SDGs and pinpoint possible sources of finance, through the Integrated National Finance Framework (INFF) process, including by promoting an active participation of the private sector in the implementation of the 2030 Agenda (box V.8).

Box V.8 UN system-wide efforts to promote investments in SDGs

To be better able to support member States in meeting the SDGs, the UN undertook system-wide reforms at the global, regional and national levels to improve its institutional set-up, adopt new tools to mobilize financing for development and promote active participation by the private sector in supporting the 2030 Agenda and financing the SDGs.

Institutionally, at the global level the organization revamped the United Nations Development System to guide strategic, policy-related and operational decision-making in a whole-of-system response. It also created the Inter-Agency Task Force on Financing for Development which regroups over 60 UN entities and international organizations to monitor progress on the Addis Ababa Action Agenda (AAAA)[a] and, coordinated by the Department of Economic and Social Affairs (DESA), advises governments on financing for sustainable development. At the regional level, it is in the process of revamping its regional structures and working mechanisms to tackle multi-country, transboundary, subregional and regional challenges by integrating policy advice, normative support and technical capacity, including from non-resident agencies. At the country level, it created a new generation of UN country teams to coordinate resident and non-resident agencies, and to support the mobilization of strategic finance.

Among the new tools, at the request of member States, the UN supported the adoption of integrated national financing frameworks (INFFs) by countries and the establishment of the Joint Fund for the 2030 Agenda (the Joint SDG Fund). INFFs aim to accelerate and support efforts to mobilize and align financial and non-financial resources with national sustainable development strategies.[b] Their operationalization builds on a needs assessment, design of a financing strategy, establishment of instruments to monitor and evaluate results, and adoption of mechanisms to improve governance and coordination. Several countries have pioneered the implementation of the INFFs (e.g. Cabo Verde, Kyrgyzstan, Sierra Leone and Solomon Islands).

The Joint SDG Fund supports sustainable development activities by promoting a whole-of-government approach and fostering collaboration among all UN agencies and other development partners.[c] The fund integrates economic, social and environment policies and tailors activities to country-specific contexts, with the first set of projects focused on enhancing social protection systems.[d] The new set of projects being prepared by UNCTs since the beginning of 2020 aim at catalyzing strategic investments and at creating the right conditions and capacities to align public and private capital to the SDGs.

Since 2015, the UN has also enhanced its engagement with the private sector. The Global Investors for Sustainable Development Alliance, established with the support of the UN Secretary-General, aims to identity and take forward solutions for scaling long-term private investments in the SDGs. Through the World Investment Forum, UNCTAD provides a biennial global platform for engagement and dialogue, including with the private sector, on emerging and key issues related to investing for sustainable development. Several other initiatives have been taken to ensure that investors, including institutional investors, impact investors and family businesses, have a better understanding of the 2030 Agenda and the potential it represents in terms of investment opportunities.[e] The UN also plays an instrumental role in bringing more coherence, consistency and transparency to CSR, which is required to orient financing towards sustainable development. The initiatives undertaken embrace issues related to principles for responsible investment and for women's empowerment, as well as standards of accounting and reporting.

The first cycle of the implementation and review of the SDGs came to a close in 2019. The voluntary national reviews showed that although governments had prioritized the integration of the SDGs into their national plans and policies, many of them faced significant challenges in doing so and in financing implementation. In his progress report, the UN Secretary-General stressed that the required level of sustainable development financing from the public and private sectors was not yet available.[f]

In order to further enhance the UN's role in supporting and accelerating finance for sustainable development, the Secretary-General of the United Nations released his Strategy for Financing the 2030 Agenda for Sustainable Development in September 2018 (box table V.8.1).[g] In 2019, the Secretary-General proposed a three-year Roadmap for Financing the 2030 Agenda for Sustainable Development, which highlighted the priority action areas and suggested a range of options and initiative to mobilize investment and support for financing the 2030 Agenda.

/…

Box figure V.8.1. Objectives and specific actions of the Secretary-General's Financing Strategy

Objectives

1. Aligning global economic policies and financial systems with the 2030 Agenda
2. Enhancing sustainable financing strategies and investments at regional and country levels
3. Seizing the potential of financial innovations, new technologies and digitalization to provide equitable access to finance

Actions across six areas

	☑ Integrate the SDGs and Paris Agreement into economic and financial policies and practice	☑ Scale up project finance	☑ Highlight the needs of LDCs and SIDS
Advocacy	Advocate with global leaders to embed the principles of the 2030 Agenda in economic and financial policies and regulations. Call on the financial industry to set strategies and targets that progressively align financial portfolios with the SDGs and the Paris Agreement, and to report on progress.	Urge countries to meet the commitment of US $100 billion/year by 2020 from public and private sources, including through the 2019 Climate Action Summit. Call on governments to create an enabling investment environment for green, climate-resilient development. Call on the financial industry to scale up financing for pathways consistent with low-carbon trajectories.	Encourage collaboration between public and private actors to unlock all sources of finance and financial innovation, notably for climate action and resilience. Urge the international development community to develop a package of incentives to further the development progress of graduating LDCs.
	☑ Establish global platforms	☑ Strengthen partnerships with IFIs	☑ Accelerate the work of the UN System
Engagement	CEO Alliance of Global Investors for Sustainable Development to increase long-term private investments in the SDGs. Task Force on Digital Financing of the SDGs to catalyze game-changing action that harnesses the potential and mitigates the risks related to financial technologies and the SDGs.	Joint framework of collaboration with multilateral development banks to strengthen regional and country-level synergies, including specific attention to middle income countries. Strengthen engagement with IFIs to improve debt sustainability in developing countries, notably for investment in disaster risk reduction and resilience.	Leverage the UN development system reform to increase support to countries on strategic financing for the SDGs, including to catalyze new sources of finance and leverage financial technologies. Create a shared understanding of sustainable investing practices, and improve the quality and availability of SDG-related investment data in investment data in developing countries.

[a] The AAAA was the outcome of the 2015 Third International Conference on Financing for Development, held in Addis Ababa, Ethiopia. Adopted by Heads of State and government of 193 United Nations Member States, the agreement is a follow-up action to the 2002 Monterrey Consensus and the 2008 Doha Declaration on Financing for Development.

[b] See https://developmentfinance.un.org/2019-integrated-national-financing-frameworks-sustainable-development.

[c] The Joint SDG Fund was created in 2018 to replace the Sustainable Development Goals Fund, which had been established in 2014. It was inspired by the broader principles of the Millennium Development Goals Achievement Fund. For details, see https://www.jointsdgfund.org/sites/default/files/2019-05/20181127-TORs-JF-for-2030-Agenda.pdf.

[d] Activities were financed for 36 countries. In Madagascar for example, the objective of the joint proposal was to support the Government in strengthening its social protection system and making it more sensitive to the needs of extremely poor households (representing 52 per cent of the population) with a special focus on persons living with disabilities. For additional information, see https://jointsdgfund.org/where-we-work.

[e] Examples include the Climate Finance Leadership Initiative, the Global Compact Principles, the Principles for Responsible Investment, the Principles for Sustainable Insurance, the SSE Initiative and the Istanbul International Centre for Private Sector in Development.

[f] *Progress towards the Sustainable Development Goals*, Report of the Secretary-General, 8 May 2019. United Nations, New York.

[g] See https://www.un.org/sustainabledevelopment/wp-content/uploads/2019/07/EXEC.SUM_SG-Roadmap-Financing-SDGs-July-2019.pdf.

2. Investment policy tools related to the SDGs

UNCTAD's global review of national investment policy regimes shows that investment in SDG sectors benefits from incentive schemes and outward investment though State guarantees and loans. However, these investment promotion instruments are limited and follow a piecemeal approach. Not all SDG sectors benefit equally. Moreover, it is not just promotion and facilitation measures that apply to SDG sectors; the same holds for investment restrictions and regulations.

A variety of investment policy instruments in both host and home economies apply to SDG sectors. These instruments include in particular, investment incentives, investment facilitation and outward investment promotion. Other policy tools regulate or restrict the entry of investment in any sector judged potentially harmful to sustainable development. Entry rules may also limit access for foreign investors to certain SDG sectors or subject them to a national security-related screening mechanism. In addition to policies taken at the national level, there is also a role for international investment agreements (IIAs) (table V.10).

a. Promotion schemes for inward or outward investment in SDG sectors

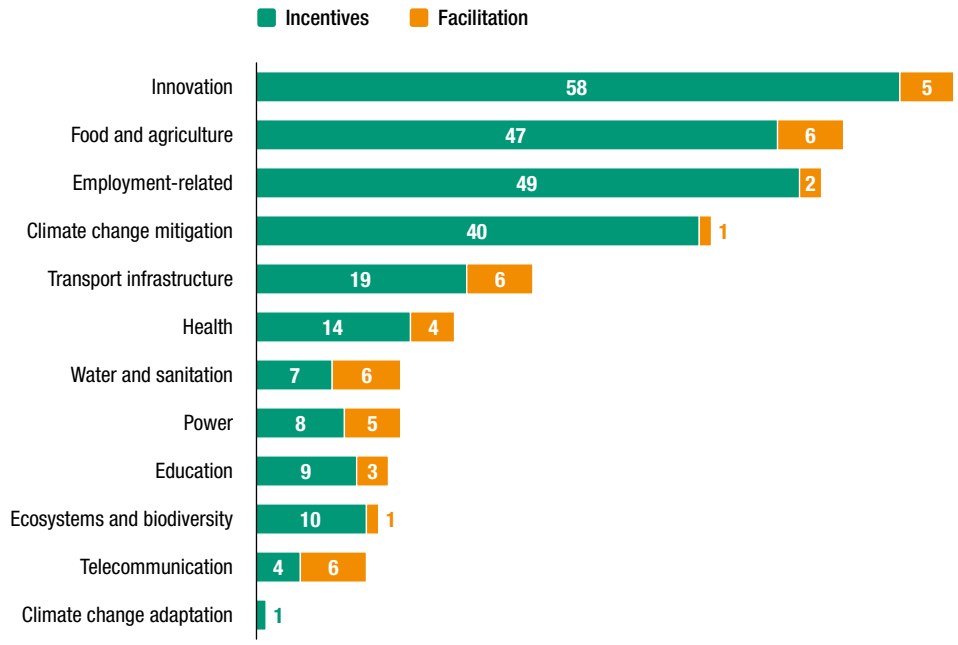
A recent review by UNCTAD of investment laws and policies as well as investment promotion agency (IPA) programmes around the globe shows that 97 economies, constituting less than half of UN Member States, have put in place specific promotion regimes that target investment in areas that are relevant to the SDGs, including SDG sectors – such as infrastructure, water and sanitation, and health – and other objectives that are relevant to specific SDGs, such as innovation (SDG 9) and employment (SDG 8) (figure V.15). In addition, most economies maintain general investment promotion schemes of a broad nature that are not particularly linked to the SDGs. These programmes are not covered in this overview.

Table V.10. Policy instruments concerning investment in the SDGs, selected examples

National policies for promoting investment in SDG sectors	
Investment incentives of host countries	• Incentives to attract SDG-related projects • Conditioning incentives on SDG-related investor performances • SEZs focusing on SDGs
Investment targeting, facilitation and aftercare	• Specific targeting of SDG-related investment • Preparation of SDG project pipelines • Image-building (advertising host economy as an SDG champion) • Priority treatment by local IPAs in the establishment process of SDG investment • Aftercare services after establishment of SDG investors
Investment guarantees and loans for outward investments related to the SDGs	• Conditioning investment guarantees and loans to prior environmental and social impact assessment • Linking guarantees and loans to SDG-related investor performance • Providing guarantees and loans exclusively for investments in SDG sectors
National policies for regulating the entry of investment for SDG purposes or in SDG sectors	
Rules regarding entry and admission of foreign investment	• SDG-related approval requirements for investment • Full or partial entry restrictions in SDG-relevant sectors • National security-related FDI screening mechanism covering SDG-relevant sectors
International investment agreements	
Promotes and protects foreign investment	• Flag SDGs as a core treaty objective • Confirm contracting parties' right to regulate • Prohibit lowering of environmental and social standards as a means for attracting investment

Source: UNCTAD.

Figure V.15. Specific investment promotion programmes relevant to the SDGs (Number)



Source: UNCTAD.

The highest share of investment promotion schemes – more than 20 per cent – is directed towards innovation activities linked to SDG 9 that promotes industrialization, technological upgrading, research and development with industrial diversification.[22] This is followed by programmes in food and agriculture (17 per cent) and employment-related promotion schemes (16 per cent). A significant number of promotion schemes also apply to climate change mitigation projects (13 per cent).

Other sectors that are important from a sustainable development perspective – including health, water and sanitation, education, ecosystems and biodiversity, and climate change adaptation – are covered less well by existing investment promotion schemes, at less than 18 per cent of the total investment promotion regimes in all SDG sectors.

• Incentive schemes for inward investment

Most investment incentives relevant to SDG sectors take the form of fiscal incentives. They are either granted for investments in specific SDG sectors or require certain SDG-related performance in the operation of the investment, independent of the sector (box V.9).

Special economic zones (SEZs) and the incentives offered therein are another means to attract investment relevant to the SDGs. Recent years have witnessed the emergence of so-called eco-industrial parks. Existing SEZs are also becoming more sustainable-development-friendly (box V.10). Nonetheless, most SEZs are not yet promoting sustainability-related business features significantly (UN, 2015).

• Facilitation of inward investment

Investment facilitation schemes focus on the simplification of administrative procedures for investors, the role of IPAs in the targeting of investors and the subsequent aftercare.[23] Only few economies (11) have SDG-specific facilitation programmes in place (box V.11). This reflects the fact that unlike investment promotion, investment facilitation usually applies equally across sectors.

Box V.9 Investment incentives relevant to SDG-related sectors (examples)

Several countries have established specific incentives schemes for investing in individual SDG-related sectors. For example,

- In *Argentina*, sustainable development of the aquaculture sector is promoted through fiscal benefits and financing options.
- In *Kazakhstan*, the list of priority activities for the implementation of investment projects includes collection, treatment and distribution of water as well as collection, treatment and disposal of waste.
- *The Republic of Korea* has in place a value added tax exemption scheme for companies involved in energy distribution to remote islands.
- In *Oman*, the income of investors engaged in education, pre-school childcare and training as well as in medical care by establishing private hospitals, is exempted from taxation.
- In *Rwanda*, a preferential tax rate is accorded to investors that undertake the generation, transmission and distribution of peat, solar, geothermal, hydro, biomass, methane and wind energy.
- The Critical Infrastructure Programme in *South Africa* provides cash-grant incentives for investments to improve critical infrastructure, including telecommunication networks and transport systems, such as roads and railways.
- *Thailand* grants incentives for agricultural investment, if the value added of a project is at least 10 per cent of revenues, modern production processes are implemented and new machinery is utilized.

Source: UNCTAD.

Box V.10 Eco-industrial parks (examples)

Some countries have started to align the infrastructure in SEZs with the SDGs. Some examples:

- In 2016, *Ethiopia* inaugurated its flagship project: the Hawassa Industrial Park. It is designed for the textile and apparel industry and is powered mostly by hydroelectricity. A dedicated zero-liquid-discharge facility, enabling the recycling of 90 per cent of sewerage, was constructed on its premises.
- *Viet Nam*, in cooperation with UNIDO, introduced in 2014 the Eco-Industrial Park Initiative. It aims at increasing deployment of clean and low-carbon technologies, minimalizing greenhouse gas emissions, improving water efficiency and introducing chemical waste management.
- Founded in 2016, Green Park in *Costa Rica* is the first industrial park and free trade zone in Latin America with Leadership in Energy and Environment Design certification. It aims to provide investors with an infrastructure and processes that comply with sustainable practices and seeks to minimize the environmental impact of manufacturing operations in the zone.

Source: UNCTAD.

Box V.11 Investment facilitation in SDG-related sectors (examples)

Specific facilitation of investment in SDG-related sectors is rare. A few examples:

- The Law on Strategic Investment in *Albania* provides for special benefits for investment in specific sectors, including urban waste management, transport, electronic communications infrastructure and large-scale farms. They include special and assisted procedures, assistive infrastructure and preferential access to land.
- Under the Law on Investment Promotion, SEZs in the *Lao People's Democratic Republic* are established with a specific administrative mechanism to create favourable conditions to attract investment that uses innovation in the production of agricultural products to save natural resources and energy.
- *Mongolia* provides certain investors with tax stabilization certificates that set tax rates for a defined period. These certificates are issued for investment that introduces high-tech and other technologies and creates stable workplaces, and for which an environmental impact assessment has been carried out, among other criteria.

Source: UNCTAD.

Box V.12 Linking investment guarantees or loans to SDGs (examples)

Both national agencies and international organisations may link their outward investment promotion schemes to the SDGs. For example:

Under the German investment guarantee scheme, an investment needs to fulfil certain conditions in order to be eligible . One condition is that it has positive effects on the host country. These can be manifested by, for example, the substitution of imports, the creation of jobs with high social standards or the implementation of modern, environmentally friendly technologies. Another essential aspect of the eligibility is the legal impact of environmental, social and human rights regulations on the project.

Proparco, the private sector financing arm of Agence Française de Développement, supports development in Southern countries. Its aims to promote the emergence of a dynamic, innovative and responsible private sector in developing and emerging countries which contributes to sustainable economic growth, job creation, the provision of essential goods and services and, more generally, to poverty reduction and the fight against climate change.

The World Bank's Multilateral Investment Guarantee Agency (MIGA) provides investors with insurance against political risks in host member countries. Proposed projects that are determined to have moderate to high levels of environmental and/or social risk, or the potential for adverse environmental and/or social impacts, are carried out in accordance with the requirements of certain performance standards: Assessment and Management of Environmental and Social Risks and Impacts; Labour and Working Conditions; Resource Efficiency and Pollution Prevention; Community Health, Safety, and Security; Land Acquisition and Involuntary Resettlement Performance; Biodiversity Conservation and Sustainable Management of Living Natural Resources Indigenous Peoples Performance Standard; and Cultural Heritage.

For private sector financing, the Asian Development Bank conducts due diligence on projects and reviews the overall economic, financial, and commercial viability of the project business plan, costs, financing and implementation plans; the legal and regulatory framework; and the feasibility and environmental and social assessment studies as well as environmental and social management plans, including resettlement plans and Indigenous Peoples plans, to address impacts on people and the environment.

Source: UNCTAD, based on websites of Proparco, MIGA and ADB and www.investitionsgarantien.de.

• Promoting SDG-related outward investment through State guarantees and loans

Numerous capital-exporting countries offer their domestic investors insurance against political risks in the host economy or provide loans to fill a financing gap. Some condition the investor's eligibility to the requirement that the planned investment does not jeopardize sustainable development or is not detrimental to it. Eligibility may also depend on whether the investment is likely to positively affect sustainable development in the host economy. If negative effects occur or positive outcomes do not materialize, the home country may be entitled to revoke the investment guarantee or loan.

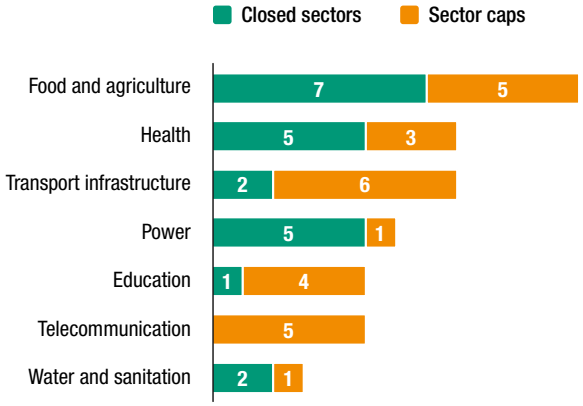
In addition, various international development banks and institutions, such as the World Bank, its Multilateral Investment Guarantee Agency (MIGA), IDB, the International Finance Corporation (IFC), the Asian Development Bank and the European Bank of Reconstruction and Development, also subject the granting of investment guarantees or financial support to an environmental and social impact assessment of the investment project (box V.12).[24]

b. Entry restrictions for investment that apply to SDG sectors

Certain investment regulations bar individual investments considered as harmful for sustainable development or restrict access to sectors with a public services nature. Such regulations usually subject investment to an approval requirement, sometimes in the form of an investment screening mechanism. Another option are investment limitations that fully or partially exclude foreign companies from investing in certain SDG sectors.

Investment restrictions affect numerous SDG sectors, above all food and agriculture, transport infrastructure and health. Investments in climate change mitigation and adaptation or in ecosystems and biodiversity are not affected by restrictions (figure V.16).

Figure V.16. Specific investment restrictions in SDG-related sectors
(Number of restrictions by sectors)



Source: UNCTAD.

• Banning investment potentially harmful for the SDGs

Many host economies subject the approval of an investment to an evaluation of its likely impact on the environment. Their legislation contains either environmental safeguards specifying that an investment detrimental to the environment shall be restricted or listing environmental-related conditions that need to be fulfilled to obtain investment approval. In other instances, assessing the impact of an investment project on specific sustainable development aspects is part of investment screening procedures related to national security. In addition to common criteria relating to national security or public interest, certain countries also evaluate the socioeconomic impact of foreign investment.[25]

• Restricting foreign investment in SDG sectors

According to UNCTAD's survey, at least 17 countries maintain approximately 50 investment restrictions in SDG-related sectors. Most of them exist in developing economies. These restrictions take the form of prohibitions of foreign investment in specified sectors or – more frequently – foreign ownership caps, including joint venture requirements (box V.13).

In some economies, SDG-related sectors – particularly those relating to the provision of basic utilities such as water, electricity or heating – are designed as public monopolies. In these cases, neither domestic nor foreign private investment is possible.

The investment laws usually do not explain the reasons for these various investment restrictions. It appears that they are mostly motivated by the wish to keep certain industries and infrastructure considered as being critical for development under domestic control. None of the examined laws mentions SDG-related considerations as a reason for the restrictive policy.

Box V.13 Investment restrictions in SDG sectors (country examples)

Several countries restrict foreign investment in specific SDG-related sectors. Several examples:

- In *China* Decree No. 25 [2019] on Issuing the Special Management Measures (Negative List) for Foreign Investment Access specifies that foreign investment in medical institutions is limited to joint ventures and cooperation.
- In *Cuba*, the Foreign Investment Act stipulates that foreign investment may be authorized in all sectors, except for education and health.
- In *Indonesia*, according to the negative investment list of 2016, the foreign ownership ceiling in hospitals as well as in basic and special medical clinics is set at 67 per cent.
- In *Iceland*, under Act No 34/1991 on Investment by Non-residents in Business Enterprises, foreign investors are barred from engaging in fishing operations or processing.
- In *Myanmar*, Notification No. 15/2017 specifies that investment activities in the two SDG sectors are authorized to be carried out only by the State: administration of electric power systems and management of natural forests and forest areas.
- In the *Philippines*, as per the 11th Regular Foreign Investment Negative List (Executive Order No. 65 of 2018), only up to 40 per cent of foreign equity is permissible in educational institutions.

Source: UNCTAD.

Rather than restricting all investments in specific SDG sectors, several countries have opted for examining individual foreign investment projects in the framework of their national security-related screening procedures. They apply to foreign engagements in various SDG sectors, such as infrastructure development, energy distribution, utilities – including water management, telecommunication, transport, health services, agriculture and food, innovative technologies and high-tech industries.

c. SDG considerations are making their way into IIAs

Since the adoption of the SDGs, 190 international investment agreements (IIAs) have been concluded. Of those, over 30 per cent include provisions addressing the SDGs directly and 59 per cent include a reference to sustainable development in their preamble (e.g. Islamic Republic of Iran–Slovakia BIT of 2016). Others provide for a definition of investment that includes a contribution to the sustainable development of the host country (e.g. Morocco–Nigeria BIT of 2016).

Two-thirds of the 58 IIAs that include SDG-related provisions envisage a public policy exception allowing the host economy to take measures to protect public policy objectives such as health and the environment (e.g. Canada–Mongolia BIT of 2016). About half stipulate that labour and environmental standards should not be relaxed to attract foreign investment (e.g. Colombia–United Arab Emirates BIT of 2017). Some contain specific provisions promoting the sustainable development compliance of foreign investors (e.g. European Union–Singapore FTA (2019)). In addition, several countries are reformulating their treaty models in line with UNCTAD's Reform Package for the IIA regime. However, looking at the IIA universe in its entirety (close to 3,300 IIAs), the overwhelming majority of treaties in force do not include provisions directly addressing sustainable development objectives.

3. Investment policy measures enacted since the adoption of the SDGs

Where the previous subsection presented the overall policy framework as applicable to investment in the SDGs, this section shows trends in policymaking from the adoption of the 2030 Agenda for Sustainable Development on 25 September 2015 until the end of April 2020. According to UNCTAD's count, 55 countries have adopted policy measures that specifically apply to investment in 10 SDG sectors or activities. Most of these policy changes were implemented in developing countries (60 per cent), with developing Asia alone having adopted about 42 per cent of them. Approximately three-fourths of the 198 measures adopted aimed at liberalizing or promoting investment in one or several SDG sectors (78 liberalization measures, 73 investment promotion or facilitation policies). The greatest number of policy changes affected transportation (27), followed by innovation (25) and food and agriculture (24) (figure V.17, box V.14).

In quantitative terms, liberalization is predominant in transportation, food and agriculture, and telecommunication, while investment promotion or facilitation policies were adopted mostly in innovation, health, and food and agriculture.

Box V.14 Investment liberalization or promotion measures in SDG-related sectors and activities (26 September 2015–30 April 2020)

Since the adoption of the SDGs, several countries have liberalized or promoted foreign investment in specific SDG sectors. For instance:

Power

- In August 2017, a new law on the gas market opened the shipment, transport and storage of natural gas to private investors in *Egypt*.
- In April 2019, *Uzbekistan* launched a privatization programme that specifies 64 public enterprises, including in power sectors.

Transportation

- In August 2018, *Cuba* allowed foreign operators to manage its railway systems.
- In September 2018, *Viet Nam* relaxed conditions on operations in inland waterway transportation, including operators as well as businesses engaged in construction and maintenance of inland water ships.

Telecommunication

- In June 2019, *Ethiopia* adopted the Communication Service Proclamation, specifying that telecommunication services are open without limitation to foreign and domestic private investors.
- In November 2017, *Qatar* provided special allowances for investors in the communication sector.

Water, sanitation and hygiene

- In July 2016, *Bahrain* allowed full foreign ownership in several sectors, including water supply.
- In January 2020, the Law on Strategic Investment was promulgated in *North Macedonia*, introducing a strategic investment category entitled to special and preferential treatment. This category is awarded only to investment in listed sectors, including water and waste management.

Food and agriculture

- In January 2016, the Law on Strategic Investment entered into force in *Albania*. It applies to investments in certain industries meeting defined minimum capital requirements, among them agriculture and fisheries. Covered investments benefit from e.g. facilitated administrative procedures, priority handling and access to public land.
- In April 2017, the *Lao People's Democratic Republic* promulgated a new Investment Promotion Law that provides for special incentives in promoted sectors, including clean and organic agriculture.

Climate change mitigation

- In October 2018, *Burkina Faso* adopted a new Investment Code that lowers the performance obligations for investors in green and renewable energy sectors.
- In July 2019, the *United Arab Emirates* liberalized its foreign investment regime by allowing full foreign ownership in 122 economic activities, including projects concentrating on renewable energy.

Health

- In July 2017, *Liberia* published a new list of sectors, including health services, qualifying for special tax incentives.
- In June 2018, the *United Republic of Tanzania* lowered the income tax rate for new investors in the pharmaceutical industry from 30 per cent to 20 per cent.

Education

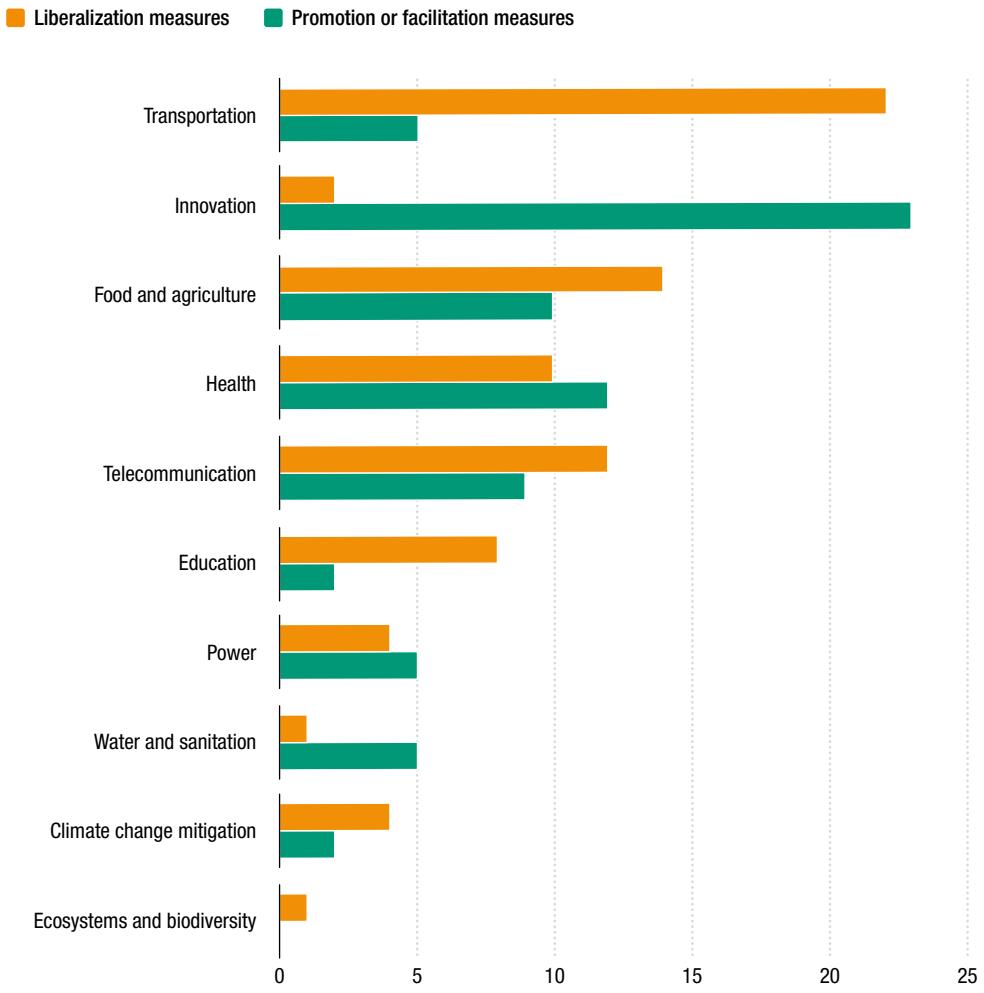
- In April 2018, *Myanmar* decided to allow foreign investors to fully own and operate private schools.
- In November 2018, the *Philippines* amended its negative list of restricted sectors by allowing 100 per cent foreign ownership e.g. in training centres and teaching at the higher education level.

Innovation

- In June 2019, *Argentina* enacted a regime for the Promotion of the Knowledge Economy. It envisages a reduced income tax and an exemption of income tax and value added tax in certain sectors, including computer and digital software, bioinformatics, neurotechnology, nanotechnology and nanoscience, space technologies and manufacturing of automation solutions.
- In December 2019, *Israel* launched the "Innovation Visas for foreign entrepreneurs" programme, which eases immigration rules for foreign start-up initiators and provides certain incentives.

Source: UNCTAD.

Figure V.17. **Investment policy measures in SDG-related sectors, by type and total number** (26 September 2015 – 30 April 2020)



Source: UNCTAD.

* * *

Despite commitments to the SDGs by all countries at the highest level, not enough has been done so far to promote investment in SDG sectors. Although many countries have adopted sustainable development strategies and related national development plans emphasizing the need to attract more capital into SDG sectors and activities, comprehensive action plans on how to promote investment and how to maximize its impact on sustainable development are to a large extent absent. The UN is assisting developing countries in this regard through the INFF process.

Investment promotion schemes in most countries are not specifically targeted at attracting investment in SDG-relevant sectors To the extent that incentives or other promotional measures that focus on specific SDG sectors are in place, they often leave out core SDG sectors, such as health, education, ecosystems and biodiversity, water and sanitation, and climate change adaptation. Recent years have also witnessed some investment liberalization measures in SDG sectors. The persistent and significant investment gap calls for more systematic efforts to mainstream the SDGs into the overall investment policy framework of countries and to embed SDG strategies into investment promotion schemes.

E. THE WAY FORWARD

A new set of global actions to facilitate a "Big Push" in private sector investment in the SDGs is urgently needed. The proposed set of actions serves as an implementation framework for the UN Secretary-General's Strategy for Financing the 2030 Agenda for Sustainable Development and constitutes UNCTAD's response to the call by the General Assembly for "concrete recommendations for the advancement of investment for the implementation of the 2030 Agenda" (Resolution on Promoting investments for sustainable development).

1. A "Big Push"

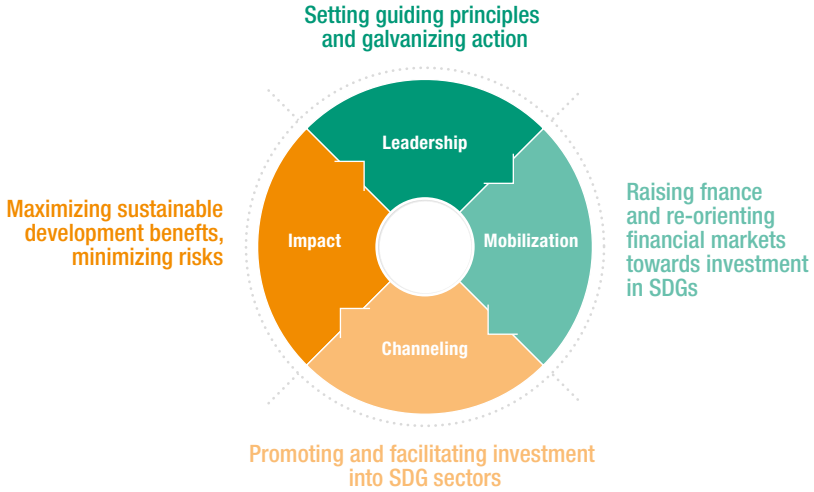
A new set of global actions to facilitate a "Big Push" in private sector investment in the SDGs is urgently needed. Current investment in SDG sectors, especially in developing countries, is too low (section A), sustainability financing largely bypasses developing countries (section B) and SDG-specific policies are not being rolled out fast enough (sections C and D). Furthermore, this situation has been compounded by the impact of the COVID-19 crisis, which risks subordinating progress on the SDGs to the priority of economic recovery. A Big Push for private investment in the SDGs can build on the six areas of transformative action proposed in UNCTAD's Investment Policy Framework for Sustainable Development (IPFSD),[26] taking into account the progress made since then by UNCTAD and others.

This set of six policy action areas can serve as an implementation framework for the UN Secretary-General's Strategy and Roadmap for Financing the 2030 Agenda for Sustainable Development. Together, these can make a decisive contribution to increasing financing for the SDGs, enhancing policies to support SDG impact, and tackling the channelling and impact challenges in developing countries.

2. A balanced approach

The holistic strategic framework of the IPFSD Action Plan, namely providing guidance, mobilizing funds, channelling them into SDG sectors and maximizing their impact, remains a valid point of departure (figure V.18). The four guiding principles for private sector investment in the SDGs proposed by the IPFSD, namely (a) balancing liberalization with regulation, (b) ensuring both attractive risk-return profiles and accessible and affordable goods and services, (c) aligning measures to attract private funds with the fundamental role of the State and (d) differentiating between the global scope of the SDGs and special efforts for LDCs and other vulnerable economies, must remain the overriding considerations in any policy agenda for boosting investment in the SDGs.

Figure V.18. Strategic framework for corporate investment in the SDGs



Source: UNCTAD.

- *Balancing liberalization with regulation.* SDG sectors often, by their nature, provide public goods and frontline services; private sector involvement requires careful balancing of market access considerations with appropriate public regulations and oversight.
- *Balancing the need for attractive risk-return rates with the need for accessible and affordable services for all.* The risks undertaken by corporate actors and their expected returns need to be weighed against the requirement to ensure the accessibility and affordability of goods and services.
- *Balancing a push for private investment with public investment.* Private sector involvement is not a panacea for solving the SDG financing problem but can play an important role in complementing and supporting public sector engagement. Mobilizing private and public funding must go hand in hand.
- *Balancing the global scope of the SDGs with the need to make a special effort in LDCs and other vulnerable economies*. Although the SDGs provide a global framework, their attainment is particularly important in the most vulnerable economies. Their special situation therefore requires national and international measures tailored to their specific contexts.

3. A set of transformative actions

The Action Plan presents a range of policy tools to respond to the investment mobilization, channelling and impact challenges faced especially by developing countries, including (1) mainstreaming SDGs into the national investment policy framework and international investment treaty regime, (2) re-orienting national investment promotion and facilitation strategies towards SDGs investment, (3) establishing regional SDG Investment Compacts, (4) fostering new forms of partnerships for SDG investment with investment-development stakeholders, (5) deepening the integration of ESG in financial markets, and (6) changing the global business mindset.

Against this background, *WIR20* updates UNCTAD's set of six transformative actions for a "Big Push" in private sector investment in the SDGs (figure V.19). It includes policy tools that have been elaborated and put into practice by UNCTAD and others since the adoption of the SDGs, such as the Global Action Menu for Investment Facilitation, the IIA Reform Package, the Entrepreneurship Policy Framework, and the Accounting Development Tool.

Figure V.19. A big push for action: six policy packages

1. New generation of investment policies

- **At national level**
  New investment policies based on IPFSD building in the SDG angle in a holistic and effective manner
- **At international level**
  IIA Reform based on UNCTAD Reform Package and the forthcoming IIA Accelerator to bring "old-generation" treaties speedily up to date.

2. Reorientation of investment promotion and facilitation

- **SDG-oriented investment facilitation based on UNCTAD's Global Action Menu**
- **SDG investment guarantees and insurance schemes**

3. Regional SDG Investment Compacts based on UNCTAD Guiding Principles

- **G-20 Guidelines**
- **ACP Guidelines**
- **D-8 Guidelines**
- **Regional/South-South economic cooperation**
  focusing on:
  – Regional SDG SEZs

4. New forms of partnerships for SDG investment

- **Home-host country IPA networks**
- **Create investment-ready and ESG-aligned financial products and investment projects in developing countries**
- **Online pools of bankable projects**
- **SDG-oriented linkages programmes**
- **Family business for sustainable development initiative**

5. Enabling a re-orientation of financial markets

- **Guidelines for corporate SDG contribution indicators**
- **UN Sustainable Stock Exchanges Initiative**
- **Strengthen the credibility of sustainable financial products** (through the development sustainability assessment standards and reliable data)
- **Fully integrate sustainability along the entire investment value chain, and across public and private markets**
- **Develop more sustainability-themed capital market products dedicated to the SDGs**

6. Changing the global business mindset

- **UN-SG Global Investors Initiative**
- **Training programmes for SDG investment (e.g. fund management/ financial market certification)**
- **Entrepreneurship programmes** for vulnerable groups (migrants, women, youth)
- **Improve corporate reporting and benchmarking on gender and diversity**

GUIDING PRINCIPLES

- **Balancing liberalization and regulation**
- **Balancing the need for attractive risk-return rates with the need for accessible and affordable services**
- **Balancing the global scope of the SDGs with the need to make a special effort in LDCs**
- **Balancing the push for private funds with the continued fundamental role of public investment**

Source: UNCTAD, based on IPFSD 2015.

It also takes into account several other UN initiatives aimed at engaging investors and capital markets, including stock exchanges, institutional investors, impact investors and family businesses, in the pursuit of the 2030 Agenda. This includes the work of the UN's Inter-agency Task Force on Financing for Development, and specifically its Financing for Sustainable Development Reports.[27] Lastly, the set of actions also reflects some of the relevant policy findings and recommendations of recent *World Investment Report*s.

Specifically, the new set includes these six transformative actions:

1. Mainstreaming SDGs into the national investment policy framework and international investment treaty regime on the basis of UNCTAD's Guiding Principles

At the national level, a coherent and comprehensive road map for attracting investment into SDG sectors and ensuring it contributes to sustainable development should be an integral part of national strategies and development plans based on the IPFSD. This includes reviewing, updating and possibly lifting investment restrictions in line with national security and other public concerns. At the international level, the SDGs should be a core objective when negotiating new IIAs and modernizing "old-generation" treaties, based on UNCTAD's IIA Reform Package[28] and the forthcoming IIA Accelerator.

2. Reorienting national investment promotion and facilitation strategies towards SDGs investment

New investment promotion and facilitation policies and the revision of existing ones should be guided by sustainable development priorities based on UNCTAD's Global Action Menu for Investment Facilitation.[29] Promotion policies should pay specific attention to those SDG sectors where individual countries see the biggest need for investment, and efficient monitoring systems should be in place to regularly assess the effectiveness of existing investment promotion schemes for sustainable development. National, bilateral, regional and international investment guarantees and insurance schemes should incorporate sustainable development priorities.

3. Establishing regional SDG Investment Compacts through various regional integration schemes

Regional SDG investment compacts should be further pursued, based on the IPFSD's core principles for investment policymaking, which have provided the foundation for the G20 Guiding Principles for Global Investment Policymaking,[30] the joint UNCTAD-ACP Guiding Principles for Investment Policymaking,[31] and the joint D8 Organization for Economic Cooperation-UNCTAD Guiding Principles for Investment Policymaking,[32] setting regional investment cooperation on an SDG-oriented path. Regional and South-South economic cooperation should pay special attention to regional industrial policies (*WIR18*) and regional SDG SEZs (*WIR19*).

4. New forms of partnerships for SDG investment with investment-development stakeholders

Bilateral, regional and multilateral investment promotion partnerships should emphasize the development of investment-ready and ESG-aligned financial products and investment projects in developing countries, including through online pools of bankable SDG projects. SDG projects should include SDG-oriented linkages programmes with local suppliers. Global initiatives such as the *Family Business for Sustainable Development Initiative* (FBSD) jointly developed by UNCTAD and The Family Business Network, should further mobilize firms to embed sustainability into their business strategies and serve as a model for galvanizing business uptake of support for the SDGs.[33]

5. Deepening the integration of ESG in financial markets by establishing a global monitoring mechanism with a harmonized approach to disclosure

The deepening of ESG integration in financial markets should be boosted by the widespread adoption of the Guidelines for Corporate SDG Contribution Indicators,[34] and the Accounting Development Tool,[35] by further enlarging the UN's SSE Initiative,[36] and by establishing a global monitoring mechanism with a harmonized approach to disclosure, tasked with the development of sustainability assessment standards and reliable data to strengthen the credibility of sustainable financial products. Sustainability should be fully integrated along the entire investment chain and across public and private markets, and more sustainability-themed capital market products dedicated to the SDGs should be developed.

6. Changing the global business mindset

The UN Secretary-General's Global Investors Initiative should be fully embraced by all MNEs and should accelerate its work on changing the global business mindset in line with the Secretary-General's strategy and road map for SDG financing. Training programmes for SDG investment should be developed and widely adopted by institutions of higher learning (e.g. fund management/financial market certification). Entrepreneurship training programmes based on UNCTAD's Entrepreneurship Policy Framework should be extended to reach vulnerable groups, such as migrants, women and youth.[37] Corporate reporting and benchmarking on gender and diversity should be improved.

The new and updated set of global actions for a "Big Push" in private sector investment in the SDGs can be operationalized through UNCTAD's and the UN's technical assistance and capacity-building tools (e.g. the INFFs, Investment Policy Reviews, business facilitation and entrepreneurship training). It is conceived as a "living document" that can be regularly updated and adapted in light of the General Assembly's annual guidance on the matter, as provided for in its resolution on "Promoting investment in sustainable development" (A/RES/74/199).

4. Recommendations to the General Assembly

This chapter responds to the request of the General Assembly resolution on "Promoting investment for sustainable development" to "inform the General Assembly at its seventy-fifth session of the implementation of the present resolution, based on their ongoing research, through a dedicated section of the *World Investment Report*, with a special focus on the gaps and challenges faced and the progress made in promoting investments for sustainable development" (paragraph 31).[38]

The chapter presented a global overview of SDG-related investment flow and policies trends. It did not assess the impact of those investments and investment policies. For this, efficient monitoring systems are needed to regularly assess the effectiveness of policies and promotion schemes for increasing investment in sustainable development, at both the national and the global levels. At the national level, policy impact evaluation is a core element of the UN's INFFs, and their operationalization at the country level should prioritize the establishment of instruments to monitor and evaluate results. At the global level, UNCTAD will continue its regular monitoring of global SDG investment trends and policies through its well-established mechanisms, e.g. the *Global SDG Investment Trends Monitor*, the *Global SDG Investment Policy Monitor* and the *World Investment Report.* UNCTAD will also continue to promote investment in the SDGs through global platforms such as the World Investment Forum (box V.15), in partnership with all key investment-development stakeholders.

The General Assembly resolution also calls for providing "concrete recommendations for the advancement of investment for the implementation of the 2030 Agenda" (Ibid.). The updated set of transformative actions proposed in this report is UNCTAD's answer to this call.

In line with the General Assembly resolution, UNCTAD stands ready to support the "continuing consideration of these issues" (Ibid.) in the General Assembly and its biennial World Investment Forum (box V.15). This provides the high-level global platform for multi-stakeholder dialogues and actions on key and emerging investment-development challenges and opportunities, with a particular emphasis on SDGs. The outcomes of these deliberations can be shared with the General Assembly.

Box V.15 The World Investment Forum

Established in 2008, the UNCTAD World Investment Forum is a high-level, biennial, multi-stakeholder gathering designed to facilitate dialogue and action on the world's key and emerging investment-development challenges. Bringing together all actors in the investment chain, including MNEs, family businesses and SMEs, and ranging from upstream actors such as stock exchanges, capital markets regulators, private equity funds and sovereign wealth funds to downstream actors such as IPAs, PPP units and project developers, it strives to fill a gap in the global economic governance architecture by establishing a global platform for engaging on investment-development issues and overcoming the SDG financing challenge.

With its sixth edition held in Geneva in November 2018, attended by more than 6,600 participants, including 11 Heads of State and government, 55 ministers, 45 leaders of international organizations and over 1,700 private sector senior executives, the Forum is now recognized by governments and business leaders as the most important investment-development event for the international community..

NOTES

[1] UNCTAD's estimate based on GSIA (2018).

[2] SSE database.

[3] The data were provided by Morningstar. The data do not include funds that employ limited exclusionary screens without a broader emphasis on ESG, nor do they include the growing number of funds that now formally consider ESG factors in a non-determinative way in their security selection.

[4] China Social Investment Forum (2019), "China Sustainable Investment Review 2019", Beijing.

[5] UNCTAD's calculation based on TrackInsight data as of March 2020.

[6] According to the quarterly statistics of the European Fund and Asset Management Association, assets of regulated, open-ended fund assets worldwide were about $58 trillion at the end of the fourth quarter of 2019.

[7] "Chinese companies tap 'virus bonds' to raise billions quickly," Reuters, 13 February 2020.

[8] IFC (2020), "Social bonds for COVID-19 illustrative case study", https://www.ifc.org/wps/wcm/connect/3d1ccd21-ad12-4468-b03d-251cd6421bc5/SB-COVID-Case-Study-Final-30Mar2020-310320.pdf?MOD=AJPERES&CVID=n4RsBEk.

[9] ICMA (2020), "Q&A for social bonds related to Covid-19", https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Social-Bonds-Covid-QA310320.pdf.

[10] IPIECA (2017), "Mapping the oil and gas industry to the Sustainable Development Goals: An Atlas", Ethical Trading Initiative (2017), "Realise the potential of your ethical trade program".

[11] Transparency International (2017), "No sustainable development with tackling corruption: the importance of tracking SDG 16".

[12] OECD, "Responsible Business Conduct and the Sustainable Development Goals".

[13] Forest Stewardship Council (2019), "FSC: A tool to implement the SDGs", Marine Stewardship Council, "The MSC and the United Nations Sustainable Development Goals".

[14] International Organisation for Standardisation (2018), "ISO 26000 and the SDGs".

[15] Global Reporting Initiative, "SDG Compass: Linking the SDGs and GRI", "Inventory of Business Indicators".

[16] Global Reporting Initiative (2018), "Using corporate reporting to strengthen Sustainable Development Goals".

[17] The number of firms from Africa is relatively small (56) and is overweighted by firms from South Africa listed in the Johannesburg Stock Exchange, which requires that listed companies report annually on ESG factors. The exchange is also a founding member of the integrated reporting committee of South Africa and provides listed companies with written guidance on ESG reporting.

[18] UNCTAD (forthcoming). "ESG integration in public pension and sovereign wealth funds".

[19] See, for example, Sustainable Stock Exchanges Initiative (2018). "How stock exchanges can advance gender equality". https://sseinitiative.org/wp-content/uploads/2019/12/How-stock-exchanges-can-advance-gender-equality.pdf.

[20] UN DESA, compilation of executive summaries concerning voluntary national reviews during 2017-2019.

[21] https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en.

[22] This includes a large number of fiscal incentives that are the subject of international reform efforts to combat tax avoidance by MNEs.

[23] https://unctad.org/en/PublicationsLibrary/diaepcb2018d4_en.pdf.

[24] https://www.iadb.org/en/projects/environmental-and-social-impact-assessments-eias; https://www.ebrd.com/work-with-us/project-financ;e/environmental-and-social-impact-assessments.html; http://documents.worldbank.org/curated/en/843201521089993123/Environmental-and-social-impact-assessments.

[25] Examples are the Republic of Korea, Lithuania, Poland, Portugal and Spain.

[26] See https://investmentpolicy.unctad.org/investment-policy-framework.

[27] See https://developmentfinance.un.org/.

[28] See https://investmentpolicy.unctad.org/publications/1190/unctad-s-reform-package-for-the-international-investment-regime-2018-edition-.

[29] See https://investmentpolicy.unctad.org/publications/148/unctad-global-action-menu-for-investment-facilitation.

[30] See http://e15initiative.org/wp-content/uploads/2015/09/E15-Investment-Zhan-Final-1.pdf.

[31] See http://www.acp.int/content/joint-acp-unctad-guiding-principles-investment-policymaking-approved.

[32] See https://investmentpolicy.unctad.org/publications/1221/joint-d-8-organization-for-economic-cooperation---unctad-guiding-principles-for-investment-policymaking.

[33] See https://fbsd.unctad.org/.

[34] See https://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=2469.

[35] See https://isar.unctad.org/accounting-development-tool/.

[36] See https://sseinitiative.org/.

[37] See https://unctad.org/en/Pages/DIAE/Entrepreneurship/Entrepreneurship-Policy-Framework-and-Implementation-Guidance.aspx.

[38] See https://undocs.org/en/A/RES/74/199.

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ANNEX TABLES

List of annex tables available on the UNCTAD website, www.unctad.org/wir

Annex table 1. FDI flows, by region and economy, 2014–2019 (Millions of dollars)

Region/economy	FDI inflows						FDI outflows					
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
World[a]	1 403 865	2 041 770	1 983 478	1 700 468	1 495 223	1 539 880	1 366 900	1 708 088	1 543 239	1 600 984	986 351	1 313 770
Developed economies	669 561	1 274 405	1 265 245	950 150	761 391	800 239	848 356	1 275 585	1 103 818	1 095 155	534 028	916 879
Europe	329 804	719 505	674 829	569 780	363 658	429 213	300 926	806 049	572 000	539 475	418 738	474 994
European Union	312 030	645 446	591 331	465 077	415 117	446 896	282 976	684 898	448 426	511 816	345 280	455 245
Austria	4 583	1 488	-8 508	14 953	2 086	4 643	-727	7 029	-2 033	10 251	5 872	10 578
Belgium	-3 506	28 331	59 243	5 159	17 733	9 707	10 029	55 199	36 374	33 601	26 518	19 707
Bulgaria	462	2 220	1 026	1 829	1 214	1 223	268	167	408	345	341	332
Croatia	2 896	91	274	555	1 152	1 365	1 981	-142	-1 939	-726	231	231
Cyprus	46 454	23 946	10 928	15 360	6 469	24 248	60 907	39 280	8 690	13 800	-2 152	14 053
Czechia	5 492	465	9 815	9 522	11 010	7 577	1 620	2 487	2 182	7 560	8 663	4 918
Denmark	4 682	3 616	235	3 749	163	930	8 257	9 420	10 110	9 518	-1 107	16 045
Estonia	685	36	1 059	1 921	1 486	3 044	42	182	487	874	49	1 967
Finland	18 571	2 109	8 582	2 864	-2 427	8 170[c]	1 745	-16 084	23 717	-740	10 957	4 569[c]
France	2 673	45 365	23 077	24 833	38 185	33 965	49 849	53 218	64 848	35 985	105 636	38 663
Germany	-3 204	30 541	15 633	60 354	73 570	36 359	84 076	99 025	63 661	104 087	78 813	98 700
Greece	2 687	1 268	2 765	3 485	3 973	4 631	3 019	1 578	-1 667	168	477	438
Hungary	7 968	-14 537	-5 439	3 502	8 365	5 205	3 854	-16 110	-8 272	1 199	5 073	2 626
Ireland	48 248	217 869	39 414	52 835	-28 089	78 234	41 235	168 480	30 086	-2 048	727	18 103
Italy	23 254	19 635	28 469	24 047	32 886	26 569	26 361	21 644	16 181	24 531	32 692	24 934
Latvia	895	734	258	668	994	789	518	68	147	131	191	-161
Lithuania	-183	1 054	436	1 030	1 094	975	9	369	51	69	672	153
Luxembourg	18 893	12 500	31 900	-6 815	-16 757	-11 421	34 401	17 314	30 171	34 765	11 623	1 482
Malta	11 205	5 069	4 248	3 407	4 024	3 573[d]	2 281	-5 163	-5 298	-7 237	-7 442	-7 163[d]
Netherlands	45 034	178 990	30 698	60 478	114 306	84 216	59 435	247 737	156 621	46 902	-18 843	124 652
Poland	14 269	15 271	15 690	9 179	13 947	13 220	2 898	4 996	11 600	2 760	-406	2 132
Portugal	4 897	7 630	5 066	7 534	6 794	8 234	-3 726	5 226	872	-949	501	-470
Romania	3 216	3 840	5 000	5 419	6 219	5 971	-374	562	5	-97	379	38
Slovakia	-513	106	806	4 017	1 184	2 449	43	6	96	1 325	234	153
Slovenia	1 051	1 675	1 246	898	1 369	910	276	267	290	338	268	135
Spain	22 601	8 558	31 569	38 807	45 010	12 406	36 790	41 926	43 946	52 349	27 074	24 135
Sweden	4 030	8 390	19 141	14 249	3 857	20 568	9 194	13 037	4 699	25 506	16 814	22 814
United Kingdom	24 690	39 186	258 699	101 241	65 300	59 137	-151 286	-66 821	-37 606	117 547	41 425	31 480
Other developed Europe	17 774	74 059	83 498	104 703	-51 459	-17 683	17 950	121 151	123 574	27 659	73 458	19 749
Iceland	447	709	-427	-41	-394	-241	-257	-31	-1 147	-208	78	513
Norway	7 987	-1 932	-4 667	-2 577	2 087	4 298	18 254	32 431	2 656	-2 278	12 597	8 138
Switzerland	9 340	75 283	88 592	107 322	-53 151	-21 740	-47	88 751	122 065	30 145	60 782	11 097
North America	260 738	511 461	507 848	303 780	297 020	296 547	393 285	331 799	358 768	378 726	-40 744	201 501
Canada	59 005	43 836	36 056	26 522	43 459	50 332	60 271	67 440	69 507	78 348	49 879	76 602
United States	201 733	467 625	471 792	277 258	253 561	246 215	333 014	264 359	289 261	300 378	-90 623	124 899
Other developed economies	79 019	43 439	82 568	76 590	100 714	74 479	154 145	137 737	173 050	176 954	156 034	240 384
Australia	58 507	29 580	48 294	45 303	68 048	36 156	18 185	-9 337	2 267	5 932	6 362	5 397
Bermuda	-3[c]	-143[c]	82[c]	-288[c]	73[c]	119[d]	120[c]	-84[c]	72[c]	-42[c]	-31[c]	-45[d]
Israel	6 049	11 337	11 988	18 169	20 789	18 224	4 526	10 969	14 579	6 153	6 117	8 566
Japan	12 030	2 976	19 359	10 977	9 858	14 552	130 843	136 249	155 937	164 683	143 161	226 648
New Zealand	2 437	-310	2 845	2 429	1 946	5 427	471	-58	196	227	425	-183
Developing economies[a]	677 340	729 889	651 979	700 636	699 306	684 723	446 188	400 401	414 234	467 357	414 747	373 102
Africa	53 908	57 564	46 023	41 535	50 577	45 368	8 188	6 444	3 953	12 025	8 157	5 337
North Africa	12 039	12 327	13 841	13 275	15 398	13 679	770	1 364	1 514	1 379	2 295	1 887
Algeria	1 507	-585	1 636	1 232	1 466	1 382	-18	103	46	-9	880	83
Egypt	4 612	6 925	8 107	7 409	8 141	9 010	253	182	207	199	324	405
Libya	-	-	-	-	-	-	77	395	440	110	276[d]	345[d]
Morocco	3 561	3 255	2 157	2 686	3 559	1 599	436	653	580	1 021	782	1 033
South Sudan	44[d]	0.2[d]	-8[d]	1[d]	60[d]	18[d]	-	-	-	-	-	-
Sudan	1 251	1 728	1 064	1 065	1 136	825	-	-	-	-	-	-
Tunisia	1 064	1 003	885	881	1 036	845	22	31	242	57	34	22
Other Africa	41 869	45 238	32 182	28 261	35 178	31 689	7 418	5 080	2 439	10 647	5 862	3 449
West Africa	12 121	10 714	11 955	11 510	13 717	10 870	15	-720	-2 995	1 172	1 065	1 760
Benin	406	150	132	201	194	230	17	33	17	32	10	32
Burkina Faso	356	232	391	3	268	208	70	14	51	10	68	33
Cabo Verde	180	116	127	111	105	104[d]	-8	-4	-9	-14	-20	-21[d]
Côte d'Ivoire	439	494	578	975	620	1 009	16	14	29	676	145	394
Gambia	36	13	-28	18	33	32[d]	-	-23	-1	7	-6[d]	0.2[d]
Ghana	3 357	3 192	3 485	3 255	2 989	2 319[d]	12	221	15	16	81	37[d]
Guinea	77	53[d]	1 618[d]	577[d]	353[d]	45[d]	2	4	-4	1	-	-1[d]

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Annex table 1. FDI flows, by region and economy, 2014–2019 (continued)

Region/economy	FDI inflows						FDI outflows					
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Guinea-Bissau	29	19	24	16	21	31	3	2	0.5	0.3	-	1
Liberia	277	627	453	248[c]	143[d]	138[d]	-36[d]	30[d]	168[d]	54[d]	84[d]	102[d]
Mali	144	276	356	563	467	494	1	82	97	15	0.3	59
Mauritania	501[d]	502[d]	271[d]	587[d]	773[d]	885[d]	28[d]	0.2[d]	1[d]	10[d]	4[d]	5[d]
Niger	823	529	301	339	466	593	89	34	40	29	39	52
Nigeria	4 664	3 592	3 681	3 813	6 401	3 299	-565	-1 509	-3 879	285	538	276
Senegal	403	409	472	588	848	983	27	31	224	82	53	114
Sierra Leone	375	252	138	129	218[c]	368[d]	-	-	-	-	-	-
Togo	54	258	-46	89	-183	133	359	349	257	-33	70	677
Central Africa	5 306	8 307	5 394	8 951	9 365	8 702	174	337	338	291	288	142
Burundi	47	7	0.1	0.3	1	1	-	0.2	-	-	-	1
Cameroon	727	627	664	814	765[c]	782[d]	-10	-11	-39	22	108[c]	8[d]
Central African Republic	3	3	7	7[d]	18[d]	26[d]	-	-	-	-	-	-
Chad	-676[d]	560[d]	245[d]	363[d]	461[d]	567[d]	-	-	-	-	-	-
Congo	1 659	3 803	1 612	4 417	4 315	3 366[d]	-21	-16	10	45	14[d]	23[d]
Congo, Democratic Republic of the	1 843	1 674	1 205	1 340	1 617	1 478	344	508	272	292	209	127
Equatorial Guinea	168[d]	233[d]	54[d]	305[d]	396[d]	452[d]	-	-	-	-	-	-
Gabon	1 048[d]	991[d]	1 244[d]	1 314[d]	1 379[d]	1 553[d]	-146[d]	-150[d]	45[d]	-84[d]	-63[d]	-34[d]
Rwanda	459	380	342	356	382	420	4	3	48	16	18	18
Sao Tome and Principe	27	29	22	34	31	57[d]	4	3	1	0.3	2	-1[d]
East Africa	6 615	6 873	7 842	8 647	8 537	7 756	296	434	286	458	371	486
Comoros	5	5	4	4	7	8[d]	-	-	-	-	-	-
Djibouti	153[c]	124[c]	160[c]	165[c]	170[d]	182[d]	-	-	-	-	-	-
Eritrea	47[d]	49[d]	52[d]	55[d]	61[d]	67[d]	-	-	-	-	-	-
Ethiopia	1 855	2 627	4 143	4 017	3 310	2 516[d]	-	-	-	-	-	-
Kenya	821	620[d]	679	1 266	1 626	1 332	75	242	157	257	164	204
Madagascar	314	436	451	358	353	227	37	82	90	106	118	215
Mauritius	456	216	379	480	372	472	141	100	28	89	83	59
Seychelles	230	195	155	192	120	126	16	10	10	6	5	8
Somalia	261[d]	303[d]	330[d]	369[d]	408[d]	447[d]	-	-	-	-	-	-
Uganda	1 059	738	626	803	1 055	1 266	27	0.3	0.2	0.3	0.3	0.3
United Republic of Tanzania	1 416	1 561	864	938	1 056	1 112[d]	-	-	-	-	-	-
Southern Africa	17 827	19 344	6 990	-847	3 560	4 360	6 934	5 029	4 810	8 725	4 138	1 061
Angola	3 658	10 028	-180	-7 397	-6 456	-4 098	887	-785	273	1 352	6	-2 349
Botswana	515	379	143	261	286	261	-111	-183	-170	1	-82	-43
Eswatini	26	41	21	-56	36	130	1	-1	-7	65	-11	22
Lesotho	95	207	159	123	129	118	-	-	-	-	-	-
Malawi	387	510	116	90	102	98	4	4	4	5	6	6
Mozambique	4 902[c]	3 867[c]	3 093[c]	2 293[c]	2 703[c]	2 212[c]	97[c]	2[c]	35[c]	26[c]	-14[c]	-30[c]
Namibia	441	857	368	374	157	-17	22	102	-5	-66	98	10
South Africa	5 771[c]	1 729[c]	2 235[c]	2 008[c]	5 450[c]	4 624[c]	7 669[c]	5 744[c]	4 474[c]	7 371[c]	4 076[c]	3 119[c]
Zambia	1 489	1 305	663	1 108	408	753[d]	-1 706	125	177	-72	32	294[d]
Zimbabwe	545	421	372	349	745	280	72	22	29	42	27	33
Asia	460 182	514 308	468 403	502 002	498 560	473 898	412 228	372 364	399 357	416 980	406 741	327 588
East and South-East Asia	387 091	431 871	382 016	422 450	416 166	388 554	377 760	324 000	352 971	366 754	344 694	279 798
East Asia	257 538	317 636	270 355	270 124	267 233	232 753	288 710	255 020	302 701	290 890	281 831	223 758
China	128 502	135 577	133 711	136 315	138 305	141 225	123 120	145 667	196 149	158 290	143 040	117 120
Hong Kong, China	113 038	174 353	117 387	110 685	104 246	68 379[b]	124 092	71 821	59 703	86 704	82 201	59 279[b]
Korea, Democratic People's Republic of	102[d]	79[d]	89[d]	-13[d]	1[d]	26[d]	-	-	-	-	-	-
Korea, Republic of	9 274[c]	4 104[c]	12 104[c]	17 913[c]	12 183[c]	10 566[c]	27 999[c]	23 687[c]	29 890[c]	34 069[c]	38 220[c]	35 531[c]
Macao, China	3 456	1 037	1 959	439	3 327	1 902[d]	681	-876	-1 002	226	274	-159[d]
Mongolia	338	94	-4 156	1 494	2 174	2 443	107	11	14	49	37	127
Taiwan Province of China	2 828[c]	2 391[c]	9 261[c]	3 291[c]	6 998[c]	8 213[c]	12 711[c]	14 709[c]	17 946[c]	11 552[c]	18 058[c]	11 861[c]
South-East Asia	129 553	114 235	111 662	152 327	148 933	155 801	89 050	68 980	50 270	75 865	62 862	56 039
Brunei Darussalam	568	173	-150	460	382	275	-	-	-	-	-	-
Cambodia	1 853	1 823	2 476	2 786	3 208	3 706	82	88	79	115	124	102
Indonesia	21 811	16 641	3 921	20 579	20 563	23 429	7 077	5 937	-12 215	2 077	8 053	3 380
Lao People's Democratic Republic	868[c]	1 078[c]	935[c]	1 686[c]	1 320[c]	557[c]	7[c]	40[c]	15[c]	10[c]	-	-
Malaysia	10 877	10 082	11 336	9 399	7 618	7 650	16 369	10 546	8 011	5 638	5 114	6 304
Myanmar	946	2 824	2 989	4 341	3 554	2 766	-	-	-	-	-	-
Philippines	5 285	4 447	6 915	8 704	6 602	4 996	6 299	4 347	1 032	1 752	770	658

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Annex table 1. FDI flows, by region and economy, 2014–2019 (continued)

Region/economy	FDI inflows						FDI outflows					
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Singapore	73 287	59 700	68 818	83 604	79 738	92 081	52 477[c]	45 223[c]	39 968[c]	48 830[c]	29 761[c]	33 283[c]
Thailand	4 809	5 624	1 815	6 661	10 399	4 146	5 575	1 687	12 367	16 963	18 442	11 847
Timor-Leste	49	43	5	7	48	75	13	13	13	-	-	-
Viet Nam	9 200	11 800	12 600	14 100	15 500	16 120	1 150	1 100	1 000	480	598	465
South Asia	41 448	51 221	54 281	51 642	52 225	57 429	12 020	7 816	5 521	11 493	11 632	12 284
Afghanistan	44	163	94[c]	53[c]	119[c]	39[d]	-	1	15[c]	11[c]	41[c]	26[d]
Bangladesh	1 551	2 235	2 333	2 152	3 613	1 597	44	46	41	142	23	-1
Bhutan	22	6	-34	-10	6	7	-	-	-	-	-	-
India	34 582	44 064	44 481	39 904	42 156	50 553	11 783	7 572	5 072	11 141	11 447	12 104
Iran, Islamic Republic of	2 105	2 050	3 372	5 019	2 373[d]	1 508[d]	3	120	104	76[d]	75[d]	85[d]
Maldives	333[c]	298[c]	457[c]	458[c]	539[c]	565[c]	-	-	-	-	-	-
Nepal	30	52	106	198	67	185	-	-	-	-	-	-
Pakistan	1 887	1 673	2 576	2 496	1 737	2 218	122	25	52	52	-21	-7
Sri Lanka	894	680	897	1 373	1 614	758	67	53	237	72	68	77
West Asia	31 644	31 215	32 105	27 910	30 169	27 915	22 448	40 548	40 865	38 733	50 415	35 506
Bahrain	1 519	65	243	1 426	1 654	942	-394	3 191	-880	229	111	-197
Iraq	-10 176	-7 574	-6 256	-5 032	-4 885	-3 076	242	148	304	78	188	194
Jordan	2 178	1 600	1 553	2 030	955[c]	916[c]	83	1	3	7	-8[c]	41[c]
Kuwait	953	311	419	348	204	104	-10 468	5 367	4 528	9 013	3 715	-2 495
Lebanon	2 863	2 159	2 568	2 522	2 654[d]	2 128[d]	1 241	660	1 005	1 317	611[d]	438[d]
Oman	1 287[c]	-2 172[c]	2 265[c]	2 918[c]	4 191[c]	3 125[d]	1 358[c]	336[c]	356[c]	2 424[c]	567[c]	1 116[d]
Qatar	1 040	1 071	774	986	-2 186	-2 813	6 748	4 023	7 902	1 695	3 523	4 450
Saudi Arabia	8 012	8 141	7 453	1 419	4 247	4 562	5 396	5 390	8 936	7 280	22 987	13 185
State of Palestine	160	103	297	188	252	176	-187	-73	45	3	31	29
Turkey	12 969	18 976	13 745	11 020	12 981	8 434	6 682	4 809	2 954	2 622	3 607	2 841
United Arab Emirates	11 072	8 551	9 605	10 354	10 385	13 787	11 736	16 692	15 711	14 060	15 079	15 901
Yemen	-233	-15	-561[d]	-270[d]	-282[d]	-371[d]	12[d]	4[d]	1[d]	6[d]	4[d]	3[d]
Latin America and the Caribbean[a]	160 943	156 412	136 610	156 193	148 920	164 236	25 628	21 703	10 818	38 249	127	41 598
South America	115 423	106 505	91 521	106 701	100 657	117 185	17 912	9 669	9 422	33 623	-7 912	30 930
Argentina	5 065	11 759	3 260	11 517	11 873	6 244	1 921	875	1 787	1 156	1 802	1 574
Bolivia, Plurinational State of	657	555	335	712	302	-160	-33	-2	89	80	-84	47
Brazil	63 846	49 961	53 700	66 585	59 802	71 989	-3 261	-11 643	-5 901	19 040	-16 336	15 515
Chile	22 849	20 491	12 104	6 519	7 021	11 437	12 091	15 543	6 770	5 526	278	7 937
Colombia	16 169	11 724	13 848	13 837	11 535	14 493	3 899	4 218	4 517	3 690	5 126	3 214
Ecuador	777	1 331	755	625	1 456	966	-	-	-	-	-	-
Guyana	255	122	163	327	1 180	1 713[d]	-	-	26	-	-	9[d]
Paraguay	412	308	425	526	481	478	-	-	-	-	-	-
Peru	3 930	8 314	6 739	6 860	6 488	8 892	1 107	189	1 156	500	19	896
Suriname	164	267	300	98	119	7	-	-	-	-	-	-
Uruguay	2 328	905	-1 177	-837	-487	189	-184	89	-62	1 398	621	662
Venezuela, Bolivarian Republic of	-1 028	769	1 068	-68	886	934	2 373	399	1 041	2 234	661	1 076
Central America	41 969	46 495	41 674	45 115	45 551	43 069	7 654	11 872	1 196	4 590	7 962	9 916
Belize	153[c]	65[c]	44[c]	24[c]	122[c]	103[c]	3[c]	0.5[c]	2[c]	0.3[c]	1[c]	2[c]
Costa Rica	2 927	2 752	2 204	2 742	2 237	2 536	109	211	77	159	53	117
El Salvador	306	397	347	889	826	662	-0.1	0.3	-0.4	0.2	-	0.4
Guatemala	1 389	1 221	1 185	1 170	1 003	998[c]	106	117	117	169	218	181[c]
Honduras	1 417	1 204	1 139	1 176	961	498	103	252	239	141	66	-1
Mexico	30 434	35 352	30 989	34 165	34 746	32 921	6 911	10 663	482	3 919	7 712	10 228
Nicaragua	884	950	899	772	359	515	94	45	65	65	75	23
Panama	4 459	4 556	4 866	4 177	5 297	4 835	329	584	214	138	-163	-634
Caribbean[a]	3 551	3 412	3 416	4 377	2 713	3 983	62	163	200	35	78	752
Anguilla	73[b]	79[b]	60[b]	54[b]	56[b]	125[b]	-15[b]	11[b]	-2[b]	-1[b]	-1[b]	-1[d]
Antigua and Barbuda	46[b]	107[b]	81[b]	113[b]	116[b]	139[b]	3[b]	10[b]	12[b]	13[b]	9[b]	11[d]
Aruba	208	-27	28	162	136	-76	-35	10	-0.4	83	30	57
Bahamas	3 551	865	1 260	901	947	637	2 679	170	359	151	117	148
Barbados	592	418	269	206	242	215	-229	52	-194	-28	9	28
British Virgin Islands	55 756[d]	25 502[d]	57 778[d]	57 574[d]	58 777[d]	57 997[d]	85 821[d]	73 077[d]	30 661[d]	52 919[d]	39 463[d]	41 014[d]
Cayman Islands	49 833[d]	80 258[d]	64 360[d]	22 938[d]	16 771[d]	34 690[d]	23 386[d]	75 453[d]	9 133[d]	8 720[d]	4 140[d]	7 331[d]
Curaçao	69	146	133	173	127	56[d]	44	19	38	-148	30	11[d]
Dominica	14[b]	13[b]	41[b]	-2[b]	-37[b]	33[b]	-2[b]	-12[b]	-	-	-	-
Dominican Republic	2 209	2 205	2 407	3 571	2 535	3 013	-	-	-	-	-	-

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Annex table 1. FDI flows, by region and economy, 2014–2019 (concluded)

Region/economy	FDI inflows						FDI outflows					
	2014	2015	2016	2017	2018	2019	2014	2015	2016	2017	2018	2019
Grenada	89[b]	151[b]	95[b]	112[b]	127[b]	131[b]	6[b]	9[b]	5[b]	9[b]	15[b]	10[b]
Haiti	99[c]	106[c]	105[c]	375[c]	105[c]	75[c]	-	-	-	-	-	-
Jamaica	582	925	928	888	775	665[c]	80	34	226	47	13	446[c]
Montserrat	5[b]	5[b]	2[b]	2[b]	2[b]	6[b]	-	-	-	-	-	-
Saint Kitts and Nevis	163[b]	120[b]	94[b]	51[b]	85[b]	92[b]	5[b]	-6[b]	-1[b]	-0.4[b]	-0.5[b]	-
Saint Lucia	60[b]	114[b]	129[b]	131[b]	135[b]	31[b]	68[b]	21[b]	5[b]	6[b]	13[b]	8[d]
Saint Vincent and the Grenadines	123[b]	58[b]	153[b]	98[b]	100[b]	113[b]	5[b]	5[b]	-9[b]	-5[b]	-5[b]	-6[d]
Sint Maarten	48	28	42	33	-197	59[d]	1	0.1	2	2	5[d]	-
Trinidad and Tobago	661[c]	177[c]	-24[c]	-457[c]	-702[c]	230[d]	-18[c]	128[c]	-25[c]	-12[c]	65[c]	306[d]
Oceania	2 307	1 604	943	907	1 249	1 221	144	-110	107	102	-279	-1 421
Cook Islands	-	5	10	2	12	8[d]	-	0.2	0.3	0.3	0.3	0.3[d]
Fiji	380	205	390	386	471	321	38	-33	-16	-2	-4	-36
French Polynesia	62	26	62	79	-45[d]	33[d]	31	23	24	15	-28[d]	4[d]
Kiribati	3[c]	-1[c]	2[c]	1[c]	-1[c]	0.5[d]	0.1[c]	0.1[c]	0.1[c]	0.1[c]	0.1[c]	0.1[d]
Marshall Islands	-8	-5	-3	6	10	4[d]	-	-	-	-	-	-
Micronesia, Federated States of	20	-	-	-	-	-	-1	-	-	-	-	-
New Caledonia	1 757	1 210	414	495	349[d]	413[d]	58	58	80	79	96[d]	83[d]
Palau	41	36	36	27	22[d]	22[d]	-	-	-	-	1[d]	-
Papua New Guinea	-30	28[c]	-40[c]	-180[c]	338[c]	334[d]	-	-174[c]	-	-	-355[c]	-1 484[d]
Samoa	23	27	3	9	17	1[d]	4	4	15	0.1	-	5[d]
Solomon Islands	22	32	39	43	25	30	1	5	1	7	9	5
Tonga	56	12	9	14	15	13[d]	11	5	1	1	1	1[d]
Tuvalu	0.3[d]	0.3[d]	0.3[d]	0.3[d]	0.3[d]	0.3[d]	-	-	-	-	-	-
Vanuatu	-18	29	22	24	38[d]	41[d]	1	2	1	1	1[d]	1[d]
Transition economies	56 963	37 476	66 254	49 681	34 526	54 917	72 356	32 102	25 187	38 473	37 577	23 788
South-East Europe	4 631	4 937	4 647	5 529	7 426	7 213	482	525	239	313	589	568
Albania	1 111	946	1 101	1 149	1 290	1 281	33	38	64	26	83	127
Bosnia and Herzegovina	550	361	350	450	473	528	18	73	39	78	-33	-9
Montenegro	498	699	226	559	490	453	27	12	-185	11	109	67
North Macedonia	273	240	375	205	725	365	10	15	24	2	12	40
Serbia	1 999	2 348	2 352	2 878	4 128	4 281	356	346	250	147	363	269
CIS	52 332	32 539	61 607	44 152	27 099	47 705	71 874	31 576	24 948	38 159	36 988	23 221
Armenia	407	184	334	251	254	254	29	29	71	29	7	-143
Azerbaijan	4 430	4 048	4 500	2 867	1 403	1 504	3 230	3 260	2 574	2 564	1 761	2 432
Belarus	1 828	1 668	1 238	1 279	1 421	1 293	39	122	114	70	50	-7
Kazakhstan	8 489	4 057	8 511	4 669	3 757	3 118	3 815	795	-5 235	913	-1 101	-2 592
Kyrgyzstan	348	1 142	579	222	139	209	-	-1	-	-29	-5	3[d]
Moldova, Republic of	341	237	84	157	308	589	37	19	9	13	38	43
Russian Federation	29 152	11 858	37 176	25 954	13 228	31 735	64 203	27 090	26 951	34 153	35 820	22 530
Tajikistan	451	572	345	307	360	213	-	-	35	159	82	23
Turkmenistan	3 830[d]	3 043[d]	2 243[d]	2 086[d]	1 985[d]	2 166[d]	-	-	-	-	-	-
Ukraine	410	2 961	3 284	2 601	2 355	3 070	111	-51	16	8	-5	648
Uzbekistan	809[c]	1 041[c]	1 663[c]	1 797[c]	625[c]	2 286[c]	4[c]	5[c]	6[c]	9[c]	2[c]	3[c]
Georgia	1 837	1 729	1 650	1 963	1 265	1 268	407	309	407	269	340	282
Memorandum												
Least developed countries (LDCs)[e]	27 354	37 833	25 952	20 835	22 432	21 147	415	697	1 914	2 225	900	-511
Landlocked developing countries (LLDCs)[f]	28 918	25 033	24 217	25 549	22 220	22 002	5 654	4 273	-2 115	3 921	886	482
Small island developing states (SIDS)[g]	7 681	4 185	4 672	3 838	3 605	4 126	2 818	513	424	271	316	973

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

[a] Excluding the financial centers in the Caribbean (Anguilla, Antigua and Barbuda, Aruba, the Bahamas, Barbados, the British Virgin Islands, the Cayman Islands, Curaçao, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten and the Turks and Caicos Islands).

[b] Directional basis calculated from asset/liability basis.

[c] Asset/liability basis.

[d] Estimates.

[e] Least developed countries include Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, the Comoros, the Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, the Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Vanuatu, Yemen and Zambia.

[f] Landlocked developing countries include Afghanistan, Armenia, Azerbaijan, Bhutan, the Plurinational State of Bolivia, Botswana, Burkina Faso, Burundi, the Central African Republic, Chad, Eswatini, Ethiopia, Kazakhstan, Kyrgyzstan, the Lao People's Democratic Republic, Lesotho, Malawi, Mali, the Republic of Moldova, Mongolia, Nepal, North Macedonia, the Niger, Paraguay, Rwanda, South Sudan, Tajikistan, Turkmenistan, Uganda, Uzbekistan, Zambia and Zimbabwe.

[g] Small island developing States include Antigua and Barbuda, the Bahamas, Barbados, Cabo Verde, the Comoros, Dominica, Fiji, Grenada, Jamaica, Kiribati, Maldives, the Marshall Islands, Mauritius, the Federated States of Micronesia, Nauru, Palau, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Príncipe, Seychelles, Solomon Islands, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu.

Annex table 2. FDI stock, by region and economy, 2000, 2010 and 2019 (Millions of dollars)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2019	2000	2010	2019
World[a]	7 377 272	19 922 422	36 470 162	7 408 709	20 465 356	34 571 124
Developed economies	5 779 574	13 137 112	24 285 679	6 699 287	17 078 498	26 223 359
Europe	2 454 519	7 865 660	12 595 845	3 174 007	9 918 670	14 324 294
European Union	2 322 122	7 028 467	11 068 983	2 907 116	8 675 008	12 573 803
Austria	31 165	160 615	205 634	24 821	181 638	234 578
Belgium	-	473 358	566 116	-	431 613	656 429
Belgium and Luxembourg	195 219	-	-	179 773	-	-
Bulgaria	2 704	44 970	51 856	67	2 583	2 817
Croatia	2 664	32 215	29 866	760	4 914	1 112
Cyprus	2 846	260 132	445 091	557	242 556	442 796
Czechia	21 644	128 504	170 682	738	14 923	45 364
Denmark	73 574	96 136	105 748[b]	73 100	163 133	202 517[b]
Estonia	2 645	15 551	27 476	259	5 545	10 076
Finland	24 273	86 698	78 353[b]	52 109	137 663	130 051[b]
France	184 215	630 710	868 691	365 871	1 172 994	1 532 826
Germany	470 938	955 881	953 306[b]	483 946	1 364 565	1 719 389[b]
Greece	14 113	35 026	40 513[b]	6 094	42 623	19 848[b]
Hungary	22 870	91 015	97 841	1 280	23 612	33 732
Ireland	127 089	285 575	1 120 301	27 925	340 114	1 085 167
Italy	122 533	328 058	445 741	169 957	491 208	558 400
Latvia	1 691	10 869	17 948	19	895	1 763
Lithuania	2 334	15 339	20 411	29	2 647	4 667
Luxembourg	-	172 257	128 422	-	187 027	217 156
Malta	2 263	129 770	205 758[b]	193	60 596	61 285[b]
Netherlands	243 733	588 077	1 749 779	305 461	968 105	2 565 287
Poland	33 477	187 602	236 506	268	16 407	24 835
Portugal	34 224	121 239	161 640	19 417	71 676	58 077
Romania	6 953	68 699	97 095	136	2 327	1 349
Slovakia	6 970	50 328	59 750	555	3 457	4 727
Slovenia	2 389	10 667	18 135	772	8 147	7 024
Spain	156 348	628 341	751 510	129 194	653 236	606 549
Sweden	93 791	352 646	339 543	123 618	394 547	396 541
United Kingdom	439 458	1 068 187	2 075 271	940 197	1 686 260	1 949 442
Other developed Europe	132 397	837 193	1 526 862	266 891	1 243 661	1 750 491
Iceland	497	11 784	8 705	663	11 466	5 750
Norway	30 265	177 318	167 475	34 026	188 996	218 513
Switzerland	101 635	648 092	1 350 682	232 202	1 043 199	1 526 228
North America	3 108 255	4 406 182	10 502 927	3 136 637	5 793 476	9 374 193
Canada	325 020	983 889	1 037 092	442 623	983 889	1 652 480
United States	2 783 235	3 422 293	9 465 835	2 694 014	4 809 587	7 721 713
Other developed economies	216 801	865 270	1 186 906	388 643	1 366 352	2 524 871
Australia	121 686	527 728	714 249	92 508	449 740	579 257
Bermuda	265[b]	2 837[c]	2 562[c]	108[b]	925[c]	152[c]
Israel	20 426	60 086	166 229	9 091	67 893	110 383
Japan	50 323	214 880	222 527[b]	278 445	831 076	1 818 139[b]
New Zealand	24 101	59 738	81 340	8 491	16 717	16 941
Developing economies[a]	1 545 734	6 086 960	11 311 557	689 810	3 018 107	7 899 906
Africa	153 062	603 657	953 996	39 815	137 761	285 498
North Africa	45 590	201 105	301 616	3 199	25 777	38 887
Algeria	3 379[b]	19 540	31 956	205[b]	1 513	2 822
Egypt	19 955	73 095	126 639	655	5 448	8 155
Libya	471[b]	16 334	18 462[b]	1 903[b]	16 615	20 943[b]
Morocco	8 842	45 082	66 523	402	1 914	6 460
Sudan	1 398	15 690	28 494	-	-	-
Tunisia	11 545	31 364	29 542[b]	33	287	508[b]
Other Africa	107 472	402 552	652 380	36 616	111 983	246 611
West Africa	33 010	90 651	200 452	6 381	18 090	20 922
Benin	213	604	2 433	11	21	289
Burkina Faso	28	354	2 664	0.4	8	437
Cabo Verde	192[b]	1 252	2 169[c]	-[b]	2[c]	94[c]
Côte d'Ivoire	2 483	6 978	10 775	9	94	1 361
Gambia	216	323	443[b]	-	-	-

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Annex table 2. FDI stock, by region and economy, 2000, 2010 and 2019 (continued)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2019	2000	2010	2019
Ghana	1 554[b]	10 080	38 445[b]	-	83	500[b]
Guinea	263	486[c]	4 738[b]	12	144[c]	70[b]
Guinea-Bissau	38	63	229	-	5	11
Liberia	3 247	10 206[c]	8 862[b]	2 188	4 714	4 748[b]
Mali	132	1 964	4 971	1	18	291
Mauritania	146[b]	2 372[b]	8 995[b]	4[b]	28[b]	93[b]
Niger	45	2 251	7 011	1	9	370
Nigeria	23 786	50 973	98 618	4 144	12 576	8 851
Senegal	295	1 699	6 398	22	263	865
Sierra Leone	284[b]	482[c]	2 084[b]	-	-	-
Togo	87	565	1 619	-10	126	2 943
Central Africa	5 053	39 227	100 113	1 651	2 217	4 054
Burundi	47	13[c]	228[b]	2	2[c]	3[b]
Cameroon	917[b]	3 099[b]	8 434[b]	1 252[b]	971[b]	877[b]
Central African Republic	104	511	684[b]	43	-	-
Chad	576[b]	3 594[b]	6 495[b]	-	-	-
Congo	1 893[b]	9 261[b]	28 946[b]	40[b]	34[b]	80[b]
Congo, Democratic Republic of the	617	9 368	25 622	34	229	2 893
Equatorial Guinea	1 060[b]	9 413[b]	14 564[b]	-	-	-
Gabon	-227[b]	3 287[b]	12 241[b]	280[b]	946[b]	79[b]
Rwanda	55	422	2 631	-	13	121
Sao Tome and Principe	11[b]	260[b]	269[b]	-	21	3[b]
East Africa	7 202	37 308	99 607	387	1 864	4 183
Comoros	21[b]	60[b]	129[b]	-	-	-
Djibouti	40[c]	332[c]	1 755[b]	-	-	-
Eritrea	337[b]	666[b]	1 122[b]	-	-	-
Ethiopia	941[b]	4 206[b]	24 923[b]	-	-	-
Kenya	932[b]	5 449[b]	15 742[b]	115[b]	494[b]	2 117[b]
Madagascar	141	4 383[c]	7 733[b]	9[b]	193[c]	898[b]
Mauritius	683	4 658	5 765[b]	132	864	786[b]
Seychelles	515	1 701	3 145	130	247	301
Somalia	4[b]	566[b]	3 152[b]	-	-	-
Uganda	807	5 575	14 317	-	66	82[b]
United Republic of Tanzania	2 781	9 712	21 824[b]	-	-	-
Southern Africa	62 208	235 365	252 207	28 198	89 813	217 452
Angola	7 977	32 458	18 618	-8	1 870	3 601
Botswana	1 827	3 351	5 042	517	1 007	1 014
Eswatini	536	927	784	87	91	118
Lesotho	330	929	732[b]	-	-	-
Malawi	358	963	1 513[b]	-5	45	377[b]
Mozambique	1 249	4 331[c]	42 893[c]	1	3[c]	7[c]
Namibia	1 276[c]	3 595[c]	6 828[c]	45[c]	722[c]	1 575[c]
South Africa	43 451[c]	179 565[c]	150 951[c]	27 328[c]	83 249[c]	207 947[c]
Zambia	3 966	7 433[c]	19 134[c]	-	2 531[c]	2 170[c]
Zimbabwe	1 238	1 814	5 713[b]	234	297	640[b]
Asia	1 052 044	3 882 614	8 065 952	596 576	2 466 052	6 849 484
East and South-East Asia	952 016	3 021 228	6 726 704	579 262	2 200 328	6 205 959
East Asia	694 413	1 873 617	4 038 422	495 206	1 599 149	4 699 915
China	193 348	586 882[b]	1 769 486[b]	27 768	317 211	2 099 400
Hong Kong, China	435 417	1 067 520	1 867 936[d]	379 285	943 938	1 794 027[d]
Korea, Democratic People's Republic of	53[b]	160[b]	872[b]	-	-	-
Korea, Republic of	43 738[c]	135 500[c]	238 553[c]	21 497[c]	144 032[c]	440 147[c]
Macao, China	2 801[b]	13 603	38 419[b]	-	550	3 223[b]
Mongolia	182	8 445	22 556	-	2 616	665
Taiwan Province of China	18 875	61 508[c]	100 600[b]	66 655	190 803[c]	362 453[b]
South-East Asia	257 603	1 147 611	2 688 282	84 056	601 179	1 506 045
Brunei Darussalam	3 868[b]	4 140	7 127	-	-	-
Cambodia	1 580	9 026	34 030	193	345	1 095
Indonesia	25 060	160 735	232 614	6 940	6 672	78 817
Lao People's Democratic Republic	588[b]	1 888[b]	9 931[b]	26[b]	68[b]	95[b]
Malaysia	52 747	101 620	168 981	15 878	96 964	118 604
Myanmar	3 752[b]	14 507[b]	34 126	-	-	-
Philippines	13 762[b]	25 896	87 993[b]	1 032[b]	6 710	52 560[b]

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Annex table 2. FDI stock, by region and economy, 2000, 2010 and 2019 (continued)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2019	2000	2010	2019
Singapore	110 570	633 354[c]	1 697 556[c]	56 755	466 723[c]	1 106 192[c]
Thailand	30 944	139 286	254 416	3 232	21 369	137 441
Timor-Leste	-	155	396	-	94	109
Viet Nam	14 730[b]	57 004[b]	161 111[b]	-	2 234[b]	11 133[b]
South Asia	30 743	268 995	556 942	2 761	100 512	187 813
Afghanistan	17[b]	963[c]	1 595[b]	-	16[c]	96[b]
Bangladesh	2 162[b]	6 072	16 385[c]	68	168[c]	1 623[c]
Bhutan	4[b]	56	141	-	-	-
India	16 339	205 580[c]	426 928[c]	1 733	96 901[c]	178 694[c]
Iran, Islamic Republic of	2 597[b]	28 953[b]	57 369[b]	411[b]	1 713[b]	3 979[b]
Maldives	128[b]	1 114[b]	4 775[b]	-	-	-
Nepal	72	239	1 892[b]	-	-	-
Pakistan	6 919	19 828	34 798	489	1 362	1 922
Sri Lanka	2 505	6 190	13 058	60	351	1 497
West Asia	69 286	592 391	782 306	14 553	165 213	455 712
Bahrain	5 906	15 154	30 077	1 752	7 883	19 147
Iraq	-48	7 965	-	-	632	2 869
Jordan	3 135	21 899	36 203[c]	44	473	653[c]
Kuwait	608	11 884	14 904	1 428	28 189	32 997
Lebanon	14 233	44 285	68 089[b]	352	6 831	16 046[b]
Oman	2 577[b]	14 987[b]	31 332[b]	-	2 796[b]	11 992[b]
Qatar	1 912	30 549	31 061[b]	74	12 995	44 780[b]
Saudi Arabia	17 577	176 378	236 166[c]	5 285	26 528	123 050[c]
State of Palestine	1 418	2 176	2 777	-	241	318
Syrian Arab Republic	1 244	9 939[b]	10 743[b]	-	5	5[b]
Turkey	18 812	188 449	164 906	3 668	22 509	47 754
United Arab Emirates	1 069[b]	63 869	154 107	1 938[b]	55 560	155 430
Yemen	843	4 858	1 942[b]	13[b]	571[b]	672[b]
Latin America and the Caribbean[a]	338 774	1 585 995	2 262 920	53 170	413 467	762 929
South America	186 641	1 085 163	1 398 849	43 634	288 295	508 840
Argentina	67 601	85 591	69 170	21 141	30 328	43 527
Bolivia, Plurinational State of	5 188	6 890	11 769	29	8	910
Brazil	-	640 330	640 731[b]	-	149 333	223 947[b]
Chile	45 753	160 904	267 820	11 154	61 126	131 574
Colombia	11 157	82 991	205 890	2 989	23 717	63 847
Ecuador	6 337	11 858	19 707	-	-	-
Guyana	756	1 784	6 273[b]	1	2	37[b]
Paraguay	1 219	3 254	7 214	-	-	-
Peru	11 062	42 976	115 330	505	4 265	9 353
Suriname	-	-	2 058[c]	-	-	197[c]
Uruguay	2 088	12 479	28 273	138	345	7 606
Venezuela, Bolivarian Republic of	35 480	36 107	24 616	7 676	19 171	27 843
Central America	139 768	453 135	793 963	8 534	122 877	251 838
Belize	294[c]	1 454[c]	2 339[c]	42[c]	49[c]	72[c]
Costa Rica	2 809	15 936	41 755	22	1 135	3 503
El Salvador	1 973	7 284	10 113	104	1	4
Guatemala	3 420	6 518	17 299[c]	93	382	1 665[c]
Honduras	1 392	6 951	16 479	-	850	2 426
Mexico	121 691	389 571	628 460[c]	8 273	116 906	230 362[c]
Nicaragua	1 414	4 681	11 579[b]	-	181	725[b]
Panama	6 775	20 742	65 937[c]	-	3 374	13 080[c]
Caribbean[a]	12 365	47 697	70 108	1 002	2 295	2 251
Anguilla	-	-	785[b]	-	-	65[b]
Antigua and Barbuda	-	-	1 109[b]	-	-	92[b]
Aruba	1 161	4 567	4 293[b]	675	682	817[b]
Bahamas	3 278	13 160	25 353	452	2 538	7 122
Barbados	308	4 970	7 488	41	4 058	3 818
British Virgin Islands	30 289[b]	265 783[b]	826 100[b]	69 041[b]	376 866[b]	911 257[b]
Cayman Islands	27 316[b]	151 519[b]	514 975[b]	21 643[b]	75 212[b]	232 872[b]
Curaçao	-	527	1 727[b]	-	32	711[b]
Dominica	-	-	320[b]	-	-	2[b]
Dominican Republic	1 673	18 793	42 118	-	-	-

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Annex table 2. FDI stock, by region and economy, 2000, 2010 and 2019 (concluded)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2019	2000	2010	2019
Grenada	-	-	1 256[b]	-	-	82[b]
Haiti	95	625[c]	1 925[c]	-	-	-
Jamaica	3 317	10 855	17 254[c]	709	176	1 032[c]
Netherlands Antilles	277	-	-	6	-	-
Saint Kitts and Nevis	-	-	1 775[b]	-	-	21[b]
Saint Lucia	-	-	1 097[b]	-	-	229[b]
Saint Vincent and the Grenadines	-	-	1 497[b]	-	-	59[b]
Sint Maarten	-	256	274[b]	-	10	177[b]
Trinidad and Tobago	7 280	17 424	8 811[b]	293	2 119	1 219[b]
Oceania	1 854	14 694	28 688	249	827	1 995
Cook Islands	-	-	116[b]	-	-	13[b]
Fiji	356	2 963	5 207	39	47	54
French Polynesia	146[b]	442[b]	1 043[b]	-	144[b]	349[b]
Kiribati	-	5[c]	14[b]	-	2[c]	2[b]
Marshall Islands	20[c]	120[c]	206[b]	-	-	-
Micronesia, Federated States of	-	7[c]	235[b]	-	-	5[b]
New Caledonia	-41[b]	5 726[b]	14 786[b]	2[b]	304[b]	873[b]
Palau	173	232	464[b]	-	-	-
Papua New Guinea	935	3 748	4 843[b]	194	209	473[b]
Samoa	77	220	91[b]	-	13	23[b]
Solomon Islands	106	552	598	-	27	68
Tonga	19[b]	220[b]	465[b]	14[b]	58[b]	110[b]
Tuvalu	-	5[c]	8[b]	-	-	-
Vanuatu	61[b]	454	611[b]	-	23	26[b]
Transition economies	51 964	698 350	872 926	19 611	368 752	447 859
South-East Europe	1 237	43 479	78 032	16	2 553	5 978
Albania	247	3 255	8 811	-	154	680
Bosnia and Herzegovina	450	6 709	8 755	-	211	483
Montenegro	-	4 231	5 652[b]	-	-	178[b]
North Macedonia	540	4 351	6 350	16	100	98
Serbia	-	22 299	43 964	-	1 960	4 079
CIS	49 965	646 394	775 749	19 477	365 351	439 003
Armenia	513	4 405	5 664	-	150	536
Azerbaijan	1 791	7 648	32 300	1	5 790	26 127
Belarus	1 306	9 904	14 513	24	205	1 410
Kazakhstan	10 078	82 648	149 369	16	16 212	15 606
Kyrgyzstan	432	1 698	5 590[c]	33	2	10[b]
Moldova, Republic of	449	2 957	4 792	23	90	302
Russian Federation	29 738	464 228	463 860[b]	19 211	336 355	386 622[b]
Tajikistan	136	1 226	3 073[b]	-	-	153[b]
Turkmenistan	949[b]	13 442[b]	38 178[b]	-	-	-
Ukraine	3 875	52 872	48 906	170	6 548	8 045
Uzbekistan	698[b]	5 366[b]	9 504[c]	-	-	192[c]
Georgia	762	8 477	19 145	118	848	2 878
Memorandum						
Least developed countries (LDCs)[e]	36 035	162 244	376 310	2 604	11 621	24 058
Landlocked developing countries (LLDCs)[f]	33 846	179 781	406 760	1 025	29 136	50 413
Small island developing States (SIDS)[g]	16 546	60 387	90 508	1 811	10 288	15 255

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

[a] Excluding the financial centers in the Caribbean (Anguilla, Antigua and Barbuda, Aruba, the Bahamas, Barbados, the British Virgin Islands, the Cayman Islands, Curaçao, Dominica, Grenada, Montserrat, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sint Maarten and the Turks and Caicos Islands).

[b] Estimates.

[c] Asset/liability basis.

[d] Directional basis calculated from asset/liability basis.

[e] Least developed countries include Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, the Comoros, the Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, the Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Vanuatu, Yemen and Zambia.

[f] Landlocked developing countries include Afghanistan, Armenia, Azerbaijan, Bhutan, the Plurinational State of Bolivia, Botswana, Burkina Faso, Burundi, the Central African Republic, Chad, Eswatini, Ethiopia, Kazakhstan, Kyrgyzstan, the Lao People's Democratic Republic, Lesotho, Malawi, Mali, the Republic of Moldova, Mongolia, Nepal, North Macedonia, the Niger, Paraguay, Rwanda, South Sudan, Tajikistan, Turkmenistan, Uganda, Uzbekistan, Zambia and Zimbabwe.

[g] Small island developing States include Antigua and Barbuda, the Bahamas, Barbados, Cabo Verde, the Comoros, Dominica, Fiji, Grenada, Jamaica, Kiribati, Maldives, the Marshall Islands, Mauritius, the Federated States of Micronesia, Nauru, Palau, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Príncipe, Seychelles, Solomon Islands, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu.

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- Developed economies: the member countries of the OECD (other than Chile, Colombia, Mexico, the Republic of Korea and Turkey), plus the new European Union member countries which are not OECD members (Bulgaria, Croatia, Cyprus, Malta and Romania), plus Andorra, Bermuda, Liechtenstein, Monaco and San Marino, plus the territories of Faeroe Islands, Gibraltar, Greenland, Guernsey and Jersey.
- Transition economies: South-East Europe, the Commonwealth of Independent States and Georgia.
- Developing economies: in general, all economies not specified above. For statistical purposes, the data for China do not include those for Hong Kong Special Administrative Region (Hong Kong SAR), Macao Special Administrative Region (Macao SAR) and Taiwan Province of China.

Methodological details on FDI and MNE statistics can be found on the Report website (unctad/diae/wir).

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The following symbols have been used in the tables:

- Two dots (..) indicate that data are not available or are not separately reported. Rows in tables have been omitted in those cases where no data are available for any of the elements in the row.
- A dash (–) indicates that the item is equal to zero or its value is negligible.
- A blank in a table indicates that the item is not applicable, unless otherwise indicated.
- A slash (/) between dates representing years, e.g., 2010/11, indicates a financial year.
- Use of a dash (–) between dates representing years, e.g., 2010–2011, signifies the full period involved, including the beginning and end years.
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Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.

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