

WORLD INVESTMENT REPORT 2021

INVESTING IN SUSTAINABLE RECOVERY



UNITED NATIONS

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

UNCTAD



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INVESTING IN SUSTAINABLE RECOVERY



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PREFACE

Global flows of foreign direct investment have been severely hit by the COVID-19 pandemic. In 2020, they fell by one third to \$1 trillion, well below the low point reached after the global financial crisis a decade ago. Greenfield investments in industry and new infrastructure investment projects in developing countries were hit especially hard.

This is a major concern, because international investment flows are vital for sustainable development in the poorer regions of the world. Increasing investment to support a sustainable and inclusive recovery from the pandemic is now a global policy priority. This entails promoting investment in infrastructure and the energy transition, in resilience and in health care.

The *World Investment Report* supports policymakers by monitoring global and regional investment trends and national and international policy developments. This year's report reviews investment in the Sustainable Development Goals (SDGs) and shows the influence of investment policies on public health and economic recovery from the pandemic.

A concerted global effort is needed to increase SDG investment leading up to 2030. The package of recommendations put forward by UNCTAD for promoting investment in sustainable recovery provides an important tool for policymakers and the international development community.

I commend this report to all engaged in building a sustainable and inclusive future.



António Guterres
Secretary-General of the United Nations

FOREWORD

The COVID-19 pandemic caused a dramatic fall in global foreign direct investment (FDI) in 2020, bringing FDI flows back to the level seen in 2005. The crisis has had an immense negative impact on the most productive types of investment, namely, greenfield investment in industrial and infrastructure projects. This means that international production, an engine of global economic growth and development, has been seriously affected.

The crisis has rolled back progress made in bridging the investment gap achieved following the adoption of the SDGs. This demands a renewed commitment and a big push for investment and financing in the SDGs.

The main focus now is on the recovery process. But the issue is not only about reigniting the economy, it is about making the recovery more sustainable and more resilient to future shocks.

Given the scale and multitude of the challenges, we need a coherent policy approach to promote investment in resilience, balance stimulus between infrastructure and industry, and address the implementation challenges of recovery plans.

This report looks at investment priorities for the recovery phase. It shows that for developing and transition economies, and least-developed countries (LDCs) in particular, the development of productive capacity is a helpful guide in setting investment priorities and showing where international investment can most contribute, but also where it has been hit hardest during the pandemic.

The report argues that five factors will determine the impact of investment packages on sustainable and inclusive recovery: additionality, orientation, spillovers, implementation and governance.

The report also points at specific challenges that will arise with the roll-out of recovery investment plans and proposes a framework for policy action to address them. The policy framework presents innovative actions and tools for strategic priority setting. For policymakers, the starting point is the strategic perspective, in the form of industrial development approaches. Industrial policy will shape the extent to which firms in different industries will be induced to rebalance international production networks for greater supply chain resilience and greater economic and social resilience.

Our task today is to build forward differently. This will not be possible without reigniting international investment as an engine of growth, and ensuring that the recovery is inclusive and thus that its benefits extend to all countries.



Isabelle Durant
Acting Secretary-General of UNCTAD

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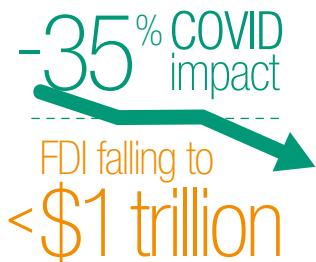
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ABBREVIATIONS

AfCFTA	African Continental Free Trade Area	ISDS	investor–State dispute settlement
ASEAN	Association of Southeast Asian Nations	IT	information technology
BIT	bilateral investment treaty	LDC	least-developed country
BRICS	Brazil, Russian Federation, India, China, South Africa	LLDC	landlocked developing country
CAI	Comprehensive Agreement on Investment	LLMIC	low- and lower-middle-income country
CARIFORUM	Caribbean Forum	M&A	merger and acquisition
CDSB	Carbon Disclosure Standards Board	MNE	multinational enterprise
CEPA	Comprehensive Economic Partnership Agreement	NT	national treatment
CETA	Comprehensive Economic and Trade Agreement	OECD	Organization for Economic Co-operation and Development
CFTA	Continental Free Trade Agreement	OSISC	One-Stop Investment Services Centre
CIS	Commonwealth of Independent States	PPE	personal protective equipment
COVID-19	coronavirus disease 2019	PPP	public-private partnership
CPP	Canada Pension Plan	PPPIA	Public Private Partnership and Investment Act
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership	R&D	research and development
CSR	corporate social responsibility	RCEP	Regional Comprehensive Economic Partnership
DFC	Development Finance Corporation	RDIF	Russian Direct Investment Fund
EPA	Economic Partnership Agreement	SASB	Sustainability Accounting Standards Board
ESG	environmental, social and governance	SDG	Sustainable Development goal
ETF	exchange-traded fund	SEZ	special economic zone
FDI	foreign direct investment	SIDS	small island developing States
FITTA	Foreign Investment and Technology Transfer Act	SOE	State-owned enterprise
FTA	free trade agreement	SO-MNE	State-owned multinational enterprise
GATS	General Agreement on Trade in Services	SPAC	special purpose acquisition company
GDP	gross domestic product	SPE	special-purpose entity
GRI	Global Reporting Initiative	SPIC	special investment contract
GVC	global value chain	SSE	Sustainable Stock Exchange
ICMA	International Capital Market Association	TCFD	Taskforce on Climate-related Financial Disclosures
ICSID	International Centre for Settlement of Investment Disputes	TIP	treaty with investment provision
ICT	information and communication technology	TNI	Transnationality Index
IIA	international investment agreement	UNCITRAL	United Nations Commission on International Trade Law
IIRC	International Integrated Reporting Council	UO	ultimate ownership
IMF	International Monetary Fund	USMCA	United States–Mexico–Canada Agreement
IOSCO	International Organization of Securities Commissions	WASH	water, sanitation and hygiene
IPA	investment promotion agency	WEPs	Women's Empowerment Principles
IPFSD	Investment Policy Framework for Sustainable Development	WFE	World Federation of Exchanges
IPO	initial public offering		

KEY MESSAGES



INVESTMENT TRENDS AND PROSPECTS

The COVID-19 crisis caused a dramatic fall in foreign direct investment (FDI) in 2020. Global FDI flows dropped by 35 per cent to \$1 trillion, from \$1.5 trillion in 2019. This is almost 20 per cent below the 2009 trough after the global financial crisis.

The decline was heavily skewed towards developed economies, where FDI fell by 58 per cent, in part due to oscillations caused by corporate transactions and intrafirm financial flows. FDI in developing economies decreased by a more moderate 8 per cent, mainly because of resilient flows in Asia. As a result, developing economies accounted for two thirds of global FDI, up from just under half in 2019.

FDI patterns contrasted sharply with those in new project activity, where developing countries are bearing the brunt of the investment downturn. In developing countries, the number of newly announced greenfield projects fell by 42 per cent and the number of international project finance deals – important for infrastructure – by 14 per cent. This compares to a 19 per cent decline in greenfield investment and an 8 per cent increase in international project finance in developed economies.

All components of FDI were down. The overall contraction in new project activity, combined with a slowdown in cross-border mergers and acquisitions (M&As), led to a decline in equity investment flows by more than 50 per cent. With profits of multinational enterprises (MNEs) down 36 per cent on average, reinvested earnings of foreign affiliates – an important part of FDI in normal years – were also down.

The impact of the pandemic on global FDI was concentrated in the first half of 2020. In the second half, cross-border M&As and international project finance deals largely recovered. But greenfield investment – more important for developing countries – continued its negative trend throughout 2020 and into the first quarter of 2021.

FDI trends varied significantly by region. Developing regions and transition economies were relatively more affected by the impact of the pandemic on investment in GVC-intensive and resource-based activities. Asymmetries in fiscal space for the roll-out of economic support measures also drove regional differences.

- Among developed countries, FDI flows to Europe fell by 80 per cent. The fall was magnified by large swings in conduit flows, but most large economies in the region saw sizeable declines. Flows to North America fell by 42 per cent; those to other developed economies by about 20 per cent on average. In the United States the decline was mostly caused by a fall in reinvested earnings.
- FDI flows to Africa fell by 16 per cent to \$40 billion – a level last seen 15 years ago. Greenfield project announcements, key to industrialization prospects in the region, fell by 62 per cent. Commodity exporting economies were the worst affected.
- Flows to developing Asia were resilient. Inflows in China actually increased, by 6 per cent, to \$149 billion. South-East Asia saw a 25 per cent decline, with its reliance on GVC-intensive FDI an important factor. FDI flows to India increased, driven in part by M&A activity.

- FDI in *Latin America and the Caribbean* plummeted, falling by 45 per cent to \$88 billion. Many economies on the continent, among the worst affected by the pandemic, are dependent on investment in natural resources and tourism, both of which collapsed.
- FDI flows to *economies in transition* fell by 58 per cent to just \$24 billion, the steepest decline of all regions outside Europe. Greenfield project announcements fell at the same rate. The fall was less severe in South-East Europe, at 14 per cent, than in the Commonwealth of Independent States (CIS), where a significant part of investment is linked to extractive industries.

FDI in structurally weak and vulnerable economies was further weakened by the pandemic. Although inflows in the least developed countries (LDCs) remained stable, greenfield announcements fell by half and international project finance deals by one third. FDI flows to small island developing States (SIDS) fell by 40 per cent, and those to landlocked developing countries (LLDCs) by 31 per cent.

COVID-19 has caused a collapse in investment flows to sectors relevant for the SDGs in developing countries. All but one SDG investment sector registered a double-digit decline from pre-pandemic levels. The shock exacerbated declines in sectors that were already weak before the COVID-19 crisis – such as power, food and agriculture, and health.

Large MNEs, key actors in global FDI, are weathering the storm. Despite the 2020 fall in earnings the top 100 MNEs significantly increased their cash holdings, attesting to the resilience of the largest companies. The number of State-owned MNEs, at about 1,600 worldwide, increased by 7 per cent in 2020; several new entrants resulted from new State equity participations as part of rescue programmes.

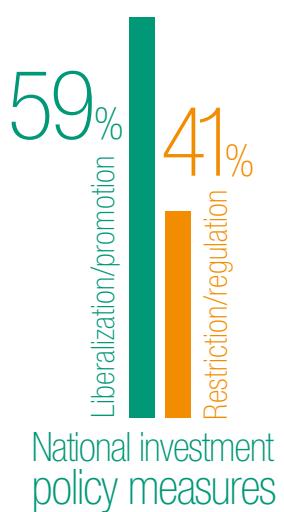
Looking ahead, global FDI flows are expected to bottom out in 2021 and recover some lost ground, with an increase of about 10 to 15 per cent. This would still leave FDI some 25 per cent below the 2019 level. Current forecasts show a further increase in 2022 which, at the upper bound of projections, would bring FDI back to the 2019 level. Prospects are highly uncertain and will depend on, among other factors, the pace of economic recovery and the possibility of pandemic relapses, the potential impact on FDI of recovery spending packages, and policy pressures.

SDG investment
..... pre-crisis
levels

INVESTMENT POLICY DEVELOPMENTS

The number of investment policy measures of a regulatory or restrictive nature more than doubled in 2020. UNCTAD's monitoring of national investment policy measures counted 50, against 21 in 2019. The increased use of screening mechanisms driven by national security concerns over FDI in sensitive industries was a key factor. Most measures that liberalized, promoted or facilitated investment were adopted in developing economies; the total number of these measures remained stable. As a result, the share of more restrictive policy measures reached 41 per cent, the highest on record.

The international investment agreements (IIA) regime is going through a process of rationalization. The entry into force of the EU agreement to terminate all intra-EU bilateral investment treaties (BITs) and the emergence of new megaregional IIAs are adding to the consolidation of bilateral investment policymaking and accelerating regional rulemaking.





The number of ISDS cases surpassed 1,100. Most of the 68 publicly known ISDS cases initiated in 2020 were brought under IIAs signed before the turn of the century. In 2020, ISDS tribunals rendered at least 52 substantive decisions in investor–State disputes. Discussions on the reform of the investor–State dispute settlement (ISDS) system continued at the multilateral level.

All newly signed IIAs now include reform-oriented clauses. IIAs concluded in 2020 all contain features in line with UNCTAD's Reform Package for the International Investment Regime, with the preservation of States' regulatory space being the most frequent area of reform. In 2020, UNCTAD launched its IIA Reform Accelerator to support the reform process.

Investing in the health sector

Most countries actively encourage domestic as well as foreign investment in the health sector, according to an UNCTAD survey. The range of policy tools deployed varies by region and level of development and includes incentives, investment promotion and facilitation, and dedicated special economic zones. While the pandemic has led some countries to increase oversight of health-sector investment, it has also led many governments to double down on efforts to encourage investment in the industry. Internationally, these efforts are complemented by market access and national treatment commitments for health services in the GATS and in some free trade agreements, and by treaty regimes for the protection of investment and intellectual property rights. However, low- and lower-middle-income countries (LLIMCs) face specific challenges that limit their capacity to attract investment in the health sector. Therefore, UNCTAD proposes an Action Plan for the promotion of investment to build productive capacity in key segments of the health-care industry, in support of SDG 3.

INVESTING IN SUSTAINABLE RECOVERY

The recovery of international investment has started, but it could take some time to gather speed. Early indicators on greenfield investment and international project finance – and the experience from past FDI downturns – suggest that even if firms and financiers are now gearing up for “catch-up” capital expenditures, they will still be cautious with new overseas investments in productive assets and infrastructure.

The focus of both policymakers and firms is now on building back better. Resilience and sustainability will shape the investment priorities of firms and governments. For firms, the push for supply chain resilience could lead to pressures in some industries to reconfigure international production networks through reshoring, regionalization or diversification. For governments, recovery stimulus and investment plans focusing on infrastructure and the energy transition imply significant project finance outlays. The implications for international investment flows of both sets of priorities are significant.



Supply chain resilience

MNEs have three sets of options to improve supply chain resilience. They include (i) network restructuring, which involves production location decisions and, consequently, investment and divestment decisions; (ii) supply chain management solutions

(planning and forecasting, buffers, and flexibility); and (iii) sustainability measures that have the additional benefit of mitigating certain risks. Because of the cost of network restructuring, MNEs will first exhaust other supply chain risk mitigation options.

In the short term, the impact of the resilience push on international investment patterns will be limited. In the absence of policy measures that either force or incentivize the relocation of productive assets, MNEs are unlikely to embark on a broad-based restructuring of their international production networks. Resilience is not expected to lead to a rush to reshore but to a gradual process of diversification and regionalization as it becomes part of MNE location decisions for new investments.

However, in some industries the process may be more abrupt. Policy pressures and concrete measures to push towards production relocation are already materializing in strategic and sensitive sectors. Recovery investment plans could provide further impetus: most investment packages, in both developed and developing countries, include domestic or regional industrial development objectives.

Recovery investment priorities

Recovery investment plans in most countries focus on infrastructure sectors – including physical, digital and green infrastructure. These are sound investment priorities that (i) are aligned with SDG investment needs; (ii) concern sectors in which public investment plays a bigger role, making it easier for governments to act; and (iii) have a high economic multiplier effect, important for demand-side stimulus.

A broader perspective on priorities for promoting investment in sustainable recovery includes not only infrastructure but also industries that are key to growth in productive capacity. Investment in industry, both manufacturing and services, was hit much harder by the pandemic than investment in infrastructure. A slow recovery of investment in industrial sectors – in which FDI often plays a more important role – will put a brake on productive capacity growth. For developing countries in particular, initiatives to promote and facilitate new investment in industry, especially in sectors that drive private sector development and structural change, will be important to complement recovery investment in infrastructure.

Recovery investment challenges

Recovery investment packages are likely to affect global investment patterns in the coming years owing to their sheer size. The cumulative value of recovery funds intended for long-term investment worldwide is already approaching \$3.5 trillion, and sizeable initiatives are still in the pipeline. Considering the potential to use these funds to draw in additional private funds, the total “investment firepower” of recovery plans could exceed \$10 trillion. For comparison, that is close to one third of the total SDG investment gap as estimated at the time of their adoption.

The bulk of recovery finance has been set aside by and for developed economies and a few large emerging markets. Developing countries account for only about 10 per cent of total recovery spending plans to date. However, the magnitude of plans is such that there are likely to be spillover effects – positive and negative – to most economies. And international project finance, one of the principal mechanisms through which public funds will aim to generate additional private financing, will channel the effects of domestic public spending packages to international investment flows.

Investment in developing countries
10% of total recovery push

The use of international project finance as an instrument for the deployment of recovery funds can help maximize the investment potential of public efforts, but also raises new challenges. Addressing the challenges and maximizing the impact of investment packages on sustainable and inclusive recovery will require several efforts:

- Swift intervention to safeguard existing projects that have run into difficulty during the crisis, in order to avoid cost overruns and negative effects on investor risk perceptions.
- Increased support for and lending to high-impact projects in developing countries, as the deployment of recovery funds in developed economies will draw international project finance to lower-risk and lower-impact projects.
- Efforts by bilateral and multilateral lenders and guarantee agencies to counter upward pressure on project financing costs in lower-income developing countries.
- Vastly improved implementation and absorptive capacity, because recovery investment plans imply an increase in global infrastructure spending of, at a minimum, three times the biggest annual increment of the last decade, for several years running.
- Strong governance mechanisms and contracts that anticipate risks to social and environmental standards on aggressively priced projects.

A policy framework for investment in sustainable recovery

Promoting investment in resilience, balancing stimulus between infrastructure and industry, and addressing the implementation challenges of recovery plans requires a coherent policy approach. At the strategic level, development plans or industrial policies should guide the extent to which firms in different industries should be induced to rebalance international production networks for greater supply chain resilience (from a firm perspective) and greater economic and social resilience (from a country perspective). They should also drive the promotion and facilitation of investment in industry, needed for complementarity with infrastructure spending.

For developing countries, industrial development strategies should generate a viable pipeline of bankable projects. The lack of shovel-ready projects in many countries remains a key barrier to attracting more international project finance. The risk now is that, in the absence of projects that have gone through the phases of design, feasibility assessment and regulatory preparation, the roll-out of recovery investment funds will incur long delays.

At the level of execution, addressing recovery investment challenges can draw on initiatives included in UNCTAD's Action Plan for Investment in the SDGs, which includes actions aimed at funds mobilization, channeling and impact management.

UNCTAD believes that the drive on the part of all governments worldwide to build back better, and the substantial recovery programmes that are being adopted by many, can boost investment in sustainable growth. The goal should be to ensure that recovery is sustainable, and that its benefits extend to all countries and all people.

CAPITAL MARKETS AND SUSTAINABILITY

UNCTAD estimates that the value of sustainability-themed investment products in global capital markets amounted to \$3.2 trillion in 2020, up more than 80 per cent from 2019. These products include sustainable funds (over \$1.7 trillion), green bonds

(over \$1 trillion), social bonds (\$212 billion) and mixed-sustainability bonds (\$218 billion). Most are domiciled in developed countries and targeted at assets in developed markets.

Sustainability-themed funds continued their growth despite volatile markets in 2020. Their number increased to almost 4,000 by June 2020, up 30 per cent from 2019, with assets under management now representing 3.3 per cent of all open-ended fund assets worldwide.

Social bonds boomed in 2020. Social and mixed-sustainability bond issuance grew more than five-fold. COVID-19 response bonds led by supranational entities such as the African Development Bank and the European Union gave a significant boost to the social and sustainability bond markets and demonstrated proof of concept for tackling other public crises and financing the SDGs.

There are persistent concerns about greenwashing and about the real impact of sustainability-themed investment products. The fund market needs to enhance credibility by improving transparency. Funds should report not only on ESG issues but also on climate impact and SDG alignment. Importantly, to maximize impact on sustainable development more funds should invest in developing and transition economies. Nevertheless, the rapid growth of the sustainable investment market confirms its potential contribution to filling the SDG financing gap.

Institutional investors and financial service providers

Institutional investors are in a strong position to affect change on sustainability. They can do so primarily through two routes: (i) asset allocation – where they choose to invest the capital at their disposal, which can have a determinative impact on companies and markets; and (ii) active ownership – how they influence the policies of the companies they invest in through corporate governance mechanisms.

The potential influence on corporate sustainability of pension funds and sovereign wealth funds (SWFs) is enormous. They manage assets of \$52 trillion and \$9.2 trillion, respectively. More than 40 per cent of their assets are invested in publicly listed equities, making them “universal owners” with large shareholdings in companies across a wide range of sectors and markets.

However, public pension funds and SWFs could do more to promote sustainability. Only 16 of the 50 largest public pension funds and 4 of the 30 largest SWFs in the world published a sustainable investment report in 2019. More fundamentally, public pension fund portfolios largely bypass developing-country markets, limiting their contribution to sustainable development.

Insurance companies can contribute to sustainable development through their role as risk solution providers, as well as through their role as investors (with assets under management of more than \$30 trillion in 2018). Climate change is a systemic risk for the world. Total economic losses from disasters globally were an estimated \$202 billion in 2020, up from \$150 billion in 2019, with about \$190 billion resulting from natural catastrophes.

The banking sector can foster sustainable development through corporate lending. The volume of sustainable financial products has grown in recent years – the sustainable loan market was valued at about \$200 billion in 2020 – driven by increased demand and by campaigns to promote financial sector sustainability efforts.



Stock exchanges and derivatives exchanges

Stock exchanges and derivatives exchanges affect sustainability in their markets through their influence on corporate ESG behaviour and through the promotion of sustainable finance products. Derivatives exchanges can contribute through sustainability-aligned derivatives products, ESG data products and enhanced transparency. Stock exchanges contribute through a wider set of mechanisms. The number of stock exchanges with written guidance for issuers on ESG disclosure (SDG 12.6) has grown rapidly, from 13 in 2015 to 56 at the end of 2020. The number of exchanges that provide training on ESG topics to issuers and investors also continues to rise, with over half offering at least one training course.

Mandatory ESG reporting is on the rise, supported by both exchanges and security market regulators. The number of exchanges covered by mandatory rules on ESG disclosure more than doubled in the past five years, to 25 today. The number of stock exchanges with dedicated sustainability bond segments (including green bond segments, SDG 13) increased by 14 between 2019 and 2020, taking the total to 38.

The future of sustainable finance



In the coming years, the sustainable investment market needs to transition from a niche to a mass market that fully integrates sustainability in business models and culture, leading up to 2030 and beyond. To do so, the market needs to tackle concerns of greenwashing and SDG-washing, and address its geographical imbalance. Much work has been done over the past decade by asset owners, financial institutions, exchanges, regulators and policymakers. Better coordination and effective monitoring of their activities can help accelerate the transition.

To this end, UNCTAD, together with partners, will launch the UN Global Sustainable Finance Observatory. The Observatory will address the challenges of fragmentation in standards, proliferation in benchmarking, complexity in disclosure, and self-declaration of sustainability. It will integrate the relevant instruments and outputs on its virtual platform to facilitate the assessment, transparency and integrity of sustainable finance products and services. The Observatory will work in tandem with the standards-setting processes of the financial industry and regulatory bodies to promote the full and effective integration of sustainable development (as defined by the SDGs) into all aspects of the global financial ecosystem.

The UN Global Sustainable Finance Observatory will be launched officially in October 2021 at UNCTAD's World Investment Forum, which brings together the global investment-for-development community, including all capital market stakeholders along the global investment chain.

CHAPTER I

GLOBAL INVESTMENT TRENDS AND PROSPECTS

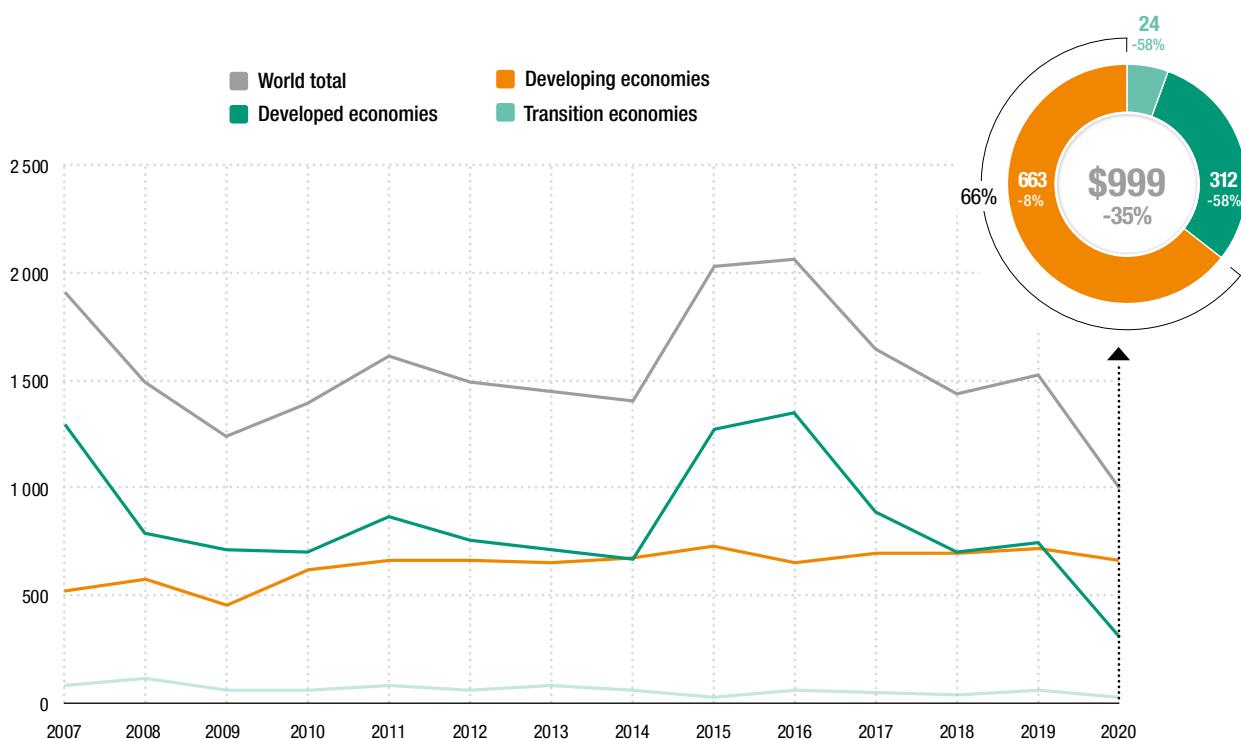


A. CURRENT FDI TRENDS

1. Global trends

Global foreign direct investment (FDI) flows fell by 35 per cent in 2020, reaching \$1 trillion, from \$1.5 trillion in 2019 (figure I.1). This is the lowest level since 2005 and almost 20 per cent lower than the 2009 trough after the global financial crisis. The lockdowns around the world in response to the COVID-19 pandemic slowed down existing investment projects, and the prospects of a recession led multinational enterprises (MNEs) to re-assess new projects. The fall in FDI was significantly sharper than the fall in gross domestic product (GDP) and trade.

Figure I.1. | FDI inflows, global and by group of economies, 2007–2020 (Billions of dollars and per cent)



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

FDI plummeted in developed and transition economies, falling by 58 per cent in both. It decreased by a more moderate 8 per cent in developing economies, mainly because of resilient flows in Asia (up 4 per cent). As a result, developing economies accounted for two thirds of global FDI, up from just under half in 2019.

Both the steep decline in developed economies and the relatively strong showing in Asia were influenced to a significant degree by large fluctuations in a small number of conduit economies. Of the global decline of some \$500 billion, almost one third was accounted for by the Netherlands and caused by the liquidation of several large holding companies, corporate reconfigurations and intrafirm financial flows. The uptick in Asia was mostly driven by an increase in FDI flows to Hong Kong, China (up \$46 billion from low levels in 2019),

Table I.1.

Announced greenfield projects, cross-border M&As and international project finance deals, by group of economies, 2019–2020

Group of economies	Type of FDI	Value (Billions of dollars)			Growth rate (%)	Number		Growth rate (%)
		2019	2020			2019	2020	
Developed economies	Cross-border M&As	424	379	-11		5 802	5 225	-10
	Greenfield projects	346	289	-16		10 331	8 376	-19
	International project finance	243	175	-28		543	587	8
Developing economies	Cross-border M&As	82	84	2		1 201	907	-24
	Greenfield projects	454	255	-44		7 240	4 233	-42
	International project finance	365	170	-53		516	443	-14
Transition economies	Cross-border M&As	1	12	716		115	69	-40
	Greenfield projects	46	20	-58		697	371	-47
	International project finance	26	21	-18		59	31	-47

Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics) for M&As, information from the Financial Times Ltd, fDi Markets (www.fdimarkets.com) for announced greenfield FDI projects and Refinitiv SA for international project finance deals.

largely reflecting financial transactions by Chinese MNEs. Excluding the effects of conduit flows, one-off transactions and intrafirm financial flows, the global decline was slightly more moderate (about 25 per cent) and uniform (with flows to developing Asia down 6 per cent).¹

The patterns in new greenfield investment announcements and international project finance deals contrasted sharply with FDI patterns, with much steeper declines in developing economies than in developed ones. Greenfield announcements in developing countries fell by 44 per cent in value and international project finance deals by 53 per cent, compared with 16 per cent and 28 per cent in developed countries (table I.1). These investment types are crucial for the development of productive capacity and infrastructure and for the prospects for a sustainable recovery.

The sudden and simultaneous interaction of supply- and demand-side shocks triggered a cascade of effects. The slowdown in project activity (across greenfield, project finance and cross-border mergers and acquisitions (M&As)) resulted in a large drop in new equity flows (figure I.2). Intracompany loans were negative in many countries because of changes in financial positions within MNEs in response to the crisis. Lower earnings also affected reinvestment; the profits of the largest MNEs plunged by 36 per cent on average. Although reinvested earnings declined by only 7 per cent overall, in many large host countries they declined significantly. For example, reinvested earnings of foreign affiliates in the United States fell by 44 per cent. In other countries with significant investment in commodity-related industries, reinvested earnings suffered from the combined effects of the pandemic and the plummeting oil prices early in the year.

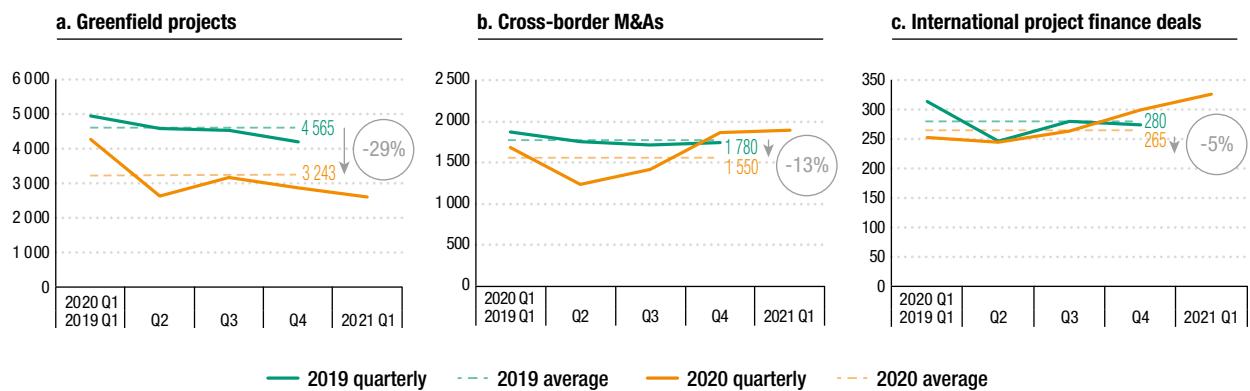
The impact of the pandemic on global investment trends was immediate and concentrated in the

Figure I.2. Global FDI inflows, by components, 2019 and 2020 (Billions of dollars and per cent)


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

Figure I.3.

Announced greenfield projects, cross-border M&As and international project finance deals, 2019 Q1–2021 Q1

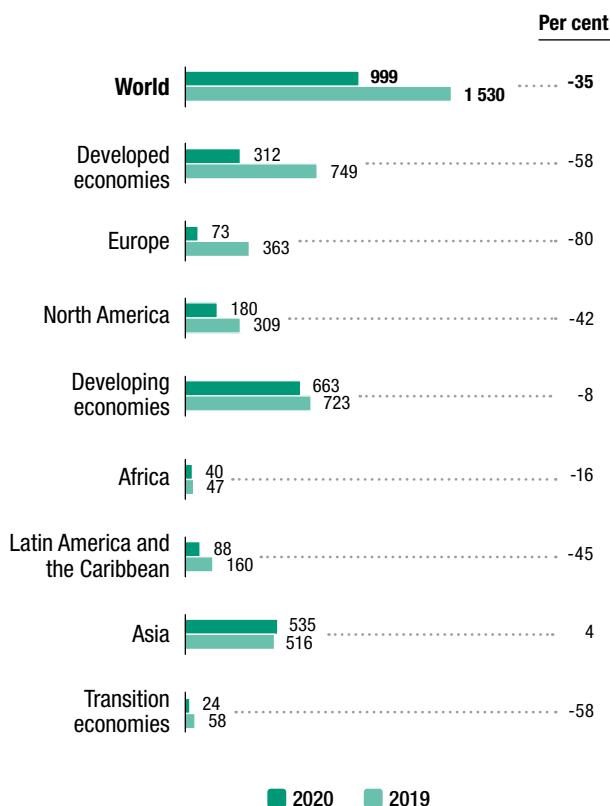


first half of 2020. In the second half, cross-border M&As and international project finance deals partly recovered (although the recovery was concentrated in developed economies). In contrast, greenfield investment continued its negative trend throughout 2020 and into the first quarter of 2021 (figure I.3).

2. Trends by geography

Figure I.4.

FDI inflows, by region, 2019 and 2020 (Billions of dollars and per cent)

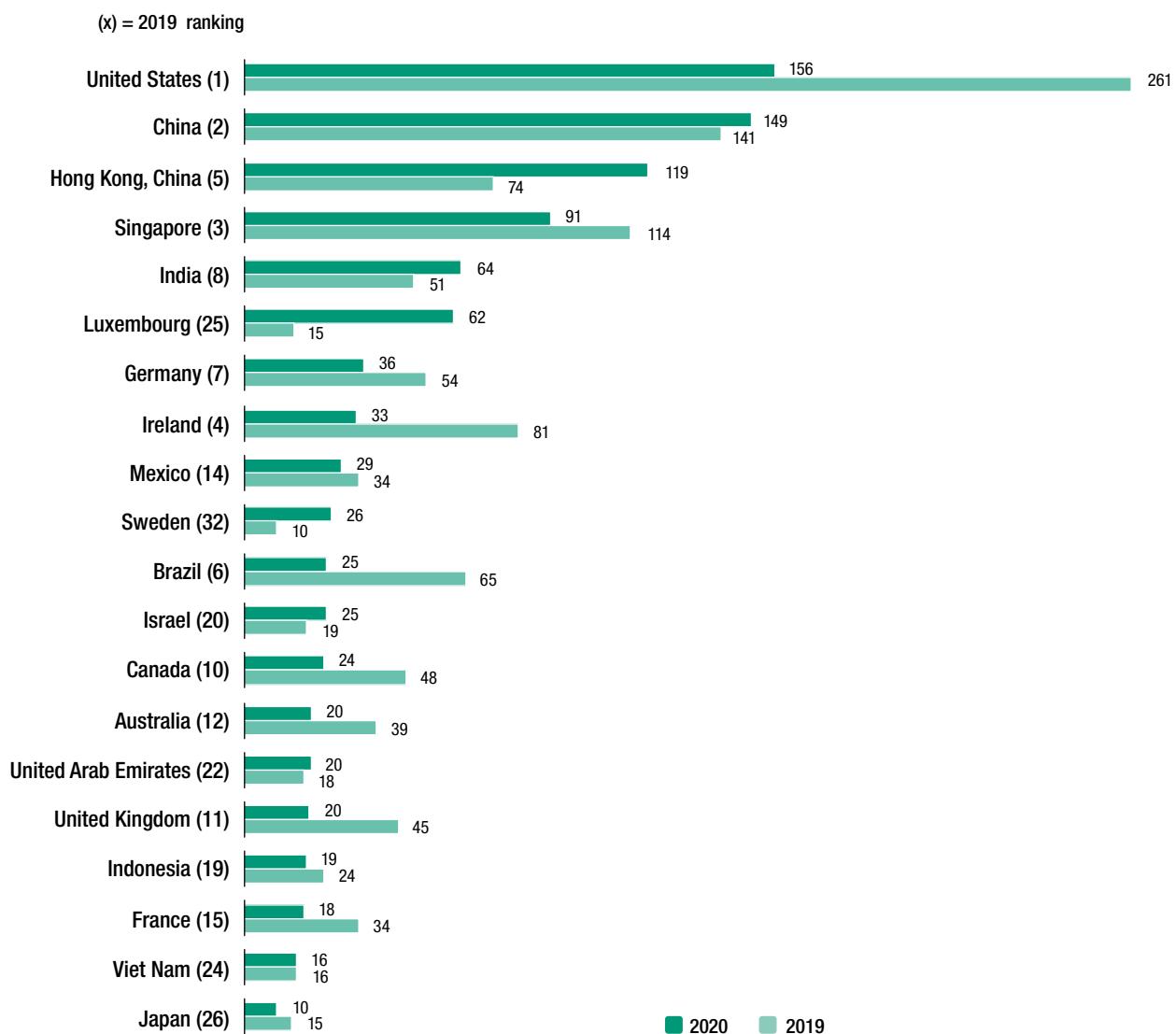


a. FDI inflows

FDI flows to developed economies fell by 58 per cent to \$312 billion (figure I.4). The decline was inflated by strong fluctuations in conduit and intrafirm financial flows, and by corporate reconfigurations. The value of net cross-border M&A sales in developed economies, normally the most important FDI type in those economies, decreased by 11 per cent to \$379 billion. The values of announced greenfield investments and cross-border project finance deals declined by 16 per cent and 28 per cent, respectively.

Aggregate inflows in Europe plummeted by 80 per cent, reaching only \$73 billion. FDI fell in European countries that have significant conduit flows (in addition to the Netherlands, Switzerland remained in negative territory), but it also dropped in large economies such as the United Kingdom (-57 per cent), France (-47 per cent) and Germany (-34 per cent). FDI to the European Union fell by 73 per cent to \$103 billion. Flows to the United States decreased by 40 per cent, to \$156 billion, mainly because of a reduction in reinvested earnings. Nevertheless, the country remained the largest recipient of FDI, followed closely by China (figure I.5).

Figure I.5. | FDI inflows, top 20 host economies, 2019 and 2020 (Billions of dollars)

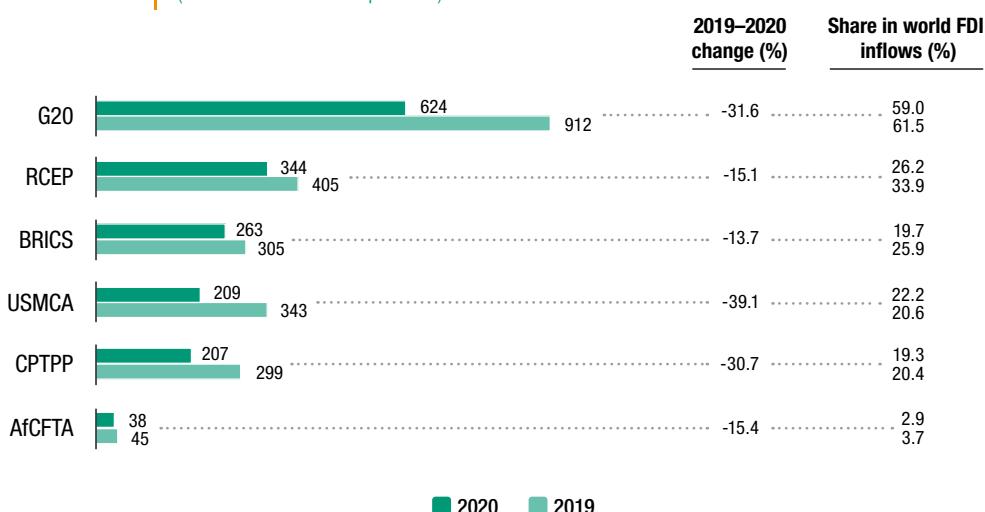


Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

New equity inflows also fell, mirroring drops in both greenfield investment and cross-border M&As. Elsewhere, flows to Australia halved and those to Japan decreased by 30 per cent.

FDI flows to developing economies decreased less steeply, by 8 per cent to \$663 billion. FDI flows to China rose by 6 per cent to \$149 billion, mainly because of resilient economic growth, investment facilitation efforts and continuing investment liberalization.

Developing Asia, already the largest FDI recipient region – accounting for more than half of global FDI – registered a rise of 4 per cent to \$535 billion. However, excluding sizeable conduit flows to Hong Kong, China, flows to the region were down 6 per cent. FDI in South-East Asia – normally an engine of growth for global FDI – contracted by 25 per cent to \$136 billion, with declines in investment in all the largest recipients, including Singapore (-21 per cent), Indonesia (-22 per cent) and Viet Nam (-2 per cent). The newly signed Regional Comprehensive Economic Partnership (RCEP) became one of the largest FDI recipient groups (figure I.6). In India FDI rose, pushed up by acquisitions in the information and communication technology (ICT) industry, making it the fifth largest recipient in the world.

Figure I.6.**FDI inflows in selected groups, 2019 and 2020**
(Billions of dollars and per cent)

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

Note: G20 includes only the 19 member countries (excluding the European Union); AfCFTA = African Continental Free Trade Area; BRICS = Brazil, Russian Federation, India, China and South Africa; CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership; RCEP = Regional Comprehensive Economic Partnership; USMCA = United States–Mexico–Canada Agreement.

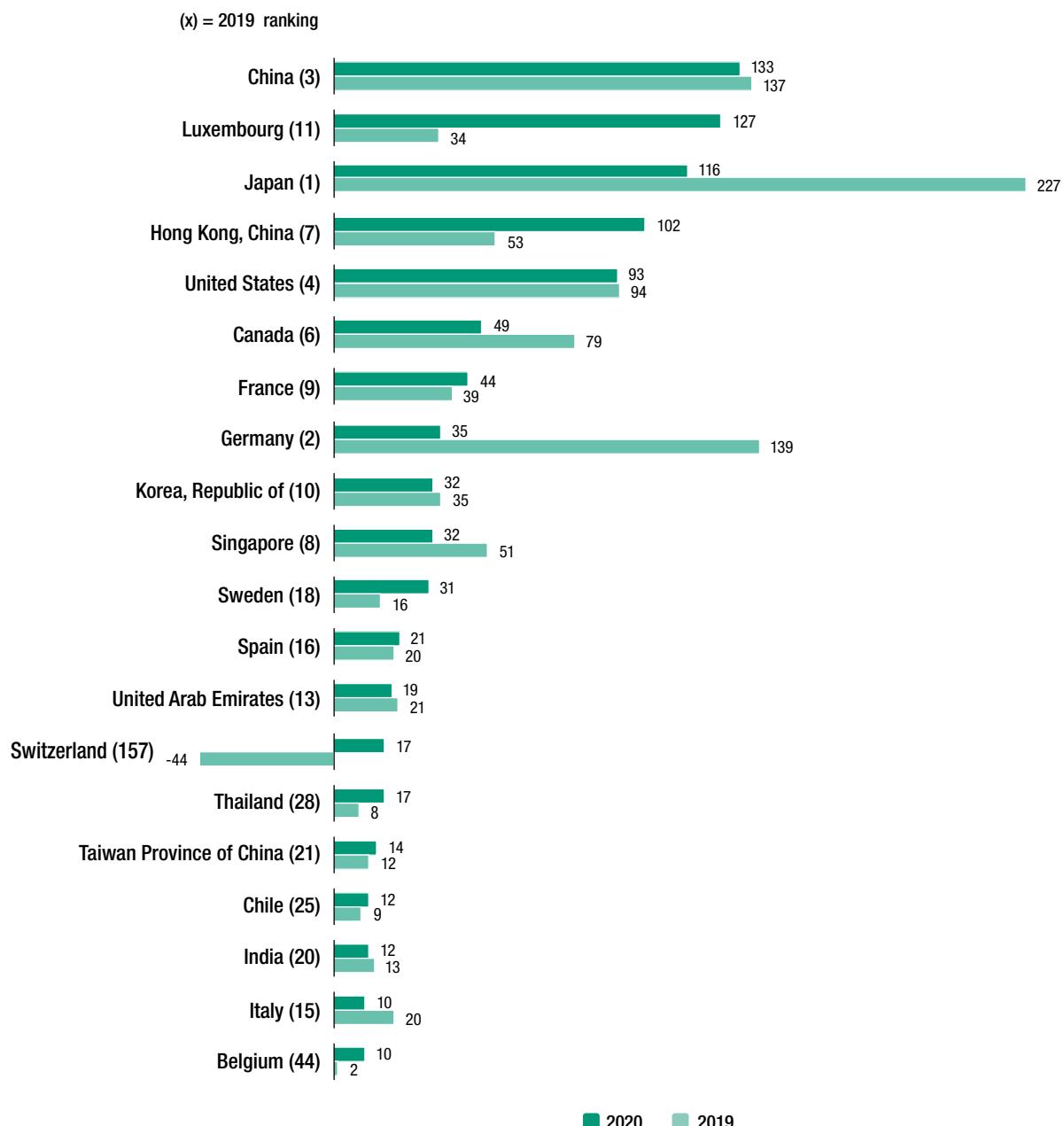
FDI flows to Latin America and the Caribbean, Africa and transition economies tumbled as the collapse in export demand caused by the pandemic and a significant drop in commodity prices early in 2020 weighed heavily on their investment prospects. FDI in Latin America and the Caribbean dropped 45 per cent to \$88 billion, the steepest decline among developing regions. Inflows to Brazil, Colombia, Chile and Peru plummeted while those to Mexico fell less sharply (by 15 per cent to \$29 billion). FDI flows to Africa declined by 16 per cent in 2020 to \$40 billion – a level last seen 15 years ago. Egypt remained the largest recipient in the region. In 2020, flows to the transition economies shrank by 58 per cent to \$24 billion. Inflows plummeted in the Russian Federation, the largest economy of transition economies – from \$32 billion in 2019 to \$10 billion, reflecting its significant dependence on investment in the extractive industry.

b. FDI outflows

In 2020, MNEs from developed economies reduced their investment abroad by 56 per cent, to \$347 billion. As a result, their share in global outward FDI dropped to a record low of 47 per cent. As with inflows, the decline in investment by major investor economies was exacerbated by strong volatility in conduit flows.

Aggregate outward investment by European MNEs (including large negative flows) fell by 80 per cent to \$74 billion – the lowest amount since 1987. This fall was driven by sharp declines in outflows from the Netherlands, Germany, Ireland and the United Kingdom. Outflows from the Netherlands – normally among the largest source countries in Europe – dropped by \$246 billion to -\$161 billion, owing to corporate reconfigurations and holding-company liquidations. Despite several sizeable acquisitions abroad by German MNEs, large withdrawals of loans (-\$55 billion) reduced FDI outflows by 75 per cent. In the United Kingdom, outflows declined from -\$6 billion to -\$33 billion, with continued large negative reinvested earnings. In addition, MNEs from the United Kingdom divested some of their assets abroad. For example, Tesco sold its stores in Thailand for \$9.9 billion and Vodafone unloaded its tower assets in Italy for \$5.8 billion.

Figure I.7. | FDI outflows, top 20 home economies, 2019 and 2020 (Billions of dollars)



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

Outflows from the United States remained flat at \$93 billion. An increase in flows to Europe was offset by reduced investment in Asia, mainly in Singapore. Investment by Japanese MNEs – the largest outward investors in the last two years – dropped by half to \$116 billion, as large M&A purchases were not repeated in 2020.

The value of investment activity abroad by MNEs from developing economies declined by 7 per cent, reaching \$387 billion. However, excluding flows from Hong Kong, China, that value declined by 22 per cent. Outward FDI from China, despite a 3 per cent decline, remained high at \$133 billion, making China the largest investor in the world (figure I.7). The value of cross-border M&A purchases by Chinese MNEs doubled, mostly due to financial transactions in Hong Kong, China. Continued expansion of the Belt and Road Initiative also

led to resilient FDI outflows amid the pandemic. Outflows from South-East Asia decreased by 16 per cent to \$61 billion. Flows from Singapore dropped by 36 per cent, to \$32 billion, with most investment going to other countries of the Association of Southeast Asian Nations (ASEAN). In contrast, outward FDI from Thailand more than doubled to \$17 billion, mostly in financial services and manufacturing in neighbouring countries. Thai companies actively pursued cross-border M&A purchases (for instance, Bangkok Bank acquired Bank Permata in Indonesia for \$2.3 billion).

Outward investment by Latin American MNEs collapsed in 2020, recording an overall disinvestment of -\$3.5 billion, for the first time ever. The decline in value (of about \$50 billion) was caused mostly by continued negative outflows from Brazil (-\$26 billion), resulting from MNEs raising funds through their overseas subsidiaries and from a 41 per cent decrease of outward FDI from Mexico. Outflows from Chile, in contrast, rose by 25 per cent to \$12 billion, as Chilean MNEs increased loans to their foreign affiliates abroad.

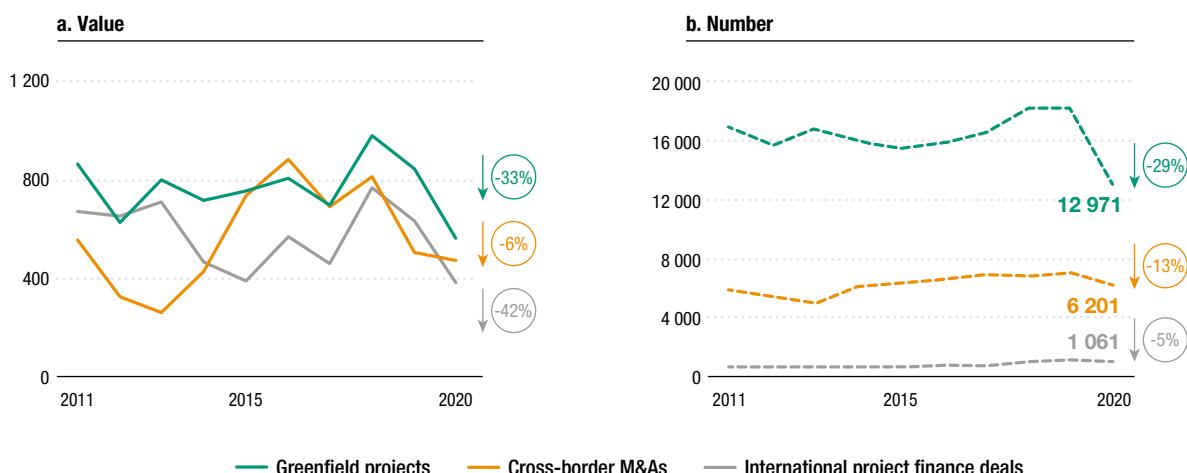
In 2020, FDI outflows from transition economies fell by 76 per cent to \$6 billion, mostly driven by reduced investment overseas by Russian MNEs in extractive industries because of lower reinvested earnings (-83 per cent).

3. Trends by type and sector

The pandemic had a sizeable impact across all types of FDI in 2020, affecting investment in all regions and industries (figure I.8). Greenfield project announcements decreased in volume and number, by 33 per cent and 29 per cent, respectively. International project finance volumes were also affected – declining by 42 per cent – although the number of project finance deals (more indicative of the trend) slowed by only 5 per cent. The value of net cross-border M&As decreased by 6 per cent and the number of deals by 13 per cent, as the sharp decline in the first half of the year was mostly offset by a surge in the last quarter of 2020.

Figure I.8.

Announced greenfield projects, cross-border M&As and international project finance deals, 2011–2020 (Billions of dollars and number)



Source: UNCTAD, cross-border M&A database (www.unctad.org/fdistatistics) for M&As, information from the Financial Times Ltd, fDi Markets (www.fdimarkets.com) for announced greenfield FDI projects and Refinitiv SA for international project finance deals.

a. Greenfield investment trends

The value of announced greenfield investment projects fell to \$564 billion in 2020 (table I.2), the lowest level ever recorded. The geographical focus of foreign investors shifted to developed economies. Consequently, developing countries faced an unprecedented downturn in greenfield FDI projects.

The importance of the primary sector continued to wane. The aggregate value of announced greenfield projects in the sector halved to \$11 billion, representing less than 2 per cent of the total. More than half of that value came from a single \$6.4 billion project in oil and gas extraction in Australia, announced by Royal Dutch Shell (Netherlands–United Kingdom).

The contraction in the number of greenfield project announcements was most pronounced in the manufacturing sector. The services sector, which represents half of the value of global greenfield projects in 2019, was less affected.

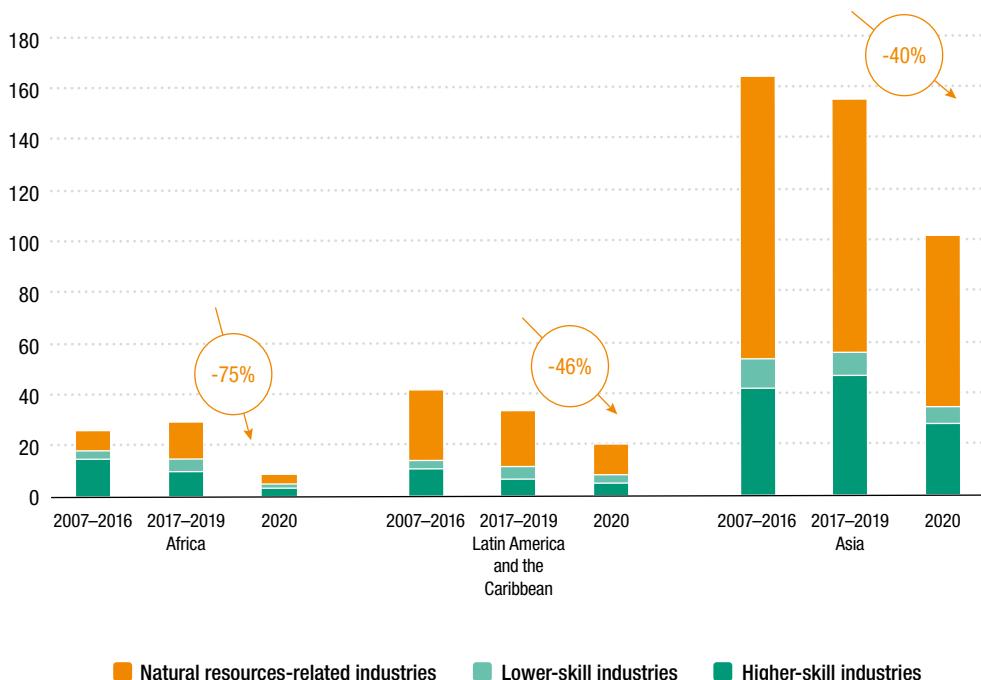
Greenfield announcements in energy generation and distribution decreased by 13 per cent to \$99 billion, as foreign investors continued to invest more in renewable energy power projects than in projects based on fossil fuels. Projects in renewable energy, which hit a record high in terms of both value and number in 2019, were not immune from the global economic shock but showed resilience. Greenfield investment in renewables declined by only 5 per cent in value, to \$88 billion, across 507 projects. All but one of the 10 highest-value energy projects announced by foreign investors in 2020 were in the renewable energy industry.

The pandemic boosted demand for digital infrastructure and services globally. This led to higher values of greenfield FDI project announcements targeting the ICT industry, rising by more than 22 per cent to \$81 billion. Although the number of announced projects decreased by 13 per cent, the ICT industry attracted the largest share of projects. Major project announcements in this industry included a \$6 billion deal by Telefónica (Spain) to build a fibre-optic network in Germany, a \$2.8 billion investment by Amazon (United States) in ICT infrastructure in India and a \$1.8 billion investment by Alphabet (United States) in Poland through Google.

Table I.2. Announced greenfield projects, by sector and selected industries, 2019–2020

Sector/industry	Value (Billions of dollars)			Growth rate (%)	Number		Growth rate (%)
	2019	2020	2019		2019	2020	
Total	846	564	-33		18 261	12 971	-29
Primary	21	11	-47		151	100	-34
Manufacturing	402	237	-41		8 180	5 139	-37
Services	422	315	-25		9 930	7 732	-22
<i>Top 10 industries in value terms</i>							
Energy and gas supply	113	99	-13		560	529	-6
Information and communication	66	81	22		3 332	2 903	-13
Electronics and electrical equipment	53	46	-14		1 201	862	-28
Chemicals	47	40	-15		752	442	-41
Construction	66	35	-47		437	319	-27
Automotive	62	33	-47		1 022	558	-45
Coke and refined petroleum	94	30	-69		109	54	-50
Transportation and storage	43	26	-39		764	627	-18
Trade	22	23	5		688	572	-17
Finance and insurance	24	19	-19		1 028	715	-30

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

Figure I.9.**Developing economies: announced FDI greenfield projects in manufacturing by value (Billions of dollars and per cent)**

Source: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fdimarkets.com).
Note: Natural resources-related industries include (i) coke, petroleum products and nuclear fuel; (ii) metals and metal products; (iii) non-metallic mineral products; and (iv) wood and wood products. Lower-skill industries include (i) food, beverages and tobacco and (ii) textiles, clothing and leather; higher-skill industries include all other manufacturing industries.

Greenfield project announcements in manufacturing industries registered a 41 per cent decline to \$237 billion. In developing economies, where such investments are most important for industrial development, the decline mirrored the global trend, with a 42 per cent fall to \$129 billion. Manufacturing projects remained concentrated in Asia (\$101 billion) (figure I.9).

The energy price shock early in 2020 also affected resource-based processing industries, halving the number of investment announcements in coke and refined petroleum and reducing the value of announced projects by a third, to \$30 billion. Nevertheless, several large projects were announced in this sector, among them one by Hengyi Group (China) for an investment exceeding \$13 billion to build a refinery and petrochemical complex in Brunei Darussalam.

The number of new projects almost halved in the automotive and chemical industries as well. However, despite the decline worldwide, several large-scale investments in basic chemicals projects contributed to a minor increase in the value of projects in developing countries. The downward pressure on the value of announced investments in manufacturing was mitigated in part by significant projects in semiconductors and batteries for transport equipment. TSMC (Taiwan Province of China) announced an investment of \$12 billion in a chip factory in the United States. Announcements of battery investments included \$5.1 billion by Contemporary Amperex Technology (China) in Indonesia, \$2.3 billion by Honeycomb Energy Technology (China) in Germany and \$2.2 billion by Groupe PSA (France), also in Germany.

b. International project finance trends

International project finance activity was less affected by the crisis than greenfield investment, with a decline of only 5 per cent in the number of new projects. However, the relative resilience of project finance was due only to continued growth in renewable energy projects, which constitute more than half of project finance deals. The pandemic affected international deals more than projects led by domestic sponsors, as overall project finance activity remained stable. Greater risk aversity among international sponsors, often involved in the largest projects, led to a decline in total project values of 42 per cent, to \$367 billion (table I.3) – the lowest level since 2003.

International project finance announcements in the oil and gas industry decreased by 78 per cent in value and 16 per cent in number compared with 2019. Within this industry, the most drastic contraction across developing regions was reported in Asia, where the value of announced investment fell from \$68 billion to \$17 billion, although the number of deals increased by 20 per cent.

In value terms, most project finance is in infrastructure – including transport infrastructure, power generation and distribution, and other utilities. The pandemic recovery and stimulus packages adopted in developed countries and regions, which focused largely on infrastructure, are therefore expected to provide a boost to international project finance. Infrastructure project finance in 2020 increased in telecommunication (62 per cent) but declined significantly in other key industries: energy (-28 per cent) and transport (-26 per cent).

The value of energy infrastructure projects fell to the lowest point in eight years (-40 per cent to \$27 billion). Asia was the only region reporting growth, in both number and value of projects. Two major ones were announced in Viet Nam: a \$5 billion gas-fired power plant proposed by ExxonMobil (United States) and a \$2.2 billion coal-fired power plant developed by Thai MNEs in the Quang Tri Economic Zone.

Telecommunication investment increased broadly because of the pandemic-induced acceleration in digital adoption; however, this increase was not reflected in project finance announcements in ICT infrastructure in developing countries. The value of those announcements fell from \$57 billion in 2019 to less than \$7 billion (the 2019 value was inflated by a single large megaproject).

Table I.3. Announced international project finance deals, selected industries, 2019–2020

Industry	Value (Billions of dollars)			Growth rate (%)	Number		Growth rate (%)	
	2019	2020	2019		2020	2019		
Total	634	367		-42		1 118	1 061	-5
<i>Top 10 industries by number</i>								
Renewable energy	179	167	-7		644	689	7	
Energy	45	27	-40		95	68	-28	
Oil and gas	151	33	-78		74	62	-16	
Transport infrastructure	86	35	-59		66	49	-26	
Mining	41	12	-72		71	46	-35	
Telecommunication	65	31	-53		26	42	62	
Residential/commercial real estate	18	10	-44		50	34	-32	
Industrial real estate	18	36	101		36	30	-17	
Water and sewerage	5	4	-25		22	19	-14	
Petrochemicals	15	12	-19		12	16	33	

Source: UNCTAD, based on data from Refinitiv SA.

In transport infrastructure, the 59 per cent decline in the value of announced investment was due to the smaller number of large-scale projects. With larger deals becoming more difficult to close in higher-risk environments, the number of projects exceeding \$1 billion dropped by more than half (from 18 in 2019 to just 8 in 2020). In developed economies, the value of investment more than halved to \$17 billion, despite an increase in the number of projects. In developing regions, only Africa registered an increase in the value of such projects, to \$14 billion, owing to an \$11 billion railway project announced in Zambia.

c. Cross-border M&As

Cross-border M&A sales reached \$475 billion in 2020 – a decrease of 6 per cent compared with 2019 (table I.4). Contrary to the overall trend, the value of cross-border M&As in food, beverages and tobacco quadrupled to \$86 billion, owing to a corporate reconfiguration registered as a merger of Unilever (United Kingdom) with Unilever (Netherlands) for \$81 billion. Among the top target industries were information and communication, and pharmaceuticals, as the pandemic gave the digital and health sectors a big push.

Sales of assets in digital-related industries rose significantly (mainly in manufacturing of computers, electronics, optical products and electrical equipment, and in information and technology). Notable deals included the purchase of Cypress (United States) by Infineon (Germany) for \$9.8 billion.

After a jump in 2019, the value of M&A sales in pharmaceuticals stabilized at \$56 billion, but the number of deals rose significantly, reaching 211 – the highest number ever recorded. This appears to reflect a pivot in expansion strategies in the industry, from large M&As to smaller acquisitions, particularly in therapeutics, and research and development collaborations such as that between Pfizer (United States) and BioNTech (Germany) for the COVID-19 vaccine.²

Table I.4. Net cross-border M&As, by sector and selected industries, 2019–2020

Sector/industry	Value (Billions of dollars)			Number		
	2019	2020	Growth rate (%)	2019	2020	Growth rate (%)
Total	507	475	-6	7 118	6 201	-13
Primary	37	25	-31	433	658	52
Manufacturing	243	228	-6	1 633	1 136	-30
Services	227	221	-3	5 052	4 407	-13
<i>Top 10 industries in value terms</i>						
Food, beverages and tobacco	20	86	323	193	136	-30
Information and communication	25	80	225	1 312	1 248	-5
Pharmaceuticals	98	56	-43	186	211	13
Electronics and electrical equipment	21	40	94	279	165	-41
Utilities	12	33	165	190	190	0
Telecommunication	6	29	372	84	61	-27
Finance and insurance	49	28	-43	619	562	-9
Extractive industries	35	24	-31	354	527	49
Real estate	37	22	-40	436	327	-25
Trade	16	18	10	575	496	-14

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

In developed countries, where cross-border M&As are a significant part of total FDI, the value of deals decreased by 11 per cent, mostly in North America (-40 per cent) while in Europe the increase of 25 per cent was inflated by the corporate reconfiguration in the Netherlands.

In the primary sector (mainly in mining, quarrying and petroleum), M&A values fell by 31 per cent. Over the past decade, M&As in the sector have contracted steadily, reflecting a continued trend of reduced investment in the upstream activities of the oil and gas industry. Several large divestments were registered in the primary sector in 2020. For example, BP (United Kingdom) sold its Alaska business to Hilcorp (United States) for \$5.6 billion, and Mubadala (United Arab Emirates) divested its shares in Borealis to OMV (Austria) for \$4.7 billion. In developing Asia and in transition economies, however, the value M&A sales in the sector still increased.

4. SDG investment trends in developing economies

The pandemic is exacerbating the SDG investment gap, particularly in LDCs and other structurally weak economies. SDG-relevant greenfield investment in developing regions is now 33 per cent lower than before the pandemic, and international project finance is down by 42 per cent. This decline is much larger in developing countries than in developed countries. Gains in investment in renewable energy and digital infrastructure in developed economies reflect the asymmetric effect that public support packages will have on global SDG investment trends. The drop in foreign investment may reverse the progress achieved in promoting SDG investment in recent years, posing a risk to delivering the 2030 agenda for sustainable development and to sustained post-pandemic recovery.

Greenfield and project finance investment activity fell markedly, with all but one of the SDG investment sectors (renewable energy) registering double-digit declines from the pre-COVID level (table I.5).

Table I.5.

The pandemic impact on investment in SDGs: announced greenfield and project finance, change in value, 2019–2020 (Per cent)

Infrastructure Transport infrastructure, power generation and distribution (except renewables), telecommunication	  	-54	Health Investment in health infrastructure, e.g. new hospitals		-54
Renewable energy Installations for renewable energy generation, all sources		-8	Food and agriculture Investment in agriculture, research, rural development		-49
WASH Provision of water and sanitation to industry and households		-67	Education Infrastructural investment, e.g. new schools		-35

Source: UNCTAD.

a. Greenfield investment

In developing and transition economies, the positive trends in the pre-pandemic period were reversed by the COVID-19 crisis, except in the telecommunication sector. The number of announced greenfield projects was growing at a rate of 4 per cent annually in the pre-pandemic period (2015–2019), mostly led by the transport, telecommunication, WASH and education sectors (table I.6). The shock also worsened trends in sectors that were already struggling before the pandemic, such as power, food and agriculture and health.

The decline in the overall value of greenfield projects in LDCs was less pronounced, but the impact could be more detrimental than in other developing countries. Greenfield investment in food and agriculture (including processing industries), an important investment sector in LDCs, registered a drop of 91 per cent.³ This raises additional concerns about the impact in the poorest economies around the world and confirms the urgency to further mobilize investment for basic needs.

Table I.6.

Announced greenfield projects in SDG sectors

(Millions of dollars and per cent)

SDG-relevant sector	Developing and transition economies				LDCs			
	Pre-pandemic trend ^a (%)	2019	2020	Pandemic impact ^b (%)	Pre-pandemic trend ^a (%)	2019	2020	Pandemic impact ^b (%)
Total								
Value	-5	137 192	92 266	-33	-8	12 711	9 808	-23
Number of projects	4	1 727	1 157	-33	-5	106	73	-31
Power ^c								
Value	-23	18 144	10 571	-42	-32	1 480	3 446	133
Number of projects	-10	29	15	-48	-19	3	3	-
Renewable energy								
Value	-5	42 594	30 180	-29	-21	2 030	3 204	58
Number of projects	5	259	195	-25	-3	15	20	33
Transport services								
Value	9	27 115	11 221	-59	31	3 627	756	-79
Number of projects	2	347	196	-44	6	36	15	-58
Telecommunication ^d								
Value	6	19 107	24 197	27	-34	255	1 896	642
Number of projects	4	322	250	-22	-32	6	20	233
Water, sanitation and hygiene (WASH)								
Value	4	1 894	598	-68	..	61	-	-100
Number of projects	4	19	7	-63	..	1	-	-100
Food and agriculture								
Value	-2	20 815	10 846	-48	19	4 703	408	-91
Number of projects	3	386	268	-31	-4	23	7	-70
Health								
Value	-6	6 252	3 840	-39	-15	419	77	-82
Number of projects	7	286	165	-42	4	14	5	-64
Education								
Value	12	1 271	812	-36	22	137	21	-85
Number of projects	3	79	61	-23	-3	8	3	-63

Source: UNCTAD, based on Financial Times Ltd, fDi Markets (www.fdimarkets.com).

^a Compound annual growth rate (CAGR) for 2015–2019.

^b Changes from 2019 to 2020.

^c Excluding renewable energy.

^d Including information services activities.

b. Project finance

International project finance in developing and transition economies was also severely affected by the health crisis. Cross-border project finance deals directed towards SDG sectors decreased by 42 per cent in value and 14 per cent in number compared with 2019, on par with the drop in greenfield investment (table I.7).

In LDCs the total project finance value grew by 27 per cent, but the number of projects declined by 22 per cent. The positive trend in investment values is driven by a few deals in transport infrastructure: the Standard Gauge Railway Project in Zambia, worth \$11 billion; the Ndyane Port Project for \$1.1 billion in Senegal; renewable energy projects including the Lotus Energy Solar for \$10 billion in Ethiopia; and the Ayago Project for \$1.4 billion in Uganda.

As the investment gaps widen, the outlook for meeting the SDGs becomes more uncertain. Growth in SDG investment was already lagging before the pandemic. With less than 10 years left to achieve the goals of the UN's 2030 Agenda for Sustainable Development, a renewed commitment involving all stakeholders and leveraging all sources of finance – public and private – will be crucial, even just to resume the pre-pandemic growth trajectory.

Table I.7.

Announced international project finance deals in SDG sectors

(Millions of dollars and per cent)

SDG-relevant sector	Developing and transition economies				LDCs			
	Pre-pandemic trend ^a (%)	2019	2020	Pandemic impact ^b (%)	Pre-pandemic trend ^a (%)	2020	2019	Pandemic impact ^b (%)
Total								
Value	12	204 645	117 935	- 42	8	22 805	28 984	27
Number of projects	9	393	338	- 14	21	58	45	- 22
Power								
Value	- 15	29 278	21 130	- 28	- 5	7 287	4 432	- 39
Number of projects	0	62	46	- 26	7	13	9	- 31
Renewable energy								
Value	9	66 649	70 345	6	10	6 843	11 159	63
Number of projects	14	257	250	- 3	33	34	29	- 15
Transport infrastructure								
Value	23	47 627	18 458	- 61	35	6 190	12 601	104
Number of projects	4	45	22	- 51	12	8	4	- 50
Telecommunication								
Value	319	57 001	6 585	- 88	..	2 099	-	- 100
Number of projects	73	9	9	-	..	1	-	- 100
Water, sanitation and hygiene (WASH)								
Value	- 2	3 403	1 172	- 66	..	225	792	253
Number of projects	3	16	7	- 56	..	1	3	200
Food and agriculture								
Value	- 29	687	219	- 68	- 37	162	-	- 100
Number of projects	19	4	2	- 50	-	1	-	- 100
Health								
Value	- 100	-	9	-	-	..
Number of projects	- 100	-	1	-	-	..
Education								
Value	..	-	18	-	-	..
Number of projects	..	-	1	-	-	..

Source: UNCTAD, based on Refinitiv.

^a Compound annual growth rate (CAGR) for 2015–2019.

^b Changes from 2019 to 2020.

B. FDI PROSPECTS

1. Global prospects

Global FDI flows are expected to bottom out in 2021 and recover some lost ground with an increase of 10–15 per cent. This would still leave FDI some 25 per cent below the 2019 level and more than 40 per cent below the recent peak in 2016 (figure I.10). Current forecasts show a further increase in 2022 which, at the upper bound of the projections, could bring FDI back to the 2019 level of \$1.5 trillion.

The relatively modest recovery in global FDI projected for 2021 reflects lingering uncertainty about access to vaccines, the emergence of virus mutations and delays in the reopening of economic sectors. As FDI tends to trail other macroeconomic indicators after a shock, a full and broad-based recovery in flows to pre-pandemic levels is expected to take longer. This is despite expectations of a boom in capital expenditures by MNEs as a result of a peak in cash holdings and pent-up spending plans (for details, see section I.C). Increased expenditures on both fixed assets (e.g. machinery and equipment) and intangibles will not translate directly into a rapid FDI rebound, as confirmed by the sharp contrast between rosy forecasts for capital expenditures and still depressed greenfield project announcements.

Moreover, the FDI recovery will be uneven. Developed economies are expected to drive global growth in FDI, both because of strong cross-border M&A activity and large-scale public investment support. FDI inflows to Asia will remain resilient; the region has stood out as an attractive destination for international investment throughout the pandemic.

Figure I.10. Global FDI inflows, 2015–2020 and 2021–2022 forecast
(Billions of dollars)



Source: UNCTAD forecasting model.

A substantial recovery of FDI to Africa and to Latin America and the Caribbean is unlikely in the near term. These regions have more structural weaknesses and less fiscal space, and they are more dependent on greenfield investment, which is expected to remain weak in 2021.

Early indicators – FDI projects in the first months of 2021 – confirm diverging trajectories between cross-border M&As, largely driven by financial market dynamics, and greenfield projects. After fully recovering in the second half of 2020, cross-border M&A activity remained broadly stable in the first quarter of 2021. Notably, both the number and the value of newly announced M&A deals are on the increase in 2021, suggesting a potential surge in M&A activity later in the year. Announced greenfield investment is not showing signs of recovery yet; after a significant contraction in 2020, it remained weak in early 2021.

The modest growth forecast for 2021 – to about \$1.1–1.2 trillion – would still put global FDI flows slightly above the range projected this time last year (*WIR20*). (At the time, the forecast for 2020 was fully in line with the actual trend, at -35 per cent).⁴ The upward revision is supported by several factors. Despite delays and setbacks, the deployment of vaccines will allow more and more countries to ease restrictions during the course of 2021. Excess savings by households and pent-up consumer demand are expected to drive growth, especially in wealthier economies. This will have positive spillovers for trade in goods and for commodity prices, which are both increasing. The anticipated growth spurt will likely raise corporate profitability, with a positive effect on the reinvested earnings component of FDI.

Moreover, governments in developed countries and higher-income emerging markets have responded to the COVID-19 crisis with large fiscal stimulus programmes, mostly in the form of transfers to distressed households and firms. As current measures wind down, both the European Union and the United States have pushed forward public investment strategies. Such measures will have a positive effect on FDI, particularly in the infrastructure, green and digital economy sectors. In addition, low borrowing costs and buoyant financial markets worldwide are pushing up cross-border M&A activity. The withdrawal of immediate fiscal support measures may also lead to a spike in M&As as distressed firms seek buyouts.

Supporting the upward revision of the forecast, global output and trade were more resilient than expected over 2020, so the outlook for 2021 has improved in recent months. The estimated contraction of the global economy in 2020 (at -3.3 per cent) is about one percentage point smaller than projected in the October 2020 World Economic Outlook of the International Monetary Fund (IMF); also, the latest forecast growth of global output for 2021 (from April) has been increased by 0.8 percentage points relative to the forecast of October 2020. Following a similar path, the World Trade Organization's 2021 projection for global merchandise trade volume has also been revised upwards by 0.8 percentage points relative to October, after better-than-expected results in 2020. The expectation is now that trade will recover to pre-crisis levels by the end of 2021.

Current projections suggest that FDI will increase a further 15–20 per cent in 2022, up to \$1.4 trillion. This would imply that FDI will largely recover by the end of 2022 in the baseline forecast, which assumes continued improvement in the health and economic situations over the next two years. The most optimistic upper-bound scenario implies the absence of subsequent regional or global crisis relapses, as well as rapid economic growth and high investor confidence. Under these conditions, FDI could fully recover to its pre-pandemic level of about \$1.5 trillion by 2022. The lower-bound scenario reflects the possibility of a prolonged downturn in global FDI. Although FDI is not expected to contract further, it could remain at a low level – about \$1.2 trillion, over 2021 and 2022.

A full recovery of FDI to historical levels is not assured. In the medium term, the pandemic could accelerate the push towards improving supply-chain resilience and lead to policy pressures for greater national or regional self-sufficiency. Tighter restrictions on international trade and investment have already emerged because of the pandemic. A rebalancing of global supply chains towards more local (domestic or regional) operations, possibly boosted by policy incentives, could exert lasting downward pressure on global FDI.

2. Regional prospects

Looking at regional contributions to global FDI growth, the improvement projected for 2021 is driven by developed economies and by East and South-East Asia (table I.8). In other regions, prospects are mixed. This reflects limited vaccine availability, limited fiscal space to stimulate investment, high economic uncertainty and the more risk-averse behaviour by international investors common after severe shocks.

In Africa, FDI is projected to increase by 5 per cent but remain 15 per cent below the 2019 level. Although commodity prices have largely recovered following a drop in 2020, projected growth in the region is muted. Fiscal and monetary buffers are limited in most countries, and vaccines are in short supply. Over the medium term, the region's high potential and investment needs will accelerate FDI inflows, especially if the investment climate continues to improve. In this respect, ongoing efforts through the African Continental Free Trade Agreement (AfCFTA) with measures lowering barriers to intraregional trade could support FDI flows, which have significant scope to expand.

In Asia, FDI growth is expected to continue, with a 5 to 10 per cent increase year on year in 2021. Asia was the only region where FDI was resilient in 2020. It benefits from growing markets, extensive regional and global FDI linkages and an investment climate that has remained generally open despite the pandemic. The Regional Comprehensive Economic Partnership, signed in November 2020, could support further growth in regional investment ties. Export-driven manufacturing economies in South-East Asia will benefit from the recovery in trade and rising global demand. Higher oil prices will boost FDI in West Asia. Yet, although the region has managed the health crisis relatively well, the recent second wave of COVID-19 in India shows that significant uncertainties remain. This has major impacts on prospects for South Asia. A wider resurgence of the virus in Asia could significantly lower global FDI in 2021, given that region's significant contribution to the total.

Table I.8. FDI inflows: annual growth, 2018–2020 and 2021 forecast (Per cent)

Group/region	Actual			2021 Projection	
	2018	2019	2020	Range	Baseline
World	-13	7	-24^a	10 to 15	10
Developed economies	-21	6	-37^a	15 to 20	15
Europe	-32	5	-35 ^a	15 to 20	17
North America	-18	18	-42	10 to 20	15
Developing economies	-1	4	-8	5 to 10	7
Africa	13	4	-16	0 to 10	5
Asia	-2	4	4	5 to 10	8
Latin America and the Caribbean	-4	7	-45	-5 to 5	0
Transition economies	-28	58	-58	-10 to 0	-6

Source: UNCTAD forecasting model.

^a The forecasts refer to the FDI trend excluding the effects of conduits, one-off transactions and intrafirm financial flows. Therefore, growth rates for 2020 in this table differ from actual rates presented elsewhere in this report.

China remains a major catalyst of FDI flows to the region. Despite significant uncertainty surrounding developments related to geopolitical and commercial tensions, MNEs continue to invest heavily in China, considering it an indispensable strategic market. They are also encouraged by its rising purchasing power, well-developed infrastructure and generally favourable investment climate. Some MNEs may reshore or diversify away from China because of rising labour costs and the need to improve supply-chain resilience. However, the substantial flow of market-seeking FDI, particularly by MNEs in technology and services industries, is cushioning any negative trend in efficiency-seeking FDI. FDI diversification efforts benefit South-East Asia in particular.

FDI in Latin America and the Caribbean is projected to stabilize at 2020 levels, following a major contraction of 45 per cent in 2020. Latin America is severely affected by the COVID-19 crisis, and its recovery may lag that of other regions. Fiscal stimulus measures in the United States should provide some impulse to the wider region through trade and remittances but policy uncertainty is high, with general elections scheduled in 2021 and 2022 in several major FDI recipient economies (including Chile, Colombia and Brazil).

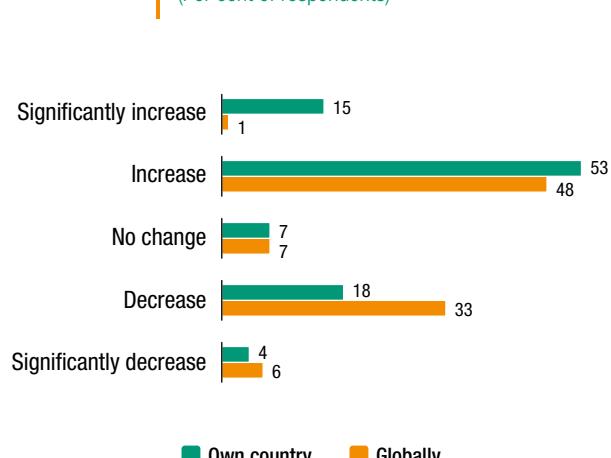
Economic prospects in North America and Europe have improved, following the extension of massive fiscal support and the roll-out of vaccines over the course of 2021. FDI is projected to increase by 15 to 20 per cent in Europe following the collapse in 2020 but will remain 30 per cent below 2019 levels. (Ultimately, values in Europe will depend in large part on further oscillations in financial flows through conduit economies, the effect of which is neutralized in UNCTAD's forecasting methodology.) FDI in North America is also projected to increase by about 15 per cent. Fiscal stimulus measures and growing consumer demand are expected to revive the domestic economy in the United States. In the short term, however, several factors could increase uncertainty for international investors, including new corporate tax reforms and the possible continuation of trade tensions.

Transition economies dependent on oil and primary commodity revenues will benefit from rising prices. As a result of economic sanctions affecting the Russian Federation and low growth prospects in the region, FDI to this group has been weak for several years. It contracted by 58 per cent in 2020 and is not expected to increase in 2021. An improved investment outlook will depend on various factors, including the effective deployment of vaccines, an increase in global demand for primary commodities, and an easing of regional and international geopolitical tensions.

3. IPA expectations

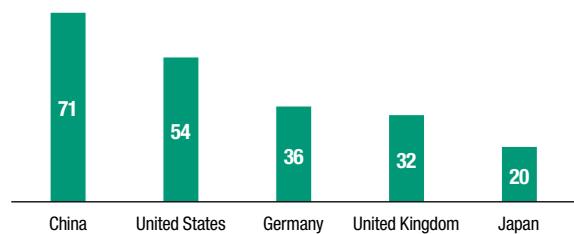
Despite the continuation of the pandemic in 2021 and a far from promising immediate investment outlook, investment promotion agencies (IPAs) showed optimism in UNCTAD's annual survey. Their expectations for FDI flows into their own countries in 2021 are high, with an overwhelming number expecting either an increase or a significant increase in inflows after a meagre year for most. At the global level (figure I.11), however, expectations were more tempered. Only 49 per cent of respondents foresee an increase in global FDI in 2021, indicating that IPAs acknowledge the challenges in attracting FDI in the current climate.

Figure I.11. IPA expectations: FDI inflows, 2021
(Per cent of respondents)



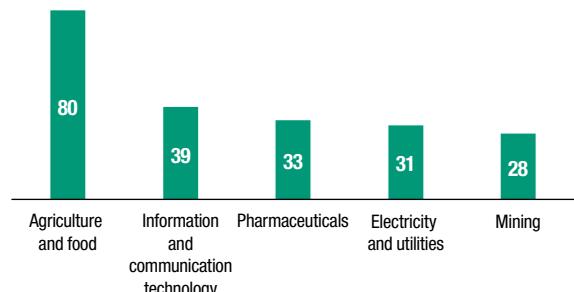
Source: UNCTAD.

Figure I.12. | **IPA expectations: largest investment-source economies, 2021** (Per cent of respondents)



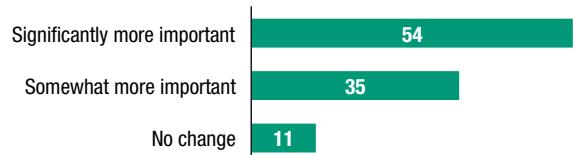
Source: UNCTAD.

Figure I.13. | **IPA expectations: most important industries for investment, 2021** (Per cent of respondents)



Source: UNCTAD.

Figure I.14. | **IPA expectations: role of foreign investment in health-care in the pandemic aftermath** (Per cent of respondents)



Source: UNCTAD.

IPAs rank China, the United States and Germany as the most likely sources of foreign investment to their countries (figure I.12). Almost three quarters of respondents consider China as one of the main sources of investment in 2021, a considerably higher share than in previous years. This is due to the rising importance of China as an investor home country, including in infrastructure financing, especially in developing countries. The United Kingdom and Japan were also considered among the more likely investing economies, by 32 and 20 per cent of IPAs, respectively.

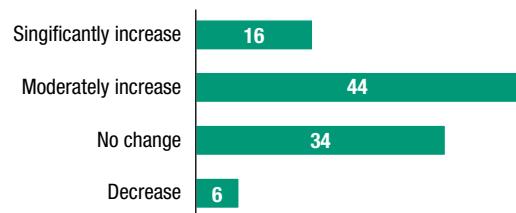
IPAs overwhelmingly rank agriculture and food among the more important investment industries in 2021 (figure I.13). Natural resource processing is seen as a key entry point for foreign investment, especially in developing and transition economies, where nearly all survey respondents selected agriculture and food as one of the key investment industries. The second highest ranked industry for attracting FDI was ICT, which was picked by 39 per cent of respondents. The high ranking of the ICT industry reflects the acceleration of digitization in response to the pandemic. The pharmaceutical industry was also picked by one third of respondents as one of the more important industries for attracting investment, a significantly higher share than in previous years. The pandemic has drawn attention to the importance of diversification and building resilience in the industry.

A majority of respondents believe foreign investment will play a more important role in health care, including in hospitals and clinics and in production of medical supplies and pharmaceuticals (figure I.14). Already, some countries have reported significant investment decisions in the health-care sector.

Finally, IPAs are ambivalent about the impact of economic rescue and recovery packages around the world on foreign investment in infrastructure in their countries. While a little more than half of respondents expect investment in infrastructure to increase because of these packages, the rest expect either no change (34 per cent) or a decrease (6 per cent) (figure I.15). Some countries reported actively adjusting their regulatory environments to attract foreign investment in infrastructure.

Figure I.15.

IPA expectations: impact of economic rescue and recovery packages on infrastructure investment (Per cent of respondents)



Source: UNCTAD.

C. INTERNATIONAL PRODUCTION

1. Key indicators of international production

Despite the drastic decline in global FDI flows during the crisis, international production will continue to play an important role in supporting economic growth and development. FDI flows overall remained positive, adding to capital stocks accumulated in foreign affiliate networks. Table I.9 provides an overview of key indicators of international production.

Table I.9. Selected indicators of FDI and international production, 2020 and selected years

	Value at current prices (Billions of dollars)					
	1990	2005–2007 (pre-crisis average)	2017	2018	2019	2020
FDI inflows	205	1 425	1 647	1 437	1 530	999
FDI outflows	244	1 464	1 605	871	1 220	740
FDI inward stock	2 196	14 607	33 162	32 784	36 377	41 354
FDI outward stock	2 255	15 316	32 851	31 219	34 351	39 247
Income on inward FDI ^a	82	1 119	2 084	2 375	2 202	1 745
<i>Rate of return on inward FDI^b</i>	5.4	8.8	6.3	6.9	6.2	4.7
Income on outward FDI ^a	128	1 230	2 101	2 330	2 205	1 802
<i>Rate of return on outward FDI^b</i>	7.6	9.5	6.4	6.8	6.3	4.9
Cross-border M&As	98.0	729.2	694.0	815.7	507.4	475.0
Sales of foreign affiliates	7 615	28 444	30 866	33 203
Value-added (product) of foreign affiliates	1 588	6 783	8 244	8 254
Total assets of foreign affiliates	7 305	70 643	114 441	110 220
Employment by foreign affiliates (thousands)	30 861	68 057	82 600	85 504
<i>Memorandum</i>						
GDP ^c	23 627	52 546	80 834	85 893	87 345	84 538
Gross capital formation ^c	5 748	13 009	20 938	22 743	23 090	22 260
Royalties and licence fee receipts	31	179	391	427	419	394

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 TNCs from Australia, Austria, Belgium, Canada, Czech Republic, Finland, France, Germany, Greece, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Portugal, Slovenia, Sweden, Switzerland and the United States for sales; those from the Czech Republic, France, Israel, Japan, Portugal, Slovenia, Sweden, and the United States for value-added (product); those from Austria, Germany, Japan and the United States for assets; those from Czech Republic, Japan, Portugal, Slovenia, Sweden, and the United States for exports; and those from Australia, Austria, Belgium, Canada, Czech Republic, Finland, France, Germany, Italy, Japan, Latvia, Lithuania, Luxembourg, Macao (China), Portugal, Slovenia, Sweden, Switzerland, and the United States for employment, on the basis of three years average shares of those countries in worldwide outward FDI stock.

^a Based on data from 168 countries for income on inward FDI and 142 countries for income on outward FDI in 2020, 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.

^c Data from IMF (2021a).

2. Internationalization trends of the largest MNEs

The internationalization levels of the top 100 MNEs stagnated in 2020 (table I.10).

There were wide differences across industries. MNEs in energy and heavy industry reduced their presence abroad. Others, including pharmaceuticals and telecommunication, expanded their international operations. Light industries, utilities, and automotive and trading companies, while also suffering lower sales during the year, kept their international production structure stable.

Extractives, heavy industry and construction MNEs suffered an average drop in foreign sales of more than 15 per cent. Hit by the oil price crash at the beginning of the year, oil and gas MNE sales dropped by 30 per cent. This led to a halt in foreign investments and, in some cases, restructuring and asset divestment programmes, leading to a smaller foreign presence. For example, Royal Dutch Shell (Netherlands–United Kingdom) shed about 15 per cent of foreign assets during 2020, and Equinor (Norway) and BP (United Kingdom) about 10 per cent. ExxonMobil (United States) is expecting to generate \$15 billion from divestments in 2021 (mostly abroad) and up to \$25 billion by 2025. Major energy MNEs such as TC Energy (Canada) and Repsol (Spain) reduced their overseas operations and production to the extent that they slipped out of the top 100 ranking.

The pandemic boosted demand for pharmaceuticals and health-care services, leading to revenue increases of 15 per cent in the health sector, especially in foreign markets (18 per cent); the search for successful smaller companies to help develop new products led to

Table I.10.

Internationalization statistics of the 100 largest non-financial MNEs, worldwide and from developing and transition economies

(Billions of dollars, thousands of employees and per cent)

Variable	100 largest MNEs, global					100 largest MNEs from developing and transition economies		
	2018 ^a	2019 ^a	2018–2019 Change (%)	2020 ^b	2019–2020 Change (%)	2018 ^a	2019	2018–2019 Change (%)
Assets (Billions of dollars)								
Foreign	9 334	9 403	0.7	9 639	2.5	2 593	2 700	4.1
Domestic	6 711	7 869	17.3	8 286	5.3	5 691	6 021	5.8
Total	16 045	17 272	7.7	17 924	3.8	8 284	8 720	5.3
Foreign as share of total (%)	58	54		54		31	31	
Sales (Billions of dollars)								
Foreign	5 937	5 843	-1.6	5 335	-8.7	2 614	2 476	-5.3
Domestic	3 899	4 491	15.2	4 158	-7.4	3 047	3 370	10.6
Total	9 836	10 333	5.1	9 493	-8.1	5 661	5 846	3.3
Foreign as share of total (%)	60	57		56		46	42	
Employment (Thousands)								
Foreign	9 544	9 339	-2.1	9 076	-2.8	4 931	4 532	-8.1
Domestic	8 571	10 431	21.7	10 495	0.6	8 231	9 238	12.2
Total	18 115	19 770	9.1	19 571	-1.0	13 162	13 770	4.6
Foreign as share of total (%)	53	47		46		37	33	
Unweighted average TNI	64	61		61		49	48	
Median TNI	63	61		60		45	47	

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 2020 data for the 100 largest MNEs from developing and transition economies are not yet available.

^a Revised results.

^b Preliminary results.

numerous international acquisitions and an average 20 per cent increase in foreign assets for pharmaceuticals MNEs. The biggest of such deals was the acquisition by Novartis (Switzerland) of The Medicines (United States) for \$7.4 billion.

Accelerated digitalization benefitted tech MNEs. For hardware and IT companies, the increase in international revenues (10 per cent) did not lead to an increase in cross-border acquisitions, as the number of announced deals in the second quarter of 2020 would have predicted (*WIR20*). Increased regulatory scrutiny of top tech MNE activities and market positions slowed down their foreign investments in the second half of the year. Their foreign asset profile was also negatively affected by the gradual move away from China of Apple (United States) and Intel (United States), which reduced assets in China by 20 per cent and more than 80 per cent, respectively. In contrast, purely digital tech and delivery services companies such as Alphabet (United States), Tencent (China) and Amazon (United States) saw their foreign revenues increase by two thirds on average, and their foreign assets were almost 30 per cent higher in value at the end of fiscal year 2020. During the past year Amazon alone announced about \$12 billion of greenfield investments to strengthen its logistics and retail network. As part of the boom in e-commerce and delivery services, Deutsche Post (Germany) also invested heavily in its foreign assets, re-entering the top 100 ranking.

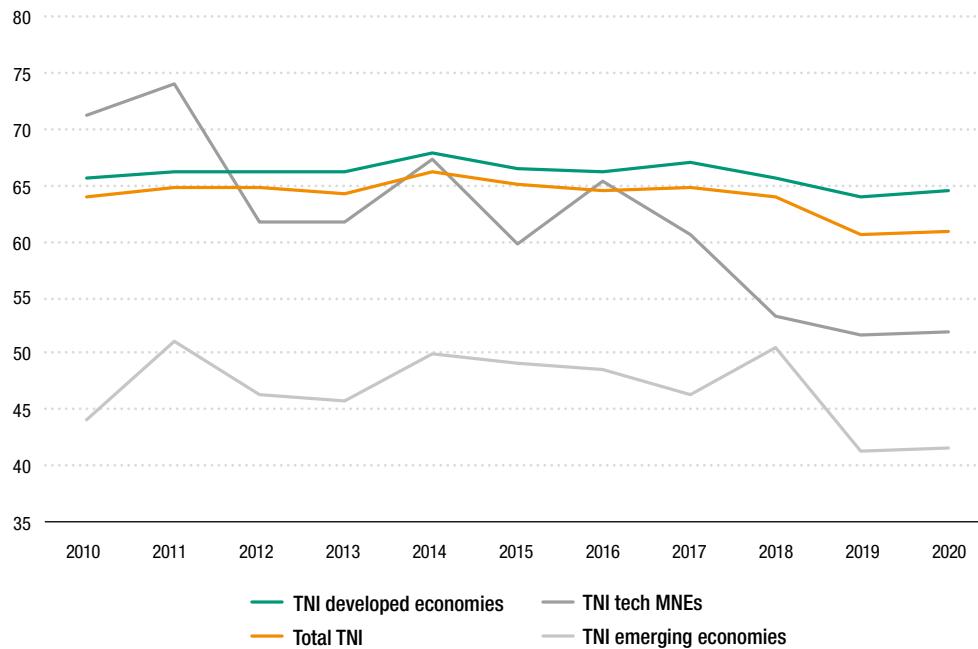
The pandemic impact was uneven also within industries, with some MNEs accelerating foreign activities on the back of consolidation trends, possibly precipitated by the crisis. For example, the longer-term consolidation of the automotive industry led to the tie-up of Fiat-Chrysler (Italy–United States) and Groupe PSA (France) to create Stellantis (Netherlands).⁵ Similarly, the consolidation of the telecommunication industry drove Deutsche Telekom (Germany) up in the ranking, while Liberty Global (United Kingdom) re-entered the top 100 after several years of absence. At the same time, fierce price competition combined with the need to invest in new 5G networks pushed Vodafone (United Kingdom) to spin off its tower assets, a move that other integrated telecommunication companies are considering so as to create a more agile company while monetizing costly infrastructure.

The overseas investment activity of top developing-country MNEs was muted, as many operate in the worst affected industries: extractives and heavy industry. The tech giant Tencent (China) was the largest investor from emerging markets as it acquired a participation of 10 per cent in the music publisher Universal Music (United States) for \$3.3 billion and a software publisher, Leyou (Hong Kong, China) for almost \$1.4 billion. The only other big transaction from emerging-market MNEs was the acquisition by State Grid (China) of electric power distributor Chilquinta (Chile) for \$2.2 billion, a deal that was announced in mid-2019.

The gradual decrease of the aggregate transnationality index (TNI) over the last five years is explained mostly by geographical and industry compositional effects and only marginally by the reversal of internationalization of individual MNEs (figure I.16). The number of MNEs from emerging markets in the global top 100 increased from 8 in 2015 to 15 in 2020. Their lower transnationality levels affect aggregate internationalization levels. The entry of Saudi Aramco (Saudi Arabia) in 2019, with a TNI of 15 per cent, and State Grid (China) in 2017, with a TNI below 5 per cent, were particularly impactful. In much the same way, within the technology industry, the gradual addition of digital companies such as Amazon (United States), Alphabet (United States) and Tencent (China) brought about a gradual decline in the average TNI for the industry.

Internationalization reversal processes are much slower. The restructuring of companies such as ExxonMobil (United States), Airbus (France–Netherlands), Repsol (Spain) and General Motors (United States) implied a reduction of their TNI by about 10 percentage points over

Figure I.16. Average TNI by region and for tech MNEs, 2010–2020
(Per cent)



Source: UNCTAD.

Note: TNI averages are unweighted.

the last 10 years. The effect of last year's asset sales in extractives and heavy industries, which were at the core of the ranking in the past, only adds to their decline in numbers (from about 30 in 2010 to 21 last year), accelerating the growing presence in the ranking of MNEs with a much lighter asset footprint, such as digital and pharmaceuticals companies.

The increasing importance of intangibles in the global economy is reflected in the growing importance of technology companies in the ranking, boosted by the crisis. Although their number remained constant at 13 MNEs, their share of foreign sales in the total ranking increased by five percentage points to 22 per cent. This was achieved without a corresponding increase in the share of foreign assets, highlighting their ability to reach foreign markets without the corresponding productive investment. For pharmaceutical companies, this trend is slower and less apparent because – although much of their value is based on intangibles – their production processes still rely on tangible assets.

Despite falling revenues and earnings, MNEs managed to maintain constant cash from operations. They also secured additional financing, mostly in the form of debt. The average rate of new issuance of corporate debt doubled in 2020. At the same time, acquisitions decreased and capital expenditures remained stable, leading to soaring cash balances. Many corporations also raised equity capital, reversing a recent trend to buy back shares. In 2020 the top 5,000 non-financial listed MNEs increased their cash holdings by more than 25 per cent to \$8 trillion.

Differences in exposure to the crisis across industries compounded differences related to size and access to credit. The tourism and travel industries saw operating cash declining by 90 per cent but were able to increase debt more than tenfold. With very low interest rates, investors were willing to finance firms that were strong enough to outlive the crisis, favouring the largest MNEs. While, on average, the top 5,000 MNEs doubled their issuance of debt, the top quarter of corporations (by 2019 revenues) almost tripled it.

In the top 100 MNEs, average levels of cash and liquid assets also rose significantly, especially in highly integrated industries such as the automotive industry; for example, Toyota Motors (Japan) increased cash holdings by more than \$30 billion (up 68 per cent) and Volkswagen (Germany) by \$22 billion. The high levels of cash on hand in the largest MNEs could boost further consolidation activity and investment in the coming years.

Cross-border initial public offerings (IPOs) are reaching record numbers (figure I.17).

They present advantages for both foreign companies and local investors. Emerging-market firms aim to tap into richer capital markets. Mature market investors look for exposure to faster-growing economies. Cross-border IPOs and cross-listings can affect FDI in various ways:

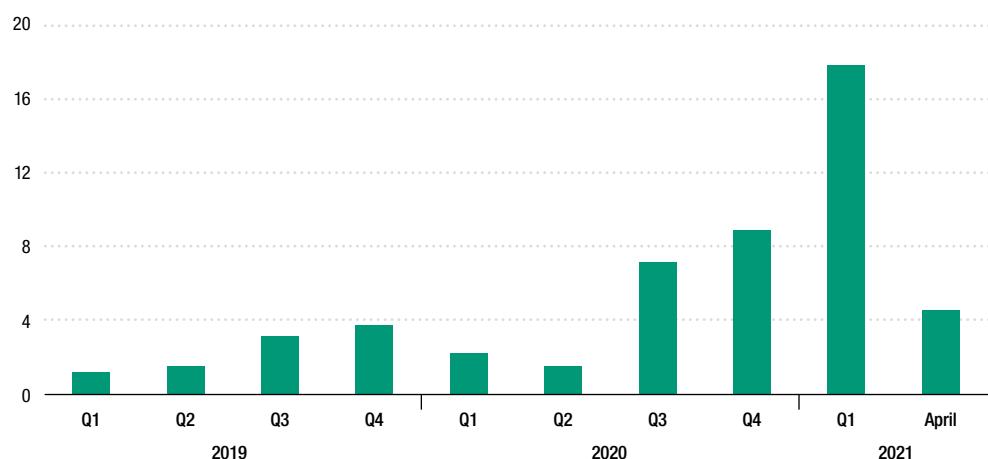
- Direct listings of overseas companies, often dual listings, in which individual investors acquire more than 10 per cent of shares, represent FDI in the headquarters' economy.
- Listings of foreign subsidiaries. For example, in 2019 Naspers (South Africa) spun off its subsidiary Prosus in the Netherlands through an IPO; the operation resulted in a divestment of \$36 billion from the host country.
- Listings through reverse acquisitions. For example, the ride-hailing company Grab (Singapore) announced that it will go public by merging with a New York-listed special purpose acquisition company controlled by Altimeter Capital Management (United States), in a deal that will value the combined entity at nearly \$40 billion.

* * *

MNEs are increasingly adopting policies on diversity and inclusiveness.

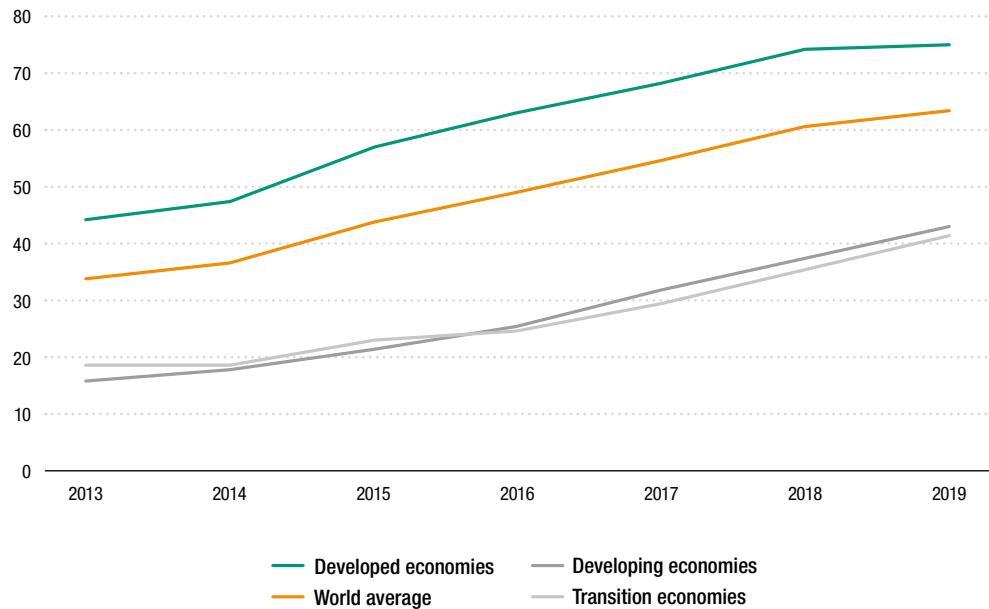
The attention of MNEs to gender equality, as proxied by the existence of a diversity policy, is growing – especially in emerging economies, where the number of such policies doubled in the five years leading up to 2019 (figure I.18). More than 40 per cent of MNEs based in developing countries now report having an internal diversity policy, gradually catching up with MNEs based in developed economies, where three quarters report such a policy, with peaks of over 85 per cent in Europe and North America. Reporting rates are influenced by home-country attention to gender issues, disclosures required by stock markets, and the visibility and size of the company, which affect its exposure to consumer and stakeholder pressures.

Figure I.17. | Value of cross-border IPOs, 2019–2021 (Billions of dollars)



Source: UNCTAD, based on Refinitiv.

Figure I.18. Share of top 5,000 MNEs with a diversity policy, average and by economic group, 2013–2019 (Per cent)



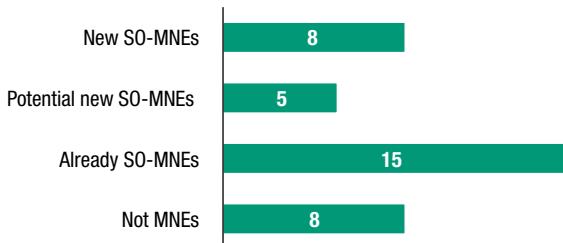
Source: UNCTAD, based on Refinitiv. Update of UNCTAD (2021) Multinational Enterprises and the International Transmission of Gender Policies and Practices, Geneva.

3. State-owned multinational enterprises

In response to the COVID-19 crisis, governments have taken a vast array of measures to support the business sector. In some cases, rescue packages include the acquisition of equity stakes in companies in financial distress, potentially increasing the number and presence of State-owned enterprises (SOEs) in the economy (figure I.19). To date, the impact on the number of State-owned MNEs (SO-MNEs) has been limited – especially in comparison with the increase in that number during the global financial crisis a decade ago – for several reasons:

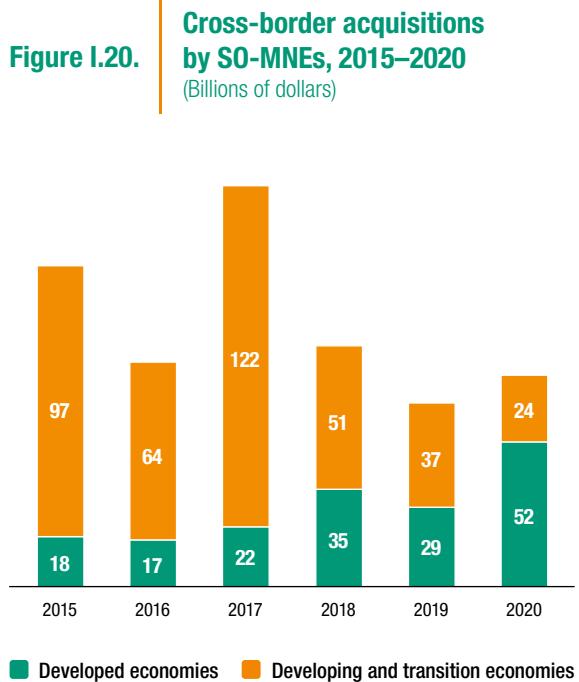
- Bailout programmes have relied mostly on the provision of credit lines, grants and payroll support rather than equity injections.
- Bailouts have focused on the worst-affected industries, especially travel and tourism, where firms were already partly State owned (for example, Finnair (Finland), SAS (Denmark–Sweden) and Emirates (United Arab Emirates)) or were purely domestic companies (such as Network Rail in the United Kingdom).
- Capital injections may still be ongoing or planned (for example, the rescue of Liberty Steel in the United Kingdom or the Eurostar between the United Kingdom and France).
- Injections may come in the form of warrants or convertibles, deferring the possibility of increased state ownership to the future (for example, Southwest and Delta airlines in the United States, and Air New Zealand).

Figure I.19. Companies nationalized in response to the COVID-19 crisis, 2020–2021 (Number)



Source: UNCTAD.

Figure I.20.



Source: UNCTAD, based on Refinitiv and Orbis BvD.

Except for a few cases in emerging Asian economies (China, Hong Kong (China) and Singapore) all equity injections took place in developed economies, and in particular in Europe. In emerging economies, capital injections occurred on already State-owned carriers (Singapore Airlines, Cathay Pacific, China Eastern and Southern airlines). Across developed countries two different approaches were followed, with programmes in the United States and New Zealand privileging equity-backed loans and convertibles, while European countries chose to buy equity stakes in several cases.

The COVID-19 crisis slowed down ongoing privatization programmes owing to elevated uncertainty and lower market demand.

For example, programmes in Brazil and Viet Nam suffered setbacks. Brazil launched its privatization programme at the end of 2018 with the expectation to reduce the number of SOEs from 134 to 12. During 2020 only two privatizations were completed: the sale of the insurance company La Caixa (subsidiary of La Caixa Federal) and of two

subsidiaries of Petrobras. Viet Nam approved the privatization of 174 SOEs between 2016 and 2020. The pandemic significantly delayed plans for several companies, including MobiFone, Agribank, Northern Food, Vinacomin and Vietnam National Chemical Group.

Overall, the number of SO-MNEs in 2020 increased by 7 per cent with respect to 2019, to about 1,600. In addition to the companies included following COVID-19-related bailout programmes, several more were nationalized for reasons not related to the pandemic. About two thirds of the new SO-MNEs are included because of minority participations by public pension funds or sovereign wealth funds.⁶ The remaining new SO-MNEs are companies for which information about their governance structure became available only now. With the exception of a few from Africa, these are all in transition economies (Belarus and Ukraine) and are typically smaller companies with a single affiliate in a neighbouring country (e.g. the Russian Federation). Often these companies are a legacy of highly integrated markets and are not active in international capital markets (*WIR19*).

SO-MNEs from emerging markets drastically reduced their international acquisitions in 2020, from \$37 billion to \$24 billion (figure I.20). The decrease followed a longer-term trend of a fall in overseas activity by emerging SO-MNEs and underscored their vulnerability to the crisis.

D. INTRAREGIONAL FDI

The momentum for regional FDI is expected to grow over the coming years.

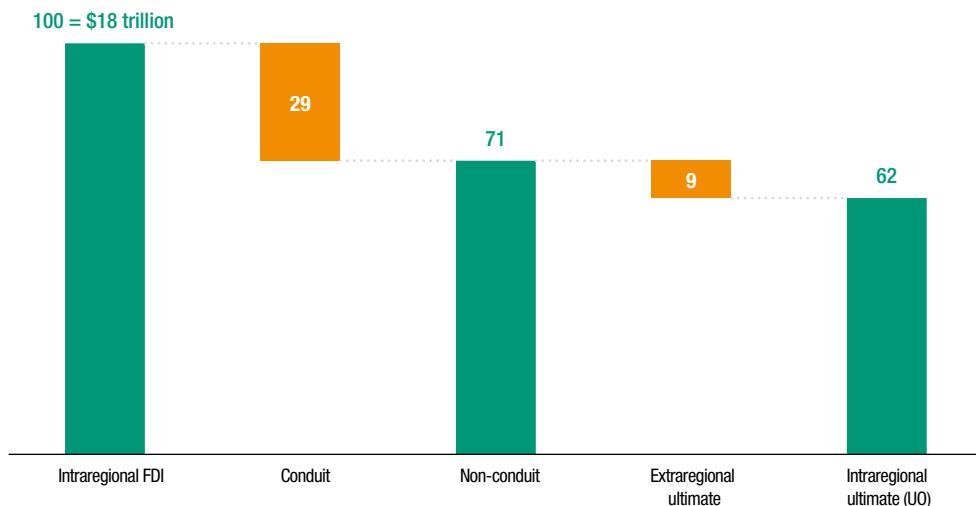
Policy pressures for strategic autonomy, business resilience considerations and economic cooperation will boost regional production networks. However, a shift towards more intraregional FDI would represent much more of a break with the past than commonly thought: new data on FDI networks shows that, to date, investment links are still more global than regional in scope.

There is widespread expectation that international production networks will become more regional in scope in the post-pandemic world (Enderwick and Buckley, 2020). *WIR20* lists regionalization as one of four more likely trajectories for international production by 2030. However, the starting point – the geographical spread of FDI networks today – is often unclear. The measurement of the size of intraregional investment stock is not straightforward. Indirect investment flows through conduit jurisdictions and pass-through entities make it difficult to discern geographical patterns in the global FDI network (*WIR16* and *WIR19*). Identifying intraregional FDI requires separating ultimate ownership (UO) patterns from purely financial flow patterns. This section proposes a new analytical framework to provide a clearer account of trends in intraregional investment, addressing the statistical challenges caused by indirect FDI.

The simplest approach to sizing intraregional investment is to sum the values of bilateral FDI stock involving any two countries – a direct investor and a direct recipient – in the same region. This lumps together different bilateral links that are quite diverse, including not only direct links between an ultimate investor (or owner) and a final destination but also double-counted pass-through investment (an investor from within the region invests in another country in the region through a conduit in a third country in the region) and pass-through investment where either the final productive investment or the ultimate owner is located outside the region.

These different types of links are all relevant because they provide a picture of the regional exposure of countries in terms of external assets and liabilities, revealing patterns of financial integration. However, not all components contribute equally to real economic integration. Links in which both the ultimate owner and the investment are located within the region are arguably more relevant than “artificial” intraregional investment links created by investors from outside the region choosing to channel their investment in the region through a regional hub, where they might locate a holding company, regional headquarters or back-office functions.

The total value of intraregional FDI can be decomposed into investment in conduit entities – either double-counted regional investment or investment with an ultimate recipient outside the region – and non-conduit investment in productive assets. Investment in productive assets can then originate from extraregional ultimate investors or from regional ultimate investors (figure I.21). The latter corresponds to the UO component of intraregional FDI. Recent advances in UNCTAD’s methodology for the measurement of conduit investment and the tracking of UO links make it possible to quantify each component (box I.1).

Figure I.21**Intraregional FDI stock: bilateral inward stock by main components, 2019 (Trillions of dollars and per cent)**

Source: UNCTAD bilateral FDI database. UNCTAD estimates.

Box I.1.**Measuring intraregional investment**

The simplest approach to the measurement of intraregional FDI is to sum the bilateral FDI stocks between any two countries in a region. This approach aggregates several types of bilateral links:

Case A. Direct links between an ultimate investor and an ultimate recipient.

Case B. Conduit investment between an ultimate investor and an ultimate recipient in the region.

Case C. Direct links with an ultimate recipient outside the region.

Case D. Direct links with an ultimate investor outside the region.

Other cases are possible that can be reconducted to these four archetypes. Components A, B1, B2, C1 and D2 in box figure I.1.1 are generally reported as bilateral FDI stock in official statistics, although with some differences across international organizations. Unlike the IMF Coordinated Direct Investment Survey (IMF-CDIS), UNCTAD removes investment through special-purpose entities (SPEs) from aggregate stock figures when reported by countries, thus partially addressing cases B and C. A systematic approach to the analysis of intraregional investment requires sizing all conduit investment, not only that reflected by reported SPEs, and addressing case D (extraregional ultimate investors).

A full decomposition of intraregional FDI stock enables the analytical transition from intraregional FDI to intraregional UO links – links between a real investment in productive assets in one economy (ultimate recipient) and the investors who ultimately control the assets in another economy (ultimate owner) in the same region.

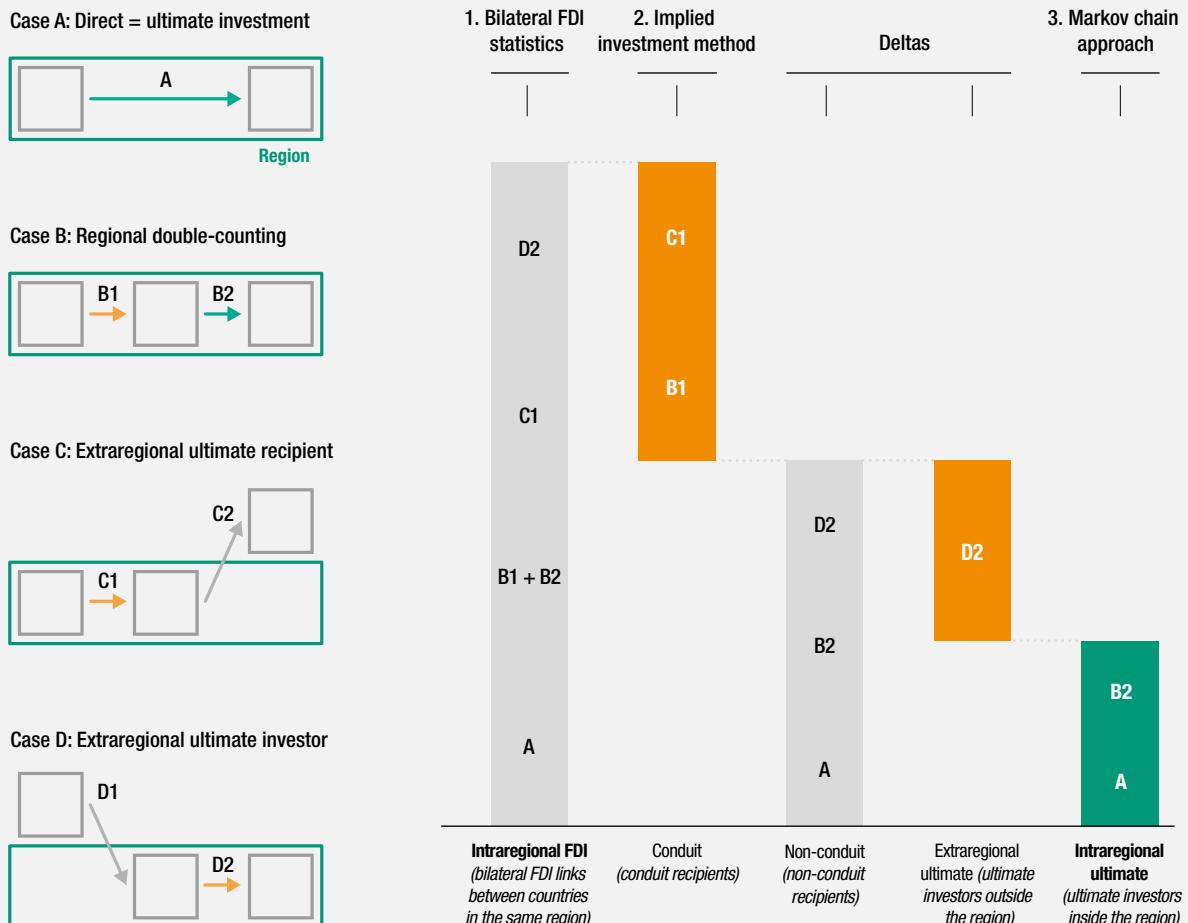
Intraregional FDI (labelled 1 in the figure) encompasses all bilateral links between two economies in the same region. Data can be obtained from balance-of-payment statistics. Primary sources include UNCTAD bilateral FDI database, international direct investment statistics of the Organization for Economic Cooperation and Development (OECD) and IMF-CDIS.

Inward FDI to conduit entities (labelled 2 in the figure) includes either double-counted intraregional investment (case B) or intraregional FDI that is then routed to economies outside the region (case C) through SPEs. Only a limited, but growing, number of countries report separate FDI positions on SPEs. For those countries that do not report SPEs it is possible to estimate their importance; this report uses UNCTAD's implied investment method (*WIR15*; Bolwijn et al., 2018). The IMF employed an approach similar to that of UNCTAD to estimate "phantom" FDI (Damgaard et al., 2019). The UNCTAD approach builds on the assumption of a relationship between GDP and FDI stock; economies with a disproportionate amount of FDI relative to their size are identified as outliers and the oversized component is associated with conduit structures or SPEs. This report employs a hybrid approach that uses SPE data where available and confines the estimation only to countries that do not report on SPEs. Statistical issues related to conduit FDI and different estimation methods are discussed in Casella et al. (2021).

/...

Box I.1. Measuring intraregional investment (Concluded)

Box figure I.1.1. Intraregional FDI, decomposition explained



Source: UNCTAD.

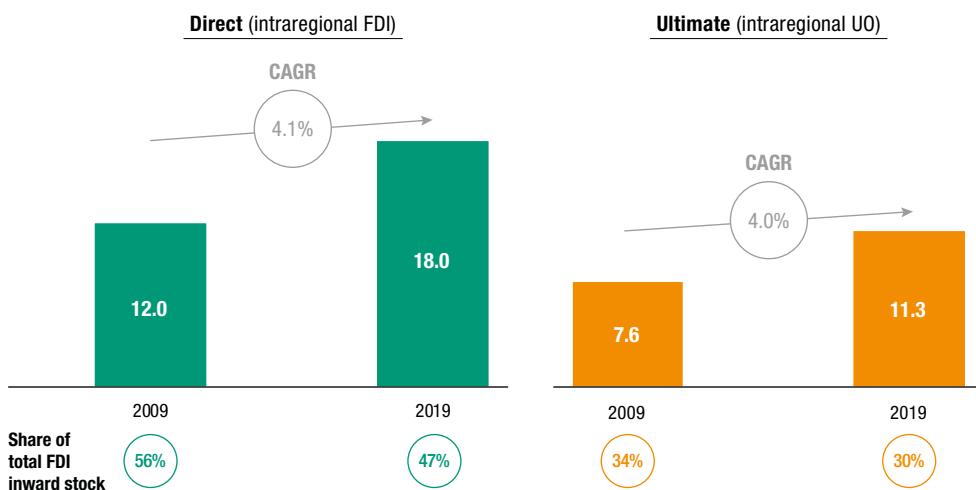
The separate treatment of SPEs reduces but does not eliminate the impact of conduit FDI on the sizing of intraregional investment. The simple removal of conduit FDI on the recipient side of the investment link is insufficient because extraregional investors often use regional conduits (case D). In practice, financial centres receive and transmit a mix of intra- and extra-regional FDI (B2 and D2 respectively, in the figure). The solution to this problem is to apply to non-conduit recipients (i.e. final destinations of productive assets) the UNCTAD Markov chain approach to estimate the distribution of ultimate investors (Casella, 2019).^a After applying the Markov chain computation, only the share of productive investment corresponding to ultimate investors within the region (labelled 3 in the figure) is retained as intraregional UO links, while the rest is extraregional.

One caveat applies to the computation of the final component of the regional decomposition through the Markov chain methodology. This methodology captures all investment (in productive assets) with an ultimate investor within the region. This includes also regional round-tripping – investment with an ultimate investor within the region and a conduit outside the region. This case does not involve any direct intraregional FDI links, so it is not included in the decomposition in the box figure. At the global level, extraregional round-tripping can be assumed to be small, at less than 5 per cent of regional FDI stock (*WIR16*), so that the Markov chain method estimates an upper bound that is a good approximation of the actual component. For some regions extraregional round-tripping may be larger, for example for transition economies characterized by significant investment through Cyprus.

Source: UNCTAD.

^a Before this application to intraregional FDI, the UNCTAD Markov chain approach had been used by UNCTAD to analyse the global FDI network (*WIR19*) and by the OECD to assess the economic impact of base erosion and profit-shifting measures (Turban et al., 2020).

Figure I.22. Intraregional investment, bilateral inward stock, 2009 and 2019
(Trillions of dollars and per cent)



Source: UNCTAD bilateral FDI database. UNCTAD estimates.

Note: CAGR = compound annual growth rate.

The results show that intraregional FDI is less important than it appears from bilateral investment links. The total value of bilateral FDI stock between economies in the same region was \$18 trillion in 2019, equivalent to 47 per cent of total FDI (figure I.22).⁷ This appears significant: one of every two dollars of cross-border FDI involves two countries within the same region. However, looking through regional investment hubs and counting only links between ultimate investors and final destinations (the location of the productive asset), the total falls to \$11 trillion, or 30 per cent of total FDI. At least one third of intraregional FDI is either double-counted or has an ultimate investor outside the region.

The growth of intraregional investment is also relatively slow. Bilateral FDI stock within regions grew at an average annual rate of 4 per cent in the period 2009–2019, slower than global FDI stock. Consequently, the share of intraregional FDI in total FDI stock decreased from 56 per cent in 2009 to 47 per cent in 2019 – and the share of intraregional UO links from 34 per cent to 30 per cent.

The growth of intraregional FDI links was higher in the first half of the decade (2009–2014 CAGR: 5.2 per cent) before slowing in the second half (2015–2019 CAGR: 3.0 per cent). The growth of intraregional UO links was substantially constant over that period. The difference may reflect the rapid growth of conduit flows in the early period and the subsequent slowdown in the face of stronger public and policy scrutiny of MNE tax practices. Ongoing international tax reforms could further accelerate the process of realignment between UO and direct investment links.

The size and relative importance of intraregional investment stocks varies significantly by region (table I.11). It ranges from 67 per cent of total FDI stock in Europe, to 12 per cent in Latin America and the Caribbean, and 10 per cent in Africa. The amount of intraregional FDI depends on total investment and the degree of economic integration in the region, but also on the presence of large regional investment hubs. Investment hubs in Europe and East Asia, such as Luxembourg, the Netherlands and Hong Kong, China, are among the largest FDI recipients globally.

The ultimate investor view provides a more realistic perspective of actual differences in real economic integration than the direct view. In almost all regions the value of intraregional UO links is smaller than that of intraregional FDI. In most cases it is more than a third lower.

Table I.11.

Intraregional investment by region, bilateral inward stock, direct and ultimate, 2009 and 2019 (Billions of dollars and per cent)

	Intraregional investment stock, 2019 (Billions of dollars)		Share of intraregional investment in total FDI stock in region, 2019 (Per cent)		Change in share, 2009–2019 (Percentage points)	
	Direct	Ultimate	Direct	Ultimate	Direct	Ultimate
Total	17 969	11 254	47	30	-9	-4
Europe	12 532	7 308	67	39	-11	-7
North America	913	1 086	18	21	-1	-
Africa	74	33	10	5	-	1
Asia	3 966	2 481	48	30	3	-
East Asia	2 613	1 579	50	31	4	1
South Asia	4	11	1	2	1	2
South-East Asia	277	111	12	5	-3	-2
West Asia	71	52	19	14	7	8
Latin America and Caribbean	386	161	12	5	2	-
Oceania	52	55	6	7	-3	-4
South-East Europe and CIS	46	130	5	15	1	3
<i>Memorandum</i>						
AfCFTA	74	33	10	5	-	1
ASEAN	277	111	12	5	-3	-2
CPTPP	502	391	13	10	1	-1
EU	7 386	3 844	49	25	-7	-6
RCEP	1 481	1 826	23	28	-	-1
USMCA	1 100	1 376	19	24	-4	-3

Source: UNCTAD bilateral FDI database. UNCTAD estimates.

Note: AfCFTA = African Continental Free Trade Area, ASEAN = Association of Southeast Asian Nations, CIS = Commonwealth of Independent States, CPTPP = Comprehensive and Progressive Agreement for Trans-Pacific Partnership, EU = European Union, RCEP = Regional Comprehensive Economic Partnership, USMCA = United States–Mexico–Canada Agreement.

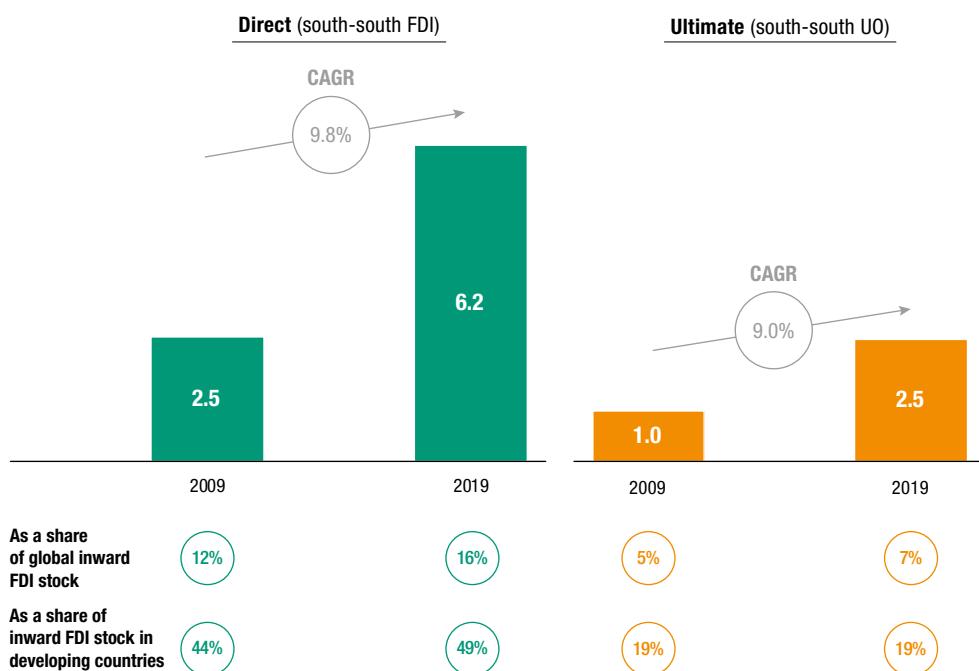
Two notable exceptions are North America and the transition economies, where the value of the UO links is higher than that of direct links because of the higher incidence of regional round-tripping.

The ultimate investor view does not change the relative ranking of regional integration across regions. However, by neutralizing the effects of large investment hubs, it tends to reduce differences between regions. It indicates two separate clusters: one of highly integrated regions, with values of intraregional UO links between 20 per cent and 40 of total FDI stock in the region, including developed regions (Europe and North America) and East Asia; and a cluster consisting of all other regions, where the share of intraregional investment is marginal, between 5 and 15 per cent. In less-developed regions FDI stock is still mostly mobilized and owned by investors outside the region.

Disentangling regional FDI networks also sheds new light on the magnitude of South-South investment. The value of investment between developing countries falls significantly when applying the UO view (figure I.23). The total value of FDI bilateral stock between any two developing countries is more than \$6 trillion, corresponding to half

of the total FDI stock in developing countries. However, the value of UO links amounts only to \$2.5 trillion, corresponding to only 20 per cent of total FDI stock in developing countries. Yet, the importance of South-South investment has been increasing in both the direct and ultimate views.

Figure I.23. Investment between developing countries, bilateral inward stock, 2009 and 2019 (Trillions of dollars and per cent)



Source: UNCTAD bilateral FDI database. UNCTAD estimates.

Note: CAGR = compound annual growth rate.

NOTES

- ¹ UNCTAD's underlying FDI trend index shows the trend in FDI excluding the effects of conduit flows, one-off transactions and intrafirm financial flows. For details on the methodology, see *WIR19*.
- ² Ernst and Young, 12 January 2021, <https://www.pharmaceutical-technology.com/features/biopharma-ey-ma-analysts-optimistic-for-2021-deals-after-a-mixed-2020/>.
- ³ The food and agriculture sector comprises four major industries: (i) agriculture, forestry, and fishery (in the primary sector); (ii) manufacturing of food, beverages and tobacco; (iii) manufacturing of pesticide, fertilisers and other agricultural chemicals; and (iv) manufacturing of food product machinery. Due to the limitation of the dataset, manufacturing projects contribute a large proportion of the total value of investment announcements in this sector. In LDCs, a \$3.3-billion fall in investment announcements in the manufacturing of pesticide, fertilisers and other agricultural chemicals) led to the 91 per cent decline in the food and agriculture investment from 2019 to 2020.
- ⁴ Excluding the effect of conduit flows, one-off transactions and intrafirm financial flows, the 2020 growth rate of global FDI becomes -24 per cent, as reported in table I.8. For methodological details on UNCTAD's FDI forecasting model, see *WIR20* and Vujanovic et al. (2021).
- ⁵ This merger will be finalized during 2021 and might not be completed until 2022.
- ⁶ Mostly in South Africa, Norway, the Republic of Korea, and Malaysia.
- ⁷ The FDI universe in this analysis is limited to countries that reported bilateral data in 2019, corresponding to more than 95 per cent of total FDI stock.

CHAPTER II

REGIONAL TRENDS



DEVELOPING ECONOMIES

AFRICA

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows
\$ 39.8 bn
2020 Decrease
-15.6%
Share in world
4.0%

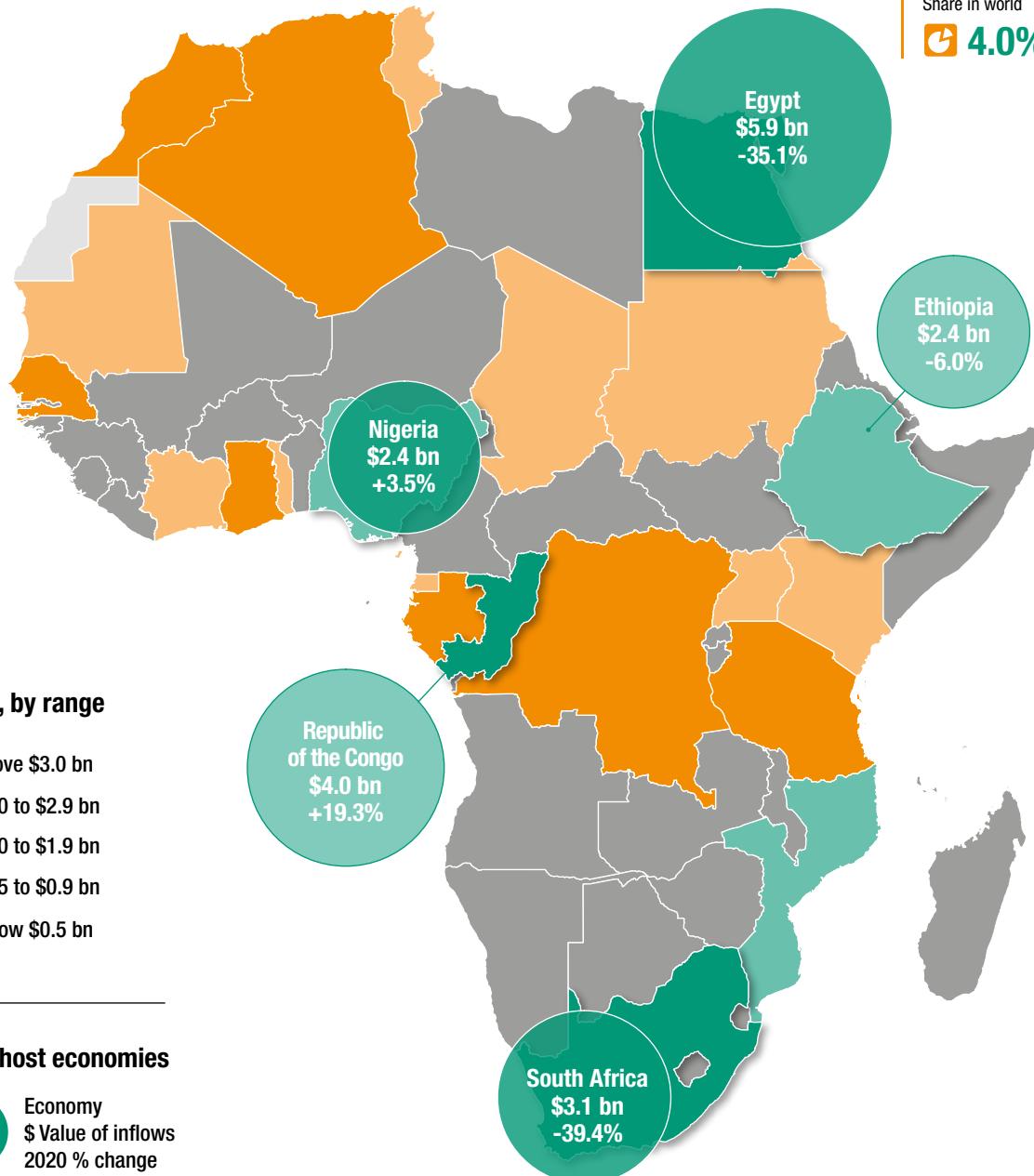
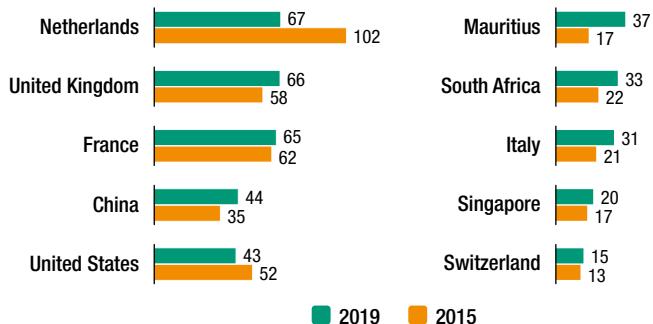
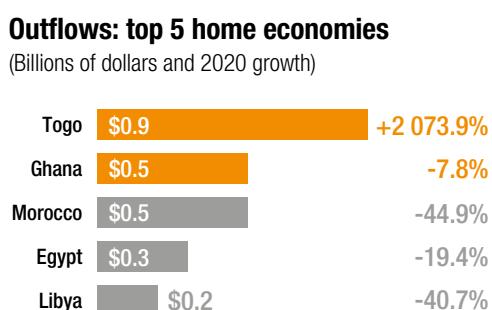


Figure A. Top 10 investor economies by FDI stock, 2015 and 2019 (Billions of dollars)



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 and low oil prices depressed FDI flows
- Greenfield projects dropped by 62 per cent
- Flows to increase marginally in 2021

Figure B. | **FDI inflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

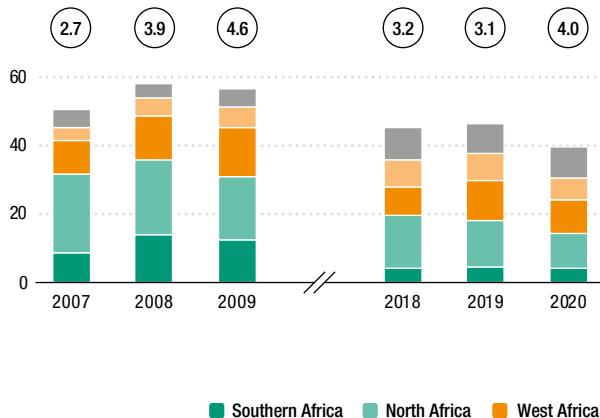


Figure C. | **FDI outflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

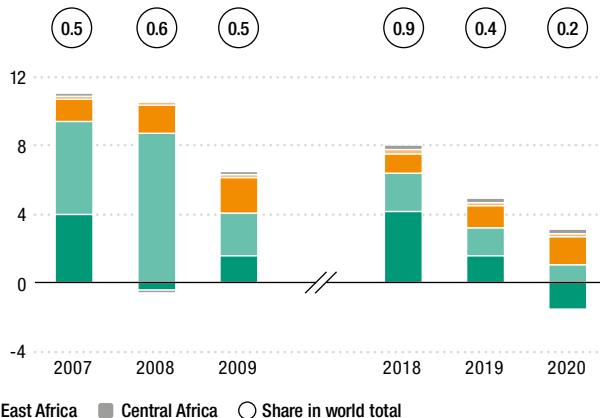


Table A. | **Net cross-border M&A sales, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	5 835	3 334	140	87
Primary	184	498	18	9
Manufacturing	2 114	2 247	36	18
Services	3 537	590	86	60

Top industries by value

Food, beverages and tobacco	1 052	1 438	13	1
Pharmaceuticals	9	776	2	5
Extractive industries	143	458	15	6
Transportation and storage	533	235	10	6
Information and communication	- 90	193	13	9
Finance and insurance	20	74	24	20

Table B. | **Announced greenfield projects, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	76 637	28 997	1 063	556
Primary	2 829	1 381	23	12
Manufacturing	32 621	8 468	409	198
Services	41 186	19 149	631	346

Top industries by value

Information and communication	4 639	8 960	100	115
Energy	10 228	5 312	64	37
Coke and refined petroleum	7 727	2 315	13	3
Food, beverages and tobacco	2 448	1 382	54	38
Transportation and storage	5 402	1 277	50	26
Automotive	4 015	1 111	63	29

Table C. | **Announced international project finance deals, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	122 930	32 073	119	72

Top industries by number

Renewable energy	8 725	11 132	48	31
Mining	12 251	2 287	32	13
Transport infrastructure	9 885	13 969	7	7
Energy	3 587	1 448	9	5
Industrial real estate	3 192	846	5	5

Table D. | **SDG sectors: greenfield and project finance, selected trends, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	60 473	15 417	17	12
Renewable energy	8 725	11 132	48	31
WASH	326	339	3	3
Food and agriculture	7 559	1 680	69	43
Health	639	267	37	14
Education	259	143	17	15

Foreign direct investment (FDI) to Africa declined by 16 per cent in 2020, to \$40 billion, as the COVID-19 pandemic continued to have a persistent and multifaceted negative impact on cross-border investment globally and regionally. The decline in Africa, higher than the decline in the developing-country average, came on top of an existing stagnant trend, with FDI on the continent having remained almost unchanged in 2019 compared to 2018. The continent went into its first recession in 25 years; the economic slowdown and mobility restrictions weighed heavily on investment indicators. Greenfield project announcements, an indication of investor sentiment and future FDI trends, dropped by 62 per cent to \$29 billion, while international project finance, especially relevant for large infrastructure projects plummeted by 74 per cent to \$32 billion. Cross-border mergers and acquisitions (M&As) fell by 45 per cent to \$3.2 billion. The FDI downturn in 2020 was particularly severe in resource-dependent economies due to low prices of and dampened demand for energy commodities. Amid the slow roll-out of vaccines and the emergence of new COVID strains, significant downside risks persist for foreign investment to Africa, and the prospects for an immediate substantial recovery are bleak. UNCTAD projects FDI in Africa to increase in 2021, but only marginally. An expected rise in demand for commodities, new opportunities due to global value chain (GVC) restructuring, the approval of key projects and the impending finalization of the African Continental Free Trade Area (AfCFTA) agreement's Sustainable Investment Protocol could lead to investment picking up greater momentum by 2022.

Inflows

The pandemic triggered cascading health and economic challenges in Africa throughout 2020, affecting FDI inflows significantly. The share of Africa in the FDI inflows of developing economies declined from 6.3 per cent to 5.9 per cent. Although most countries and regions within the continent were affected, foreign investment inflows were particularly impacted in resource dependent economies (table II.1).

FDI inflows to North Africa contracted by 25 per cent to \$10 billion, down from \$14 billion in 2019, with major declines in most countries. Egypt remained the largest recipient in Africa, albeit with a significant reduction (-35 per cent) to \$5.9 billion in 2020. Attempts to promote FDI diversification include the recent agreement to activate the \$16 billion Saudi–Egyptian investment fund that lists tourism, health, pharmaceuticals, infrastructure, digital technologies, financial services, education and food as priority sectors. Despite this, FDI to the country is still directed largely to natural resources. The discovery of the offshore Zohr gas field in the Eastern Mediterranean region has reinforced this pattern. In 2020, the development of the Baltim South West offshore project, the Kattameya field project and the third phase of the Kamose-North Sinai project were announced as priorities,

Table II.1.

Africa: pandemic impact on countries, by selected economic groupings

Country economic grouping	Share of inflows (Per cent)		Pandemic impact (Per cent change)
	2019	2020	
Oil exporters (10)	21	21	-15
Other resource-intensive economies (17)	50	44	-34
Non-resource-based economies (27)	29	35	-10

Source: UNCTAD.

Note: Country economic groupings based on IMF (2020).

all with significant participation expected from foreign investors. One sizeable investment (\$210 million) outside the gas industry was the establishment by Realme (China), a smartphone manufacturer, of its regional sales and servicing facility in Cairo, to serve the entire African market. Flows to *Morocco* remained almost unchanged at \$1.8 billion. Morocco's FDI profile is relatively diversified, with an established presence of some major MNEs in manufacturing industries including automotive, aerospace and textiles. The long-term commitment of these firms to the country, coupled with steady inflows in mining of phosphate – Morocco holds the largest reserves – mitigated against a decrease in cross-border investment inflows despite the global crisis.

FDI to *Algeria* dropped by 19 per cent to \$1.1 billion, with inflows mainly directed to the natural resources sector. In 2020, Algeria lifted restrictions that capped foreign ownership at 49 per cent, except in the retail industry and in strategic sectors, including infrastructure and natural resource processing.¹ Although this could encourage the diversification of FDI, the impact may appear only after foreign investment recovers more broadly. FDI to the *Sudan* shrank by 13 per cent to \$717 million. Easing of political tensions between the Sudan and the United States in 2020, added to other political developments conducive to investment, should pave the way for higher investment inflows in the medium term, after the negative impact of the pandemic recedes. Inflows to *Tunisia* declined to \$652 million from \$845 million in 2019, a 23 per cent fall. The manufacturing sector attracted the most FDI (54 per cent), followed by energy (33 per cent). The biggest impact of the pandemic on investment was in the services sector, where FDI declined by 44 per cent, which left its share of total FDI flows in Tunisia at only 9 per cent in 2020.²

FDI inflows to Sub-Saharan Africa decreased by 12 per cent to \$30 billion, with investment growing in only a few countries. In West Africa, inflows to *Nigeria* increased slightly, from \$2.3 billion in 2019 to \$2.4 billion. The average price of crude oil dropped by 33 per cent in 2020,³ and lower demand along with supply-side constraints caused by the slowdown in site development restricted FDI to the country in the first half of 2020. Despite the pandemic, the long-term policy of FDI diversification appears to have had some impact. One important greenfield investment (\$66 million) in the non-oil economy was the construction of a manufacturing facility in the Lekki Free Trade Zone by Ariel Foods (Kenya). There was also a significant M&A deal in the same region, with China Communications Construction Company providing the initial \$221 million equity injection in Lekki Deep Sea Port, out of a planned total investment of \$629 million. Other transactions that contributed to FDI diversification, such as the investment by Multichoice Group (South Africa) in Betking, a provider of data hosting services, were relatively small. *Senegal* was among the few economies on the continent to have received higher inflows in 2020, with a 39 per cent increase to \$1.5 billion, due to investments in energy, in both the traditional oil and gas industry as well as renewables. Work on offshore oil and gas fields started for the first time in Senegal in 2020; with production expected to start in 2022, the Government expects double-digit economic growth by 2023. The largest of these projects is the SNE Oil Field, which is being developed 100 km south of the capital, Dakar, by a consortium comprising Woodside Petroleum (Australia), Cairn Energy (United Kingdom), FAR (Australia) and Petrosen (Senegal).

Ghana registered a 52 per cent decline in FDI in 2020, leaving inflows at \$1.9 billion, from \$3.9 billion in 2019. Stringent lockdown measures in the first half of the year contributed to the investment decline, with the country among the first in the continent to impose mobility restrictions. The main investing economies in 2020 were Australia, China, the Netherlands, South Africa and the United Kingdom. Almost half of the FDI to Ghana was in manufacturing, whereas the services and mining sectors accounted for 25 and 16 per cent of foreign investment, respectively. Inflows increased in *Mauritania* by 10 per cent, to \$1.0 billion,

as a result of investments from China. FDI to *Togo* almost doubled to \$639 million, mainly due to investment from other West African countries. A key project was a \$100 million plant for building construction material announced by CimMetal Group (Burkina Faso), which is to start production in 2021. Another significant investment realized in 2020 was the new cement plant constructed by Dangote (Nigeria) for \$60 million.

Central Africa was the only region in Africa to register an increase in FDI in 2020, with inflows of \$9.2 billion, as compared with \$8.9 billion in 2019. Increasing inflows in the *Republic of the Congo* (by 19 per cent to \$4.0 billion) helped prevent a decline. Investment in the country was buoyed by flows in offshore oil fields after the completion of the Phase 2 licensing round of available oil blocks in 2019. FDI also grew in the Democratic Republic of Congo and Gabon (by 11 per cent each), to \$1.6 billion and \$1.7 billion, respectively. In the *Democratic Republic of Congo*, inflows in mining supported FDI, as prices for cobalt increased with rising demand for its use in smartphones and electric car batteries. Similarly, *Gabon* registered robust inflows in the oil industry, as the adoption of its new Petroleum Code in 2019 led to several new offshore production-sharing agreements, some of which materialized in 2020. Inflows were relatively stable in *Chad*, decreasing only 2 per cent to \$558 million. FDI to the country remained overwhelmingly concentrated in natural resources.

FDI to East Africa dropped to \$6.5 billion, a 16 per cent decline from 2019. *Ethiopia*, despite registering a 6 per cent reduction in inflows to \$2.4 billion, accounted for more than one third of foreign investment to the subregion. Although the Ethiopian economy suffered from the pandemic, especially in hospitality, aviation and other services, it still grew a substantial 6.1 per cent. The manufacturing, agriculture and hospitality industries drew the highest shares of investment in 2020. The Government initiated a programme to facilitate foreign investment in the manufacturing of personal protective equipment (PPE), and several Chinese firms have already started production. FDI to the *United Republic of Tanzania* was largely unchanged at \$1.0 billion. FDI to *Uganda* decreased by 35 per cent to \$823 million, compared with \$1.3 billion in 2019, as work on the Lake Albert oil project slowed due to the pandemic as well as disagreements between the Government and oil companies on the development strategy. The approval of the \$3.5 billion East African Crude Oil Pipeline project, which will result in the construction of a 1,400 km pipeline from Uganda to the Tanga seaport in the United Republic of Tanzania, augurs well for investment to both countries. FDI to *Somalia* increased marginally (4 per cent) to \$464 million. The country launched a new investment promotion strategy in 2020 that outlined 10 priority areas for foreign investment, including livestock, fisheries, energy and manufacturing.

FDI to Southern Africa decreased by 16 per cent to \$4.3 billion, with Mozambique and South Africa accounting for most inflows. In *Angola*, repatriation of capital by MNEs in the oil and gas industry slowed, and the country registered net inflows of -\$1.9 billion, as compared with -\$4.1 billion in 2019. Inflows were steady in *Mozambique*, increasing by 6 per cent to \$2.3 billion. The implementation of the \$20 billion investment led by Total (France) in the liquefied natural gas (LNG) project in the country slowed but continued, despite the pandemic and other challenges. FDI to *South Africa*, in contrast, decreased by 39 per cent to \$3.1 billion. South Africa has borne high human and economic costs due to the pandemic, and the country's GDP is estimated to have dropped by 8 per cent in 2020.⁴ Cross-border M&As in South Africa dipped significantly (by 52 per cent, to \$2.2 billion) but still accounted for a large part of total inflows. The largest investment realized in 2020 was PepsiCo's acquisition of Pioneer Foods after the Competition Tribunal of South Africa approved the deal. The acquisition, announced in 2019, is worth \$1.7 billion, to be disbursed over several years.

Cross-border M&As, which form a relatively small part of total inflows to Africa fell by 45 per cent to \$3.2 billion in 2020. Although multinational enterprises (MNEs) from the United States accounted for the highest value (\$2 billion) of M&As in Africa, transactions from developed economies fell considerably. In contrast, those from developing economies, especially China (at \$844 million compared with \$131 million in 2019), rose.

Foreign investment in Africa directed towards sectors related to the Sustainable Development Goals (SDGs) fell considerably in nearly all sectors in 2020. Renewable energy was an outlier, with international project finance deals increasing by 28 per cent to \$11 billion, from \$9.1 billion in 2019. This is consistent with global trends of investment in renewable energy, which has picked up even as the pandemic has constricted investment in other sectors. Renewable energy projects were announced in many countries, including some with weak electricity infrastructure. For example, Schneider Electric Solar (France) announced a \$165 million solar energy project in Burkina Faso as a part of its plan to expand its presence in Sub-Saharan Africa. In contrast, greenfield investment projects fell significantly in food and agriculture (-78 per cent to \$1.7 billion) as well as in health (-58 per cent to \$267 million) and education (-45 per cent to \$143 million), exacerbating investment gaps in human capital and the enhancement of value addition in natural resources.

Outflows

FDI outflows from Africa fell by two thirds in 2020 to \$1.6 billion, from \$4.9 billion in 2019. The highest outflows were from Togo (\$931 million). Investment from that country was largely directed to other African countries. For example, Afrik Assurances opened operations in Benin and Côte d'Ivoire in the financial services industry. Outflows from Ghana (\$542 million) and Morocco (\$492 million) were also significant, although they dropped by 8 and 45 per cent, respectively, compared with 2019. In addition to intracontinental investment, OFDI from Morocco also included investments in France. Outward investment from South Africa, traditionally a key investor, was negative (-\$2.0 billion) as South African MNEs repatriated capital from foreign countries.

Prospects

Heading into 2021, Africa is expected to see FDI rise, but only to a limited extent (table II.2). The large falls in greenfield investment (-62 per cent to \$29 billion) and international project finance announcements (-63 per cent to \$46 billion) in 2020 indicate the significant downside risks in the immediate future. Given a projected GDP growth rate in 2021 (3.8 per cent) that is lower than the projected global average and a slow vaccine roll-out programme, investment recovery in Africa is likely to lag behind the rest of the world.

Africa: growth rates of GDP, trade and FDI, 2013–2021 (Per cent)									
Variable	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^a
GDP	1.1	3.2	2.6	1.8	3.4	3.4	2.9	-3.5	3.6
Trade	-25.2	-8.1	-4.5	3.8	13.7	4.9	1.6	-10.4	8.4
FDI	-11.3	7.6	6.2	-20.1	-13.1	12.9	3.9	-15.6	(0 to 10)

Source: UNCTAD, FDI/MNE database for FDI; UN DESA for GDP and trade.

^a Forecasted.

This is in contrast to trade, which is forecast to grow (8.4 per cent) in parallel with global growth (8 per cent). In the long run, the speed and the scale of the FDI recovery will depend on the extent to which the economic and social impact of the pandemic can be contained on the continent, as well as the global economic situation and the pace of implementing key announced projects.

Despite significant risks related to foreign investment in 2021, some indicators point to a potential return of FDI to pre-COVID levels by 2022. Although the overall value of planned project finance and greenfield investments fell considerably, a few large deals announced in 2020 signal that foreign investors are engaged despite the unfavourable investment climate. For example, MTN Group (South Africa) announced it would invest \$1.6 billion to strengthen its 4G network services in Nigeria. Also, Eni announced plans to construct a natural gas processing plant as part of a joint venture with a local firm in Angola, with the opening date scheduled for 2023. Major investment announcements were also made during the Third South Africa Investment Conference in November 2020. Google, for example, announced it would invest approximately \$140 million in a fibre-optic submarine cable that will provide high-speed internet connectivity across the country. However, the realization of these sizeable investment projects is likely to be drawn out, due to the unfavourable investment, economic and epidemiological conditions.

The expected adoption of the Sustainable Investment Protocol of AfCFTA (see chapter III) could also bolster FDI flows to and within Africa in the long term (box II.1). The protocol is being negotiated as a Phase 2 issue of the agreement, along with competition policy and intellectual property rights. Finally, indications of an increase in commodity prices in 2021, especially for crude oil and natural gas, could also encourage investment flows to Africa. Oil prices are projected to increase by 21 per cent on average and non-oil commodity prices by 13 per cent.

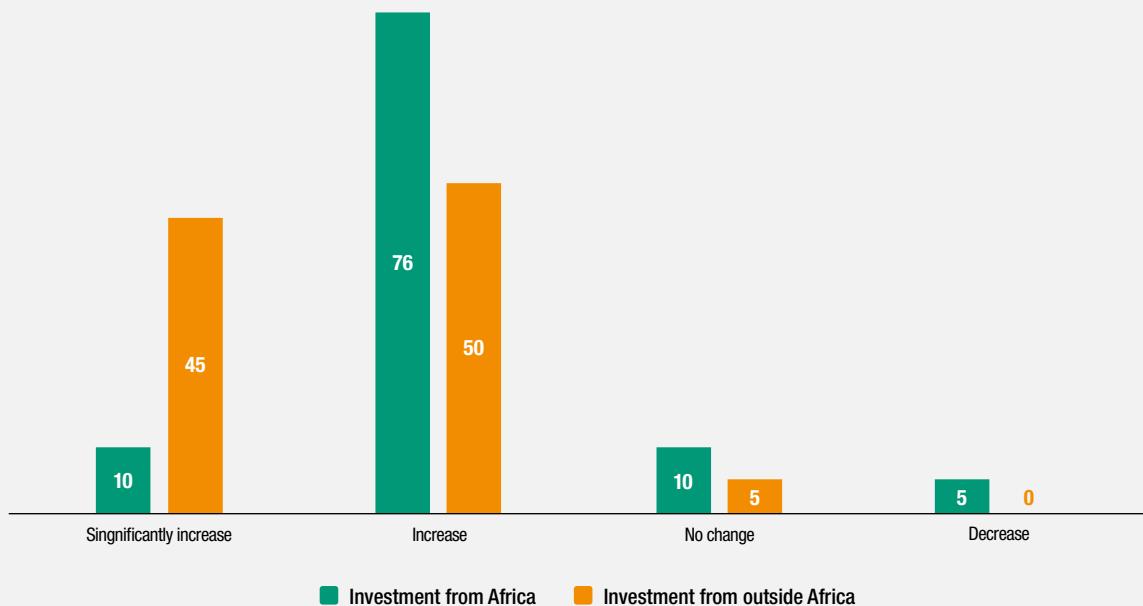
In conclusion, FDI to Africa faces strong headwinds in the short term with significant downside risks. In the longer run, vaccine availability, domestic economic recovery policies and international financial support will be critical to the revival of FDI and the post-pandemic recovery.

Box II.1.

The AfCFTA and investment in SEZs

The implementation of the AfCFTA is expected to significantly shape foreign investment into African special economic zones (SEZs). It is also likely to affect target industries and source countries of investment. According to a recent UNCTAD survey of SEZ stakeholders in Africa carried out in collaboration with the African Economic Zones Organization (AEZO), FDI in SEZs is expected to increase by 15 per cent from other members of AfCFTA and by 30 per cent from outside Africa. The survey revealed that the vast majority of African SEZs view the AfCFTA with optimism: over 85 percent of respondents expect FDI from Africa to increase or significantly increase, while almost the entirety of respondents (95 per cent) expect investment from outside Africa to do so (box figure II.1.1). In the context of enhanced regional integration, international investors are likely to increasingly pursue regional market-seeking investments, considering African SEZs as points of entry into the whole continental market, therefore scaling up FDI towards the most competitive zones.

Box figure II.1.1. | AfCFTA: expected impact on FDI in African SEZs (Per cent)



Source: UNCTAD in collaboration with AEZO.

According to SEZ stakeholders, the most promising industries for FDI flows in African SEZs post-AfCFTA implementation are agriculture and food, light manufacturing, textiles and electronics. More and more SEZs are also looking to attract investment in the automotive and construction sectors. In this regard, the implementation of the AfCFTA presents a window of opportunity for SEZs to pivot away from primary commodities traditionally driving African investment and trade flows, such as mining and hydrocarbons, while instead attracting and leveraging investment into higher value-added industries.

Source: UNCTAD.

DEVELOPING ASIA

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows
\$ 535.3 bn
2020 Increase
+3.8%
Share in world
53.6%

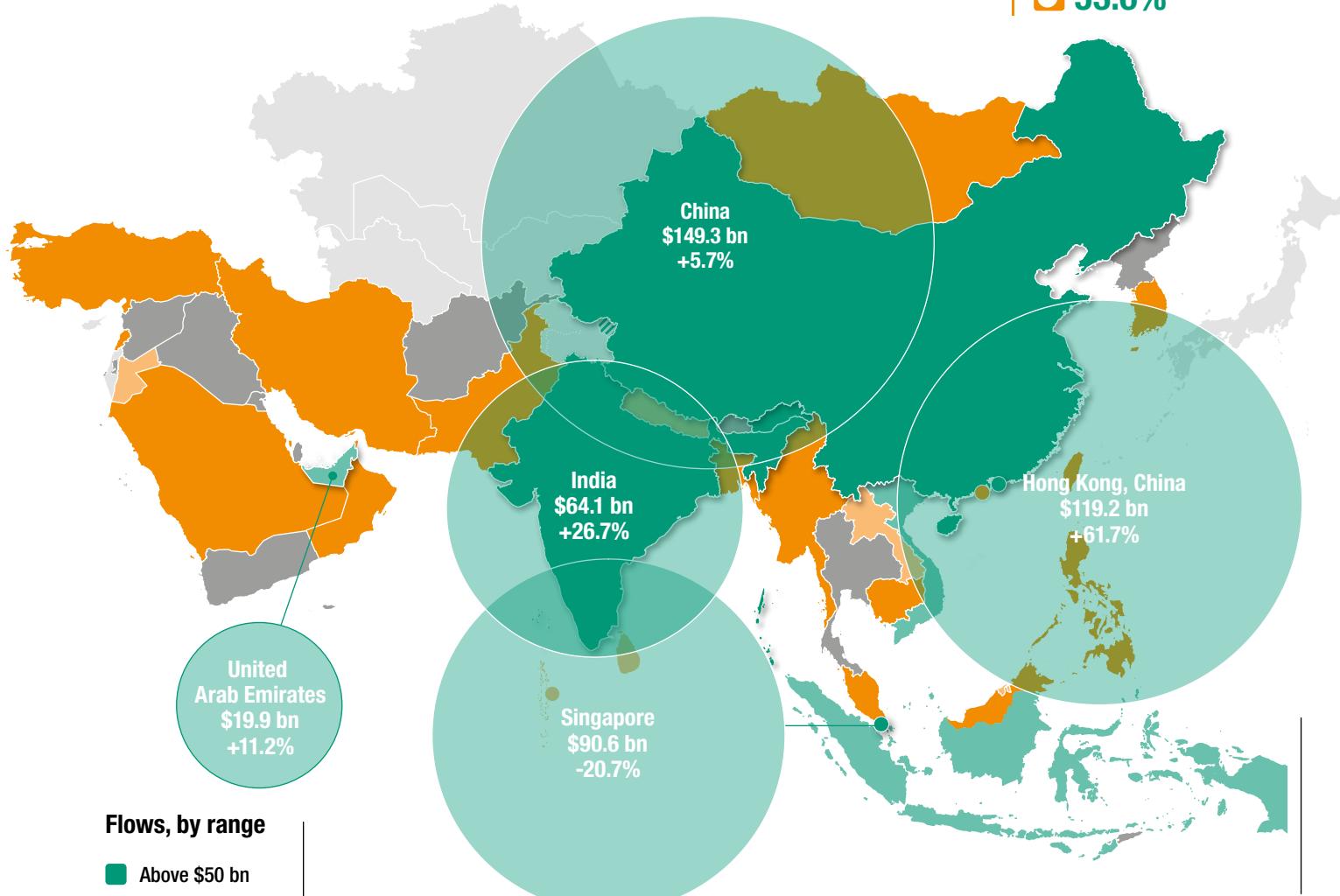
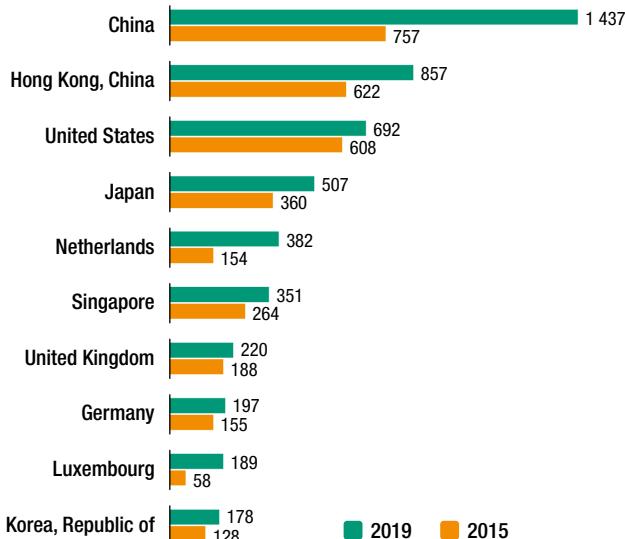


Figure A. Top 10 investor economies by FDI stock, 2015 and 2019 (Billions of dollars)



Outflows: top 5 home economies

(Billions of dollars and 2020 growth)

China	\$132.9	-2.9%
Hong Kong, China	\$102.2	+92.1%
Korea, Republic of	\$32.5	-7.8%
Singapore	\$32.4	-36.0%
United Arab Emirates	\$18.9	-10.8%

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

- Flows remained resilient
- The region accounted for half of global inward and outward FDI
- 2021 prospects favourable, with higher inflows expected

Figure B. | **FDI inflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

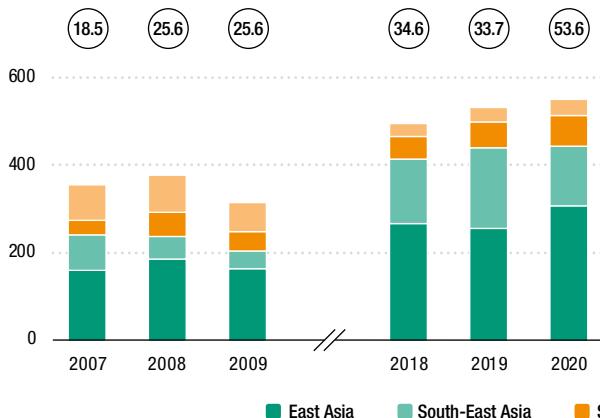


Figure C. | **FDI outflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

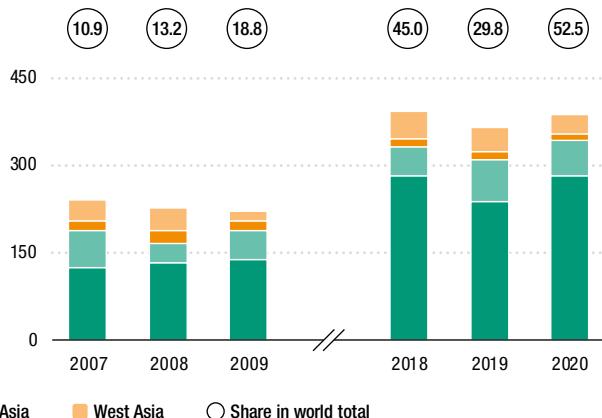


Table A.

**Net cross-border M&A sales,
2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	52 656	73 234	749	606
Primary	1 188	11 277	23	23
Manufacturing	19 411	23 545	164	134
Services	32 057	38 411	562	449
<i>Top industries by value</i>				
Information and communication	3 190	12 804	95	83
Pharmaceuticals	925	11 420	11	26
Extractive industries	469	10 787	16	11
Finance and insurance	7 619	7 887	112	93
Real estate	3 680	7 048	57	30
Utilities	-1 093	5 305	29	32

Table B.

**Announced greenfield projects,
2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	265 117	169 743	4 336	2 626
Primary	4 545	673	33	25
Manufacturing	149 375	101 319	1 974	1 113
Services	111 197	67 752	2 329	1 488
<i>Top industries by value</i>				
Chemicals	16 686	29 003	237	137
Coke and refined petroleum	52 656	22 659	39	18
Electronics and electrical equipment	20 410	17 818	382	230
Information and communication	14 373	15 538	771	541
Energy	19 682	14 374	65	55
Finance and insurance	9 463	10 923	286	229

Table C.

**Announced international project
finance deals, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	156 818	93 633	186	182
<i>Top industries by number</i>				
Renewable energy	30 711	33 354	62	88
Energy	12 816	16 113	19	22
Oil and gas	68 079	16 567	15	18
Industrial real estate	6 714	11 132	15	16
Residential/commercial real estate	6 484	3 329	30	15

Table D.

**SDG sectors: greenfield and project
finance, selected trends, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	30 964	23 000	39	31
Renewable energy	30 711	33 354	62	88
WASH	1 479	259	13	4
Food and agriculture	5 037	4 327	167	125
Health	3 693	2 464	143	91
Education	525	606	38	37

FDI inflows to developing Asia grew by 4 per cent to \$535 billion in 2020, increasing Asia's share of global inflows to 54 per cent. M&As were robust, but the value of announced greenfield investments in 2020 contracted, and the number of international project finance deals stagnated. FDI growth in the region was fundamentally driven by resilient inflows in the largest economies and inflated by a sharp rebound of inflows in Hong Kong, China after anomalously low inflows in 2019 and because of corporate reconfigurations and transactions by MNEs headquartered in the economy. In China and India, FDI increased by 6 per cent (to \$149 billion) and 27 per cent (to \$64 billion), respectively. In the United Arab Emirates, FDI increased by 11 per cent to \$20 billion. Elsewhere in the region, FDI contracted. In South-East Asia, it declined by 25 per cent, to \$136 billion, with the severe disruptions of supply chains and manufacturing activities. Investment in Singapore, a major FDI recipient, fell by 21 per cent to \$91 billion. OFDI from Asia rose 7 per cent to \$389 billion, driven mainly by an increase in outflows from Hong Kong, China and from Thailand, while OFDI from China, the largest investor country in 2020, was flat. FDI prospects for the region are more positive than those for other developing regions, owing to resilient intraregional value chains and stronger economic growth prospects. Manufacturing, an important FDI sector for the region, already showed signs of recovery in the second half of 2020. However, in smaller economies oriented towards services and labour-intensive industries, particularly hospitality, tourism, and garments, FDI could remain weak in 2021.

Inflows

FDI in developing Asia grew by 4 per cent, to \$535 billion in 2020, making it the only region to record growth. That growth was due to corporate reconfigurations and transactions by MNEs headquartered in Hong Kong, China, inflated by a rebound of investment in the economy after social unrest suppressed FDI in 2019. Excluding that economy, which traditionally accounts for sizeable conduit flows (chapter I), FDI to the region was down by 6 per cent (\$26 billion) in 2020. M&A activity was robust across the region, growing 39 per cent to \$73 billion – particularly in technology, financial services and consumer goods. In contrast, the value of greenfield investments announced in 2020 contracted by 36 per cent, to \$170 billion, from the value in 2019, and the number of international project finance transactions stagnated. Within the region, there are large divergences in the FDI trend. Whereas some of the largest economies, such as China and India, recorded FDI growth in 2020, the rest recorded a contraction. In smaller economies where FDI is concentrated in tourism or manufacturing, contractions were particularly severe.

FDI in East Asia increased 21 per cent to \$292 billion. Overall growth was inflated by the FDI recovery in *Hong Kong, China* in 2020. FDI surged 62 per cent, to \$119 billion, driven mainly by an increase in intracompany loans and reinvested earnings – dominant components of FDI for the economy. Although accounting for a small share of FDI, the rebound in cross-border M&A sales to \$11 billion (from -\$1 billion in 2019) also contributed to this rise, due to many instances of Chinese MNEs consolidating affiliates in Hong Kong, China. Considering the economy's substantial intrafirm flows and its close ties with China, which contributes 28 per cent of its FDI stock,⁵ growth in FDI in Hong Kong, China reflects corporate restructuring, particularly by Chinese MNEs, more than new investment.

FDI growth in *China* continued in 2020, growing by 6 per cent to \$149 billion. This reflects, to a degree, success in containing the pandemic and the rapid recovery. A quicker return to positive GDP growth in the second quarter of 2020 and removal of investment restrictions helped sustain investment. Growth was driven by the services sector, which accounted for more than 70 per cent of inflows; FDI accelerated particularly in technology-related industries. To facilitate investment, the government expanded

the number of industries opened to FDI, lifted foreign investment restrictions in major industries and amended the negative list for foreign investment in pilot free trade zones (see chapter III⁶) FDI in high-tech industries (hardware, software, e-commerce and research and development (R&D)) increased by 11 per cent. Growth in M&As and international project finance deals also contributed to China's FDI growth, though marginally. M&A sales rose by 97 per cent (to \$19 billion), mostly in the information and communication technology (ICT) and pharmaceutical industries. The value of new greenfield investments announced in 2020 contracted substantially in industries such as transportation and automotive.

In the *Republic of Korea*, FDI declined by 4 per cent to \$9.2 billion. Though the country was among the earliest to contain the outbreak and economic growth remained strong, a large drop in cross-border M&As caused FDI to decline. In 2020, M&As fell from \$3.8 billion in 2019 to -\$1.9 billion, driven by large divestments.⁷ Despite their overall decline, FDI inflows remained strong in some industries, particularly those related to the fourth industrial revolution (e.g. artificial intelligence (AI), big data, cloud computing), as well as electric cars and biotechnology. FDI inflows pledged to these industries grew 9.3 per cent to \$8.4 billion, amounting to more than 40 per cent of the country's total pledged FDI.

FDI in South-East Asia, an engine of global FDI growth for the past decade, contracted by 25 per cent to \$136 billion. Announced greenfield investments and international project finance deals each declined by about 20 per cent in value. Cross-border M&As, which account for a marginal portion of FDI, fell to -\$4.7 billion from \$9.8 billion in 2019. The three largest recipients (Singapore, Indonesia and Viet Nam) in that order, which accounted for more than 90 per cent of inflows in 2020, all recorded FDI declines. Lockdown measures, successive waves of COVID-19 infection, supply chain disruption, falling corporate earnings, economic uncertainties and delayed investment plans were key reasons for the contraction.

FDI in *Singapore* fell by 21 per cent to \$91 billion. Even so, the country remained the largest recipient and source of intraregional investment. FDI in the three largest recipient industries (finance, wholesale and retail trade, and manufacturing) contracted, but investment in manufacturing declined the most – by more than 80 per cent. In *Indonesia*, FDI declined by 22 per cent, to \$19 billion, because of a 58 per cent drop in investment in the manufacturing industry. Two major sources of FDI fell: investment from Japan shrunk by 75 per cent, to \$2.1 billion, and investment from Singapore by nearly 30 per cent, to \$4.6 billion. In *Viet Nam*, FDI fell by 2 per cent because of significant investment contractions in manufacturing and real estate activities (the two largest recipients last year) but was cushioned by a rise in investment in electricity projects. Inflows from major Asian economies (e.g. China, Hong Kong (China), Japan, Republic of Korea), traditionally the largest sources of FDI to Viet Nam, declined.

FDI to other South-East Asian countries also fell. In *Thailand*, FDI sank to -\$6 billion, driven by the divestment of Tesco (United Kingdom) to a Thai investor group for \$10 billion. In *Malaysia*, FDI fell by 55 per cent to \$3 billion. In *Myanmar*, FDI dropped 34 per cent to \$1.8 billion. FDI in *Cambodia* was flat at \$3.6 billion thanks to inflows in finance, which rose by 13 per cent to \$1.4 billion, compensating for a 7 per cent fall in manufacturing, primarily in the garment industry (the traditional largest manufacturing recipient) and investment declines in industries such as hospitality and real estate. FDI in the *Lao People's Democratic Republic*, in contrast, rose to \$968 million, driven by investments in hydropower. International project finance deals in that country nearly quadrupled in 2020 to \$3.3 billion, to be invested over several years.

FDI in South Asia rose by 20 per cent to \$71 billion, driven mainly by strong M&As

in India. In that country, FDI increased 27 per cent to \$64 billion. Amid India's struggle to contain the COVID-19 outbreak, robust investment through acquisitions in ICT (software and hardware) and construction bolstered FDI. Cross-border M&As surged 83 per cent to \$27 billion, with major deals involving ICT, health, infrastructure and energy. Large transactions included the acquisition of Jio Platforms by Jaadhu (a subsidiary of Facebook (United States)) for \$5.7 billion, the acquisition of Tower Infrastructure Trust by Brookfield (Canada) and GIC (Singapore) for \$3.7 billion and the sale of the electrical and automation division of Larsen & Toubro India for \$2.1 billion. Another megadeal – Unilever India's merger with GlaxoSmithKline Consumer Healthcare India (a subsidiary of GSK United Kingdom) for \$4.6 billion – also contributed.

In *Pakistan*, FDI was down by 6 per cent to \$2.1 billion, cushioned by continued investments in power generation and telecommunication industries. Inflows in *Bangladesh* and *Sri Lanka* contracted by 11 per cent and 43 per cent, respectively. FDI fell in other South-Asian economies that rely on export-oriented garment manufacturing, as orders from the United States and the European Union dropped substantially in 2020.

FDI flows to West Asia increased by 9 per cent to \$37 billion in 2020. A significant rise in M&As (60 per cent to \$21 billion) drove this growth, particularly some key acquisitions in natural resource-related projects in some of the region's main economies. By contrast, the pandemic combined with low energy prices and commodity prices significantly curtailed greenfield investment projects. The impact was particularly severe in the region's relatively smaller economies, where the needs for investment are the greatest.

FDI to the *United Arab Emirates* expanded by 11 per cent to \$20 billion. Natural resources transactions drove investments in the country, primarily ADNOC's \$10 billion sale of a 49 per cent stake in its natural-gas pipelines to a group of six investors including Global Infrastructure Partners (United States), Brookfield Asset Management (Canada) and Singapore's sovereign wealth fund. The United Arab Emirates also received investments in other industries: for example, some 53 per cent of FDI to the Emirate of Dubai in the first half of 2020 was in medium- and high-tech sectors; and a key deal was realized in the pharmaceuticals industry, with CCL Pharmaceuticals (Pakistan) acquiring a majority stake in StratHealth Pharma for an undisclosed sum. The United Arab Emirates continued to liberalize its FDI regime with the promulgation of the 2020 FDI Decree, which further facilitated foreign investment by extending some of the free zone incentives to the broader economy.⁸

Inflows to *Turkey* decreased by 15 per cent to \$7.9 billion in 2020. FDI picked up towards the end of the year (\$2.3 billion in Q4), preventing a steeper decline. European economies continued to account for the largest share of inflows (55 per cent), but the United States (14 per cent) as well as Middle Eastern (7 per cent) and Asian economies (6 per cent) were also significant investors.⁹ Major deals included a \$200 million investment by Metric Capita (France) in a pharmaceuticals manufacturing unit and the Qatar Investment Authority's acquisition of a 10 per cent equity stake in a stock exchange operator valued also at \$200 million.

FDI to *Saudi Arabia* remained robust despite the pandemic, increasing by 20 per cent to \$5.5 billion. As in Turkey, investment picked up in late 2020, reaching almost \$1.9 billion in the last quarter. The policy interventions to diversify investment appear to be effective: key investments were reported in financial services, retail, e-commerce and ICT. For example, Gulf International Bank (Bahrain) launched its new commercial banking operations in Saudi Arabia with an investment of almost \$450 million. Another sizeable investment was the acquisition of a minority stake in Saudi Digital Payments Company, a subsidiary of Saudi Telecom, by Western Union (United States) for \$200 million.

In terms of the number of new foreign investment licences awarded in 2020, Egypt and India were the most active in Saudi Arabia, followed by the United Kingdom. FDI to *Bahrain*, in contrast, contracted by a third to \$1 billion. The Government announced plans to continue implementing wide-ranging reforms to attract foreign investment and link it to national development and economic diversification plans. Foreign investment in 2020 was primarily directed at the country's manufacturing, education, health-care and information technology industries.

Across developing Asia in 2020, investment in SDG-related sectors fell (table D). Renewables saw a rise in international project finance deals to \$33 billion, with Viet Nam accounting for more than 40 per cent of all projects for wind and solar plants,¹⁰ followed by India. Investment in infrastructure (telecommunication, power and transportation), which expanded significantly before the pandemic, was suppressed in 2020.

Outflows

OFDI from Asia increased 7 per cent to \$389 billion – the only region recording growth in outflows. This underscores the region's prominence as an important investor for the developing region. Growth was driven by strong outflows from East and South-East Asia, in particular from Hong Kong (China) and from Thailand. OFDI flows from China were flat, while those from Singapore fell by 36 per cent.

OFDI from East Asia rose 19 per cent to \$282 billion. OFDI from *Hong Kong, China* doubled to \$102 billion – mostly in the form of reinvested earnings. Growth reflects, to a degree, reinvestments by MNEs listed in Hong Kong, China to affiliates in China and other parts of Asia.

China's OFDI stabilized at \$133 billion in 2020. The country's tighter screening of OFDI, added to heightened scrutiny by the United States of investments originating from China, had weighed on the country's OFDI since 2017. Continued expansion of Chinese MNEs and ongoing Belt and Road Initiative projects underpinned the stabilization in 2020. In addition, M&A purchases by Chinese investors, which almost doubled to \$32 billion, also helped stabilize OFDI.

OFDI from South-East Asia decreased by 16 per cent to \$61 billion, but the region's share of global outward investment flows rose from 6 per cent in 2019 to 8 per cent. Singapore and Thailand were the two largest investors from the region in 2020.

OFDI from *Singapore* was down 36 per cent to \$32 billion, a significant share of which was invested in ASEAN. Singapore remained a major source of investment not only for ASEAN countries, but also for other economies such as China and India. In 2020, companies from Singapore were the largest investor group in some Asian countries. More than 25 per cent of FDI in Indonesia and 40 per cent in Viet Nam was from Singapore.¹¹ OFDI from *Thailand* more than doubled to \$17 billion. In 2020, about 85 per cent of FDI from the country was in financial services, manufacturing, real estate and construction activities, going mostly to ASEAN. Thai companies are actively investing in the construction of power plants and in retail activities in the region. For instance, in Viet Nam, EGAT and the Electricity Generating Company are building a \$2.4 billion power plant, Super Energy is constructing the \$384 million Loc Ninh power plant, and B. Grimm Power is involved in a \$300 million solar power project. Thai companies actively pursued M&A transactions as well, mainly in ASEAN. In 2020, Bangkok Bank acquired Bank Permata in Indonesia for \$2.3 billion, Thai Beverage acquired Frasers Commercial Trust (Singapore) for \$1.1 billion, and a Thai investor group led by Charoen Pokphand acquired Tesco's operation in Malaysia for \$700 million.

Outward investment from *Indonesia* and the *Philippines* rose to \$4.5 billion and \$3.5 billion, respectively. Companies from these two countries made some significant M&A purchases and were involved in infrastructure projects, particularly in neighbouring countries. For example, Ayala Corporation (*Philippines*) and a Singaporean partner are constructing a \$172 million wind farm in Viet Nam, and Japfa Comfeed (*Indonesia*) inaugurated a \$13 million feed mill, also in Viet Nam.

OFDI from South Asia, by contrast, fell 12 per cent to \$12 billion, driven by a drop in investment from *India*. These outflows remained small, representing less than 2 per cent of global outflows. Companies in India are South Asia's largest investors, with more than 90 per cent of outflows in 2020. Investments from India are expected to stabilize in 2021, supported by the country's resumption of free trade agreement (FTA) talks with the European Union (EU) and its strong investment in Africa.

OFDI from West Asia dropped by 18 per cent to \$34 billion. Outward flows from *Saudi Arabia* slowed considerably (-64 per cent to \$4.9 billion), driving the overall contraction. This was a result of the Saudi Public Investment Fund refocusing on domestic investment to counterbalance the negative economic effects of the pandemic as well as the slowdown of inward FDI. After investing only \$15 billion domestically in 2019, the Fund announced plans to increase this amount to \$40 billion annually from 2020 to 2025. FDI from *Kuwait* increased considerably, to \$2.4 billion in 2020 despite the pandemic. This was mainly due to the sovereign wealth fund's new strategy of focusing on equity and infrastructure projects overseas, as opposed to portfolio investment.

Prospects

FDI inflows in Asia are expected to increase in 2021, outperforming other developing regions with a projected growth of 5–10 per cent (table II.3). Signs of trade and industrial production recovering in the second half of 2020 provide a strong foundation for FDI growth in 2021. Yet, substantial downside risks remain for the many economies in the region that struggle to contain successive waves of COVID-19 cases and where fiscal capacity for recovery spending is limited. Investment in tourism-related industries and labour-intensive manufacturing will remain weak in 2021, whereas investment in the digital economy, data centres and ICT as well as health care will be robust. Economies in East and South-East Asia, and India, will continue to attract foreign investment in high-tech industries, given their market size and their advanced digital and technology ecosystem. In 2020, amid an overall contraction in greenfield investment announcements in the region, the value of new projects in the ICT industry grew 8 per cent (table B). In many economies, accelerating infrastructure development as part of stimulus programmes is expected to encourage investment in infrastructure-related activities. In other SDG sectors,

Table II.3.

Developing Asia: growth rates of GDP, trade and FDI, 2013–2021 (Per cent)

Variable	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^a
GDP	6.1	6.0	5.8	6.3	5.7	5.3	4.2	-1.3	7.5
Trade	6.0	4.6	0.2	2.5	7.5	4.1	-0.4	-2.9	8.3
FDI	2.3	10.7	11.8	-8.5	7.3	-1.7	3.8	3.8	(5 to 10)

Source: UNCTAD, FDI/MNE database for FDI; UN (2021) for GDP and trade.

^a Forecasted.

FDI in renewables is expected to continue to grow as countries push for greener energy sources (such as in China, the Republic of Korea, Saudi Arabia and a few South-East Asian countries).

In East Asia, FDI growth is expected to continue because of strong investment in China.

This investment was triggered by the early economic recovery and by robust growth. After a severe contraction in GDP at the height of the pandemic (-6.8 per cent in Q1 2020), China reported 18.3 per cent GDP growth in the first quarter of 2021. Industrial output, fixed-asset investment and trade also expanded (by 25, 26 and 29 per cent, respectively) – suggesting an overall recovery in production and investment activities. FDI flows in the first quarter of 2021 surged 44 per cent to \$45 billion.¹² FDI in the high-tech, manufacturing and services industries is expected to remain strong, and policies to attract and retain FDI adopted in 2020 will continue to bolster investment. In terms of outward investment, despite stabilization in 2020, a return to the 2016 peak of investment from China looks unlikely in the medium term, given continued geopolitical tensions and global screening mechanisms. The country's national policies are expected to inhibit its overseas investment; this includes the new “dual circulation” strategy, which prioritizes domestic investment, and the 2017 policy that tightened the screening of OFDI.

Hong Kong, China will remain an important financial hub in Asia and a gateway to invest in China, because of its favourable tax regime, easy listing process, absence of capital controls and good regulatory framework. The stabilization of FDI, after several tumultuous years, rests on the resolution of conflicts arising from the implementation of the National Security Law, and the normalization of tensions between China and the United States. Yet progress so far has been slow, suggesting that flows to and from Hong Kong, China will remain volatile in the medium term.

In the Republic of Korea, FDI is set to recover. In the first quarter of 2021, FDI commitments grew 45 per cent to \$4.7 billion, signalling a recovery in progress.¹³ Korean MNEs will continue to be important investors for infrastructure and manufacturing projects around the region. For example, KEPCO has multiple energy projects in the region; Doosan Heavy Industries announced an investment in hydroelectric power plant construction in Phou Ngoy, in the Lao People's Democratic Republic; and Samsung is expanding its investment in manufacturing in India under that country's federal plan to boost domestic smartphone production over the next five years.

In South-East Asia, FDI is likely to increase, but much will depend on how well countries in the region are able to contain the new wave of the pandemic unfolding in 2021. Improving global and regional economic growth in 2021, as well as ASEAN Member States' economic stimulus packages, will help bolster the resilience of the region. Investment in selected service industries and technology-related activities such as the digital economy, e-commerce, digital infrastructure (5G networks and data centres) and cloud computing, is expected to remain robust. The region is projected to become a rapidly growing global data centre hub in the next five years, overtaking growth in North America and in other Asia-Pacific countries.¹⁴ Many data centre and cloud MNEs are increasing investment or building more facilities, which are expected to be completed in 2021–2022. Industrial production activities in the region are also gaining momentum, which will encourage further capital expenditure and investment to increase capacity.

To mitigate the impact of the pandemic, countries in the region are accelerating the development of major physical infrastructure (e.g. transportation, telecommunication, power and SEZs). For example, Indonesia is accelerating SEZ development, adding incentives and facilitating investment in priority industries. Large infrastructure projects launched in 2020 will stretch into the next few years. These projects include the \$10 billion La Gan wind power project in Viet Nam, led by a consortium involving

Copenhagen Infrastructure Partners (Denmark); and a \$4 billion LNG power generation facility in Bac Lieu Viet Nam by Delta Offshore Energy (Singapore). In 2020, the region was the largest location for announced greenfield investment projects (at \$68 billion), indicating MNEs' strong investment commitment to the region.

The signing of the Regional Comprehensive Economic Partnership (RCEP) Agreement in November 2020, involving the ASEAN Member States plus Australia, China, Japan, the Republic of Korea and New Zealand, will also help the region attract FDI for post-pandemic recovery.¹⁵ The RCEP establishes the world's largest free trade area with provisions promoting investment, trade and services, including e-commerce development. Relocation of production by Chinese firms and other MNEs for cost reasons and to circumvent the impact of the United States–China trade tensions, as well as to build a more resilient supply chain network, will continue to benefit the ASEAN countries in 2021 and beyond. Home-country measures such as Japan's programme to strengthen overseas supply chains will help the region host more factories and business services (JETRO, 2020).

Long-term investment growth in South Asia is expected to reverse. The value of greenfield investments announced in 2020 contracted (-59 per cent to \$27 billion in 2020), and the second wave of the COVID-19 outbreak in India weighs heavily on the country's overall economic activities. Announced greenfield projects in India contracted by 19 per cent to \$24 billion, and the second wave in April 2021 is affecting economic activities, which could lead to a larger contraction in 2021. The outbreak severely hit main investment destinations such as Maharashtra (home to one of the biggest automotive manufacturing clusters, Mumbai–Pune–Nasik–Aurangabad), and Karnataka (home to the Bengaluru tech hub), which face another lockdown as of April 2021, exposing the country to production disruption and investment delays. Yet India's strong fundamentals provide optimism for the medium term. FDI to India has been on a long-term growth trend and its market size will continue to attract market-seeking investments. In addition, investment into the ICT industry is expected to keep growing. Export-related manufacturing, a priority investment sector, will take longer to recover, but government facilitation can help. The country's Production Linkage Incentive scheme, designed to attract manufacturing and export-oriented investments in priority industries (e.g. automotive and electronics) can drive a rebound of investment in manufacturing.

In Bangladesh and Sri Lanka, FDI inflows will take longer to recover, as investment commitments in these countries remained weak. For instance, announced greenfield investment projects in 2020, an indication of FDI trends over the next few years, contracted significantly (-87 per cent in Bangladesh, and -96 per cent in Sri Lanka). This contraction is due to weak investment interests in garment production, a major export industry and FDI recipient in these countries. Investment in, and production of, garments suffered severely in 2020, with no sign of recovery as of early 2021. Garment factories in Bangladesh for example, faced some \$3 billion worth of cancelled export orders in 2020.¹⁶ In Sri Lanka, export data for January 2021 show no recovery yet.¹⁷

In West Asia, a few factors point to FDI growth continuing its upward trajectory.

First, large acquisitions completed in the first half of 2021 suggest that M&A activities are likely to remain robust. For example, in April 2021, EIG Global Energy Partners (United States) acquired a 49 per cent stake in Aramco Oil Pipelines (Saudi Arabia) for \$12.4 billion. Second, major economies have been actively facilitating FDI to support economic recovery and development. Turkey, for example, is extending its specialized free zone programme that focuses on software and ICT activities to other high value added and technology-intensive activities. As part of this initiative, Ford (United States) is building a \$2.6 billion plant for a commercial vehicle and battery assembly operation for electric vehicles in the Kocaeli industrial zone. Saudi Arabia launched an SEZ programme that

focuses on non-traditional industries, which include cloud computing, tourism, renewable energy and logistics. In late 2020, Alphabet (United States) announced plans to launch a “cloud region” to provide Google’s cloud services through a joint venture with Saudi Aramco. Similarly, the United Arab Emirates is further liberalizing its foreign investment regime and expanding foreign investors’ access to the domestic economy. This move, combined with continued acquisitions in the oil and gas sector and the implementation of major announced projects in innovative industries is likely to ensure that the country will continue driving FDI to the region.

The normalization of relations between Qatar and other members of the Gulf Cooperation Council is also expected to encourage FDI in West Asia. In addition to improving investment prospects for Qatar specifically, this is also likely to boost intraregional flows. Finally, the rebound in commodity prices in 2021 is expected to stimulate demand, driving a recovery in natural resource-seeking FDI. Oil prices are projected to increase by more than 20 per cent in 2021, which will significantly encourage future FDI flows to West Asia through its major oil-exporting economies.

LATIN AMERICA AND THE CARIBBEAN

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows
\$ 87.6 bn
2020 Decrease
-45.4%
Share in world
8.8%

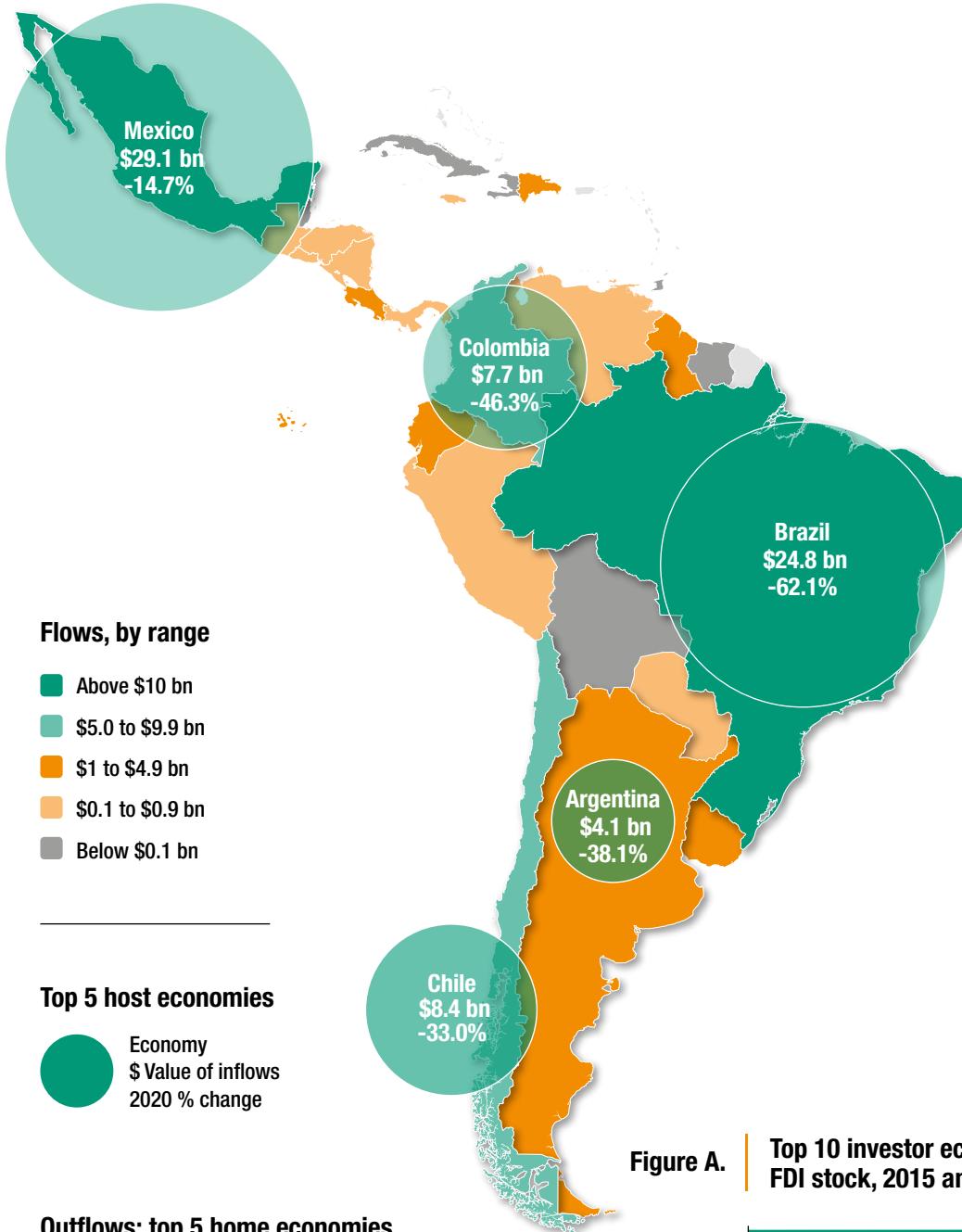
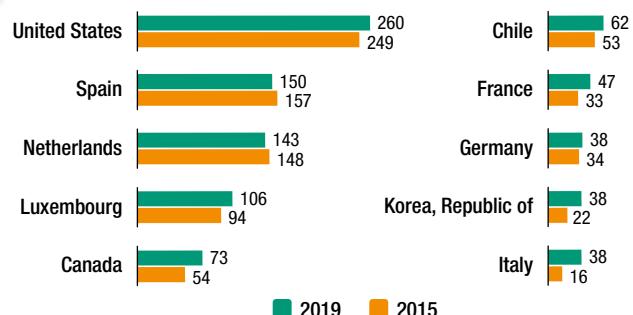


Figure A. Top 10 investor economies by FDI stock, 2015 and 2019 (Billions of dollars)



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

- The sharpest FDI decline in developing regions
- Outflows turned negative
- FDI to remain at a low level in 2021

Figure B. | **FDI inflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

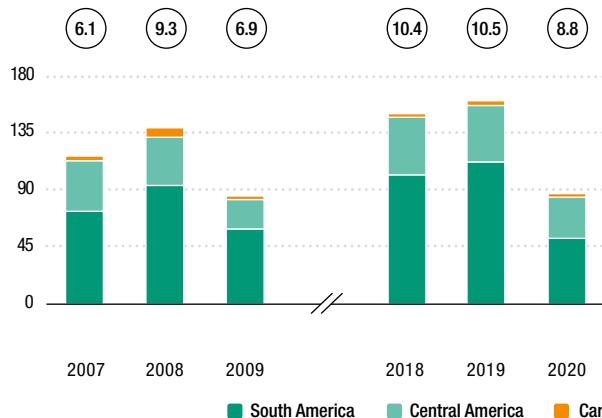


Figure C. | **FDI outflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

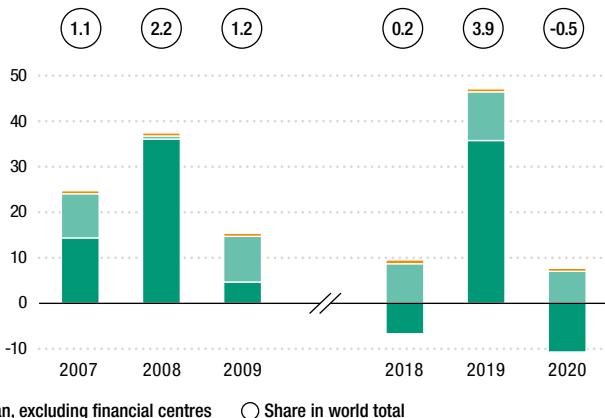


Table A.

**Net cross-border M&A sales,
2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	23 625	7 808	305	210
Primary	1 267	1 907	14	17
Manufacturing	2 925	203	82	29
Services	19 434	5 697	209	164

Top industries by value

Construction	243	2 864	7	4
Extractive industries	1 596	1 468	12	11
Finance and insurance	1 725	1 198	34	14
Administrative and support services	347	808	16	7
Other manufacturing	-	518	-2	2
Information and communication	1 037	439	43	38

Table B.

**Announced greenfield projects,
2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	112 315	56 540	1 832	1 042
Primary	8 026	944	24	19
Manufacturing	41 204	19 764	935	405
Services	63 084	35 832	873	618

Top industries by value

Energy	25 701	16 458	126	102
Information and communication	9 272	6 525	270	199
Automotive	10 087	4 537	152	55
Hospitality	6 691	3 787	77	26
Coke and refined petroleum	2 024	3 473	16	8
Paper and paper products	5 521	3 419	20	7

Table C.

**Announced international project
finance deals, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	85 243	44 376	211	189
<i>Top industries by number</i>				
Renewable energy	21 019	21 157	114	115
Mining	14 772	6 491	24	21
Energy	10 409	3 337	28	18
Oil and gas	19 069	7 702	16	17
Transport infrastructure	15 269	2 714	18	9

Table D.

**SDG sectors: greenfield and project
finance, selected trends, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	27 523	6 741	50	31
Renewable energy	21 019	21 157	114	115
WASH		14	-	1
Food and agriculture		3 940	2 606	86
Health		1 100	740	71
Education		455	63	21

In 2020, FDI flows to Latin America plummeted 45 per cent to \$88 billion, the sharpest decline among developing regions. The continent suffered the highest COVID-19 death rate in the world to date, and its economies faced a collapse in export demand, a fall in commodity prices and the disappearance of tourism. For exporters of minerals and metals, the drop in FDI was partly cushioned by the relatively quick recovery of commodity terms of trade during the second half of the year. Inflows in the hydrocarbon, hospitality and manufacturing industries were affected severely. International investment in SDG-relevant sectors suffered important setbacks, especially in spending on transport infrastructure, energy and telecommunication. Outflows from the region turned negative, to -\$3.5 billion, affected by Brazilian firms' practice of raising funds through their overseas subsidiaries. In 2021, FDI to the region is expected to remain stagnant, challenged by many downside risks, including economic and policy uncertainties. The recovery of inflows will vary across countries and industries, with foreign investors set to target clean energy, pushed by a worldwide drive towards a sustainable recovery. Other industries showing signs of a rebound include information and communication, electronics and medical device manufacturing.

Inflows

Latin America recorded an extraordinary \$73 billion reduction of FDI in 2020 (-45 per cent to \$88 billion) as it suffered the worst contraction in economic activity (-8 per cent) in the developing world. The region also recorded the worst reduction in fixed-capital formation (-13 per cent).¹⁸ Since the decline in commodity prices late in 2014, economic expansion in Latin America had been slowing from an already rather low level. The economic crisis put further pressure on the already-falling trajectory of FDI in the region.

Cross-border M&A activity plummeted 67 per cent to \$7.8 billion as both manufacturing and services suffered sharp contractions, only partly offset by higher activity in the primary sector (table A). The construction industry recorded the biggest M&A deal in Latin America – the acquisition from CPP Investments (Canada) of the 40 per cent share capital of IDEAL (Mexico), a company specializing in infrastructure construction, for \$2.5 billion. The number of announced greenfield projects declined 43 per cent, as a result of fewer commitments in the automotive, hospitality and energy industries (table B), whereas announced international project finance deals were more resilient, down only 10 per cent, as announcements in renewable energy (accounting for more than half of the number of projects) increased marginally (table C). Yet, in terms of value, both greenfield and project finance deals dropped by half.

In South America, FDI declined 54 per cent to \$52 billion. FDI to Brazil, the largest recipient in Latin America, plunged by 62 per cent to \$25 billion – its lowest level in two decades. Experiencing both the highest incidence of COVID-19 cases and deaths in the region and a severe economic contraction, Brazil adopted soft containment measures for the population's mobility and implemented conspicuous fiscal transfers aimed at the vulnerable population, attenuating the contraction of GDP (-4.1 per cent versus -6.6 per cent in the subregion). Among the major Latin American economies, Brazil's real GDP is now expected to make the fastest recovery to pre-pandemic levels. In this context, FDI equity flows to the domestic service sector contracted (-37 per cent), reflecting a reduction of foreign investment in electricity and gas services (-62 per cent), commerce excluding vehicles (-33 per cent), financial services (-68 per cent) and transportation and logistics (-90 per cent). In contrast, the insurance industry registered an unprecedented rise of FDI, as CNP Assurances (France) acquired the insurance portfolio of Caixa Seguridade Participacoes, an insurance agency ultimately owned by the State-owned Caixa Economica

Federal, for \$1.9 billion. FDI into oil and gas extraction activities plummeted by almost 60 per cent but nevertheless recorded important inflows owing to privatizations. Petrobras, the State-owned oil and gas company, sold two Rio de Janeiro-based producers of crude petroleum and natural gas: Trident Energy Management (United Kingdom) acquired a 52 per cent stake of Enchova & Pampo Oil Hubs for an estimated \$1.1 billion, and Karoon Energy (Australia) bought the Bauna oil field for an estimated \$665 million. The privatization programme is set to be revamped this year. In the first months of 2021, three privatization plans had already gained legislative approbation: for the post office, Correios; for the broadcasting company EBC and for the sale of a stake (reducing State participation from 61 to 45 per cent) in Electrobras, the country's major electricity provider. Looking forward, announced greenfield and international project finance deals indicate foreign investors' continued interest in investment in renewable energy in the country.

Peru and Chile, as well as other minerals and metals exporters, benefitted from a quick recovery of the commodity terms of trade during the second half of the year that will possibly revamp inflows during 2021. In the midst of severe lockdown measures, FDI flows to *Chile* declined 33 per cent to \$8.4 billion, owing to lower capital investments (-29 per cent) and lower reinvested earnings (-28 per cent). The country's resilience, relative to peers in South America, resulted from the quick recovery in mineral prices, supportive fiscal spending (14 per cent of GDP) and execution of one of the fastest vaccination campaigns in the world. Yet, cross-border M&As nearly vanished (-92 per cent) as deals from China and European partners such as Spain and France plummeted. From a sectoral perspective, Chile's commitment to a green transition has laid the ground to attract additional foreign capital in the green energy industries. Indeed, 40 per cent of greenfield announcements were recorded in the renewable energy industry, especially in solar electric power. The newly enacted Energy Efficiency Law and an upcoming national energy policy for 2050 could further enhance favourable conditions for FDI in the sector.¹⁹ Announcements, which intensified in the second half of the year, included six projects from Enel (Italy), three from OPDEnergy (Spain) and three from Solarcentury (United Kingdom). Looking ahead, FDI inflows are set to rebound slightly in 2021, benefitting from a fast domestic economic recovery, stronger investment and consumption, higher lithium and copper prices, and the Chinese recovery stimulus on exports. The encouraging outlook for FDI is reflected in the announcement of 41 international project finance deals in 2020, a figure unchanged from 2019. For instance, Mainstream Renewable Power (Ireland) raised senior debt for the construction of a green energy transmission line that cost about \$1.8 billion.

In *Peru*, the combination of prolonged lockdowns, the economic contraction and political instability contributed to the 88 per cent reduction in FDI to \$982 million. The drop in FDI reflected lower capital investment (-88 per cent), higher loan repayments to parent companies (-\$1 billion) and lower reinvestment of earnings (-28 per cent). In the second quarter of the year, GDP plummeted 30 per cent and capital formation shrank by 56 per cent, in one of the worst slumps in the world. In response, the Government used its previous surplus to fund a massive stimulus package – equivalent to 15 per cent of GDP – to support the most vulnerable populations. Despite the government effort, the prolonged lockdown had a major impact on foreign investment in manufacturing activities, as shown by greenfield data (-98 per cent), only partially offset by rising inflows to the financial and utility industries, which expanded by 38 and 96 per cent, respectively. Cross-country M&As also plummeted: the only deal of the year was the acquisition from Orica (Australia) of 84 per cent of Exsa, a Lima-based manufacturer of explosives, for \$202 million. Looking ahead, FDI is expected to partially rebound in 2021 and 2022,²⁰ boosted by the recovery of commodity prices, the related economic recovery, the formation of a new government after the June elections, further fiscal support and a probable currency

appreciation. The encouraging outlook is reflected in the 20 per cent increase in international project finance deals. More than half of the new project announcements are in energy generation and only about a quarter in transport infrastructure upgrading (three projects); the rest are in mining (two projects) and oil (one project).

South American hydrocarbons exporters such as Colombia and Ecuador suffered from falling oil prices that compounded the sanitary and economic crises, leading to contractions of FDI. In *Colombia*, FDI tumbled by 46 per cent to \$8 billion, with much lower flows to industries connected to commodities – oil extraction (-68 per cent) and mining (-49 per cent) – and manufacturing (-57 per cent). FDI cutbacks intensified in the second half of the year, in particular in oil-related industries, which recorded disinvestments of -\$229 million in the third quarter. Large-scale social protests and the downgrade of the country's investment rating²¹ weighed heavily on inflows. Despite the challenging economic context, fixed investment is expected to rebound by 10.5 per cent in 2021, benefitting from the Government's efforts to improve the business climate. For instance, it introduced a special tax regime for mega-investments by providing tax breaks and other fiscal incentives.²² It also implemented a domestic infrastructural programme (5G network plan) to enhance connectivity for its growing digital sector. This sector showed signs of FDI dynamism as Teleperformance (France) and Amazon (United States) announced they would increase their business operations in the country, whereas in the customer experience sector, Alorica (United States), Transcom (Sweden) and TDCX (Singapore) announced new openings.²³

Argentina's FDI inflows, already on a downward trajectory since 2018, plummeted by 38 per cent to \$4.1 billion in 2020. The country experienced a prolonged shutdown of the industrial sector, which caused a fall in fixed-capital formation and a decrease in economic activity (10 per cent).²⁴ These contractions further complicated financing conditions for the country (in recession since 2018), which ultimately defaulted on its foreign debt. The challenging environment had a major impact on FDI: new investments retracted by 45 per cent and reinvested earnings decreased by 22 per cent. M&A deals recorded a divestment of \$290 million after sizeable international investors (among them Walmart (United States), Schlumberger (United States), MetLife (United States) and Danone (France))²⁵ sold their local assets to domestic or regional investors.

Inflows to *Uruguay* increased 43 per cent to \$2.6 billion, the highest level since 2012, owing to the lowest levels of COVID-19 infection in the region, the creation of the Coronavirus Fund of \$625 million and the dynamism of the tech industry, along with increases in several tax benefits granted to eligible projects under the investment promotion regime.²⁶ FDI flows recovered quickly from the drop recorded in the first quarter of the year as new capital investment rose and intercompany loans expanded. Looking forward, the doubling of the number of greenfield projects in information and communication, reaching over 37 per cent of all projects announced, point to a thriving industry.

In *Ecuador* FDI inflows in 2020 remained stable at \$1 billion. Despite fiscal difficulties, recent efforts to attract investment in the extractive industries by reintroducing production-sharing contracts and eliminating the 70 per cent “windfall tax” on profits in mining bore some fruits. The first large-scale mines Fruta del Norte (gold) and Mirador (copper) started production at the end of 2019. International project finance deals accelerated in number and volume in 2020 as investors pursued other opportunities in mining activities, such as the Cangrejos copper-gold project announced in June 2020 and valued at up to \$1.5 billion. Lumina (Canada) received approval for its environmental impact study on the concession in February 2021.

FDI to Central America fell 24 per cent to \$33 billion. Inflows to *Mexico*, which was already suffering a recession in 2019, were relatively resilient compared with the rest of the region and dipped by only 15 per cent, to \$29 billion. Yet, 60 per cent of inflows were

generated during the first quarter of the year, when reinvested earnings are typically registered. Excluding these data, FDI fell 63 per cent over the last three quarters of the year compared with the same period in 2019, affected by the growing uncertainty over the Government's economic agenda, its commitment to fiscal austerity, the collapse of fixed investment and GDP contraction (-8.2 per cent). Added to these factors were persistent concerns regarding the current administration's critical stance on public-private partnerships (PPPs) and the role of the private sector in key industries, as well as the financial situation of State-owned oil company Pemex and the massive assistance it receives from the Government (worth \$3.5 billion). In this uncertain context, falling commodity prices provoked contractions in FDI into mining (-49 per cent) and oil and gas extraction (-46 per cent). In addition, changes in the five-year plan and policy of CFE, the State-owned electricity provider, have deterred private investment in utilities and contributed to a 67 per cent contraction in FDI in the generation, transmission and distribution of electricity.

In 2020, FDI concentrated in manufacturing (41 per cent of total FDI): activities related to the automotive industry, which captured almost half of inflows to the industrial sector, declined -29 per cent due to lower worldwide production, while manufacture of computer and electronic parts (50 per cent) as well as of machinery and equipment (113 per cent) registered positive surges in response to spikes in United States demand. For instance, during the first three quarters of the year, FDI inflows into the production of medical equipment and supplies amounted to \$132 million, up 20 per cent from the same period of 2019, because of higher demand for COVID-19-related supplies.²⁷ This is still small with respect to total flows to the country but is expected to grow, as reflected by a 50 per cent increase in the value of announced projects to produce medical devices. Becton Dickinson (United States) invested \$9 million in a new plant in the state of Sonora to expand its assembly of infusion sets. Integer Holdings (United States) announced the expansion of its facilities in Tijuana, where it produces battery for ventilators; and Paykel (New Zealand) started planning the construction of its third facility in Mexico, to produce respiratory equipment. More foreign capital in this industry is to be expected. Several United States manufacturers – IIMAK, Centerpiece and Eastek – have already announced their intention to add factories in Mexico. Apart from manufacturing, inflows were allocated to financial services (23 per cent), transportation (10 per cent), trade (8 per cent) and mining activities (5 per cent). Looking forward, the entry into force on 1 July 2020 of the United States–Mexico–Canada (USMCA) FTA could have a dampening effect on FDI inflows through its possible impact on the labour cost of manufacturing there.

FDI to Costa Rica declined by 38 per cent to \$1.7 billion, owing to lower external demand, the collapse of tourism and other pandemic-related factors. The recession deepened fiscal imbalances, and the Government had to secure a multiyear \$1.8 billion assistance from the IMF, a deal that caused civil unrest.²⁸ FDI to SEZs, which accounts for the largest portion of inflows to the country, declined by 41 per cent to approximately \$1.1 billion. Tourism activities also attracted much lower foreign investment (-70 per cent to \$18 million), as did factories outside of SEZs (-40 per cent to \$313 million). Yet the past industrial development push for medical device manufacturing in SEZs is bearing fruit, with Costa Rica attracting 22 of the 32 greenfield projects to produce medical devices and equipment announced in the region, representing the highest volume. Capital flows to the medical devices industry come mostly from United States companies such as Nevro, which committed \$21 million to build a manufacturing facility in the Coyol free zone, and ICU Medical, which announced a \$13 million investment to expand its operations and install solar panels in its Heredia plant. Looking ahead, Costa Rica's admission to the Organization for Economic Cooperation and Development (OECD), approved in May 2020, and the endorsement of PPP regulations²⁹ are expected to bolster FDI.

FDI flows to *Panama* shrank 86 per cent to \$589 million, the lowest level in almost two decades. To counter the economic impact of the pandemic, the Government launched several construction projects for highways, railways and bridges and approved a new investment incentives regime, mainly in the form of tax benefits, targeting multinational companies that carry out operations from Panama and provide manufacturing services.³⁰ Despite the rather unfavourable economic picture, M&As increased from \$175 to \$480 million, mainly because of the purchase of Multibank (Panama), a commercial bank, by Leasing Bogota (Colombia). Looking forward, the resumption of global trade will sustain flows, but the recovery will probably be slow, as indicated by the slump in announced greenfield projects (-26 per cent in number).

In 2020, FDI in the Caribbean region, excluding the offshore financial centres, declined 36 per cent to \$2.5 billion. The Caribbean region suffered from the collapse in tourism and the halt in investment in the travel and leisure industry triggered by the pandemic. The overall contraction was mainly caused by a 15 per cent decline in FDI to the *Dominican Republic*, the major recipient in the region, to \$2.6 billion. Divestments in telecommunication (-\$122 million) and lower investment in SEZs (-11 per cent, to \$232 million) and mining (-90 per cent, to \$21 million) are responsible for the decline. Nonetheless, greenfield project announcements increased from \$1.1 billion to \$2.5 billion, boosted by government approval of a PPP law that improved the business climate for foreign investors. More than 60 per cent of the value of the projects announced went to three industries: financial services, renewable energy and medical devices (three projects each, out of a total of 14 projects).

In *Haiti*, FDI flows dropped from \$75 to \$30 million, in response not only to the pandemic crisis but also to civil unrest and the alarming worsening of the humanitarian crisis that has continued since 2018.³¹ Finally, FDI to *Trinidad and Tobago* turned negative, to -\$439 million, with a severe impact in the energy industry, which accounts for approximately half of GDP.³²

SDG investment flows in Latin America and the Caribbean also retracted (table D). Except for renewable energy, unchanged in 2020 in both the number of projects and their value, investment activity fell sharply across all SDG sectors. Particularly worrying is the contraction of infrastructure investment (including in telecommunication, energy and transport) by more than -75 per cent. Before the pandemic, the region was already suffering an acute gap in infrastructure investment – estimated at 2.5 per cent of GDP – representing a major roadblock to growth.³³ In education, international investment was 86 per cent lower in value, the worst contraction across SDG sectors in the region. Greenfield projects in the food and agriculture industries declined by one third. Despite the greater need to upgrade the health care industry and expand access to care, SDG investment in health industries failed to improve, with the value and number of deals lower by one third.

Outflows

The outward investment of Latin America MNEs collapsed in 2020, recording an overall disinvestment of -\$3.5 billion, as the region suffered this deep contraction in economic activity and fixed capital formation. The collapse was mostly caused by largely negative outflows from Brazilian firms (-\$26 billion), which continued to raise funds through their overseas subsidiaries. The result was partly offset by Chilean firms, which increased outflows by 25 per cent to \$12 billion owing to an increase in intracompany loans granted to affiliated companies to \$2.3 billion, the highest volume since 2015. Mexican corporations also recorded positive outflows (\$6.5 billion), albeit significantly lower (-41 per cent) than in 2019. Similarly, outflows from Colombia plummeted 39 per cent to \$2 billion. Overall, Chile, Colombia and Mexico generated almost all outward investment from Latin America.

Latin America MNEs also announced fewer greenfield projects in 2020, with an aggregate value down 57 per cent to \$7.9 billion, due to retrenchment by all of the main outward investors: Mexico (-71 per cent), Colombia (-65 per cent), Brazil (-39 per cent) and Chile (-37 per cent). The biggest outward deal in the region in 2020 was the acquisition of Multibank (Panama) by Banco de Bogota (Colombia) for \$434 million.

Prospects

In 2021 FDI to the region is likely to remain substantially stable (table II.4) and below the average increase expected for developing economies as a whole. Muted expectations are supported by the values of greenfield projects announced in 2020, which halved to \$56.5 billion, and of international project finance deals, which, with the exception of projects in renewables, decreased by 64 per cent (table C).

Even assuming that fiscal and monetary conditions continue to accommodate the economic recovery and that vaccination campaigns make rapid progress, FDI is not expected to recover to its pre-crisis level before 2023.³⁴ In 2021, real GDP is expected to grow at a similar pace across the subregions: 4.4 per cent in South America, 5.6 per cent in Central America and 3.7 per cent in the Caribbean. This economic recovery, however, is much slower than the 6.7 per cent rebound expected in emerging-market and developing countries. Recovery of FDI inflows will follow closely the recovery of fixed-capital formation, both private and public, but will also depend on political factors such as general elections in Peru, Chile, Honduras and Nicaragua, and midterm elections scheduled in Mexico and Argentina. Particularly critical exogenous factors include the strength of the economic recovery in China and its neighbours, the impact of the major fiscal push in the United States to modernize infrastructure and support green industries – as it may boost demand for mineral exports, thus bolstering FDI inflows – and changes in global monetary and financial conditions.

Inflows in manufacturing industries should recover slowly overall, with food, beverages and tobacco as well as motor vehicles recovering relatively quicker. The United States' efforts to diversify the supply chain in specific industries, such as electronics and medical devices, could fuel inflows in these industries. In the services sector, the information and communication industry is expected to continue to show dynamism, especially in software production, business process outsourcing services and fintech. Foreign investment in traditional industries such as oil and gas, should recover at a slower pace following the gradual global reopening of productive activity, while FDI in the transport and telecommunication industries will be the slowest to rebound, at least until tourism and free mobility are restored. Finally, the global push for a green recovery will boost demand for minerals critical to clean energy technologies – present in the region are mostly lithium, nickel and copper – possibly leading to a faster recovery of international investment in mining projects. Related to this, the regional commitment to energy transition is sustaining and attracting investment in renewables, which will continue to grow and is already accelerating in 2021.

Latin America and the Caribbean: growth rates of GDP, trade and FDI, 2013–2021 (Per cent)									
Variable	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^a
GDP	2.8	1	0.1	-1.2	0.9	0.5	-0.3	-7.3	4.3
Trade	1.1	1.3	4.7	1.8	3.7	3.6	0.4	-7.7	8.4
FDI	-7.0	-13.7	-2.8	-13.3	15.1	-4.0	6.9	-45.4	(-5 to 5)

Source: UNCTAD, FDI/MNE database for FDI; UN (2021) for GDP and trade.

^a Forecasted.

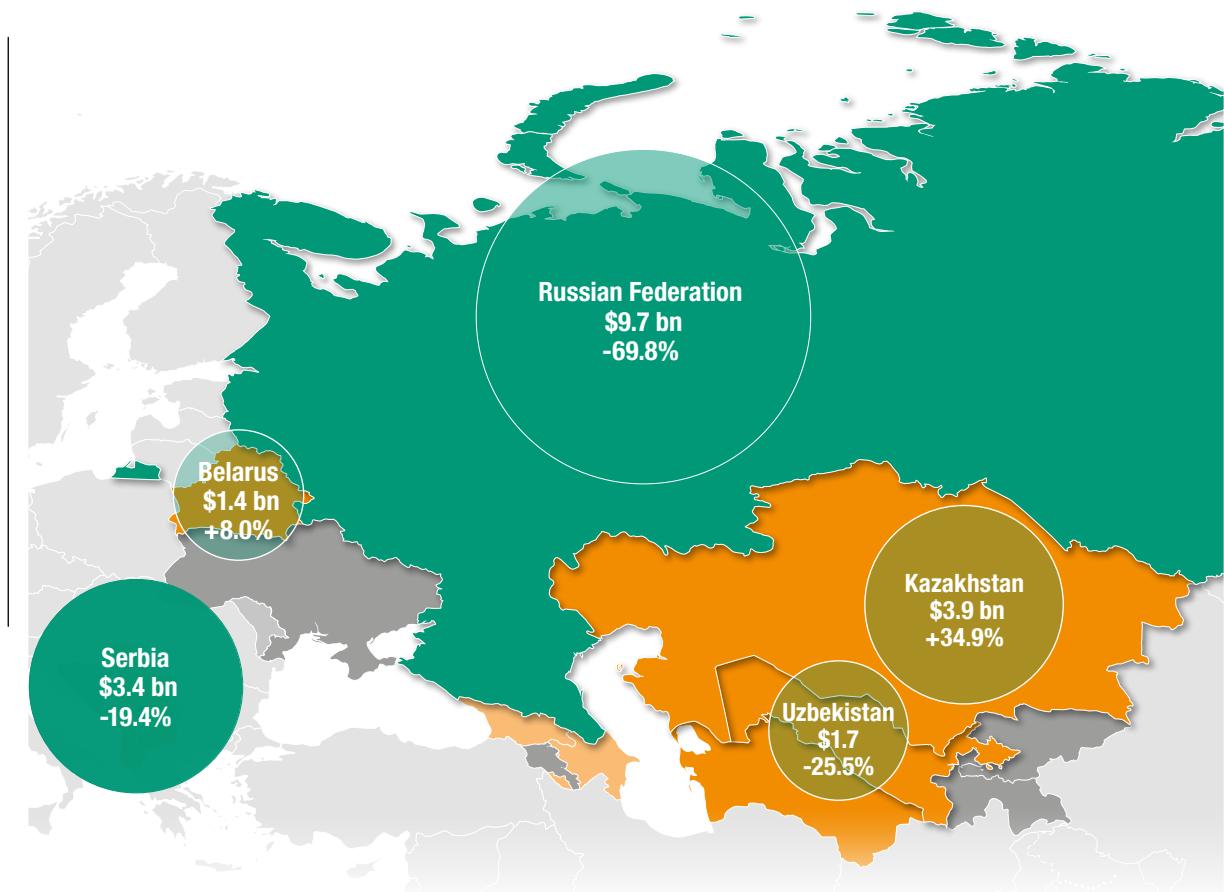
TRANSITION ECONOMIES

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows
\$ 24.2 bn

2020 Decrease
-58.2%

Share in world
2.4%



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

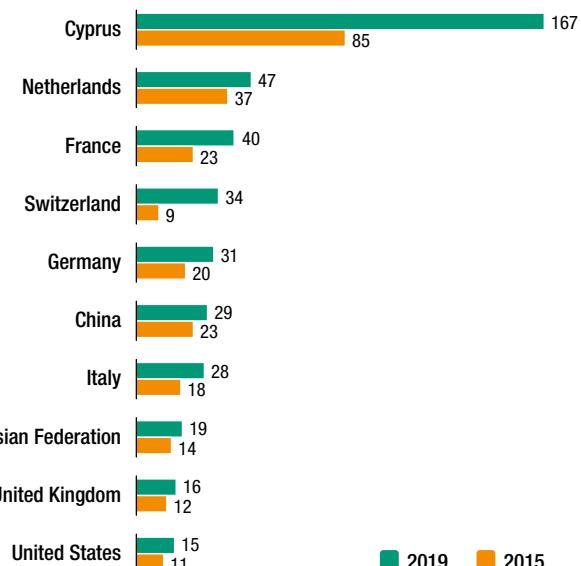


Outflows: top 5 home economies

(Billions of dollars and 2020 growth)

Russian Federation	\$6.3	-71.3%
Azerbaijan	\$0.8	-66.1%
Serbia	\$0.1	-57.6%
Albania	\$0.1	-30.1%
Belarus	\$0.1	+413.8%

Figure A. Top 10 investor economies by FDI stock, 2015 and 2019 (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

- Inflows more than halved
- Outflows suffered a three-quarter decline
- A return to pre-pandemic levels of inward FDI is unlikely

Figure B. | **FDI inflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

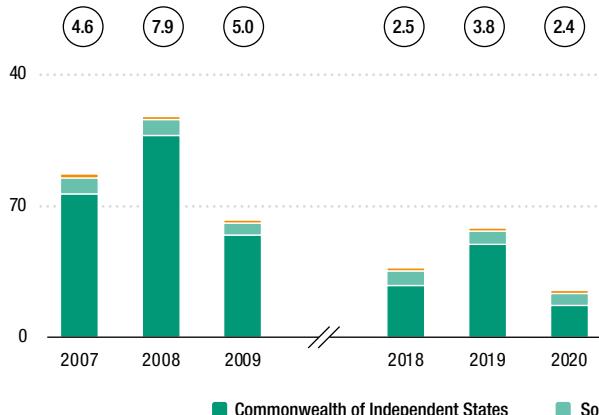


Figure C. | **FDI outflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

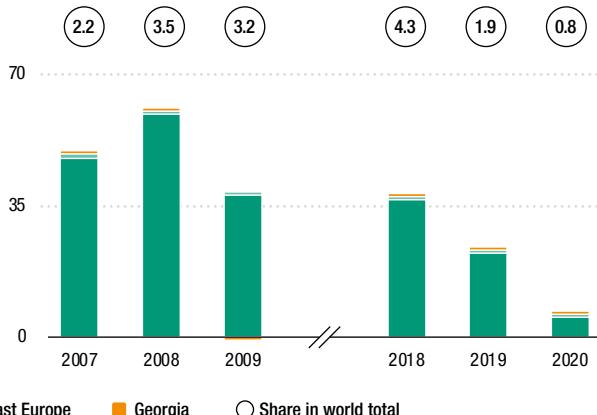


Table A. | **Net cross-border M&A sales, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	1 422	11 596	115	69
Primary	291	11 608	12	15
Manufacturing	275	-680	29	9
Services	856	668	74	45

Top industries by value

Extractive industries	131	11 608	6	15
Trade	-38	296	11	6
Information and communication	149	252	31	6
Utilities	-66	161	-2	6
Hospitality	-	44	-2	3
Pharmaceuticals	181	33	2	4

Table B. | **Announced greenfield projects, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	46 036	19 529	697	371
Primary	806	862	15	10
Manufacturing	31 870	7 884	430	207
Services	13 360	10 784	252	154

Top industries by value

Energy	5 127	4 608	33	16
Automotive	5 393	1 777	45	20
Information and communication	916	1 681	46	50
Food, beverages and tobacco	3 285	1 665	47	36
Hospitality	1 050	1 427	10	9
Construction	1 629	1 229	13	10
Paper and paper products	528	789	6	9

Table C. | **Announced international project finance deals, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	26 225	21 424	59	31
<i>Top industries by number</i>				
Renewable energy	6 194	4 702	33	16
Industrial real estate	1 829	10 057	7	3
Mining	1 589	653	3	3
Petrochemicals	231	4 211	1	2
Transport infrastructure	12 480	784	4	2

Table D. | **SDG sectors: greenfield and project finance, selected trends, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	14 945	1 015	10	3
Renewable energy	6 194	4 702	33	16
WASH	75	-	2	-
Food and agriculture	4 180	2 228	62	47
Health	816	369	34	12
Education	33	-	3	-

In 2020, the pandemic hit FDI flows to the transition economies of South-East Europe, the Commonwealth of Independent States (CIS) and Georgia harder than economies in most other regions. Inflows shrank by more than half to \$24 billion, their lowest level since 2003. This fall was significantly bigger than the average for the world (-34 per cent) or developing economies (-8 per cent). The contraction of inflows was far more severe in the CIS and Georgia than in South-East Europe. Overall, only three countries in the region recorded higher FDI in 2020 than in 2019. Pre-existing problems and economic vulnerabilities, such as significant reliance on natural resource-based investment (among some large CIS countries) or on GVCs (in South-East Europe), were exacerbated. The value of greenfield project announcements fell by 58 per cent to \$20 billion in 2020, the lowest level ever recorded, and the number of announced cross-border project finance deals almost halved. Outflows, based largely on the activities of natural-resource-based Russian MNEs, also suffered from the crisis and declined by three quarters. Despite recovery efforts, a return to pre-pandemic levels of inward FDI is unlikely in the coming years, owing to slow economic growth affecting market-seeking FDI, the constraints of the pandemic limiting fast diversification, economic sanctions and geopolitical instability in parts of the region.

Inflows

FDI flows to the transition economies declined by 58 per cent to \$24 billion in 2020, their lowest recorded level since 2003. It was both the deepest crisis-related fall and the largest year-to-year fall registered in the region's inflows to date.³⁵ Most economies in the region – including the Russian Federation – experienced declines, though to greatly varying degrees. FDI grew in only three countries: Belarus, Kazakhstan and Montenegro.

In South-East Europe, which is less dependent on natural resources, FDI decreased too (-14 per cent, to \$6 billion), although to a far lesser extent than in the CIS and Georgia (-64 per cent, to \$18 billion). Activities related to supplying global value chains were under pressure in practically all countries, explaining part of the decline in FDI. Delays in implementing export-oriented investment projects related to GVCs weighed on inflows to the South-Eastern European economies, as well as the Republic of Moldova – all customarily attractive destinations for investment in automotive supply and assembly, as well as hospitality activities (*WIR19, WIR20*). Despite South-East Europe's close links with the EU, which could translate into nearshoring activities, new projects were slow to materialize in the early phase of the crisis.

Economies in transition continued to receive most of their inward FDI from Western European economies.³⁶ The top 10 also included China, the Russian Federation and the United States. Cyprus, traditionally the main conduit for round-tripped and trans-shipped FDI to transition economies, is still the biggest source country, followed by the Netherlands.

The Russian Federation remained the largest recipient of FDI in the region, accounting for more than 40 per cent of inflows. However, inflows declined by 70 per cent to \$10 billion as a result of both the pandemic and very low prices for raw materials, the latter exacerbated by the conflict between the Russian Federation and Saudi Arabia about oil prices in March and April 2020. Prices have since recovered, as producer countries agreed to resolve the disagreement and hold back production, but remain still far below their pre-crisis level. Severe lockdowns also weighed on production in the spring. The country's GDP decreased by 3.1 per cent in 2020.

FDI inflows were negative in the first quarter of the year due to significant repatriation of intracompany loans but recovered gradually in the subsequent quarters. New equity investment decreased more moderately (by 31 per cent), recovering in the second half of the year from the early slump. Among the largest sources of inflows in 2020 were some large economies such as France, Turkey, the United Kingdom and the United States. Geographical proximity also shaped FDI within the territory of the Russian Federation, with continued Chinese cross-border investment in the Russian Far East³⁷ and resilient investment from Finland.³⁸

The pandemic created challenges for Russian policies aimed at diversifying the industry composition of FDI inflows. Despite the downturn in commodity prices, oil and gas kept receiving a large share (over one quarter) of inflows, followed by wholesale and retail trade, and metallurgy. FDI flows to other industries declined. The economic downturn severely affected foreign investment in high-tech industries. Most of the projects initiated by the State-owned Russian Direct Investment Fund in the development of AI, agribusiness and renewable energy with foreign partners were frozen in 2020. The Fund was more successful with new projects in other industries, such as its co-investment with Barilla (Italy) to build mills and produce pasta in one of the country's SEZs. Diversification of FDI is still at an early stage: the share of inward FDI stock of industries other than oil and gas is well below 1 per cent.

The Russian Government has been considering providing more protection for large domestic and international private investors, reimbursing part of the costs of infrastructure development and providing subsidized loans. By 2024, the Government expects to sign up to 1,000 such agreements, covering \$185 billion worth of investment. At the same time, the Government announced plans to modernize the system of special investment contracts (SPICs) by including new activities declared as priorities for the post-pandemic period. In the last decade, SPICs played a role in attracting foreign investment in the Russian automotive industry.

One major exception to the overall decline of inflows in the region was Kazakhstan, the second largest recipient of FDI, where inflows grew by 35 per cent to \$3.9 billion. Growing investment in mining, transport, financial services, telecommunication and energy compensated for declining inflows in construction, metallurgy and trade, which suffered particularly from the effects of the pandemic. Most of the FDI in the country's large hydrocarbons industry was related to the Tengiz megaproject with Chevron (United States), expected to be completed by 2022. In international project finance deals, the Kazakhstan QazTechna bus manufacturing plant project – involving Chinese capital – became operational at the end of 2020. Also involving Chinese capital was the construction of the DoubleStar rubber and tyre factory, which started in 2020. In telecommunication, the Netherlands-based VEOL (VimpelCom) (Russian Federation) launched a new project.

In Serbia, inflows declined by 19 per cent to \$3.4 billion. The COVID-19 crisis affected reinvested earnings in particular. The economic downturn also had an impact on export-oriented activities, as problems in GVCs, of which Serbian firms had become an integral part, led to interruptions in production. Manufacturing was the sector hardest hit by the FDI downturn, including the machinery and equipment, metallurgy, and rubber and plastic industries. Despite the interruptions in trade and GVCs, the automotive industry still registered some expansions, such as that of the Magna Seating plant and of Cooper Tire & Rubber (United States). In the services sector, too, the decline in FDI affected a broad range of activities, including construction, trade and transportation and storage. Inflows from various key source countries of FDI, including Austria, Germany and neighbouring Hungary, as well as the Russian Federation and the United States declined significantly.

The Development Agency of Serbia, which promotes domestic and foreign investment equally, used its incentives and promotion programmes to respond to the pandemic. Under its scheme for co-financing investment projects, 20 contracts were signed during 2020 with companies planning to invest about \$1.4 billion and create close to 5,000 jobs. New tools to keep free economic zones attractive were introduced, including health protection measures, lower rents and a shift of transactions and meetings online as much as possible. The pandemic also acted as a catalyst to accelerate the Supplier Development Programme, started in 2019, which seeks to improve the benefits of FDI. Although the focus of investment promotion remains capital-intensive projects, especially in the automotive cluster, there is a marked shift from activities with lower value added to projects related to innovation, high-tech segments, digitalization, and research and development.

In *Uzbekistan*, inflows declined by 26 per cent to \$1.7 billion, despite the relatively good macroeconomic situation, with GDP expanding by 1.6 per cent in 2020, and the country's efforts to attract new FDI. The law on SEZs adopted in February 2020, for example, facilitated new investment projects in the energy sector, as well as in the telecommunication industry. In May 2020, the Government announced that 70 companies and consortia from 30 countries had submitted proposals for green-energy projects. In addition, the Volkswagen Group (Germany) launched an investment project in the SEZ of Jizzakh. However, because the country is doubly landlocked – i.e. surrounded only by other landlocked countries – border closures and other restrictive measures adopted by domestic and neighbouring-country authorities affected the economy and delayed investment projects.

Inflows grew in *Belarus* (by 8 per cent, to \$1.4 billion), the fifth largest recipient in 2020. The country adopted anti-pandemic restrictions later than most of the world and the other countries of the transition region, and those measures were less restrictive than elsewhere. Large inflows registered in the first quarter of the year were followed by three quarters of practically no net inward FDI. The pause in inflows was also related to social unrest following the presidential elections in August 2020. In addition to investment in the automotive sector (the Delkom40 (Poland) rubber production project), furniture production (Polipol Mebel Bel (Germany)), IT (EffectiveSoft (United States)) and logistics (China Merchants Group), the country also attracted a new project in renewable energy (Green Genius (Lithuania)).

FDI flows to *Ukraine* declined by about \$7 billion in 2020, turning into a net divestment (-\$868 million), owing to the combined effects of the pandemic, macroeconomic problems and geopolitical tensions. Reinvested earnings were particularly sensitive to the uncertainties in the business environment. Mining, manufacturing, trade and financial services were among the activities most affected by the downturn. Food, beverages and tobacco production, and information and communication, in contrast, were among the few industries escaping the decline. Despite the difficult business environment, a project finance agreement to develop the \$1 billion, 800 MW Donetsk onshore wind farm, a build-own-operate project, was signed with Chinese investors. In manufacturing, the largest new foreign investment was that of Kostal (Germany), a \$170 million project to produce automotive components.

Montenegro, the smallest economy of the region, joined only Kazakhstan and Belarus in registering higher FDI inflows in 2020, albeit from a low base (up 27 per cent to \$529 million), owing to a rise in intracompany loans in manufacturing and banking. Foreign investment in the real estate sector, which traditionally drives inflows in the tourism-based economy, declined by 35 per cent. Most of the FDI originated in the Russian Federation, China and Switzerland, in that order.

The net value of cross-border M&As targeting the region increased to \$12 billion in 2020.

The rise was mainly due to the acquisition of 10 per cent of Vostok Oil by CB Enterprises (Singapore). In addition, some corporate restructurings of Russian firms, partly in response to the pandemic, involved conduit locations (e.g. Cyprus). Most of the takeovers took place in the extractive industries, with smaller transactions in trade and in information and communication (table A).

The value of greenfield project announcements fell by 58 per cent to \$20 billion, suggesting that new investment will remain sluggish in the medium term.

Projects already registered will take several years to materialize, so their trends can affect future FDI to a large degree over those years. The biggest decline in announcements was in manufacturing industries (table B); the fall in new projects in the motor vehicles and other transport equipment industries was exceptionally large. The downturn in services, in contrast, was more modest, with some industries (e.g. information and communication) registering growth. Greenfield commitments declined from practically all countries in 2020; however, the value of announced projects from developed countries declined less sharply than less sharply than that from such developing countries as China.

The number of announcements of international project finance deals, an important source of investment in infrastructure in the region, fell from 59 to 31 in 2020 (table C) – the largest relative drop among all regions in the world. The value of deals declined by 18 per cent, to \$21 billion. Domestic deals, whose number increased by 35 per cent, partially compensated for the 47 per cent decline in the number of cross-border transactions, though domestic deals also experienced a decline in value terms, indicating difficulty in accessing finance. One reason for the continued increase in the number of domestic deals was the different perceptions and acceptance of risks of domestic and foreign sponsors. The total number of deals nonetheless declined by 13 per cent, compared with a 3 per cent increase globally and a 13 per cent increase in developed economies.

Investment commitments in SDG-related sectors play a very marginal role in transition economies (table D). The decline affected all sectors in both number and value of investment plans. Infrastructure investments plummeted as the number of international project finance deals shrank to one in power and two in transport. In telecommunication, no international project finance deal has been announced in the last decade. The number of WASH and health projects fell to zero. Education, too, registered steep declines, while renewable energy and food and agriculture were less affected.

Outflows

In 2020, FDI outflows from transition economies fell by three quarters to \$5.6 billion.

The traditionally largest home country, the Russian Federation, registered a decline in outward investment of 71 per cent, to \$6.3 billion. As FDI outflows from the rest of the region turned negative, the share of the Russian Federation in their net value exceeded 100 per cent. The region's MNEs (especially Russian ones) were impacted doubly in 2020: first, by the immediate measures undertaken to slow the spread of the virus, which resulted in border closures and other obstacles to doing business; and second, by low prices for oil, gas and other commodities that hit the largest MNEs of the region, which focus on natural resources. Large Russian MNEs' earnings, from which foreign expansion is largely financed (*WIR20*), fell in 2020. For example, Lukoil, the country's second largest oil producer and one of the world's largest full-cycle oil and gas companies in terms of proven reserves and production, recorded a large drop in revenues and a 97-per-cent fall in net profits in 2020, compared with 2019.³⁹

Cross-border M&A purchases from the region, already negative in 2019, remained so in 2020. Most of the divestment took place in the services sector, in both transition and developing economies. Already in 2019, Russian MNEs had financed part of their activities by borrowing from their affiliates – a trend that continued in 2020. In addition, reinvested earnings declined by 83 per cent, putting another brake on foreign expansion.

By value, OFDI from the Russian Federation was directed mainly at Belarus, Germany, Switzerland and the United Kingdom in 2020. Russian MNEs also actively channelled their foreign investment through conduit locations, although the share of those locations has diminished somewhat in recent years. MNEs such as VEON (VimpelCom) not only carry out large FDI transactions but have also moved their corporate headquarters abroad (Kuznetsov, 2021).

Most of the greenfield announcements by Russian MNEs in 2020 were limited in size compared with previous years and shifted focus towards transition or developing economies. Investors were mostly non-hydrocarbon, natural resource-based and telecommunication MNEs. The largest greenfield projects announced by a Russian MNE was Novolipetsk Steel's \$508 million construction site in India, followed by the telecommunication projects of Netherlands-headquartered VEON (VimpelCom) in Kazakhstan and Uzbekistan. The largest project targeting a Western European country was Basic Element's \$72 million warehousing development in London, and the largest project targeting North America was Kaspersky Lab's small (\$22 million) software security investment in Canada.

Prospects

Despite important measures adopted in some countries of the region to curtail the effects of the crisis, FDI flows to transition economies are unlikely to recover to their pre-crisis level soon. UNCTAD estimates that FDI flows to the transition economies will not start to recover before 2022. The stagnation of flows in 2021 will be in contrast with a 10 to 15 per cent growth on world average and a 5 to 10 per cent increase in the average of developing countries.

Most of the region's macroeconomic indicators are expected to improve by 2021 or 2022, but more slowly than the world average. For example, GDP is expected to grow by 3.3 per cent after a decline of the same magnitude in 2020. Trade is forecast to rebound by a robust 6.5 per cent, after a drop of 6.2 per cent in 2019 (table II.5). These macroeconomic phenomena are expected to recover to their pre-crisis trends faster than FDI.

Both greenfield and project finance announcements suggest low investor commitment for future FDI in the region. The drop in value of greenfield projects announced in 2020 was bigger than the world average (-33 per cent) and that of the developing economies (-44 per cent).

Table II.5.

Transition economies: growth rates of GDP, trade and FDI, 2013–2021 (Per cent)

Variable	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^a
GDP	2.6	1.2	-1.2	0.8	2.4	3.1	2.2	-2.7	3.3
Trade	2.5	-0.9	1.8	3.2	5.3	5.7	0.5	-6.2	6.5
FDI	28.8	-32.2	-40.1	96.2	-24.4	-27.5	58.0	-58.2	(-10 to 0)

Source: UNCTAD, FDI/MNE database for FDI; UN DESA for GDP and trade.

^a Forecasted.

The decline was particularly steep in the region's largest recipients of greenfield investment, such as Kazakhstan (86 per cent) and the Russian Federation (-67 per cent), which will weigh heavily on levels of FDI to transition economies over 2021 and 2022. In manufacturing, which experienced the biggest decline in 2020 (table B), FDI is likely to remain very sluggish in the coming years. A structural shift from natural resources may be difficult under these circumstances, and it is highly unlikely that FDI flows to transition economies will recover to their pre-crisis level soon.

OFDI from economies in transition is also expected to continue its decline in 2021, as economic recession in home economies and relatively low commodity prices (despite some rebound) will keep curtailing the ability of the region's MNEs to invest abroad.

Despite challenging circumstances, policy actions undertaken by Governments of the region to support economic recovery may encourage foreign investment and somewhat improve FDI prospects. However, many macroeconomic interventions, such as monetary easing, have no specific investment target and thus the extent of their impact on FDI is limited. Monetary easing, which is relatively new in the region, is accompanied by more government spending on both infrastructure and manufacturing: in the Russian Federation, such spending is projected to amount to \$86 billion in 2020–2024.⁴⁰ In *Uzbekistan*, the Government created a \$1 billion Anti-Crisis Fund that invests in anti-pandemic and recovery projects. In Serbia, the total value of the package of economic measures to reduce the negative effects caused by the pandemic and support the economy amounted to \$6.1 billion (11 per cent of GDP).⁴¹

The pandemic has also led Governments in the region to revise their investment facilitation and promotion schemes, which might help bolster FDI over the next few years. Although the focus is still on increasing the volume of new projects, considerations of diversification has been receiving more attention. At the same time, more attention is paid to intraregional connections, to environmental issues and to the green economy.

DEVELOPED ECONOMIES

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows

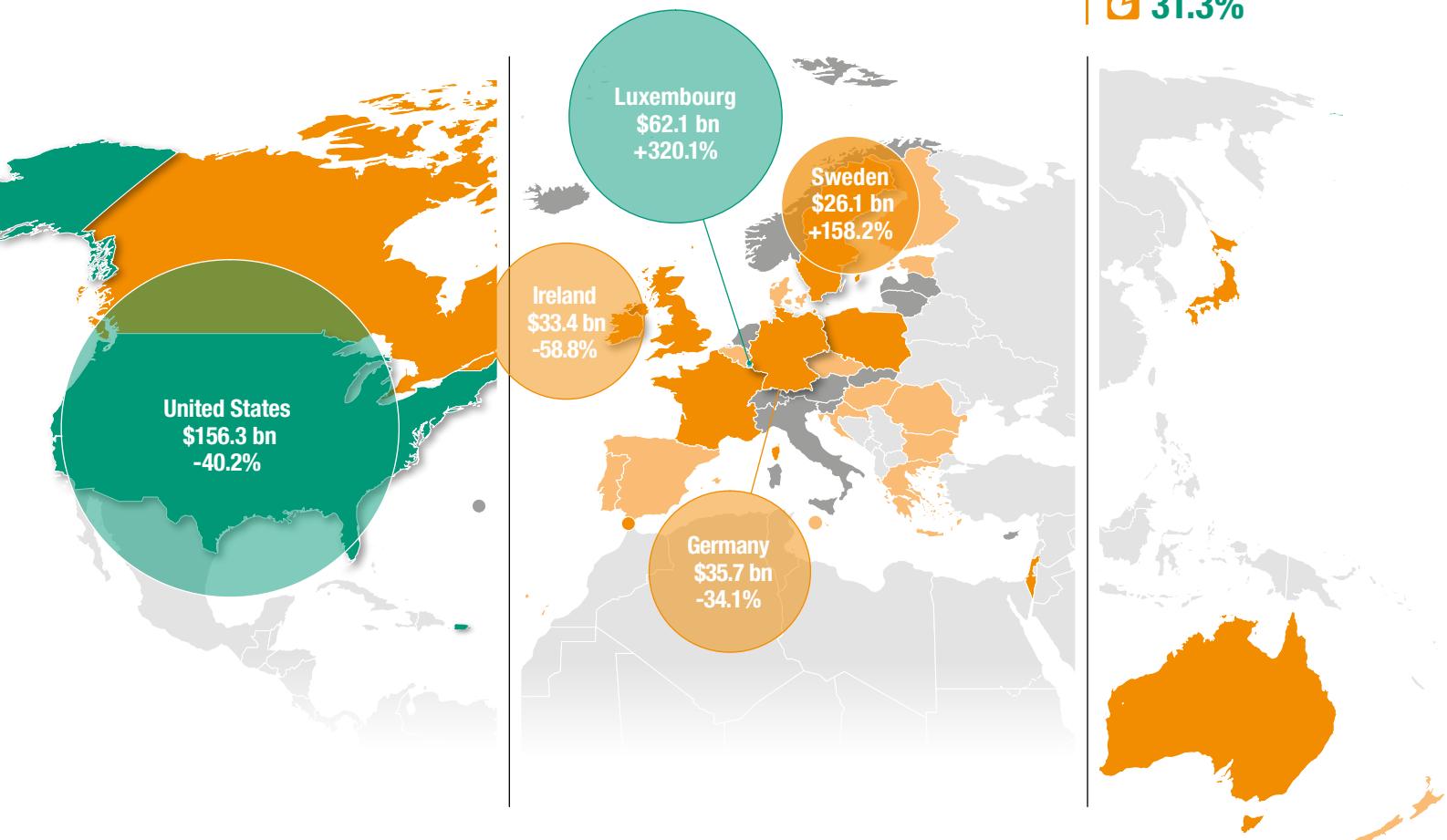
312.2 bn

2020 Decrease

-58.3%

Share in world

31.3%



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 |
| | 2020 % change |

Outflows: top 5 home economies

(Billions of dollars and 2020 growth)

Luxembourg	\$127.1	+268.7%
Japan	\$115.7	-49.0%
United States	\$92.8	-0.8%
Canada	\$48.7	-38.3%
France	\$44.2	+14.3%

Figure A.

Top 10 investor economies by FDI stock, 2015 and 2019 (Billions of dollars)

United States	4 532	3 995
Luxembourg	4 018	4 287
Netherlands	1 655	1 440
United Kingdom	1 548	1 214
Germany	1 470	1 148
France	1 284	1 060
Switzerland	1 191	853
Japan	1 116	778
Ireland	877	800
Canada	815	564

2019 2015

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

- Inflows halved, heavily affected by financial transactions
- Global FDI share plummeted to the lowest on record
- Developed economies are leading the recovery

Figure B. | **FDI inflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

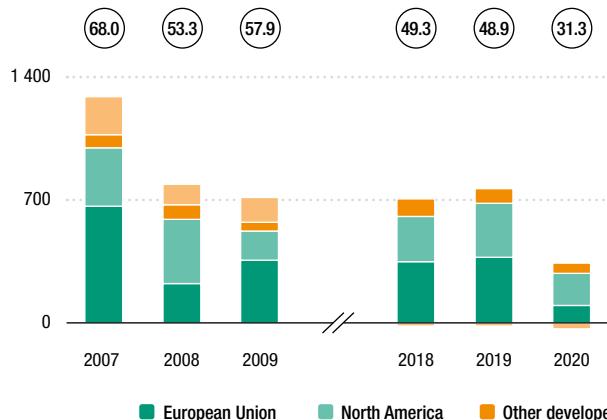


Figure C. | **FDI outflows, 2007–2009 and 2018–2020**
(Billions of dollars and per cent)

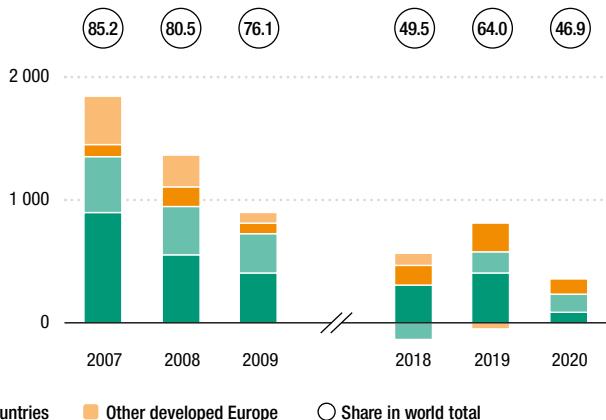


Table A. | **Net cross-border M&A sales, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	423 539	378 888	5 802	5 225
Primary	33 507	48	365	590
Manufacturing	218 440	202 966	1 319	946
Services	171 592	175 874	4 118	3 689

Top industries by value

Food, beverages and tobacco	18 757	82 744	131	101
Information and communication	20 428	66 752	1 130	1 112
Pharmaceuticals	96 183	44 043	155	175
Electronics and electrical equipment	20 113	38 090	239	159
Utilities	2 119	26 708	153	142
Trade	14 071	19 739	463	405

Table B. | **Announced greenfield projects, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	345 740	289 048	10 331	8 376
Primary	5 180	7 424	55	34
Manufacturing	147 242	99 647	4 432	3 216
Services	193 317	181 978	5 844	5 126

Top industries by value

Energy	52 506	58 231	272	319
Information and communication	36 924	48 260	2 145	1 998
Construction	42 634	25 868	357	275
Electronics and electrical equipment	28 452	25 650	604	516
Trade	12 564	16 157	434	434
Automotive	18 756	14 844	501	332

Table C. | **Announced international project finance deals, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	242 684	175 411	543	587

Top industries by number

Renewable energy	112 121	96 319	387	439
Telecommunication	8 454	23 949	17	33
Transport infrastructure	38 633	16 964	21	27
Oil and gas	27 919	8 111	33	23
Energy	15 767	5 734	33	22

Table D. | **SDG sectors: greenfield and project finance, selected trends, 2019–2020**

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	62 853	46 647	71	82
Renewable energy	112 121	96 319	387	439
WASH	423	81	16	7
Food and agriculture	8 789	9 695	316	261
Health	12 554	14 253	496	407
Education	641	260	52	32

In 2020, FDI flows to developed countries fell by 58 per cent to \$312 billion. The impact of the COVID-19 pandemic slowed existing investment projects, while the uncertainty surrounding the global economic outlook led MNEs to suspend or delay new projects. The share of developed economies in global FDI plummeted to 31 per cent – the lowest on record. Cross-border M&As sales decreased by 11 per cent, and greenfield investment projects announced in 2020 dropped by 16 per cent. In contrast, the number of international project finance deals rose by 8 per cent. FDI in extractive industries was severely hit, whereas investment in ICT was higher than in 2019. Flows fell by 80 per cent in Europe, intensified by sharp negative inflows in some economies with significant conduit flows, and by 42 per cent in North America. The pandemic also weighed on investment by MNEs based in developed economies, but while FDI outflows from European MNEs contracted, outward investment from the United States remained stable. In 2021, FDI flows to developed economies are expected to recover by up to 20 per cent, reflecting expectations for higher growth in GDP, a rebound in international trade and a recovery in corporate profits, and the effects of massive fiscal stimulus packages.

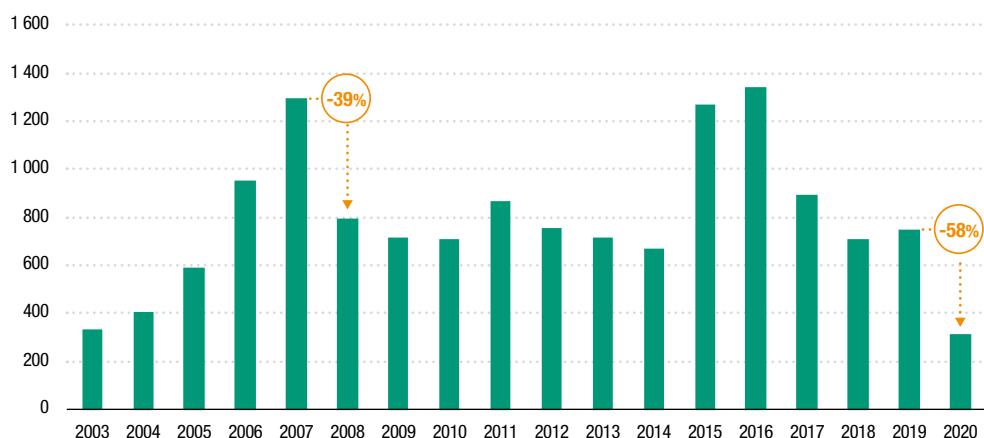
Inflows

FDI flows to developed countries in 2020 fell by 58 per cent to \$312 billion, from \$749 billion in 2019 – accounting for more than 80 per cent of the global decline.

Lockdown measures, consecutive waves of COVID-19, supply chain disruptions, falling corporate profits and the postponement of MNEs' investment plans were the key reasons for the contraction of FDI to levels last recorded in 2003 (figure II.1).

Among the components of FDI flows, new equity investments were curtailed, as reflected in the decline of cross-border M&As. In 2020, the value of net cross-border M&A sales in developed economies, by far the largest form of FDI inflows to the group, fell by 11 per cent to \$379 billion (table A). The decrease in M&A investment occurred mainly in the primary sector (from \$34 billion in 2019 to \$48 million), reflecting a fall in commodity prices, a lack of large deals and some divestments. For example, BP (United Kingdom) divested its affiliate in Alaska to Hilcorp (United States) for \$5.6 billion, and Mubadala (United Arab Emirates) sold 40 per cent of the shares it owned in Borealis (Austria) to OMV (Austria). In manufacturing and services, net M&A sales in developed countries remained close to their 2019 level.

Figure II.1. | Developed economies: FDI inflows, 2003–2020 (Billions of dollars)



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

However, the overall value of deals in food, beverages and tobacco and in utilities, as well as in information and communication, was substantially higher than in 2019, mainly because of large transactions. These industries indeed recorded the largest deals in 2020, including the merger of Unilever (United Kingdom) with Unilever (Netherlands) for \$81 billion. In contrast, the value of M&As in pharmaceuticals, as well as in finance and insurance, fell by 54 per cent and 52 per cent, respectively.

Despite a decline in aggregate value, the number of cross-border M&As deals targeting pharmaceuticals reached a record level of 175 transactions – a 13 per cent increase from 2019 (table II.6). The largest deals include the acquisition of The Medicines (United States) from Novartis (Switzerland) for \$7.4 billion. There were 79 deals in medical equipment and supplies – a 14 per cent decline; among them, Steris (United Kingdom) acquired the entire share capital of Key Surgical (United States), a medical equipment and supplies merchant, for \$850 million. The pandemic also boosted the number of projects in Industry 4.0 activities. For example, there were 838 deals in computer programming – the highest number ever recorded.

The value of greenfield projects announced in developed economies, to be invested over several years, fell by 16 per cent to \$289 billion in 2020. Manufacturing industries experienced the biggest decline (by 32 per cent to \$99 billion), with an exceptionally large fall in chemicals and coke and refined petroleum. The value of greenfield projects in services remained relatively stable (at \$182 billion), while in the primary sector, despite an increase in 2020, greenfield projects remained small in absolute value (\$7 billion). The value of announced projects in information and communication, in contrast, rose by a substantial 31 per cent to \$48 billion – the highest level ever recorded. The largest deals include TSMC (Taiwan Province of China) announcing it would invest \$12 billion in a chip factory in the United States, and Spain's Telefónica negotiating a \$5.96 billion deal to build a fibre-optic network in Germany. Some large renewable energy projects were also announced in developed economies. For example, energy company Equinor (Norway) and SSE Renewables (United Kingdom) have started building a wind farm in the United Kingdom. The project is expected to require a capital investment of \$11 billion between 2020 and 2026. Besides value, the number of greenfield projects announced in 2020 also fell, across all sectors (table B).

International project finance deals continued to target developed economies despite the pandemic. The number of announced deals rose by 8 per cent, although their aggregate value dropped by 28 per cent (to \$175 billion) (table C). The larger number of transactions reflects large-scale public support packages and recovery investment plans; transactions in digital infrastructure and renewable energy, announced in the last quarter of 2020, accounted for most of the deals. More than one fifth of deals targeted

Table II.6.

Developed economies: net cross-border M&A sales targeting selected industries, 2019 and 2020 (Number)

Industry	2019	2020
Pharmaceuticals	155	175
Medical equipment/supplies	92	79
Electronics	239	159
Computer programming, consultancy and related activities	779	838
Information service activities	165	147
Telecommunication	64	51

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

the United States (125), followed by Spain (80), Australia (63), the United Kingdom (52) and France (42). Renewable energy remained the most important industry with three quarters of the deals (439), a 13 per cent increase from 2019, albeit a fall in terms of value. Project finance deals in telecommunication doubled to 33 projects, worth \$24 billion. In contrast, both the number and value of project finance transactions in oil and gas suffered significant contractions. The commodity price shocks early in the year weighed on investment plans in mining (-29 per cent in number and -85 per cent in value).

Inflows to Europe dropped by 80 per cent to \$73 billion, largely because of negative FDI in countries with significant conduit flows, such as the Netherlands and Switzerland. Flows to the *Netherlands* fell to -\$115 billion in 2020 as a result of large equity divestments. Some large holding companies in ICT and petrochemicals were liquidated or restructured across multiple countries in 2020. Nevertheless, a large multinational that moved its headquarters from the Netherlands to the United Kingdom partly offset the negative flows.

FDI flows to *Switzerland* remained negative (at -\$47 billion) for the third consecutive year. Although the country has built a solid industrial base in both services and manufacturing, which has resulted in a large FDI stock (\$1.5 trillion at the end of 2020), the recent negative values reflect mainly the conduit nature of a significant part of the country's annual flows. FDI to the *United Kingdom* more than halved to \$20 billion (from \$45 billion in 2019). Equity investment fell by 35 per cent, mainly due to some divestments (for example, Swiss Re sold its ReAssure Group to Phoenix Group Holding for \$4.2 billion).

FDI to the EU27 fell by 73 per cent to \$103 billion, from \$380 billion in 2019. In addition to the decline in the Netherlands, flows to *Italy* contracted sharply due to negative intracompany loans (from \$10 billion to -\$1 billion) and negative equity investments (the mobile tower assets of Vodafone (United Kingdom) were sold to Telecom Italia for \$5.8 billion, for example). FDI to *Austria* also fell (to -\$17 billion), mainly due to negative reinvested earnings⁴² and the \$4.7 billion equity divestment from Mubadala Investment (United Arab Emirates). FDI flows to *Ireland* declined to \$33 billion from \$81 billion in 2019, mainly due to a fall in intracompany loans from \$24 billion in 2019 to -\$69 billion in 2020. In *France*, FDI declined by 47 per cent to \$18 billion, in part because of lower M&A sales, which fell from \$18 billion to \$5 billion. Despite the crisis, investment in certain strategic sectors, such as R&D, health care and renewable energy, recorded a rise.⁴³ FDI flows fell also in *Germany*, by 34 per cent to \$36 billion, despite higher cross-border M&As. Foreign affiliates in Germany extended new loans or paid back previous loans to their parents abroad, reducing intracompany loans by \$55 billion. Among the largest deals in the country were the \$18.7 billion sale of Thyssenkrupp's elevator business, the acquisition of Bayer AG's animal health business by Elanco (United States) for \$6.9 billion, and the purchase of BASF's Construction Chemicals Business by Lone Star Funds (United States) for \$3.5 billion. In contrast, FDI to *Sweden* more than doubled from \$10 billion to \$26 billion, as United States MNEs injected loans in their affiliates in the country.

FDI flows to North America declined by 42 per cent to \$180 billion, as inflows to the United States decreased by 40 per cent to \$156 billion. Inflows decreased significantly in finance (-45 per cent) and wholesale trade (-87 per cent), while they rose in chemicals (22 per cent). Investments from European MNEs fell by 15 per cent, and those from Asia by 53 per cent. The reduction in corporate profits had a direct impact on reinvested earning, which fell to \$71 billion – a 44 per cent decrease from 2019. In addition, equity investments were curtailed by one fifth, reflected in the fall in cross-border M&As and announced greenfield investments. Cross-border M&A sales of United States assets to foreign investors fell for the fourth consecutive year (by 36 per cent, to \$100 billion), mostly in the primary sector (from \$18 billion to -\$2.5 billion) and manufacturing (-39 per cent).

Nevertheless, German MNEs' acquisitions doubled to \$50 billion from \$23 billion in 2019. For example, Infineon (Germany) acquired Cypress (United States) for \$9.8 billion.

FDI to Canada halved to \$24 billion in 2020. Flows plummeted in mining and quarrying (from \$20 billion to -\$10 billion) and fell by 70 per cent in manufacturing. MNEs from the United States – the major investors in the country – halved their investment.

Most other developed economies also saw their FDI inflows contract in 2020.

Flows to Australia contracted as well (-49 per cent to \$20 billion) as a result of low cross-border sales targeting chemicals and the financial sector. FDI to Japan dropped by almost one third to \$10 billion, reflecting a 25 per cent decline in FDI from MNEs in the United States. In Israel, in contrast, FDI increased by 30 per cent to \$25 billion, driven in part by M&A sales in electronics, which rose by 31 per cent to \$7.3 billion (for example, Nvidia (United States) acquired Mellanox for \$6.9 billion).

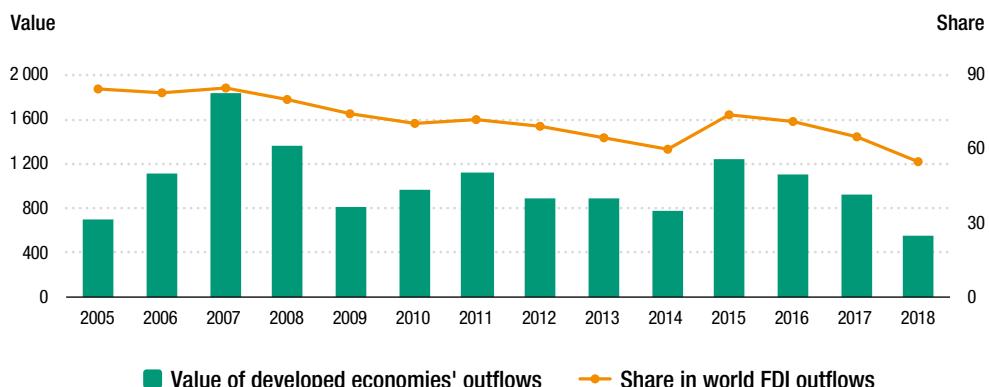
In 2020, the majority of sectors contributing to the Sustainable Development Goals (SDGs) suffered a fall in FDI to developed countries as a group. Compared with 2019, the value of international project finance announcements was 26 per cent lower in infrastructure, including energy, telecommunication and transport, and 14 per cent lower in renewable energy. The decline was mainly due to the absence of large projects, as the number of transactions increased by 15 per cent and 13 per cent, respectively. The largest transaction was the Gorgon LNG project in Australia, sponsored by companies in Japan, the Netherlands and the United States.

In contrast, the number of greenfield projects in water, sanitation and hygiene (WASH), education and health, as well as food and agriculture, were all lower than in 2019 (table D). Aggregate investment value in the latter two industries, however, increased by 14 per cent and 9 per cent, respectively.

Outflows

In 2020, MNEs from developed economies reduced their investment abroad by 56 per cent to \$347 billion – the lowest level since 1996. As a result, their share in global outward FDI dropped to a record low of 47 per cent (figure II.2). While FDI outflows from European MNEs and other developed countries declined, those from the United States remained stable.

Figure II.2. | Developed economies: FDI outflows and share in total world outflows, 2005–2018 (Billions of dollars and per cent)



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

Investment by European MNEs fell by 80 per cent to \$74 billion. Outward FDI declined in most European countries, but the trend was distorted by a few conduit economies where outflows experienced strong volatility. The Netherlands, Germany, Ireland and the United Kingdom, in that order, saw their outflows decline. Outflows from the Netherlands – normally among the largest source countries in Europe in 2019 – dropped by \$246 billion to -\$161 billion, owing to corporate reconfigurations and holding-company liquidations. German MNEs reduced their investment in 2020 to \$35 billion from \$139 billion in 2019. Large intracompany loan fluctuations also affected outflows from Switzerland (from -\$44 billion to \$17 billion) and Ireland (from -\$17 billion to -\$50 billion). Outflows from France, in contrast, rose by 14 per cent to 44 billion, as French MNEs provided loans to their foreign affiliates.

Outflows from the United States remained flat at \$93 billion. United States MNEs' outward flows increased significantly in Europe (to \$50 billion, from \$8 billion in 2019) but declined in Asia (from \$53 billion to \$15 billion), mainly due to reduced investment in Singapore. In terms of industries, MNEs from the United States halved their investment in manufacturing, mostly in chemicals, while FDI outflows increased in holding companies.

Investments by Japanese MNEs fell by 49 per cent to \$116 billion from a record \$227 billion in 2019, as large M&A purchases in that year were not repeated in 2020. Outflows to Europe and Asia halved. Nevertheless, Japan remained the third largest investor in the world, after China and Luxembourg. Among the largest acquisition were the purchase of Carlton United Breweries (Australia) by Asahi Group for \$11 billion and Hitachi's acquisition of Power Systems Division from ABB (Switzerland) for \$9.4 billion.

Prospects

In 2021, FDI flows to developed economies are expected to increase by 15 to 20 per cent, reflecting improved macroeconomic fundamentals, massive fiscal stimulus packages, the likely rebound from the anomalous low of last year and the benefit – sooner than in other economies – of wide vaccination coverage.

After the -5 per cent contraction recorded last year, real GDP growth in developed economies is projected to accelerate to 5 per cent in 2021 (table II.7), bolstered by a \$1.9 trillion rescue package in the United States and additional fiscal support in Japan. The infrastructure investment boost from economic recovery packages will lift international project finance – a sizable component of FDI. Reinvested earnings are also expected to pick up as profits return.

Table II.7.

Developed economies: growth rates of GDP, trade and FDI, 2013–2021 (Per cent)

Variable	2013	2014	2015	2016	2017	2018	2019	2020	2021 ^a
GDP	1.3	2	2.4	1.7	2.5	2.3	1.7	-5.0	5.0
Trade	2.8	4.4	4.6	2.7	5.0	3.3	1.9	-10.6	9.1
FDI	-5.9	-6.5	90.0	6.1	-33.5	-20.9	5.8	-38.0	(15 to 20)

Source: UNCTAD, FDI/MNE database for FDI; UN (2021) for GDP and trade.

^a Forecasted.

Fiscal stimulus measures and growing consumer demand are expected to revive the domestic economy in the United States. However, in the short term, several factors could increase uncertainty for international investors: new corporate tax reforms, the risk of inflation and the possible continuation of trade tensions.

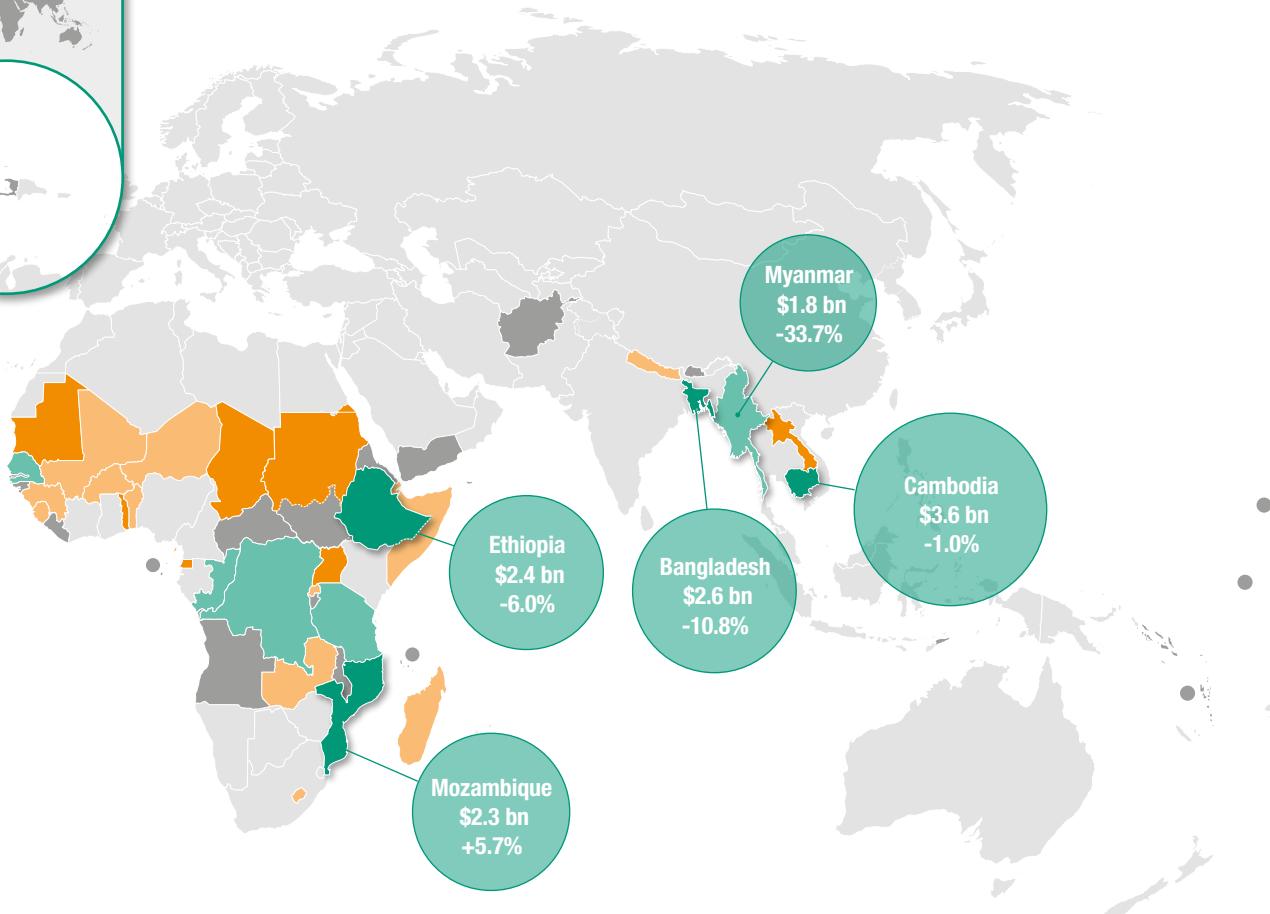
The increase of FDI flows to developed economies is more likely to come from cross-border M&As than from new investment in productive assets. Frothy financial markets due to fiscal and monetary support are likely to boost M&A activity, which accounts for the largest share of FDI in developed countries. Cross-border M&A purchases in the first four months of 2021 were already recording higher values than in the same period in 2020. M&A purchases were up 24 per cent, mainly because of transactions in chemicals, automotive and information and communication.

STRUCTURALLY WEAK, VULNERABLE AND SMALL ECONOMIES

LEAST DEVELOPED COUNTRIES

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows
\$ 23.6 bn
2020 Increase
1.4%
Share in world
2.4%



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	2020 % change
Ethiopia	\$2.4 bn	-6.0%
Bangladesh	\$2.6 bn	-10.8%
Cambodia	\$3.6 bn	-1.0%
Myanmar	\$1.8 bn	-33.7%
Mozambique	\$2.3 bn	+5.7%

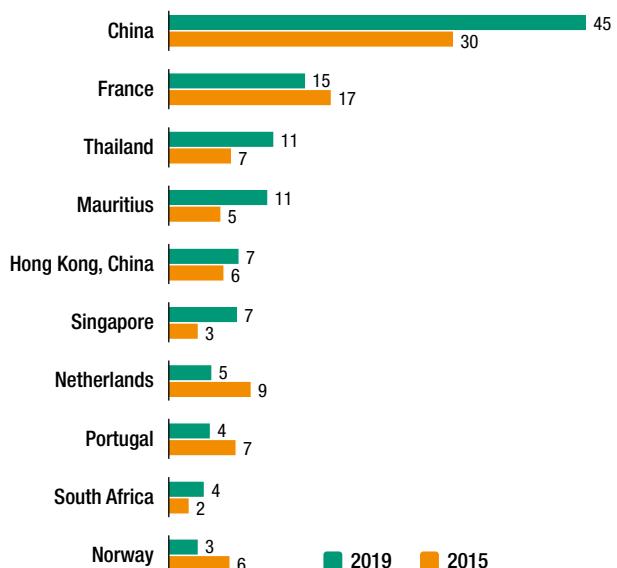
Outflows: top 5 home economies

(Billions of dollars and 2020 growth)

Togo	\$0.9	+2 073.9%
Timor-Leste	\$0.7	..
Senegal	\$0.2	+141.3%
Mozambique	\$0.2	-596.6%
Congo, Democratic Republic of	\$0.1	+11.1%

Figure A.

Top 10 investor economies by FDI stock, 2015 and 2019 (Billions of dollars)



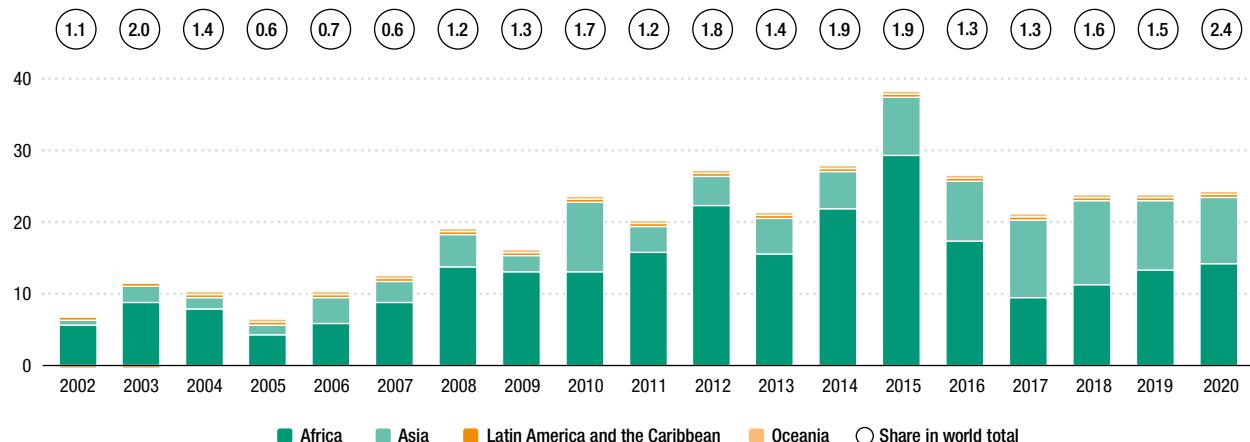
Source: UNCTAD.

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

- Flows remained flat despite the pandemic
- Greenfield projects and project finance deals dropped
- Prospects remain sluggish

Figure B. | FDI inflows, 2002–2020 (Billions of dollars and per cent)



Net cross-border M&A sales, 2019–2020				
Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	223	421	42	26
Primary	-486	404	1	7
Manufacturing	126	17	9	3
Services	584	-	32	16
<i>Top industries by value</i>				
Extractive industries	-527	404	1	6
Pharmaceuticals	..	17	..	1
Finance and insurance	54	-	13	7
Information and communication	0,3	-	1	3
Trade	128	-	4	3
Transportation and storage	-	-	3	2

Announced greenfield projects, 2019–2020				
Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	35 384	16 703	368	180
Primary	2 356	608	11	7
Manufacturing	20 848	5 351	142	55
Services	12 180	10 745	215	118
<i>Top industries by value</i>				
Energy	3 510	6 651	18	23
Coke and refined petroleum	8 859	2 456	8	3
Information and communication	337	2 018	19	28
Non-metallic mineral products	1 588	823	16	14
Transportation and storage	3 812	756	37	15
Wood and wood products	..	750	..	1

Announced international project finance deals, 2019–2020				
Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	69 054	33 536	102	69
<i>Top industries by number</i>				
Renewable energy	6 843	11 159	34	29
Mining	7 831	1 957	25	10
Energy	7 287	4 432	13	9
Industrial real estate	204	989	2	5
Transport infrastructure	6 190	12 601	8	4

SDG sectors: greenfield and project finance, selected trends, 2019–2020				
Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	15 576	17 033	22	13
Renewable energy	6 843	11 159	34	29
WASH	61	-	1	-
Food and agriculture	4 703	408	23	7
Health	419	77	14	5
Education	137	21	8	3

Despite the COVID-19 pandemic, aggregate FDI flows to the least developed countries (LDCs) remained practically unchanged in 2020, largely due to developments in Angola. The share of LDCs in global flows rose from 1.5 per cent to 2.4 per cent, the highest percentage since 2003. At the country level, FDI declined in the majority of LDCs. Investors from developing countries, especially from China and, to a lesser degree, Mauritius, South Africa and Thailand, continued to play a growing role in investment in LDCs. Greenfield announcements, an important indicator of investment intentions, decreased, as did the number of international project finance deal announcements. The decline affected investment announcements in sectors relevant for the SDGs, which is of concern for plans to help the countries graduate from LDC status. FDI inflows are forecast to remain sluggish in 2021 and 2022, as LDCs struggle to cope with the shock of the crisis.

Inflows

In 2020, flows to the 46 LDCs⁴⁴ remained stable at \$24 billion (up 1 per cent from 2019). This was partly because negative inflows to Angola diminished from -\$4.1 billion in 2019 to -\$1.9 billion in 2020 – recorded as a net FDI increase – as oil companies' repatriation of funds, related to the end of a production cycle, slowed. Excluding the impact of Angola, however, inflows to LDCs decreased by 7 per cent, mostly on par with the average in developing countries. FDI grew in other selected African LDCs, especially Senegal and Togo, as well as in the Lao People's Democratic Republic, but decreased in almost half of the group's economies. As in previous years, inflows were concentrated in some large LDCs. The top five recipients (Cambodia, Bangladesh, Ethiopia, Mozambique and Myanmar, in that order) accounted for more than half of FDI to the group, and the top 10 (adding the Democratic Republic of the Congo, Senegal, the United Republic of Tanzania, Mauritania and the Lao People's Democratic Republic) for over three quarters.

FDI inflows to the 33 African LDCs increased by 7 per cent to \$14 billion, accounting for more than 60 per cent of all inflows of LDCs. As a result, African LDCs performed better than Africa as a whole, where FDI inflows declined by 15 per cent. Inflows exceeded \$1 billion in five African LDCs, and \$500 million in another five.

In *Ethiopia*, the largest African LDC recipient of FDI, flows were down 6 per cent to \$2.4 billion. Although economic growth remained positive in 2021, the economy felt the effects of the pandemic in tourism and industries related to global supply chains. In *Mozambique*, inflows grew by 6 per cent to \$2.3 billion because of a 14 per cent increase in intracompany loans, as equity flows shrank for a fifth consecutive year (by 34 per cent to \$254 million). The implementation of the largest FDI project in the country, an LNG project by Total (France), continued during the pandemic, though it was suspended in April 2021 for security concerns. In the *Democratic Republic of the Congo*, FDI increased by 11 per cent to \$1.6 billion. New greenfield projects in telecommunications were registered, from Chinese, Egyptian and United States MNEs. The country also recorded its first two renewable energy project announcements in seven years.⁴⁵

In *Senegal*, FDI grew by 39 per cent to \$1.5 billion. The bulk of inflows was concentrated in energy, including oil, gas and renewables.⁴⁶ Unlike the energy sector, the economy as a whole entered a pandemic-induced recession owing to a fall in tourism and transport, as well as a decline in overall investment and external demand. In the *United Republic of Tanzania*, inflows remained largely unchanged – they grew by 2 per cent to \$1 billion, while in neighbouring *Uganda*, they fell by 35 per cent to \$815 million. Landlocked Uganda particularly suffered from border-closure and other measures affecting transportation. Indeed, the Uganda Investment Authority reported major pandemic-related declines in investment in the tourism, transport and construction industries, caused by a disruption

in supply chains, a slowdown in economic activity and a postponement of investment decisions. The development of an oil pipeline to transport crude oil extracted in Uganda to the Tanzanian port of Tanga could sustain investment in both countries in the future.⁴⁷

In *Togo*, where the economy suffered from depressed global demand for copper and agricultural commodities, FDI rose by 85 per cent to \$639 million, in large part because of construction of a cement plant by Dangote (Nigeria). In contrast, inflows to the *Sudan* shrank by 13 per cent to \$717 million, owing to both the pandemic and the challenging process of democratization. Although the political, economic and humanitarian situation remains fragile, work on the new Haidob seaport, a \$300 million project with Chinese capital investment, was completed in 2020. The post-pandemic recovery of FDI is expected to be driven by a more favourable international political environment thanks to largely improving relations with the United States. In *Chad*, inflows contracted by 2 per cent to \$558 million, invested almost exclusively in commodity-related activities (e.g., oil and gas, cotton). In 2020, the economy suffered a temporary suspension of oil production and a slowdown of trade on the back of border closures to contain the pandemic.

In the nine Asian LDCs, FDI inflows declined by 6 per cent to \$9.2 billion, or nearly 40 per cent of the LDC total. In *Cambodia*, the largest LDC recipient, FDI was down by 1 per cent to \$3.6 billion, despite mitigating government measures. The decline was due to investors postponing investment in both services (especially hospitality) and the export-oriented garment industry as the pandemic hit the economy and the foreign markets that firms operating in Cambodia are linked with. Inflows were concentrated in construction, garments, electric and electronic components, and agriculture. Most of the large construction projects of Chinese firms continued despite the crisis. For example, the 190-km Phnom Penh–Sihanoukville Expressway, a \$1.9 billion project, became nearly 40 per cent complete in 2020. In *Bangladesh*, inflows declined by 11 per cent to \$2.6 billion. Both general economic activities and FDI shrank in the country's export-oriented garment manufacturing, as \$3 billion worth export orders, primarily from the United States and European Union were cancelled. Foreign investment inflows are shifting away from large non-renewable energy and finance projects towards fintech, the pharmaceutical industry, liquefied natural gas plants and agribusiness, which the Government is actively promoting.

FDI in *Myanmar* plummeted by 34 per cent to \$1.8 billion in 2020, due to worsening investor perceptions, a deteriorating general business environment and the impact of the pandemic. In addition, political developments in 2021 resulted in several foreign investors reviewing or halting their activities in Myanmar. FDI in the *Lao People's Democratic Republic*, in contrast, registered a 74 per cent increase to \$968 million, because of booming infrastructure investment by Asian, especially Chinese, investors. For instance, a consortium led by Datang International Power (China) started the construction of the \$2.1 billion Sanakham Dam in 2020, and the China Railway Group is building the \$5.7 billion Laos–China Railway project.

In the smallest and most vulnerable LDCs, FDI flows declined to very low levels, as the pandemic magnified structural weaknesses. In the three LDCs in Oceania, inflows declined by 73 per cent to \$9 million, with most of these investments concentrated in mining in the *Solomon Islands*. In *Haiti*, the only LDC in Latin America and the Caribbean, FDI inflows declined by 60 per cent to \$30 million, under the strains of the pandemic, civil unrest and the ongoing humanitarian crisis. One potential source of FDI inflows could be the diaspora, which the Government started targeting in 2020.

FDI flowing from developing countries to LDCs continues to play an important role in bringing in jobs, technology and finance. China is the largest and one of the fastest-growing sources of FDI to LDCs. Between 2015 and 2019, its FDI stock in the group grew by 50 per cent, from \$30 billion to \$45 billion, and the list of greenfield and cross-border

M&A deals in 2020 indicates a further increase. In addition, the \$7 billion FDI stock held by Hong Kong (China) in LDCs originates mostly from China. LDCs also continue to attract large FDI from Mauritius (which includes large amounts of capital originating in India), Singapore, South Africa and Thailand – as measured by the FDI stock of these countries in the LDCs in 2019. The AfCFTA's investment protocol could help accelerate flows from developing countries in African LDCs. In Asian LDCs, ASEAN plays a similar catalytic role.

Though the value of cross-border M&A deals targeting LDCs was on the rise in 2020, these transactions still accounted for a very small portion of FDI, and the bulk of these deals involved sales from one foreign owner to another, involving no new foreign capital. Their net value remained small in 2020 (\$316 million) but was about 70 per cent more than in 2019, mostly due to transactions in the primary sector, especially in extractive industries (table A). In eight deals, the gross transaction value exceeded \$100 million, with the largest ones involving a change of foreign owners.

The number and value of greenfield project announcements in LDCs dropped sharply in 2020. The number of projects fell to 180, a 13-year low (-51 per cent compared with 2019). Their value also fell, to \$17 billion, a 14-year low (-53 per cent). By value, the largest projects were announced in the energy, coke and refined petroleum products, and information and communication industries (table B). Among the investors, MNEs from China and, to a lesser degree, the EU were the most active. Among the very large projects (table II.8), which were concentrated in non-renewable energy, a Chinese firm initiated three megaprojects for a combined value of \$3.4 billion in fossil energy in Myanmar; and in Angola, Eni (Italy) began a \$1.3 billion liquefied gas project and Gemcorp (United Kingdom) started a \$920 million petroleum refinery.

The number of LDC host economies that did not attract any project increased from 13 to 17. By region, African LDCs experienced the biggest decline in both the number of projects (-54 per cent, to 129) and their value (-58 per cent, to \$9.7 billion, the lowest level since 2003). In Asian LDCs, the number of projects reached a 13-year low (51, down by 43 per cent); their value also fell (to \$7 billion, also down by 43 per cent). Nevertheless, some industries in these country groups were not affected by the downward trend.

Table II.8. LDCs: selected large greenfield projects announced in 2020

Host economy	Industry	Parent company	Home economy	Estimated capital expenditure (Millions of dollars)
Myanmar	Energy	China General Technology Group (Genertec)	China	3 446 ^a
Angola	Coke and refined petroleum	Eni	Italy	1 389
Angola	Coke and refined petroleum	Gemcorp Capital	United Kingdom	920
Cambodia	Furniture	Lipp Engineering	Malaysia	750
Zambia	Energy	Power Construction Corporation of China (PowerChina)	China	548 ^a
Congo, Democratic Republic of		Ivanhoe Mines	Canada	361
Cambodia	Energy	Total	France	341
Guinea	Energy	CleanPower Generation	Germany	340 ^b
Cambodia	Construction	Aeon	Japan	290
Sudan	Agriculture	International Holdings	United Arab Emirates	225

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

Note: The values of announcements are ranked by the combined commitments of the investor in the given host country.

^a Sum of three projects in different locations.

^b Sum of two projects in different locations.

In African LDCs, the value of energy projects grew for the third consecutive year (up 17 per cent, to \$2.9 billion) and in information and communications, they hit a seven-year high (up 576 per cent, to \$1.8 billion). In Asian LDCs, energy continued to attract the highest and fastest-growing values of greenfield investment commitments (\$4 billion, up 220 per cent). By project value, the largest LDC recipients were Myanmar, Angola, Cambodia, the Democratic Republic of the Congo and Zambia.

In 2020, international project finance deals targeting LDCs diminished by 32 per cent in number (to 69) and by 51 per cent in value (to \$33 billion) (table C).

The bulk of the projects by both number (47, a decline of 32 per cent from 2019) and value (\$27 billion, a decline of 46 per cent), were recorded in 17 African LDCs. In Asia, five LDCs attracted 21 deals (a decline of 36 per cent), amounting to \$6.4 billion (a decline of 66 per cent). Among the 11 target industries, 3 attracted more projects than in 2019: industrial real estate, petrochemicals, and water and sewerage. Major projects in these industries include a 15-year water supply contract with Suez (France) in Senegal (\$326 million); a build-own-operate project in cement manufacturing in Myanmar (\$311 million) to be developed by Chinese investors, led by Gezhouba Group Cement; and two oil refinery projects (\$210 million each) in Angola to be financed by Gemcorp Capital (United Kingdom), ultimately owned by JUMO World (Mauritius). By value, Zambia attracted the most (\$11 billion in three deals), followed by Ethiopia (\$4.4 billion in three deals). By number, Myanmar attracted the most (eight deals, totalling \$1.7 billion). Angola, Guinea and the Lao People's Democratic Republic attracted six deals each.

To graduate from LDC status, countries in this group require massive investment in SDG-related activities to overcome three main disadvantages: low per capita income, low level of human development (in nutrition, health, school enrolment and literacy) and high economic vulnerability (including physical and economic exposure to shocks, limited size of the national economy and/or remoteness). So far, only six countries have managed to graduate, and six more are currently engaged to follow suit. In this respect, the pandemic has been negative on two counts: it worsened LDC handicaps, especially those related to income, health and vulnerability to shocks, and it depressed investment commitments in various SDG-related sectors.

Greenfield project announcements and international project finance commitments are the two main measures of progress with investment in SDG-related sectors. The pandemic negatively affected greenfield projects but not international project finance deals. The value of greenfield announcements in SDG-related sectors declined by 23 per cent to \$10 billion, while the value of announced project finance deals increased by 27 per cent to \$29 billion. Although the absolute value declined, the share of SDG-related projects among greenfield deals rose from 36 per cent in 2019 to 59 per cent in 2020. Among project finance deals, the share of the value of SDG-related projects increased from 33 per cent in 2019 to 86 per cent in 2020.

The pandemic affected different SDG sectors in LDCs unevenly, with foreign investment in infrastructure and renewable energy rising, and investment in food and agriculture, health and education falling (table D). In water, sanitation and hygiene (WASH), foreign investors announced no greenfield projects. Nevertheless, in cross-border project finance, the number of WASH deals announced in 2020 grew from one to three, driving the value from \$225 million to \$792 million.

Owing to an \$11 billion transport project in Zambia, infrastructure investment rose by 9 per cent to \$17 billion, although the number of deals dropped by 41 per cent. Similarly, LDCs attracted fewer renewable energy projects (a decline of 15 per cent), but they amounted to over \$11 billion, an increase of more than 60 per cent. Although the aggregate

value was driven by two larger projects (namely, a \$4 billion project finance deal in Ethiopia and a \$1.4 billion deal in Uganda), the 29 renewable energy projects were evenly spread among 20 LDCs (15 in Africa, 4 in Asia and Haiti).

If countries in this group are to progress towards becoming more resilient and graduating from their LDC status, SDG-related investment needs to be scaled up in LDCs in the post-pandemic period, especially in food and agriculture, health and education. Various LDCs are pushing towards a sustainable (green) post-pandemic recovery, which is promising. LDCs offer large untapped opportunities for FDI in SDG sectors, and policy measures undertaken by the LDC governments both before and during the COVID-19 crisis could be amplified during the post-pandemic recovery.

Prospects

The prospects of FDI in LDCs remain subdued in the immediate future.

Inflows are expected to remain sluggish over the next few years. Even though some countries contained the disease effectively and quickly (e.g. Bhutan), in many LDCs mass vaccination may be many years away. The immediate challenge is to minimize the number of “lost” years in terms of progress toward SDG goals. The main concern in LDCs is that the pandemic could wipe out development gains achieved over the last decade under the Istanbul Programme of Action (2011–2020) and the SDG agenda.

The concern extends to the six LDCs in the process of graduation. The fact that an additional two years were added to the transition period for those selected for graduation after the outbreak of the pandemic (e.g. for Bangladesh and Nepal, until 2026) suggests that the international community is willing to support LDCs to adjust in a more orderly manner to the changing conditions of the world economy. In addition, in 2019, the year before the onset of the crisis, the international community pledged \$5 billion in temporary relief for vulnerable countries (including selected LDCs). After the onset of the pandemic, the G20 finance ministers and central banks renewed commitments and put forward detailed measures to support the global economy during and after the COVID-19 pandemic, including the Debt Service Suspension Initiative for Poorest Countries, which provides relief on IMF and World Bank obligations to both countries supported by the International Development Association and LDCs. These extensions are essential to maintain trade preferences, but they can also indirectly affect FDI flows, especially in export-oriented sectors.

Some home countries have maintained and reinforced their mechanisms that support sustainable OFDI to developing countries, especially LDCs. One of them is Prosper Africa, a United States Government initiative to substantially increase two-way trade and investment between Africa and the United States. The U.S. International Development Finance Corporation, the Government’s development bank, also maintained its programme of partnering with the private sector to finance and co-finance projects in energy, health care, infrastructure and technology to advance impact investment in developing countries, including many LDCs.

The pandemic aggravated structural weaknesses that affect development in general in LDCs (WIR20). Most LDCs avoided major virus outbreaks despite their limited domestic resources and weak health-care capacity; however, future outbreaks, especially if the vaccine roll-out in LDCs continues to be delayed, could once again depress FDI. Moreover, FDI in the 39 LDCs still considered commodity dependent will remain subject to fluctuations in commodity prices, most of which have not recovered to their pre-pandemic levels. Uncertainty related to a recovery in tourism is also a major issue for selected LDCs (e.g., Bhutan, Cambodia, Ethiopia, the Lao People’s Democratic Republic and the United Republic of Tanzania) (WIR20).

The value of greenfield project announcements in 2020 indeed suggests further FDI decline. FDI is not expected to be the engine of economic recovery in LDCs; at best, it will follow the recovery led by Governments that are assisted by the international community. Under these circumstances, it is not clear what the contribution of FDI to a “build back better” strategy would be.

Governments of various LDCs are aware of these challenges and have launched efforts to mitigate the effect of the crisis on their economies as the whole and on FDI. Initially focused on the continuity of administration and public services through eGovernment services, governments shifted focus in the middle of the year towards facilitating investment and streamlining the regulatory framework for FDI as a means to make possible a more sustainable recovery. To facilitate investment, in 2020 the Government of Cambodia launched an online system for investment applications with approvals provided within eight working days for new companies. The Government of Angola created a single-contact mechanism for investors to obtain necessary authorizations in a simplified manner. It also adopted a law allowing the creation of free trade zones with incentives and benefits. In Bangladesh, the Government streamlined five laws as part of its efforts to reduce obstacles to foreign investment. In the Lao People’s Democratic Republic, the Government provided fiscal incentives, including temporary exemption from income tax and exemption of duties for pandemic-related goods. It also decided to facilitate investment in tourism, by permitting foreign investors to carry out condominium construction and to own apartments in condominiums. Rwanda also provided investment incentives relevant to SDG-related sectors: preferential tax rates to investors that undertake the generation, transmission and distribution of energy, whether peat, solar, geothermal, hydro, biomass, methane or wind.

One of the salient cases of reforms accelerated by the pandemic is that of Ethiopia, where the aim of regulatory changes has been to involve more foreign investors in efforts to achieve a sustainable recovery. To that end, an Investment Proclamation was adopted at the beginning of the pandemic (in April) shifting to a negative-list approach and authorizing the Ethiopian Investment Board to revise the list of activities prohibited to foreign investors. In addition, in September the Government adopted a new investment regulation, opening certain segments of transport to foreign investment, including railway transport and cold-chain and freight transport. In other segments, the permitted share of foreign investors was raised to 49 per cent. Restrictions on foreign ownership were also lifted in cement manufacturing, education and management consultancy. The regulation also relaxed the restrictions on the engagement of manufacturing firms in retail trade and electronic commerce.

Despite the pandemic, support was put in place in some LDCs to promote investment in infrastructure. For example, during the last year, Uganda has provided fiscal support to accelerate the development of industrial parks. The pandemic has also forced LDCs to accelerate the development of ICT and the adoption of digital technology. For example, the \$4.9 million Tuvalu allocated for projects included improvement of broadband internet connectivity.

The pandemic also put investment and regional cooperation in a new perspective. By creating larger markets, regional integration schemes will encourage intraregional FDI, especially in Africa, where the majority of the potential members of the AfCFTA (55 in total) are LDCs (33). The implementation of the AfCFTA and its sustainable investment protocol could open ample opportunities for investment in productive capacities and in sustainable development. Such investment could aid economic recovery, especially if governments promote regional production networks and the development of regional value chains, as well as attract market-seeking investment that would benefit from extended regional and continental markets (see box II.1). However, the pandemic may delay the implementation of those plans.

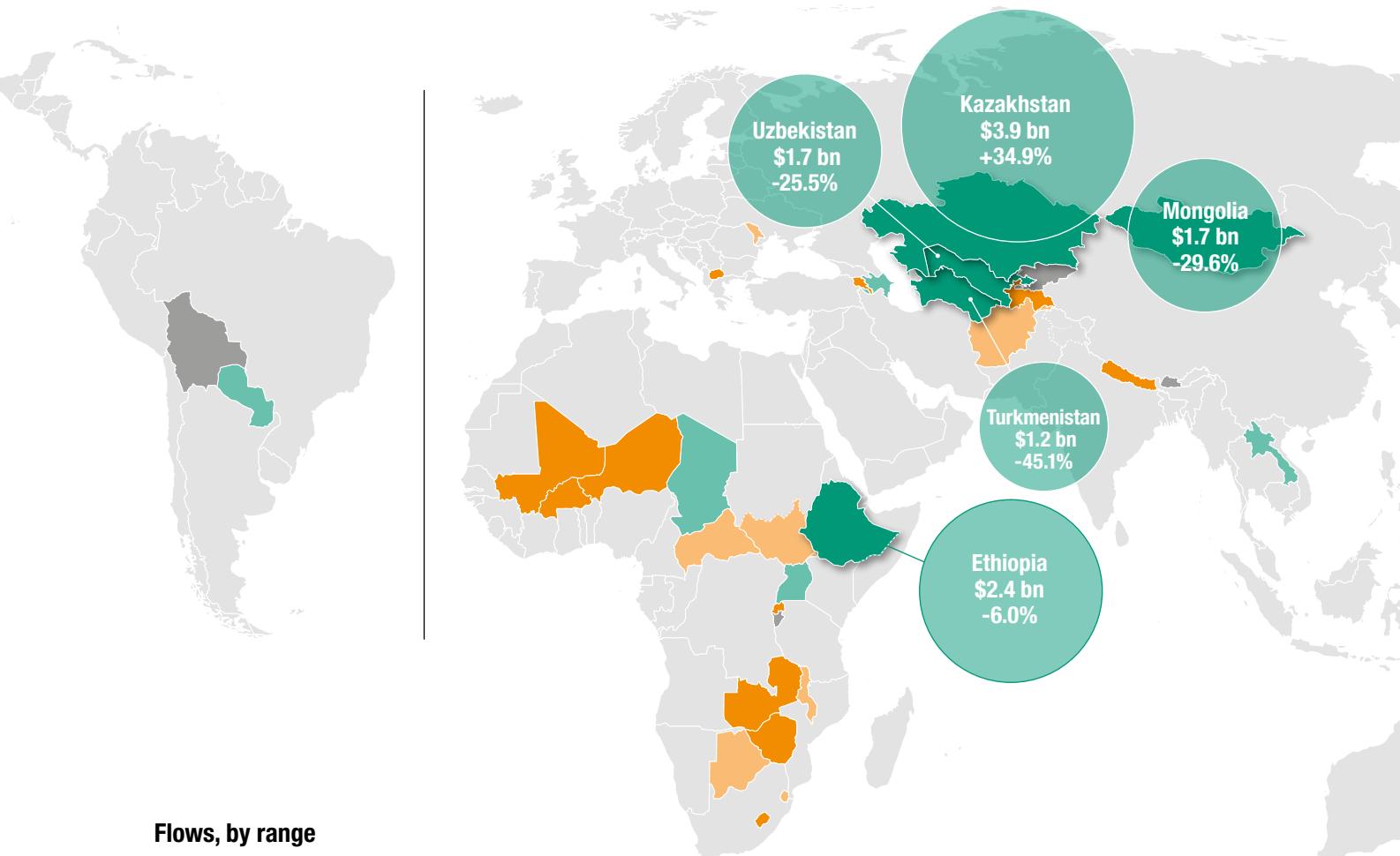
In Asia, regional cooperation could also help ASEAN LDCs (Cambodia, the Lao People's Democratic Republic and Myanmar) mitigate the impact of the pandemic.⁴⁸ In 2020, ASEAN member countries adopted the Hanoi Action Plan on Strengthening Supply Chain Connectivity to ensure a smooth flow of essential goods and agreed not to impose export bans on health care products (e.g., masks and PPE). They also approved a Comprehensive Recovery Framework that facilitates trade and investment, with a specific implementation plan covering various instruments of cooperation, such as the COVID-19 ASEAN Response Fund and the ASEAN Regional Reserve of Medical Supplies. ASEAN countries also envisage scaling up PPPs to respond to future public health emergencies and to address regional issues such as gaps in infrastructure, financing and skills. Similarly, they strive for more regional cooperation in digitalization, including a framework for cross-border payments, a plan to promote smart manufacturing, guidelines for the 5G ecosystem and joint sustainable investment projects.⁴⁹ These efforts benefit all members, including the three LDCs.

Ultimately, the future of FDI in LDCs will also depend on how attractive these economies are in MNEs' post-pandemic strategies. International production is set to undergo significant reconfiguration, which might reduce dependence on single suppliers, encourage reshoring and regionalization, and boost resilience-seeking investment (*WIR20*). All these developments present both opportunities and challenges for LDCs. In some cases, LDCs could capture parts of the diversified and regionalized value chains, and even from some forms of "replicated" sites, resulting in shorter value chains and a rebundling of production stages (e.g. in pharmaceutical production). The challenge is to make productive locations in LDCs more attractive for these activities, contributing to greater resilience and sustainability for both investors and host countries. For example, LDCs can leverage their duty-free and quota-free market access to major markets. They can also leverage links of their typically large diasporas for both investment and the acquisition of skills.

LANDLOCKED DEVELOPING COUNTRIES

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows
\$ 15.4 bn
2020 Decrease
-31.0%
Share in world
1.5%



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	2020 % change
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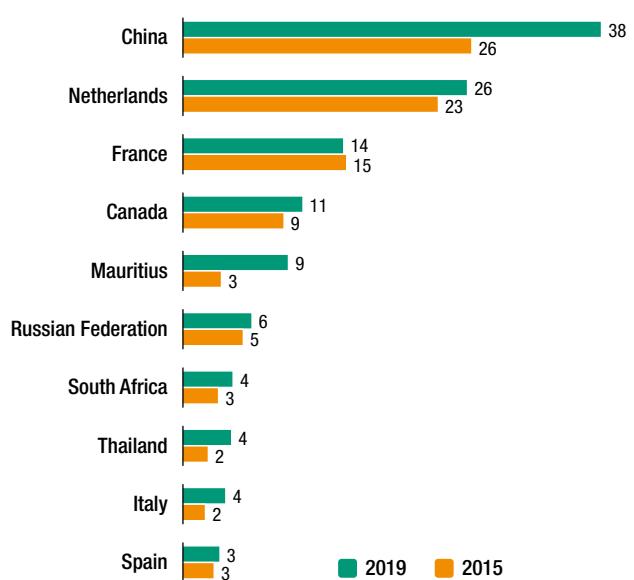
Outflows: top 5 home economies

(Billions of dollars and 2020 growth)

Azerbaijan	\$2.4	-66.1%
Zambia	\$0.1	-80.8%
Tajikistan	\$0.1	+203.0%
Zimbabwe	\$0.0	+44.3%
North Macedonia	\$0.0	-1.8%

Figure A.

Top 10 investor economies by FDI stock, 2015 and 2019 (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

- FDI declined to 2007 levels
- MNEs from developing countries remain important investors
- Low flows are expected

Figure B. | FDI inflows, 2002–2020 (Billions of dollars and per cent)

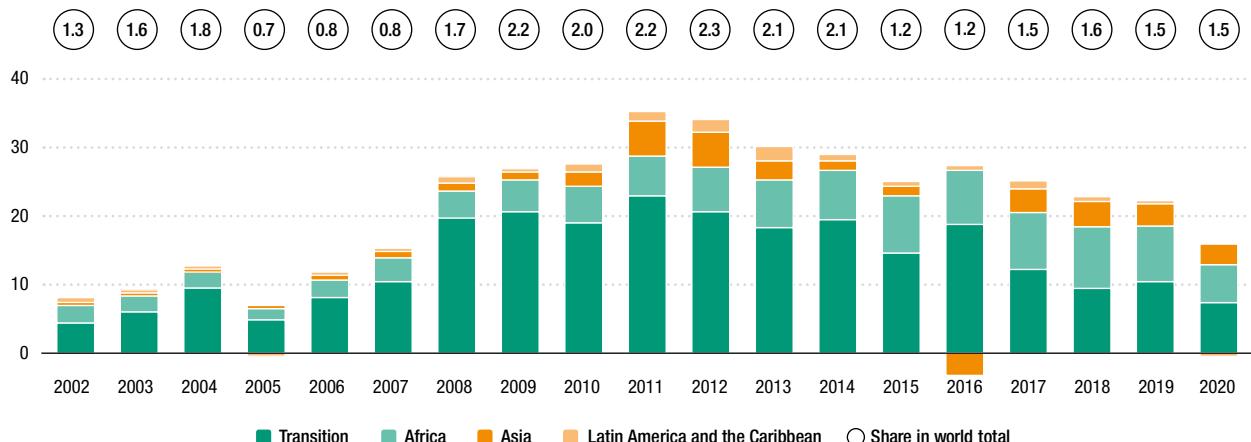


Table A. Net cross-border M&A sales, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	187	78	31	23
Primary	-19	27	2	3
Manufacturing	-	17	11	4
Services	206	33	18	16

Top industries by value

Extractive industries	-25	27	-	3
Hospitality	..	23	..	2
Pharmaceuticals	..	17	..	1
Finance and insurance	149	10	8	6
Information and communication	18	-	1	3
Trade	6	-	1	2

Table B. Announced greenfield projects, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	25 058	12 001	354	130
Primary	704	46	10	3
Manufacturing	13 892	4 457	173	44
Services	10 463	7 498	171	83

Top industries by value

Energy	5 116	4 430	24	17
Paper and paper products	178	3 200	3	1
Information and communication	307	1 822	18	22
Transportation and storage	2 140	373	22	8
Non-metallic mineral products	2 188	294	19	3
Hospitality	447	282	5	3

Table C. Announced international project finance deals, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	19 908	25 587	61	34
<i>Top industries by number</i>				
Renewable energy	6 506	9 495	35	18
Industrial real estate	2 410	727	2	5
Residential/commercial real estate	2 300	691	3	3
Transport infrastructure	242	11 244	1	2
Energy	2 306	2 624	5	2

Table D. SDG sectors: greenfield and project finance, selected trends, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	2 548	13 868	6	4
Renewable energy	6 506	9 495	35	18
WASH	61	-	1	-
Food and agriculture	3 480	205	31	5
Health	711	94	21	3
Education	106	7	8	1

In 2020, the pandemic caused major disruptions in the economic activities of landlocked developing countries (LLDCs) and severely hit their FDI inflows, which contracted by 31 per cent to \$15 billion. The drop, to the lowest level of aggregate FDI since 2007, affected practically all economies in the group, with the notable exceptions of Kazakhstan, the Lao People's Democratic Republic and Paraguay. The share of the group in global FDI flows nevertheless remained stable, though marginal, at 1.5 per cent. Because of their limited access to international transportation and their dependence on neighbouring countries' infrastructure, LLDCs are expected to attract only low FDI inflows in the coming years. Government interventions to counter the negative effects of the pandemic are limited by resource constraints in the majority of LLDCs, with the exception of a few countries. Owing to this lack of resources, rescue and recovery packages that would accelerate both economic growth and new investment will remain weak.

Inflows

FDI inflows to the 32 LLDCs declined by 31 per cent, to \$15 billion, their lowest level since 2007. The early stages of the pandemic, characterized by border closures and other measures restricting the international movement of goods, services and people, amplified LLDCs' geographic vulnerability, further hindering their access to international transportation and seaports. The consequent FDI downturn affected the large majority of economies in this group, with the notable exceptions of Kazakhstan, the Lao People's Democratic Republic and Paraguay.

Inflows to the nine landlocked transition economies and Mongolia contracted by 30 per cent to \$9.2 billion, accounting for close to 60 per cent of the group total. Although FDI to the largest recipient, *Kazakhstan*, increased by 35 per cent to \$3.9 billion, inflows declined in the other nine members of the group. In *Kazakhstan*, investment in mining, transport, financial services, telecommunication and energy continued to grow, while FDI contracted in construction, metallurgy and trade. In *Uzbekistan*, inflows dropped by 26 per cent to \$1.7 billion, despite both efforts to scale up FDI and continued GDP growth in 2020. The energy sector, including renewable energy, as well as the telecommunication and automotive industries attracted some new projects. FDI to *Mongolia* was down by 30 per cent to \$1.7 billion. One large mining project dominated inflows, which suffered heavily from the pandemic. Key external factors that crippled the mining-led economy were a sharp decline in global demand for Mongolia's key commodities and border closures with China.

In *Turkmenistan*, inflows decreased by 45 per cent to \$1.2 billion. The COVID-19 pandemic hit export revenues and investment projects, both dependent on natural gas, very hard. The country has applied relatively limited measures against the pandemic but suffered from the fall in international demand for hydrocarbons, especially from China, a major trading and investment partner. The construction of the fourth branch (Line D) of the Central Asia–China gas pipeline was postponed until 2022, and the commissioning of the Turkmenistan–Afghanistan–Pakistan–India gas pipeline until 2023. At the same time, continued strict capital controls on FDI further slowed new hydrocarbons project amid the decline of international investment. In *Azerbaijan*, inflows fell by 66 per cent, to \$507 million. Lockdown measures to contain the impact of the pandemic took their toll on economic activities.⁵⁰ Moreover, the negative effects of low prices for oil – which represents close to nine tenths of exports – affected the pipeline of new greenfield projects in the industry. Some foreign investors embarked on renewable energy projects. For example, ACWA Power (Saudi Arabia) signed an agreement with the Government of Azerbaijan to build, own and operate a 240 MW wind farm for \$216 million, with the aim of diversifying the country's energy mix.

In 2020, FDI flows to the 16 African LLDCs fell by 32 per cent to \$5.5 billion.

They accounted for more than one third of the group total. The decline in African LLDCs was more pronounced than in other African countries (-17 per cent), reflecting the landlocked economies' vulnerability to border closures and other measures affecting logistics. Absorbing a 6 per cent drop in inflows to \$2.4 billion, *Ethiopia* remained the largest LLDC recipient of FDI in Africa. The pandemic and political instability weighed on the economy and on FDI inflows, despite the Government's new investment promotion strategy targeting livestock, fisheries, energy and manufacturing. Flows to *Uganda* dropped by 35 per cent, to \$823 million. The Uganda Investment Authority estimated the most severe pandemic-related declines to be in tourism, transport and construction, which suffered from disruption in their supply chains, the slowdown in economic activity and a postponement of investment decisions.

In *Chad*, FDI decreased by only 2 per cent, to \$558 million, directed almost exclusively to commodities (among them oil and gas, and cotton). In response to the pandemic, the Government stepped up its diversification efforts, especially in agriculture and agribusiness and in infrastructure development, to improve the resilience of the economy. FDI to the *Niger*, another resource-based economy, declined by 49 per cent to \$367 million. Although the country managed to contain COVID-19 infections, investment suffered from the pandemic's economic consequences, especially border closures. The pandemic also complicated the management of security problems in mining. In the 12 remaining African LLDCs, FDI inflows contracted by close to 54 per cent (to \$1.4 billion).

FDI to the four landlocked Asian countries other than Mongolia rose by 42 per cent, to \$1.1 billion (about 7 per cent of the group total). A sharp increase in flows to the Lao People's Democratic Republic more than compensated for declining flows to the other three countries. FDI in the *Lao People's Democratic Republic* was more resilient than in many other LLDCs, growing by 74 per cent to almost \$1 billion. The country benefitted from the continued growth (7 per cent) of outward FDI from other Asian countries in 2020. Major construction projects such as the Laos–China railway, the Vientiane–Vang Vieng highway, and several small and medium-sized power projects were continued during the pandemic. Construction also started on the expansion of a potash production project, financed by Chinese capital with \$173 million on a build-own-operate basis. FDI flows to the three other landlocked economies declined by an average of 37 per cent. In *Nepal*, FDI was down by 32 per cent to \$126 million, mostly because of the stall in tourism, one of the country's key industries. The decline in tourism had a significant effect on the economy through the industry's multiple linkages with other economic activities, including FDI inflows.

In the two Latin American LLDCs, FDI inflows turned negative (-\$480 million).

In the *Plurinational State of Bolivia*, divestments accelerated from -\$217 million to more than -\$1 billion, due not only to the pandemic but also to political uncertainty in an election year, as well as subdued commodity prices, especially for hydrocarbons, metals and potash. In *Paraguay*, inflows rose by 9 per cent to \$568 million. The country's lockdown (nationwide in March and April, and in selected areas afterwards) proved effective and the economy could reopen relatively quickly. Inflows continued to mostly target the country's natural resources and agri-food industries. In 2020, ECB (Brazil) started construction on an \$800 million renewable fuel plant.

FDI inflows to LLDCs originate from a few key investor countries. China ranked first in 2019, as its FDI stock in LLDCs increased by almost one-half, from \$26 billion in 2015 to \$38 billion in 2019, reflecting the impact of Chinese policies promoting outward FDI under the framework of the Belt and Road Initiative. Three other developing and transition economies – the Russian Federation, South Africa and Thailand – also rank among the top 10 foreign investors, which highlights the importance of intraregional investment and investment between developing countries.

The cross-border net M&A inflows of LLDCs remained small and declined by 59 per cent to \$78 million (table A). In mining, Caledonia Mining (Jersey) purchased additional shares in the operator of the Blanket gold ore mine in Zimbabwe (for \$16 million), and gold mining services provider 2176423 Ontario (Canada) bought a 12 per cent stake in Steppe Gold (Mongolia) for \$11 million. In manufacturing, one major deal was the acquisition of the entire share capital of Bophelo Bioscience & Wellness (Lesotho) by Halo Labs (Canada) for \$17 million. In services, the Bashan Investment Group (Singapore) bought the majority of Hotel Uzbekistan's shares for \$23 million, via an auction.

The value of greenfield project announcements targeting the group halved to \$12 billion in 2020. The number of announcements dropped even more sharply (by 63 per cent, to 130). The decrease in value was particularly pronounced in the primary sector and in manufacturing (except pulp and paper production), and more limited in services (table B), with energy attracting multiple big projects. Large project announcements (table II.9) included a \$3.2 billion Swedish pulp and paper project in Paraguay and various projects in energy (four in Zambia, three in Uzbekistan and one in Azerbaijan), two thirds of which targeted renewable energy. Some large projects (the electricity investment by Altmax Holding (Cyprus) and the telecommunication investment by VEON (VimpelCom) (Netherlands), both in Uzbekistan) were initiated by MNEs with ultimate owners in the Russian Federation. Russian firms also announced 17 other, much smaller greenfield investments. Overall, transition-economy LLDCs attracted the lion's share of large projects.

The number of cross-border project finance deals in LLDCs was 44 per cent fewer than in 2019 (table C). Of the 34 deals, 17 were registered in Africa, 10 in the landlocked transition economies and Mongolia, and 7 in the rest of the LLDCs in Asia, but none in the two LLDCs in Latin America and the Caribbean. This was 44 per cent fewer transactions than the 61 recorded in 2019 (table C). Only the QazTechna bus manufacturing plant project in Kazakhstan was already operational. In Zambia, the \$11 billion standard-gauge railway build-own-operate project, which involves United States capital and would expand essential transportation links with the outside world, was announced.

Table II.9. LLDCs: selected large greenfield projects announced in 2020

Host economy	Industry	Parent company	Home economy	Estimated capital expenditure (Millions of dollars)
Paraguay	Paper and paper products	Girndus Investments	Sweden	3 200
Uzbekistan	Energy	ACWA Power International	Saudi Arabia	1 200
Uzbekistan	Energy	Altmax Holding	Cyprus	1 031
Zambia	Energy	Power Construction Corporation of China (PowerChina)	China	548 ^a
Azerbaijan	Energy	ACWA Power International	Saudi Arabia	216
Uzbekistan	Information and communication	VEON (VimpelCom)	Netherlands	204 ^b
Uzbekistan	Energy	Mubadala Development	United Arab Emirates	201
Chad	Energy	Merl Solar Technologies	Austria	199
Zambia	Energy	Econet Global	Mauritius	197
Kazakhstan	Rubber and plastics products	DoubleStar	China	192

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

Note: The values of announcements are ranked by the combined commitments of the investor in the given host country.

^a Sum of three projects in different locations.

^b Sum of two projects in different locations.

The \$1.7 billion Dakcheung clean coal power plant in the Lao People's Democratic Republic, which involves capital from Singapore, was undergoing a feasibility study. In Uganda, the \$1.4 billion Ayago hydroelectric power plant project, which involves Chinese financing had already received approval. An additional three projects worth over \$500 million were under development in the Lao People's Democratic Republic, Mongolia and Uzbekistan. The remaining 25 transactions in the group were smaller.

In SDG-related sectors, LLDCs attracted a smaller number of international deals than they did in 2019. Infrastructure investment deals declined (from six to four), but their value swelled more than fivefold (table D), driven by an \$11 billion transport project in Zambia and two coal-fired power projects (for a total of \$2.6 billion) in the Lao People's Democratic Republic. Kazakhstan also announced a \$244 million airport terminal project sponsored by investors from the Netherlands and the Russian Federation. In renewable energy, the number of investment deals shrank by half, though the total cost of the projects – 18 in all – rose to \$9.5 billion (up 45 per cent), thanks to the announcements of large-scale projects in Ethiopia (\$4 billion) and Uganda (\$1.4 billion). In addition to the largest two projects, African LLDCs attracted seven other projects. The rest of the 18 renewable energy projects targeted three LLDCs: the Lao People's Democratic Republic (\$1.5 billion in four projects), Nepal (\$48 million in one project) and Uzbekistan (\$1.4 billion in four projects). In other SDG-related sectors, both the number and the scale of international investment commitments plummeted (table D).

Prospects

Prospects for FDI in LLDCs remain weak for 2021 and 2022. Although the measures adopted in the early stages of the pandemic are expected to be gradually or at least eased, the reorganization of international production and value chains will remain a challenge for LLDCs as investors seek more cost-effective and resilient locations for their new operations.

The sharp decline in greenfield project announcements illustrates the challenge of attracting FDI to LLDCs. Extractive industries, including mining, and oil and gas, are expected to recover over the medium term, as demand picks up; however, the extent of the shift towards renewable energy will affect investment in these industries. In both cases, high sunk costs and long project cycles may delay investment recovery. Despite the fact that agriculture became a priority for various LLDC governments as one of the key activities to increase local resilience to future shocks, the number of greenfield project announcements in the industry remains very low. Manufacturing may undergo a structural transformation, with a shift towards activities aimed at increasing local and regional self-supply capacities. Services could recover faster, especially in infrastructure.

Unless governments scale up investment promotion and facilitation, FDI is expected remain sluggish in the majority of LLDCs. However, the effectiveness of pandemic-related measures in incentivizing FDI flows to shift to new priority activities will also depend on the availability of resources for financing those policies. In this respect, too, the group is heterogeneous. Some countries, such as Azerbaijan, Kazakhstan and Uzbekistan – and, to some degree, Botswana – have more resources than others because of their strategies of accumulating funds in State-owned entities, including sovereign wealth funds. In Kazakhstan, the arsenal of pandemic-related measures has included preferential loans, support to agriculture, tax exemptions, low-interest loans and targeted finance. In Uzbekistan, the Anti-Crisis Fund has invested in recovery projects, in addition to government policies of tax reductions and preferential lending

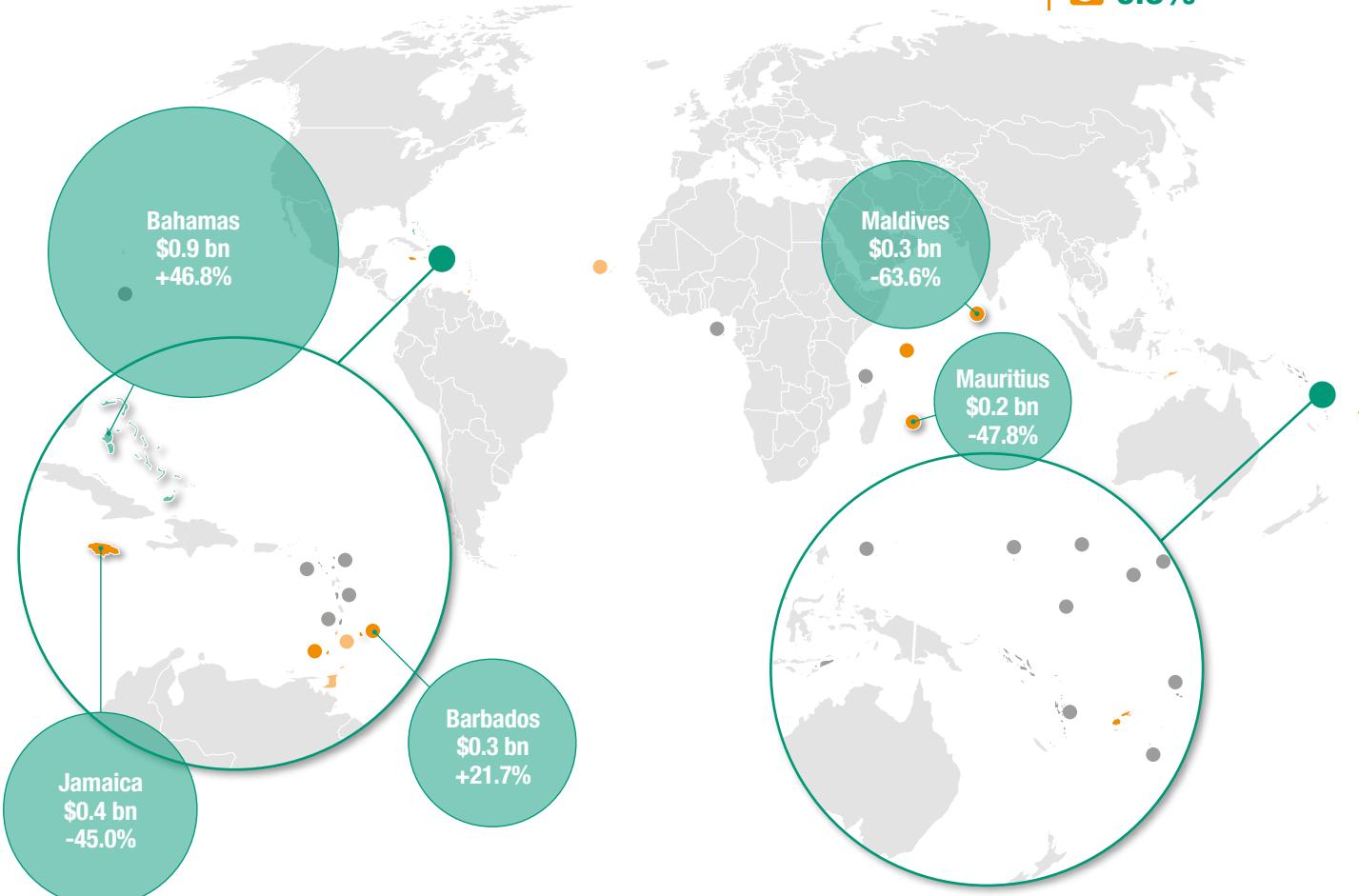
to selected activities. Botswana has also established a COVID-19 Relief Fund that has financed mostly wage subsidies, tax breaks and a government loan guarantee scheme. These schemes, although not always directed towards investment, can have an indirect impact on FDI.

Governments in countries with more limited financial resources also adopted policy measures to respond to the crisis. For example, Ethiopia initiated a programme to assist foreign investors in establishing facilities to manufacture PPE. The Uganda Investment Authority facilitated the establishment of science, industrial and business parks that would link with infrastructure development efforts including the building and establishment of infrastructure such as tarmac roads, industrial power and water supply, central sewerage treatment plants and solid waste management systems. The Rwanda Government adopted a law providing incentives for reducing operational costs, attracting talent and promoting innovation and diversification in firms investing on the country. In the Plurinational State of Bolivia, in the middle of 2020, the Government launched PROEXPORT, an agency to promote exports and tourism and attract investment. Similarly, the Zimbabwe Investment and Development Agency Act, adopted in February 2020, established the One-Stop Investment Services Centre and provides for the creation of SEZs, a tool widely adopted by countries to accelerate development and structural change (*WIR19*). Government measures such as these may help attract FDI, contributing to the LLDCs' recovery from the crisis. Their success hinges on how rapidly demand in the international market for their exported goods and services recovers, as well as on the assistance of the international community.

SMALL ISLAND DEVELOPING STATES

FDI flows, top 5 host economies, 2020 (Value and change)

2020 Inflows
\$ 2.6 bn
2020 Decrease
-40.3%
Share in world
0.3%



Flows, by range

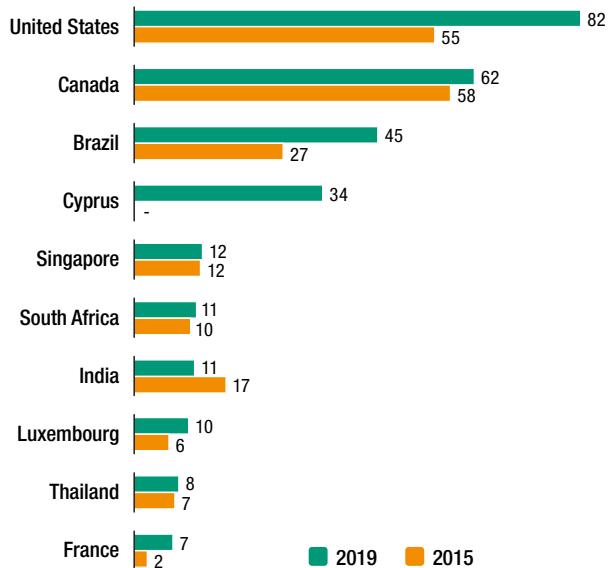
- Above \$1 bn
- \$500 to \$1000 mn
- \$100 to \$500 mn
- \$50 to \$100 mn
- Below \$50 mn

Top 5 host economies



Figure A.

Top 10 investor economies by FDI stock, 2015 and 2019 (Billions of dollars)



Outflows: top 5 home economies

(Millions of dollars and 2020 growth)

Timor-Leste	\$694	..
Trinidad and Tobago	\$172	+51.0%
Bahamas	\$157	+5.6%
Mauritius	\$26	-54.5%
Fiji	\$14	-137.9%

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 contracted sharply
- Pre-existing vulnerabilities magnified by the pandemic
- Prospects for FDI recovery are modest

Figure B. | FDI inflows, 2002–2020 (Billions of dollars and per cent)

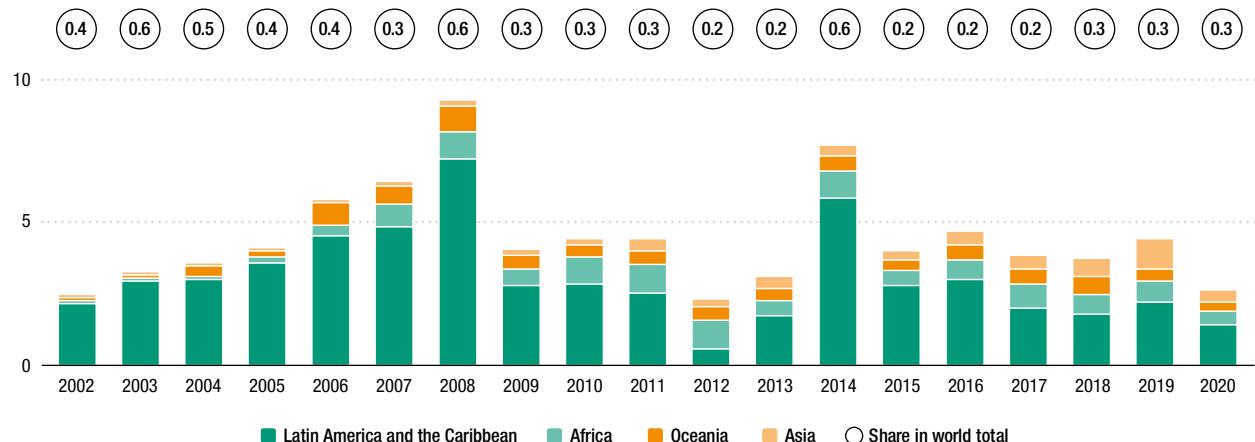


Table A. Net cross-border M&A sales, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	750	15	14	10
Primary	-650	4	-	3
Manufacturing	14	2	6	2
Services	1 385	9	8	5

Top industries by value

Finance and insurance	1 489	6	5	3
Extractive industries	-650	4	-	3
Information and communication	-104	2	-1	1
Pharmaceuticals	..	2	..	1
Chemicals	-	-	1	1
Trade	..	-	..	1

Table B. Announced greenfield projects, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	2 061	690	44	20
Primary	100	5	2	1
Manufacturing	59	44	6	4
Services	1 903	641	36	15

Top industries by value

Energy	185	330	2	2
Information and communication	162	108	2	2
Hospitality	1 202	86	8	2
Transportation and storage	..	55	..	2
Professional services	49	50	3	5
Chemicals	1	21	1	1

Table C. Announced international project finance deals, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Total	1 164	350	7	3

Top industries by number

Renewable energy	635	102	3	1
Telecommunication	..	213	..	1
WASH	..	35	..	1
Transport infrastructure	278	..	2	..
Mining	180	..	1	..

Table D. SDG sectors: greenfield and project finance, selected trends, 2019–2020

Sector/industry	Value (Millions of dollars)		Number	
	2019	2020	2019	2020
Infrastructure	278	213	2	1
Renewable energy	635	102	3	1
WASH
Food and agriculture	100	5	2	1
Health	52	-	5	-
Education

In 2020, FDI in the small island developing States (SIDS) was down by 40 per cent, a decline exceeding the world average. The scale of the contraction, which affected all SIDS regions without exception, highlights the multiple problems that these countries are facing during the COVID-19 pandemic, including the collapse of international tourism and the relocation of productive activities to places deemed to be safer, more resilient and better linked with GVCs, as well as the contraction of demand for mining resources. Extreme climate events such as hurricanes and tropical storms, whose frequency is likely to increase with climate change, add to the structural fragility of SIDS. In 2020, SIDS attracted only 0.4 per cent of FDI flows directed to developing economies (and 0.3 per cent of global flows). FDI flows are expected to remain stagnant in the short to medium term.

Inflows

In 2020, under the strains of the pandemic, FDI inflows to the SIDS⁵¹ fell by 40 per cent, to \$2.6 billion. This drop eliminated the gains recorded in 2019, which followed three consecutive years of decline. Flows in 2020 stood at levels last seen in 2012. The downturn affected practically all countries and regions of the group. Flows increased in seven countries only: the Bahamas, Barbados, Comoros, Grenada, the Marshall Islands, Palau, Samoa and São Tomé and Príncipe. Reflecting differences in levels of development and factor endowments, a handful of SIDS continued to attract the bulk of inflows. The top five host economies (the Bahamas, Jamaica, Maldives, Barbados and Mauritius) accounted for four fifths of the total FDI inflows to the group.

Inflows to the 10 Caribbean SIDS dropped 36 per cent to \$1.4 billion. These economies continued to account for more than half the inflows to SIDS. FDI suffered both in tourism, where only a handful of projects survived the collapse of international travel, and in natural resources. In *the Bahamas*, inflows grew by 47 per cent to \$897 million, despite the contraction of the domestic economy and tourism. Reconstruction works following the ravages of Hurricane Dorian in 2019 and investment in ICT services continued in 2020. In *Jamaica*, inflows were down by 45 per cent to \$366 million. The Government continued to promote a big agribusiness project involving foreign investors and also strove to convince investors in business process outsourcing to keep their operations in the country. In *Barbados*, inflows increased by 22 per cent to \$262 million despite the pandemic. FDI diversification efforts targeted renewable energy, creative and artistic industries and agro-industries, among others. In *Grenada*, inflows increased by 11 per cent, to \$146 million, despite the general downturn in tourism and related activities. New priorities for investment promotion in response to the pandemic include agribusiness, education, retail and transportation. In the largest oil producer of the SIDS group, *Trinidad and Tobago*, FDI inflows fell from \$184 million to -\$439 million, severely affecting the development of the energy sector. Unlike intracompany loans, equity capital and reinvested earnings were down sharply in the country.

In the two Asian SIDS, FDI decreased but the extent of the decline was different. In *Maldives*, where tourism is the key income generator, FDI inflows plummeted by 64 per cent, to \$348 million. Resort expansions planned for 2020 and 2021 were held off, which in turn prompted ancillary firms to push back on their investment plans as well. Those developments, coupled with a sharp fall in GDP and softening of domestic demand, dampened prospects for all private investments, including FDI. In *Timor-Leste*, inflows decreased by 3 per cent only, to \$72 million. The bulk of these inflows targeted the oil and gas sector, in which a new bidding round for production-sharing contracts was opened in October 2019. The original deadline for offers was set in October 2020 but was postponed by one year because of the pandemic.

In the five African SIDS, inflows declined by 34 per cent to \$497 million.

In the largest recipient, *Mauritius*, inflows dropped by almost half, to \$246 million. Investment in real estate, which accounts for the bulk of inflows, suffered as a consequence of the pandemic. The drop was particularly visible in real estate investment from South Africa. In *Seychelles*, the decline was more limited (-15 per cent, to \$122 million), but tourism also suffered from a drop in investment values and the freezing of projects, which affected all other activities related to hospitality. In *Cabo Verde*, where inflows traditionally originate in Western European countries and also concentrate in tourism, they contracted by 31 per cent, to \$73 million. Delays in investment projects were observed not only in tourism, but also in transportation and ICT. In *Comoros* and in *São Tomé and Príncipe*, inflows increased but remained very small. Both economies took effective measures to contain the pandemic, though they could not avoid the contraction of tourism-related activities. FDI diversification potential exists in fishing-related activities, infrastructure development, business services and, in the case of cocoa exporter *São Tomé and Príncipe*, in additional agribusiness activities such as those for coffee, pepper and vanilla production, processing and packaging.

In the 11 SIDS⁵² in Oceania, inflows decreased by 27 per cent to \$308 million.

This drop was mostly caused by the pandemic, but also by Severe Tropical Cyclone Harold, which resulted in widespread destruction in Fiji, the Solomon Islands, Tonga and Vanuatu in April 2020. In *Fiji*, the region's main recipient, FDI was down by 25 per cent to \$241 million, as the GDP contracted by close to 22 per cent on the back of low tourism activities and the knock-on effects on the rest of the economy. Investment projects were halted and delayed, given the uncertainty surrounding both the economic outlook and the resumption of global travel. The contraction of Fiji's economy was also related to the country's limited fiscal space for government-funded capital projects to counter the effects of the pandemic. In *Vanuatu*, which graduated from LDC status in 2020 during the pandemic, inflows declined by 16 per cent to \$30 million. The pandemic and the tropical cyclone prompted the postponement or cancellation of many investment projects.

MNEs from the United States remain the largest investors in SIDS. In 2019, the FDI outward stock of the United States in the group reached \$82 billion, up from \$55 billion four years earlier. It was followed by Canada, with \$62 billion (up from \$58 billion) and Brazil, with \$45 billion (up from \$27 billion). FDI sources are largely related to geographical considerations, with four developing countries near SIDS (India, Singapore, South Africa and Thailand) being main source countries too. Specific sectors also play a critical role (Canadian firms, for example, are often involved in mining projects).

Greenfield project announcements dried up in the majority of SIDS in 2020. The number of projects announced dropped by 55 per cent to 20, the lowest figure in 14 years, with value declining by two thirds to \$690 million (table B), the lowest amount ever recorded. The majority of SIDS did not report any new greenfield project in 2020. The number of countries attracting at least one project declined from 13 to 9. The hardest-hit region was the Caribbean, where the aggregate value of announced greenfield projects declined by 89 per cent to a historic low of \$140 million. Greenfield announcements were more resilient in African SIDS, mostly thanks to multiple large projects announced in *Seychelles* (table II.10).

Besides declining in number and value, greenfield announcements also shifted away from industries that Governments wish to promote so as to orient economies towards more sustainable and self-sufficient development. In agriculture, forestry and fishing, key activities bolstering self-sufficiency, transactions dropped sharply. As the pandemic halted all tourism-related activities, greenfield project announcements declined by 93 per cent in hospitality, traditionally the main source of income in these economies and the largest activity for greenfield projects in 2019. Only two hotel projects (one each in *Grenada*

Table II.10. SIDS: 10 largest greenfield projects announced in 2020

Host economy	Industry	Parent company	Home economy	Estimated capital expenditure (Millions of dollars)
Seychelles	Energy	Total	France	166
Seychelles	Energy	Qair	France	165
Maldives	Information and communication	Ooredoo (Qatar Telecom)	Qatar	102
Grenada	Hospitality	Range Holdings	United Arab Emirates	84
Mauritius	Transport and storage	Hapag-Lloyd	Germany	44
Seychelles	Professional services	Appleby	Bermuda	22
Mauritius	Professional services	Bishop Design	United Arab Emirates	22
Jamaica	Chemicals	Blanco Group	United States	21
Trinidad and Tobago	Transport and storage	Blue Water Shipping	Denmark	11
Jamaica	Other manufacturing	Cimpress	Ireland	10

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

and Maldives) were announced in 2020, for a combined value of \$86 million. The aggregate value of projects in renewable energy, transportation and chemical production, in contrast, registered a modest increase, even though this was not enough to offset the decline in other sectors. In energy, two large solar energy projects were announced in Seychelles for a combined value of \$330 million. In transportation, Hapag-Lloyd of Germany announced an investment in Mauritius, and in chemicals, Blanco Group of United States initiated one project in Jamaica. In information and communications, where many other developing economies recorded FDI gains in 2020, only two greenfield projects were announced in SIDS (in Maldives and in Mauritius).

The decline was sharper in greenfield projects originated by MNEs from developed economies, especially from the EU (except France, the source of investment in the two renewable energy projects), than in projects from MNEs in developing economies. In the latter group, investment from some West Asian economies rose (due to the telecommunication project in Maldives, with investment from Qatar), although MNEs from Latin America and the Caribbean ceased investing in the SIDS in 2020.

The number of cross-border project finance deals more than halved to only three. The combined value of projects declined by 70 per cent, from over \$1 billion to \$350 million (table C). All three deals were linked to the Belt and Road Initiative. In Fiji, Hydrofiji (Australia) and China Gezhouba Group signed a contract to develop a 32 MW hydroelectric power plant under a build-own-operate scheme for \$102 billion. In Maldives, a consortium of Huawei Marine Networks of China and other Asian MNEs signed a contract to develop an undersea cable between Maldives and Sri Lanka under a build-own-operate scheme for \$213 million. In Jamaica, China Harbour Engineering was expected to develop a water storage project under a design-build-finance-operate scheme worth \$35 million. In domestic project finance deals, whose number increased from 10 in 2019 to 12 in 2020, the bulk of deals was announced in the framework of the Belt and Road Initiative. During the pandemic, the importance of the project finance deals linked to the initiative grew from 41 per cent of all (domestic and international) project finance deals to 80 per cent. In value, these deals amounted to \$1.4 billion (accounting for over 80 per cent of the total in 2020), an increase of 54 per cent from 2019.

All indicators suggest a downward trend in investment commitments in SDG-related sectors. In infrastructure, the decline in value was limited to 23 per cent in 2020 (to \$213 million), owing to the undersea cable deal in Maldives. Foreign investors made no

new investment commitments in energy and transport infrastructure. In renewable energy, while other groups of developing economies showed some level of resilience in investment activity, in SIDS both the number and the value of cross-border investment deals stumbled (table D). In food and agriculture, too, SIDS attracted only one project. No new investment plans were announced in health or education. In WASH, although foreign investors did not make any greenfield investment announcement, SIDS in the Caribbean attracted one cross-border project finance deal of \$35 million.

Prospects

Unless pre-existing vulnerabilities are tackled quickly and efficiently, the prospects for short- to medium-term recovery of FDI inflows remain modest.

Those vulnerabilities include the concentration of FDI in a handful of activities (such as tourism and natural resources, both hard hit by the pandemic) and poor connectivity with the world economy.

Past crises suggest that in SIDS both economic activities in general and FDI in particular are slow to overcome shocks. After the global financial crisis hit these countries in 2009, FDI inflows did not pick up until 2014 and still remained below pre-crisis levels, and GDP growth rates remained below the world average until 2013. During the pandemic, the GDP of the group as a whole fell by almost 10 per cent, with half of the 28 SIDS experiencing double-digit contractions. The deepest were registered in Maldives (-32 per cent), followed by Fiji, Saint Lucia and Saint Kitts and Nevis (all 19 per cent). GDP is not forecast to recover to its 2019 level until 2023 at the earliest.

The collapse of greenfield project announcements in key industries, including tourism and agriculture, forestry and fishing, are indicative of the challenges SIDS face in attracting FDI over the coming years. In contrast, activities such as renewable energy and transportation were relatively less affected and thus can be key priorities for future investment promotion. Project finance, which is practically non-existent in the majority of SIDS, could also be leveraged to promote infrastructure development.

Scaling up transportation through both greenfield projects and project finance deals will be essential to ensure a sustainable recovery from the pandemic.

Given their geographical locations, production in SIDS is highly dependent on transportation links, particularly international maritime transport.⁵³ Maritime transport tends to be proportionately more expensive, especially for SIDS located in the Pacific Ocean. Indicators of connectivity in terms of availability and costs of services show a competitive disadvantage for SIDS but also a slow improvement, with the exception of the Bahamas and Jamaica.

Despite severe budgetary limitations, SIDS Governments adopted measures to mitigate the economic impact of the pandemic, which have indirectly affected FDI. In relatively higher-income Mauritius, an act providing for an additional investment allowance to companies affected during the early months was adopted in August 2020. Also in August, Cabo Verde adopted incentives and credits⁵⁴ to encourage job creation, including both corporate income tax and personal income tax credits, as well as a state allowance of up to 50 per cent of the salary received for some employees and a 30 per cent deduction of selected expenses for corporate entities and other businesses affected by the pandemic. In Jamaica, the Government's economic policy response included a \$31 billion stimulus consisting of \$15 billion in tax cuts and \$16 billion in spending.

Some SIDS have also been upgrading their FDI regulatory environment to encourage a more sustainable and resilient economic recovery. In Fiji, the Government has tabled in Parliament a proposal to streamline the number of investment processes and to

eliminate the difference between domestic and foreign investors, to develop new capacity in green growth and green technology for sustainable development. In Barbados, the legal and regulatory framework for PPPs was revised to facilitate more project finance in infrastructure development. In Jamaica, the recovery strategy was based on the principles of building with resilience and of sustainable development. The strategy also aims to ensure that the production of goods and services has a larger domestic value-added component, deepening the Jamaican segments of supply chains and strengthening linkages between the domestic economy and production with foreign investors in various sectors including tourism, manufacturing and construction. The Government also adopted or reinforced sectoral and cross-sectoral investment policies and strategies such as the National Sourcing Policy, the Global Services Sector Project, the Global Digital Services Strategy and the Five-Year Agribusiness Strategy. These policies and strategies facilitate both adaptation to changes and derivation of more benefits from FDI.

To promote investment, Barbados recently announced that efforts would focus on the renewable energy industry, the creative and artistic industries, and agro-industries, in addition to a restructured, more resilient tourism industry. In Jamaica, the investment promotion agency renewed its focus on eight priority areas, which include sectoral preferences (agribusiness, the digital economy), improvements in services and strategies, partnerships with the Jamaica Manufacturers and Exporters Association and the Scientific Research Council to develop new products, and more collaboration with Caribbean neighbours.

Both attracting FDI and deriving benefits from inflows in the SIDS will remain a challenge in the short and medium terms, despite government efforts to counter the negative impact of the pandemic. The policies and programmes implemented show that Governments wish to follow “build back better” strategies, changing sectoral priorities and methods of investment promotion to reduce their economic fragility and adopting production methods that support more sustainable development. In order to attain these goals, however, their efforts require the support of the international community to access necessary resources.

NOTES

- ¹ UNCTAD, *Investment Policy Monitor*, <https://investmentpolicy.unctad.org>.
- ² Foreign Investment Promotion Agency, Tunisia, “Foreign investment performance in 2020”, https://www.investintunisia.tn/En/foreign-investment-performance-in-2020_50_201_D459.
- ³ World Bank, “Commodities Price Data (The Pink Sheet)”, May 2021.
- ⁴ IMF, “Regional Economic Outlook for Sub-Saharan Africa”, April 2021.
- ⁵ FDI stock in Hong Kong, China originating from China was \$523 billion in 2019, accounting for 28 per cent of total FDI stock in the economy (Hong Kong Census and Statistics Department, 11 December 2020, <https://www.censtatd.gov.hk>).
- ⁶ The National Development and Reform Commission and the Ministry of Commerce issued Order No. 32 and Order No. 33 on 23 June 2020, respectively “Special Administrative Measures for Foreign Investment Access (Negative List) (2020 Edition)” and “Special Administrative Measures (Negative List) for Foreign Investment Access in Pilot Free Trade Zones (2020 Edition)”, and they came into effect on 23 July 2020. Major industries affected included pharmaceuticals, financial services, manufacturing, agriculture and radioactive mineral smelting (UNCTAD IPM, “China: Releases updated versions of its two negative lists”, 23 July 2020 (<https://investmentpolicy.unctad.org/investment-policy-monitor/measures/3546/china-releases-updated-versions-of-its-two-negative-lists>)).
- ⁷ This included the acquisition by KB Financial Group (Republic of Korea) of Prudential Life (United States) for \$1.9 billion and the acquisition by SKCFT Holdings (Republic of Korea) of KCF Technologies, a manufacturer of semiconductors, from Kohlberg Kravis Roberts & Co. (United States) for \$1 billion.
- ⁸ UNCTAD, *Investment Policy Monitor*, “United Arab Emirates: Amending Commercial Companies Law”, 23 November 2020, <https://investmentpolicy.unctad.org>.
- ⁹ Investment Office, Presidency of the Republic of Turkey, Newsletter Issue 85, March 2021, <https://www.invest.gov.tr/en/news/newsletters/lists/investnewsletter/investment-office-mar-2021-newsletter.pdf>.
- ¹⁰ The three largest projects were La Gan (offshore wind projects), Loc Ninh and Tay Ninh (solar projects).
- ¹¹ Some of these investments from Singapore could involve “conduit investment” (see chapter I).
- ¹² Ministry of Commerce, China, “FDI in non-financial sector”, 16 April 2021, <http://english.mofcom.gov.cn>.
- ¹³ Ministry of Trade, Industry and Energy, Republic of Korea, “FDI pledged to Korea amount to \$4.7 billion in Q1”, 5 April 2021, http://english.motie.go.kr/en/pc/pressreleases/bbs/bbsView.do?bbs_cd_n=2&bbs_seq_n=840.
- ¹⁴ See Cushman and Wakefield (2019).
- ¹⁵ UNCTAD, *Investment Trends Monitor* No. 37, Special edition, “RCEP Agreement a potential boost for investment in sustainable post-COVID recovery”, November 2020, https://unctad.org/system/files/official-document/diaeiainf2020d5_en_0.pdf.
- ¹⁶ Bangladesh Garment Manufacturers and Export Association, *The Apparel Story*, January–February 2021, <https://www.bgmea.com.bd>.
- ¹⁷ Sri Lanka Apparel Export Association, “Export performance”, February 2021, <https://srilanka-apparel.com/export-performance>.
- ¹⁸ UN ECLAC (2021), “Financing for development in the era of COVID-19 and beyond”.
- ¹⁹ “Chile tops renewable energy projects in Latin America”, *FDI Intelligence*, 16 March 2021 (<https://www.fdiintelligence.com/article/79568>).
- ²⁰ Banco Central de Reserva del Perú (2020), Reporte de Inflación Diciembre 2020.
- ²¹ Fitch rating action commentary, April 2020.
- ²² UNCTAD (2021), *Investment Policy Monitor* no. 24.
- ²³ See Peter Appleby, “Leadership, Digital-Positivity Fire FDI Momentum in Colombia” Nearshore Americas, February 2020.
- ²⁴ IMF, World Economic Outlook Update, April 2021.
- ²⁵ KPMG, Newsletter: M&A – Argentina, Q4 2020, January 2021.

- ²⁶ UNCTAD (2021), *Investment Policy Monitor* No. 24.
- ²⁷ See “Mexican factories boost production of medical supplies for U.S. hospitals while country struggles with its own coronavirus outbreak”, Washington Post, 3 April 2020.
- ²⁸ *Financial Times*, “Austerity vs populism tensions overhang LatAm debt markets”, 26 October 2020 (<https://www.ft.com/content/72879627-c9e1-435e-93e9-f43d42b7360b>).
- ²⁹ See CentralAmericaData.com, “Public-private partnerships: progress on the bill”, 27 February 2020 (https://www.centralamericanadata.com/en/article/home/PublicPrivate_Partnerships_Progress_on_the_Bill).
- ³⁰ UNCTAD (2021), *Investment Policy Monitor* no. 24.
- ³¹ Investmentmonitor.ai, “The state of play: FDI in Haiti”, 11 December 2020, <https://investmentmonitor.ai/haiti/state-of-play-fdi-in-haiti>
- ³² U.S: Department of State (2021), 2020 Investment Climate Statements: Trinidad and Tobago, <https://2017-2021.state.gov/reports/2020-investment-climate-statements/trinidad-and-tobago/index.html>.
- ³³ IDB (2019), 2019 Latin American and Caribbean Macroeconomic Report, estimates that the region has a yearly infrastructure investment gap of 2.5 per cent of GDP and that even small improvements in infrastructure efficiency could yield 3 to 4 percentage points in GDP growth rates.
- ³⁴ IMF, World Economic Outlook, April 2021.
- ³⁵ In 2009, during the global financial crisis, the drop was 47 per cent.
- ³⁶ Seven of the 10 largest source countries were from that region in 2019.
- ³⁷ For example, ginseng producer Liwei (China) invested \$335 million in the Khabarovsk Region in 2020.
- ³⁸ For example, construction company YIT continued its activities during the crisis.
- ³⁹ “PJSC Lukoil: Consolidated Financial Statements, 31 December 2020 [in Russian]”, <https://lukoil.ru/FileSystem/9/534854.pdf>.
- ⁴⁰ “The Government of the Russian Federation approved the National Action Plan to ensure the restoration of employment and incomes of the population, economic growth and long-term structural changes in the economy [in Russian]”, *ConsultantPlus*, 19 November 2020, <http://www.consultant.ru/law/hotdocs/65832.html/>.
- ⁴¹ “Programme of economic measures to reduce the negative effects caused by the Covid-19 virus pandemic and support to the economy of Serbia [in Serbian]”, presentation, Ministry of Economy, April 2020, https://privreda.gov.rs/wp-content/uploads/2020/04/Ekonomske-Mere_prezentacija_konacno.pdf.
- ⁴² Negative reinvested earnings indicate that in 2020 the dividends paid out by foreign affiliates were higher than current income recorded or that the foreign affiliates were operating at a loss.
- ⁴³ Invest in France (2021), *Annual Report 2020: Foreign Investment in France*, Paris, <https://investinfrance.fr/the-annual-report-2020-foreign-investment-in-france/>.
- ⁴⁴ Vanuatu successfully graduated from the group in 2020 and is no longer included in the analysis of the LDC group. Data are not available for Yemen.
- ⁴⁵ Sun Plus (United States) and DPA Africa Asset (Mauritius) both announced plans to develop solar power in the country.
- ⁴⁶ For example, in 2020, Woodside Petroleum (Australia) acquired a 40 per cent stake in the SNE Deepwater Oil Field for \$400 million through its Netherlands-based affiliate.
- ⁴⁷ The pipeline company is a joint venture between Total (France), CNOOC (China) and State-owned companies of the two host countries (UNOC (Uganda) and the Tanzania Petroleum Development Corporation).
- ⁴⁸ That openness can also be extended in the future to the RCEP, which, in addition to ASEAN nations, also includes Australia, China, Japan, the Republic of Korea and New Zealand.
- ⁴⁹ Joint sustainable investment projects are built on initiatives such as the ASEAN Green Bond Standards, the ASEAN Social Bond Standards, the ASEAN Sustainability Bond Standards and the ASEAN Catalytic Green Finance Facility.
- ⁵⁰ The country also suffered from 44 days of hostilities between 27 September and 10 November 2020 in the Nagorno-Karabakh conflict. See “Azerbaijan: ICRC response to escalation and COVID-19”, International Committee of the Red Cross, 4 February 2021, <https://www.icrc.org/en/document/azerbaijan-response-escalation-covid-19>.

⁵¹ The group of SIDS consists of 28 countries. Eight (Antigua and Barbuda, the Bahamas, Barbados, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines) are financial centres excluded from the *WIR*'s analysis and statistics, except in this section. Owing to the lack of FDI data, the summary in this section does not include the Federated States of Micronesia and Nauru and covers only the remaining 26 SIDS.

⁵² This summary takes into consideration the inflows of nine economies. No data are available for the Federated States of Micronesia and Nauru.

⁵³ See UNCTAD, *Policy Brief* No. 85, "Small island developing States: Maritime transport in the era of a disruptive pandemic – empower states to fend against disruptions to their maritime transportation systems, their lifeline to the world", May 2021.

⁵⁴ Law No. 100/IX/2020 of 11 August 2020.

CHAPTER III

RECENT POLICY DEVELOPMENTS AND KEY ISSUES



INTRODUCTION

The COVID-19 pandemic evoked a significant investment policy response. In 2020, the number of policy measures introduced that affected foreign investment increased by approximately 42 per cent compared with the number in 2019. The number of measures introducing regulations or restrictions, mainly adopted by developed economies, more than doubled, as several countries adopted or reinforced screening regimes for foreign investment, including in reaction to the pandemic. Conversely, the total number of measures that liberalized, promoted or facilitated investment, most of which were adopted in developing economies, remained relatively stable. Accordingly, the proportion of more restrictive or more regulatory new policy measures was the highest since 2003 (section A).

At the international level, several notable developments related to international investment agreements (IIAs) took place in 2020 and 2021 that continued to rationalize the IIA regime by consolidating bilateral investment policymaking and accelerating regional rulemaking. These developments include the emergence of new megaregional IIAs, as well as continued efforts to reform old IIAs to minimize the risk of investor–State dispute settlement (ISDS) proceedings, especially in light of policy responses taken in the context of the pandemic.

The pandemic also prompted several countries to reassess the policies put in place at both national and international levels to regulate and promote investment in the health sector, and to reconsider what needs to be done for post-pandemic recovery and resilience. As discussed in section C, which focuses on investment in health, in reaction to the pandemic several countries have increased the oversight of health-sector investment and renewed efforts to encourage new investment, including through national policies and international investment commitments. Despite these efforts, the limited productive capacities in many low- and lower-middle-income countries (LLMICs) hamper their ability to host medical industries with adequate portfolios of medicines or vaccines, health infrastructure or services. The action plan for building productive capacities in health proposed at the end of this chapter presents 10 main action areas to address 5 major challenges facing investment in health and to support the financing of SDGs discussed in chapter V.

A. NATIONAL INVESTMENT POLICIES

1. Overall trends

The number of investment policy measures adopted in 2020 (152) increased by more than 40 per cent compared with 2019. The ratio of restrictive or regulatory measures over measures aimed at liberalization or facilitation of investment reached 41 per cent, the highest on record.

In 2020, 67 economies introduced an aggregate 152 policy measures affecting foreign investment – an increase of approximately 42 per cent compared with 2019. The number of measures introducing regulations or restrictions, mainly adopted by developed economies, more than doubled to 50, as several countries adopted or reinforced screening regimes for foreign investment, including in reaction to the COVID-19 pandemic. Conversely, the total number of measures that liberalized, promoted or facilitated investment, most of which were adopted in developing economies, remained relatively stable (72). The remaining 30 measures were of a neutral or indeterminate nature (table III.1). Accordingly, the proportion of more restrictive or more regulatory new policy measures was the highest since 2003 (figure III.1).

As forecast in *WIR 2020*, the trend towards more regulatory or restrictive policy measures accelerated in the wake of the pandemic. These measures amounted to 41 percent of all the new investment policy measures reported for 2020 (not considering measures of neutral or indeterminate nature) – compared with only 24 per cent in 2019 and 28 per cent in 2009, during the global financial crisis. Although developed economies adopted the vast majority of these measures, several developing countries and emerging economies also began to strengthen their FDI review mechanisms. This surge in regulatory or restrictive investment policy measures is not only a response to an extraordinary crisis but also a continuation of a policy trend in the era since the global financial crisis.

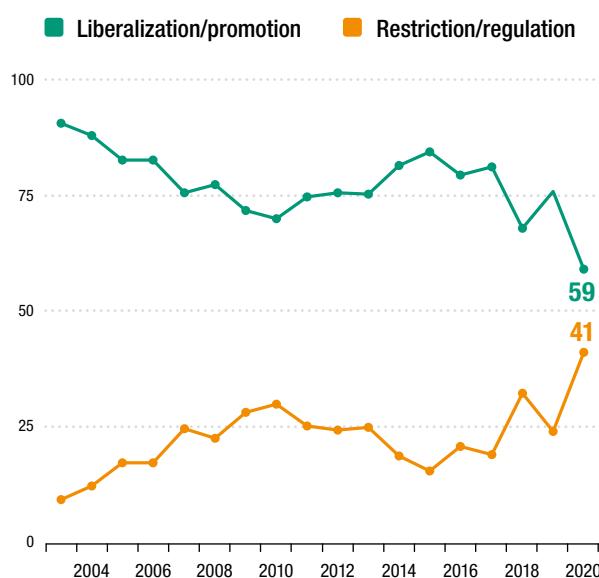
Table III.1. Changes in national investment policies, 2005–2020 (Number of measures)

Item	2003–2007 (pre-crisis average)	2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020												
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of countries that introduced changes	67	40	46	54	51	57	60	41	49	59	65	55	54	67
Number of regulatory changes	128	68	89	116	86	92	87	74	100	125	144	112	107	152
Liberalization/promotion	107	51	61	77	62	65	63	52	75	84	98	65	66	72
Restriction/regulation	20	15	24	33	21	21	21	12	14	22	23	31	21	50
Neutral/Indeterminate ^a	1	2	4	6	3	6	3	10	11	19	23	16	20	30

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.

Figure III.1. | **Changes in national investment policies, 2003–2020** (Per cent)

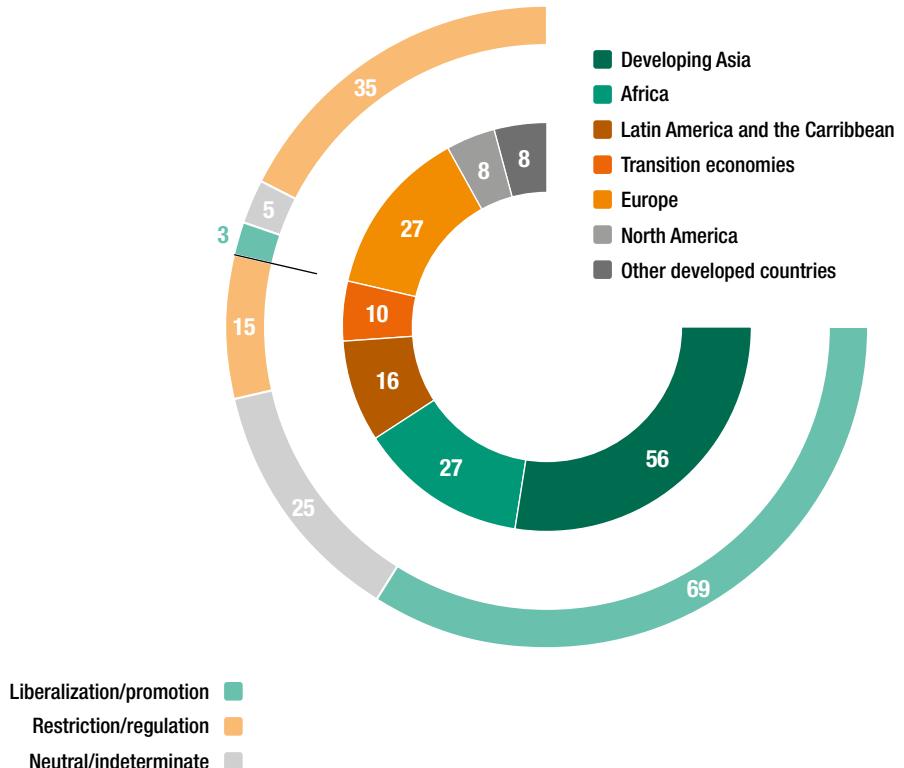


Source: UNCTAD, Investment Policy Hub.

Although policies to liberalize, promote or facilitate foreign investment continued to account for the majority of all measures adopted in 2020 (59 per cent, not considering measures of neutral or indeterminate nature), they reached the lowest share ever recorded. Steps towards liberalization were taken in various industries, including agriculture, manufacturing, mining, defence, financial services, transportation, digital media and pharmaceuticals. In addition, many countries simplified or streamlined administrative procedures, and some others expanded their investment incentive regimes to attract more foreign investment.

In regional terms, developing countries in Asia continued to lead in the adoption of new investment policy measures and became even more active than in 2019, followed by African countries (figure III.2). Developed countries, including those in Europe, North America and other regions, adopted almost three times more investment policy measures than in 2019 (43 measures compared with 15 in 2019).

Figure III.2. | **Regional distribution of national investment policy measures in 2020** (Number of measures)



Source: UNCTAD.

The nature of the new measures, however, differed significantly among regions. Sixty-nine of the measures adopted in developing economies, including in developing Asia, Africa, and Latin America and the Caribbean, and in transition economies were meant to liberalize, promote or facilitate investment (63 per cent), while only 15 imposed new regulations or restrictions (14 per cent). In sharp contrast, the vast majority (35 of 43, or 81 per cent) of the measures introduced in developed countries, including in Europe, North America and other developed regions, introduced new or reinforced existing regulations. All of them relate directly or indirectly to national security concerns about foreign ownership of critical infrastructure, core technologies or other sensitive domestic assets. Often, these measures were motivated by the desire to protect sensitive domestic businesses against foreign takeovers in the midst of the pandemic (section 2).

During the period from January to April 2021, 21 economies introduced 35 policy measures affecting foreign investment. Among these measures, 9 adopted new regulations or restrictions, while 19 liberalized, promoted or facilitated investment. The remaining 7 were of neutral or indeterminate nature.

a. National security concerns and the pandemic underpin rising FDI scrutiny

The trend towards more investment regulations and restrictions related to national security intensified in 2020 and in the first quarter of 2021, including in reaction to the pandemic. Currently concentrated in developed countries and emerging economies, it is likely to have a growing impact on FDI inflows in coming years.

Twenty-five countries and the European Union (EU), nearly all of them developed economies, adopted or reinforced screening regimes for foreign investment, bringing the total number of countries conducting FDI screening for national security to 34. Together, these countries account for 50 per cent of world FDI flows and 69 per cent of the world stock of FDI. More than half of the recent changes were made in reaction to the pandemic.

For example,

- After having temporarily lowered to zero the monetary threshold that triggers screening for all inward foreign investments in March 2020, *Australia* made this change permanent for foreign investment in national security businesses and national security land by reforming the Foreign Acquisitions and Takeovers Act of 1975 in December 2020. In addition, the time frame for screening procedures was extended from 30 days to up to 90 days.
- *Austria* enacted the Investment Control Act to replace the previously applicable FDI regime under the Foreign Trade Act. This considerably expanded the prior approval requirements for FDI.
- *Canada* adopted “enhanced scrutiny” of any FDI in businesses considered critical to the pandemic response, which will be applied until the economy recovers from the pandemic. Furthermore, the Government extended the initial review period under the National Security Review of Investments Regulations for any investment notified between 31 July 2020 and 31 December 2020. The time given to the Minister to take action for investments that are subject to the Investment Canada Act but do not require a filing was also extended. In addition, in January 2021, the thresholds above which foreign investors in Canadian businesses must obtain federal government approval under the Investment Canada Act were lowered. These thresholds, which are adjusted annually on the basis of GDP growth forecasts, have been declining because of the pandemic’s impact on the economy. In March 2021, Canada further intensified

the level of scrutiny on foreign investment in four areas where it sees a heightened risk: (i) sensitive personal data, (ii) specified sensitive technology areas, (iii) critical minerals and (iv) investments by “state-owned or state-influenced” foreign investors.

- *China*’s new Regulation on the Unreliable Entity List establishes a framework of restrictions or penalties on foreign entities deemed to endanger China’s national sovereignty, security or development interests. Furthermore, the country strengthened its national security review of foreign investment by mandating pre-closing filings and authorizing the Government to review foreign investments in various sectors, including military, agriculture, energy, transportation and information technology.
- *Finland* amended its Act on the Screening of Foreign Corporate Acquisitions of 2012 to make the Finnish investment review mechanism compatible with the EU Regulation on FDI screening of March 2019, which introduced common standards for such mechanisms.
- *France* added biotechnology to the list of sectors subject to screening. It further lowered the control threshold that requires prior governmental review of a foreign acquisition from 25 per cent of the shares to 10 per cent. The temporary alteration of the French FDI screening regime (initially supposed to apply until 31 December 2020) has been prolonged until the end of 2021.
- *Germany* amended its Foreign Trade and Payments Ordinance to impose prior governmental authorization on 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. Furthermore, Germany expanded the scope of the foreign acquisition review to a “probable impairment” of public order or security, replacing the previous “actual risk” test, in implementation of the EU Regulation on FDI screening of March 2019. In May 2021, Germany added 16 activities to the list of sectors and activities covered by the FDI review mechanism and lowered the thresholds that trigger investment screening for different types of acquisitions, depending on the sector.
- *Hungary* introduced a temporary screening mechanism applicable to foreign investments from both inside and outside the EU, which is effective until 30 June 2021.
- *India* introduced a requirement that all investment originating from countries that share land borders with India must obtain prior governmental approval, to curb opportunistic takeovers or acquisitions of Indian companies during the pandemic.
- *Italy* expanded the special power regime that requires prior approval for any foreign investment in strategic sectors, by lowering the approval threshold to acquisitions exceeding 10 percent of the share capital and widening the scope of the review to acquisitions originating from the EU. This temporary measure, first adopted in April 2020, was extended until the end of June 2021. Finally, in January 2021, the scope of the investment screening was again expanded to cover, among others, the sectors and activities listed in the EU Regulation on FDI screening of March 2019.
- *Japan* expanded foreign investment screening by adding businesses subject to the review or expanding the scope for those already listed. In addition, it lowered from 10 per cent to 1 per cent the threshold requiring prior government approval for acquisitions in Japanese firms considered relevant to national security (the Ministry of Finance listed 518 such companies in 12 industries). Manufacturing of pharmaceuticals and medical devices was also added to the list of industries that require prior investment approval.
- *Lithuania* reinforced the national security review mechanism to align it with the EU Regulation on FDI screening of March 2019. Among other changes, it expanded the list of businesses and entities considered relevant for national security by including radioactive waste companies, 5G service providers and infrastructure developers,

secure public data transmission networks, public security and emergency services, digital mobile radio communication network operators and selected power generation companies.

- *Malta* established the National Office for Foreign Direct Investment Screening, in charge of implementing the EU Regulation on FDI screening of March 2019.
- *The Netherlands* amended the Act on Undesirable Control in the Telecommunication Sector to introduce a screening mechanism for acquisitions of telecommunication providers. Any investor intending to acquire control of telecommunication providers shall notify the relevant minister eight weeks in advance.
- *New Zealand* introduced a temporary emergency notification requirement in its FDI screening mechanism to be able to review all overseas investments resulting in more than 25 per cent ownership of a New Zealand business, or an increase in an existing holding up to or beyond set thresholds (50, 75 or 100 per cent).
- *Poland* required foreign investors from countries outside the European Economic Area (EEA) to receive prior clearance from the president of the Polish Competition Authority for domestic acquisitions under certain conditions.
- *The Republic of Korea* tightened its review mechanism for foreign investment likely to result in the cross-border transfer of core national technologies.
- *Romania* introduced a legislative amendment allowing authorities to refuse to grant concessions for the exploration, development and exploitation of an oil field to a non-EU entity, on grounds of national security.
- *The Russian Federation* now subjects temporary foreign acquisitions of voting stakes in strategic companies to FDI screening procedures.
- *Slovenia* introduced a temporary screening mechanism to cover foreign investment in specific sectors or activities.
- *Spain* suspended the FDI liberalization regime, as the pandemic is seen to threaten both listed and unlisted Spanish companies, including some in strategic sectors. 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.
- The *United Kingdom* amended the legal grounds on which the Government may intervene in certain mergers under the Enterprise Act 2002. The changes lowered the jurisdictional thresholds for merger controls in three specific sectors: artificial intelligence, cryptographic authentication technology and advanced materials. Earlier, the “need to maintain in the [United Kingdom] the capability to combat and mitigate the effects of public health emergencies” was added as one of the considerations in the screening process. In April 2021, the National Security and Investment Bill received Royal Assent. The new law introduced a separate investment screening regime for businesses aiming to gain control over a company or an asset in sensitive sectors identified by the Government.
- The *United States* promulgated an implementing regulation concerning foreign acquisitions subject to reviews for reasons of national security. Besides making the review process more effective and efficient, the regulation widened the jurisdiction of the Committee on Foreign Investment in the United States. The country also established the Committee for the Assessment of Foreign Participation in the United States Telecommunications Services Sector to assist the Federal Communications Commission in its sectoral screening efforts. Furthermore, the United States now requires publicly listed companies to declare that they are not owned or controlled by any foreign government. A new measure also prohibits citizens from investing

in Chinese firms that the administration considers to be owned or controlled by the Chinese military. In January 2021, the Commerce Secretary was granted broad discretion to block or mitigate transactions with designated foreign adversaries in information and communication technology (ICT) and services that would constitute an unacceptable risk in terms of national security, economic security, public health and safety concerns.

- At the regional level, in March 2020 the *European Commission* issued a Guidance to Member States addressing the possibility of “an increased risk of attempts from non-EU investors to acquire healthcare capacities (for example for the production of medical or protective equipment) or related industries such as research establishments (for instance developing vaccines) via foreign direct investment” 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.
- In January 2021, *Czechia* introduced a new FDI screening mechanism in line with the EU Guidance on FDI screening. According to the new law, any non-EU investor must obtain a permit prior to acquiring effective control of a company in Czechia.
- In March 2021, *Slovakia* established an investment screening mechanism according to which any acquisition of more than 10 per cent of shares or voting rights in an operation of critical infrastructure may be subject to review in light of possible disruption of public order or national security. The governmental power to block acquisitions applies to a list of sectors that includes transport, ICT, energy, mining, postal services, pharmaceuticals and chemicals, metallurgy, health care, water, finance and agriculture.

The increase in the adoption of FDI screening mechanisms is likely to have a growing impact on FDI inflows in coming years. Data on the proportion of foreign investment subject to screening and the degree to which such screening blocks proposed investments are scarce. In the few countries for which data are available, they suggest that the overall project rejection rate is generally low but that the number of projects undergoing screening is increasing steadily, and so is their share in total projects (box III.1). Available data, however, may not necessarily reflect the full impact of the enhanced scrutiny on investment flows. Indeed, the adoption or reinforcement of FDI screening mechanisms may have a chilling effect on investment flows to the sectors potentially subject to screening, as foreign companies may decide to abandon their investment plans before reaching the screening phase or to not undertake business opportunities in those industries subject to scrutiny.

Other recent policy developments which, owing to their nature, may not be captured in the investment policy data presented in this report may also have a deterrent effect on investment flows in the years to come. Examples include the policy statements and initiatives by several country leaders to promote reshoring.

Box III.1.**FDI screening – summary of available data**

A small number of countries have started reporting official data on FDI screening. With no common framework for data reporting, however, the type of information, reporting periods and metrics used vary from country to country. Whereas some countries share the total number of investment projects screened for national security purposes in a given period, for example, others report the value of such transactions. Also, some countries indicate how many projects were rejected, whereas others do not.

A summary of key available data identified by UNCTAD indicates that in the Russian Federation over 17 per cent of screened transactions have been rejected, while in all other countries for which data exist, fewer than 1 per cent of screened transactions have been rejected (box table III.1.1).

For France, the data confirm intensifying scrutiny in recent years, with the proportion of projects that undergo screening more than doubling between 2017 and 2020 to almost a quarter of all projects (box table III.1.2). Lack of data prevents calculation of the rejection rate.

Data on the value of screened and rejected transactions are available only for Australia and New Zealand. In Australia, rejected transactions accounted for 7 per cent of the entire value of screened transactions from April 2018 to March 2019. In New Zealand, no proposed foreign investment was declined in 2020.

Box table III.1.1. | Screening of FDI projects, selected countries

Country	Period	Screened projects (number)	Rejected projects (number)	Rejection rate (%)
Australia	4/2018–3/2019	689	1	0.15
Canada	4/2018–3/2019	962	2	0.21
Germany	2020	163	1	0.61
Italy	2019	83	0	0
New Zealand	2020	25	0	0
Russian Federation	2019	29	5	17.24
United States	2019	231	1	0.43

Box table III.1.2. | France: screening of FDI projects, 2017–2020

Item	2017	2018	2019	2020
Total FDI projects (number)	1 298	1 323	1 469	1 215
Screened FDI projects (number)	137	184	216	275
Screening rate (%)	11	14	15	23

Source: UNCTAD, on the basis of available information:

Australia: FIRB 2018–19 Annual Report, <https://firb.gov.au/sites/firb.gov.au/files/2020-05/FIRB-AR-2018-19.pdf>.

Canada: Investment Canada Act, Annual Report 2018–19, https://www.ic.gc.ca/eic/site/ica-lic.nsf/eng/h_lk81126.html.

France: Le contrôle des IEF en chiffres, <https://www.tresor.economie.gouv.fr/services-aux-entreprises/investissements-etrangers-en-france>.

Germany: Data provided by the Federal Ministry for Economic Affairs and Energy.

Italy: Relazione concernente l'attività svolta sulla base dei poteri speciali sugli assetti societari nei settori della difesa e della sicurezza nazionale, nonché per le attività di rilevanza strategica nei settori dell'energia, dei trasporti e delle comunicazioni, relativa all'anno 2019, <http://www.senato.it/service/PDF/PDFServer/BGT/1161802.pdf>.

New Zealand: Data provided directly by the Overseas Investment Office.

Russian Federation: СФОРМИРОВАН НОВЫЙ СОСТАВ ПРАВИТЕЛЬСТВЕННОЙ КОММЕССИИ ПО ИНОСТРАННЫМ ИНВЕСТИЦИЯМ, <https://fas.gov.ru/news/29559>.

United States: Information Regarding Notices and Presidential Decisions for Covered Transactions 2008–2019, <https://home.treasury.gov/system/files/206/CFIUS-Summary-Data-2008-2019.pdf>.

b. Several investment regulations or restrictions unrelated to the pandemic were adopted

Other types of investment regulations or restrictions were introduced in several countries, mostly developing countries, and many focused on increasing local content.

For example:

- *Angola* extended the scope of local content regulations to include all companies providing goods and services to the oil sector.
- *Indonesia* introduced new requirements for e-commerce businesses to support government programmes by prioritizing locally produced goods and services and providing opportunities to promote them online. In December 2020, Indonesia introduced new local ownership requirements in the non-bank payment services sector.
- *Kenya* introduced local participation requirements in various industries, including insurance, telecommunication and ICT services.
- *Namibia* abolished some tax incentives granted to manufacturers, export processing zone companies and management companies, in view of the planned introduction of special economic zones. In April 2021, Namibia required all applications for mining licences to reserve a 15 per cent stake for local owners.
- *Oman* published a list of activities that are prohibited for foreign investors, in order to promote local products and domestic entrepreneurship.
- In January 2021, *Nepal* introduced new requirements for foreign investment. Foreign investors are now supposed to bring in 70 per cent of their proposed investment before beginning operations and the remaining 30 per cent in the following two years. They are also required to transfer the capital they have pledged within a year of their project being approved.

c. Developing countries and transition economies continue to embrace policies to promote or facilitate investment

The drastic decrease in global FDI flows caused by the COVID-19 pandemic triggered a rise in the number of promotion and facilitation measures in numerous developing countries in 2020. At least 27 countries introduced such new policy measures.

(i) New investment promotion measures

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

- *China* adopted detailed implementing regulations for the Foreign Investment Law enacted in 2019. Among other things, the regulations emphasize the intention to provide equal treatment for domestic and foreign enterprises. China also published a set of trial measures to promote foreign investment in the Yangtze River Delta area. Furthermore, China expanded by 10 per cent the list of industries in which foreign investment is encouraged.
- *North Macedonia* adopted the Law on Strategic Investment to create more favourable conditions for selected investments in the following sectors: energy, transport, telecommunication, tourism, manufacturing, agriculture and food, forestry and water economy, health, industrial and technological parks, wastewater and waste management, sport, science and education.
- *Pakistan* now allows companies to remit disinvestment proceeds to their foreign shareholders without prior approval from the State Bank.

- The *Russian Federation* introduced 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.
- *Sri Lanka* established a pharmaceuticals manufacturing zone on the southern coast of Hambantota to attract global pharmaceutical companies.
- *Uzbekistan* introduced a multi-tiered mechanism for ISDS and adopted a law on special economic zones to promote FDI.
- *Viet Nam* now allows certain disputes between foreign investors and the State to be taken to international arbitration.
- In January 2021, *Kazakhstan* introduced reimbursement by the State of up to 20 per cent of the costs of construction and installation works of investment projects, as well as purchase of equipment. It also simplified public procurement procedures with entities having concluded investment agreements.
- In April 2021, *Panama* established the legal basis for creating a new Export and Investment Promotion Agency, which will have autonomous legal personality under public law, with its own assets and independence in the exercise of its functions.

(ii) New investment incentives

At least 18 countries introduced new incentives for investors, most of a fiscal nature. For instance:

- *Angola* adopted a law to support the creation of free trade zones offering incentives and benefits.
- *Azerbaijan* expanded tax incentives for industrial and high-tech parks.
- *Colombia* introduced a special tax regime for investments exceeding a certain tax value.
- *Kuwait* temporarily granted fiscal exemptions to investors that apply for investment licences until 31 December 2020. Furthermore, Kuwait halved all fees for services provided by the Kuwait Direct Investment Promotion Authority until 31 December 2020.
- *Mauritius* provided additional investment allowances for capital expenditure on the acquisition of new plants and machinery for companies affected by the pandemic.
- *Oman* introduced new incentives for foreign investors, including exemption from certain fees and operational requirements for investment projects in the country's less-developed regions.
- *Panama* amended its tax incentive regime to promote investment in the tourism industry. The country also introduced new tax incentives for multinational companies providing manufacturing services.
- The *Republic of the Congo* introduced various tax incentives for non-resident taxpayers carrying out activities in the country without a permanent establishment.
- The *Republic of Korea* revised its Foreign Investment Promotion Act to recognize foreign reinvested earnings as foreign direct investment. It also expanded the list of sectors and technologies that are eligible for investment incentives.
- *Romania* extended its state aid scheme to support investments that promote regional development through job creation until 2028.
- *Rwanda* revised its investment incentive scheme to support key priority sectors and reduce operational costs for firms. New incentives were also introduced to support talent attraction, innovation and economic diversification. In February 2021, Rwanda also revised the Investment Code to introduce new priority sectors and activities and adopt several new tax incentives for philanthropic investors, angel investors or strategic investment projects.

- Saudi Arabia revised its mining law to facilitate investor access to financing and to support exploration and geological survey activities.
- Ukraine began to provide fiscal incentives such as tax exemptions, import duty exemptions, preferential land access and construction of necessary infrastructure for large investment projects.
- Uruguay increased tax benefits granted to eligible investment projects.
- Viet Nam expanded the list of business lines eligible for investment incentives. It also published a detailed list of conditions that apply for businesses to be considered as high-tech enterprises eligible for tax incentives.

(iii) Streamlined administrative procedures for FDI

Several countries streamlined or simplified administrative procedures for inward investment in 2020. For example:

- Angola created a single contact mechanism for investors to obtain all necessary authorizations.
- Australia introduced a licensing regime for foreign financial services providers to Australian wholesale clients. It also established licensing relief for providers of financial fund management services to attract certain types of professional investors.
- Bolivia, Panama and Uzbekistan established new government agencies to attract more investment.
- Cambodia, Cuba, Iraq, and Pakistan launched online platforms to help investors establish companies more efficiently.
- China introduced new mechanisms to strengthen the procedure for handling complaints from foreign-invested enterprises by broadening the scope of possible grievances.
- India amended its FDI policy on civil aviation, permitting non-resident Indian nationals to own up to 100 per cent (up from previously 49 per cent) of Air India under the automatic route.
- Indonesia enacted the Omnibus Law to facilitate doing business by, among other things, simplifying licensing processes, providing incentives, amending Labour Law regulations, relaxing immigration rules and harmonizing various sector-specific laws and regulations.
- Mexico simplified the criteria for foreign companies to conduct commercial activities by expanding the list of countries whose companies do not need to obtain an authorization from the Ministry of Economy. Moreover, Mexican companies with a total asset value below \$990 million and with foreign ownership of less than 49 per cent are no longer required to obtain authorization from the National Foreign Investment Commission in order to invest.
- Uzbekistan created a one-stop shop mechanism to facilitate investment.

d. FDI liberalization

About 15 per cent of the policy measures introduced in 2020 (22 measures) concerned partial or full liberalization of investment in a variety of industries.

FDI liberalization measures concerned a range of industries, including agriculture, manufacturing, mining, defence, financial services, transportation, digital media and the pharmaceutical industry. As in previous years, developing economies in Asia were the most active in liberalizing foreign investment.

- Algeria removed the 49 per cent foreign ownership ceiling so that foreign investors may now own 100 per cent of local companies, except in certain industries.

- *China* amended its national negative list and its negative list for free trade zones, lifting several restrictions on FDI in industries such as financial services, manufacturing, agriculture, radioactive mineral smelting and the pharmaceutical industry. Furthermore, China released the Special Administrative Measures for the Access of Foreign Investment in the Hainan Free Trade Port, enumerating industries and sectors that are restricted or prohibited for foreign investment in Hainan. The list is shorter than the national negative list and the negative list for free trade zones. In March 2021, China abolished the restrictions on foreign shareholding in joint-venture life insurance companies.
- In April 2021, *Costa Rica* authorized vessels under foreign flag to operate in the domestic market for maritime cabotage transportation and related tourism services.
- *Ethiopia* opened up all industries to foreign investment of at least \$200,000 for a single project. It also allowed foreign investment in certain transport services.
- *India* opened investment in the coal mining industry to non-coal companies, which are now allowed to bid for coal mines. The country also liberalized the digital news media industry and the defence sector: foreign ownership is now allowed up to 26 per cent through the government approval route in the former industry and up to 74 per cent under the automatic route in the latter. In March 2021, India increased the FDI ceiling on insurance companies from 49 per cent to up to 74 per cent.
- *Indonesia* opened several sectors to FDI by presidential decree. A new investment list was adopted, which indicates the activities that are open to 100 per cent foreign ownership (245 business lines), those that are subject to specific entry conditions (97) and those that are reserved for local businesses (112). In February 2021, Indonesia allowed foreigners to own strata title right of ownership of apartment units that are built in specific economic zones, free trade and free port zones, industrial zones or other economic zones.
- The *Lao People's Democratic Republic* for the first time permitted foreign investors to own apartments in condominiums and carry out condominium construction.
- The *Philippines* now allows 100 per cent foreign ownership in large-scale geothermal projects.
- After adopting the “Positive List of Activities”, which identified 13 industries eligible for up to 100 per cent foreign ownership, in 2019, the *United Arab Emirates* officially issued a detailed list of 122 economic activities in those industries. The country no longer requires commercial companies to have a major Emirati shareholder or agent, and therefore allows 100 per cent foreign ownership.
- *Viet Nam* for the first time introduced a negative list on market access, affording foreign investors national treatment (NT) except in the sectors included in that list. The country also raised the cap on foreign ownership in domestic airlines.
- In January 2021, *Nepal* amended its negative list to allow foreign investment in agriculture.

2. M&A controls affecting foreign investors

In 2020, at least 15 cross-border merger and acquisition (M&A) deals, valued at over \$50 million each, failed for regulatory or political reasons, including 5 that were withdrawn by the parties while waiting for regulatory approval.

The aggregate value of the 15 M&A deals terminated in 2020 for regulatory or political reasons was roughly \$12.4 billion, down from a corresponding \$87.3 billion in 2019. They involved a variety of industries (e.g. food, energy, health, telecommunication and electricity).

Three deals were formally prohibited by the host country for national security reasons. Four deals in different industries (pharmaceuticals, cement manufacturing and telecommunication) were discontinued because of concerns from competition authorities.

Another three were withdrawn for various regulatory reasons, and five were terminated because of delays in receiving approval from the host-country authorities (table III.2).

Compared with 2019, the number of M&As that were discontinued because of regulatory or political reasons increased (15 in 2020 versus 13 in 2019), but the total value diminished by approximately 86 per cent. This reflects both the smaller number of megadeals in the list of withdrawn deals, as well as the overall reduction in FDI over the course of 2020.

The fact that only three M&As were formally blocked in 2020 for national security concerns contrasts with the accelerating trend towards more regulations on screening foreign investment (section 1). As discussed earlier, one explanation could be that foreign investors have become more hesitant to engage in transactions that might raise national security concerns in host countries. Another reason could be that host-country authorities express their concerns and become engaged early in the negotiation phase of M&A deals, thereby sometimes stopping the transaction before the national security test. For example, the M&A deal between Carrefour and Couche-Tard was aborted during early negotiations after the Minister of Economy stated that he was not in favour in the name of French food security.¹ The acquisition of Iveco by China FAW Group was also terminated during the negotiation stage after the Italian Government signalled that it would oppose the deal.² Another M&A deal in which a Chinese company planned to acquire an Italian semiconductor company was blocked by the Italian Government.³ Finally, the investment screening regulations newly adopted in 2020 may not have been applicable to the M&A deals withdrawn in the same year.

Table III.2.

Foreign acquisitions withdrawn for regulatory or political reasons in 2020
(Illustrative list)

For national security reasons

China Mengniu Dairy Co Ltd–Lion Dairy & Drinks Pty Ltd^a On 25 August 2020, China Mengniu Dairy (China) walked away from its proposed \$600 million acquisition of Lion Dairy & Drinks (Australia) after the Treasurer of the Australian Government stated that the Chinese investment would be “contrary to the national interest”.

Shandong Gold Mining Co, Ltd–TMAC Resources Inc^b On 27 November 2020, the Canadian Government exercised its authority under the national security review mechanism to block the \$207 million M&A acquisition of Canadian gold producer TMAC Resources Inc by Shandong Gold Mining Co, Ltd, a Chinese State-owned enterprise.

EMST GmbH–IMST GmbH^c On 4 December 2020, the Federal Ministry of Economics and Technology of Germany prohibited the planned acquisition deal of radar specialist IMST GmbH by EMST GmbH, which is indirectly held by Chinese enterprise Addsino, due to the possible threat to public order or security. The total value of the deal is not identifiable from the publicly available sources.

For competition reasons

Prosafe SE–Floatel International Ltd^d On 13 February 2020, Prosafe (Norway) and Floatel (United States) mutually agreed to terminate their proposed \$199 million merger after the competition authorities in the United Kingdom and Norway raised serious concerns.

Ethicon Inc–Takeda Pharmaceutical Co Ltd (TachoSil business)^e On 10 April 2020, Johnson & Johnson (United States) announced that subsidiary Ethicon (United States) and Takeda (Japan) mutually decided to terminate Ethicon’s proposed \$400 million acquisition of Takeda’s TachoSil business after EU antitrust regulators and the United States Federal Trade Commission expressed significant concerns about potential anticompetitive effects.

West China Cement Ltd–SCHWENK Namibia (Pty) Ltd^f On 5 August 2020, the Namibian Competition Commission blocked the \$870 million sale of Schwenk Namibia’s stake in Ohorongo Cement (Namibia) to West China Cement (China) on the grounds that it would substantially reduce competition in the cement market.

América Móvil SAB de CV–Telefónica Moviles El Salvador SA de CV^g On 3 September 2020, América Móvil (Mexico) cancelled its \$315 million plan to acquire Telefónica Moviles (El Salvador) after assessing the regulatory conditions imposed to obtain final authorization from the Competition Superintendent.

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Table III.2.

Foreign acquisitions withdrawn for regulatory or political reasons in 2020

(Illustrative list) (Concluded)

For other regulatory reasons	
Hillhouse Capital Management Pte Ltd and Temasek Fullerton Alpha Pte Ltd–Shanghai Kinetic Medical Co Ltd ^a	On 23 November 2020, Temasek Fullerton Alpha (Singapore) and Hillhouse Capital Management (China) terminated a \$155 million investment plan to acquire Kinetic Medical (China). This decision is suspected of being related to the Chinese Government's inclusion of medical devices in its centralized procurement programme for the first time this year.
Total SA–Anadarko Petroleum Corp ^b	On 18 May 2020, Total (France) announced the cancellation of the previously reported \$4.9 billion deal to acquire Anadarko (Algeria) from Occidental Petroleum Corp. Occidental had informed Total that, as part of an understanding with the Algerian authorities on the transfer of Anadarko's interests to Occidental, Occidental would not be in a position to sell its interests in Anadarko to Total.
Teledyne Technologies Inc–Photonis Technologies SAS ^c	On 28 September 2020, Teledyne (United States) withdrew its proposed \$550 million acquisition of Photonis (France) after France's Minister of the Economy and Finance decided the deal could only proceed if a French sovereign investment fund, Banque Publique d'Investissement, was allowed to hold a minority stake in Photonis.
While waiting for host-country approval	
Aurobindo Pharma USA Inc–Sandoz Inc ^d	On 2 April 2020, Aurobindo (United States; subsidiary of Aurobindo Pharma Ltd (India)) announced it had agreed with Sandoz (United States; subsidiary of Novartis AG (Switzerland)) to terminate its \$1 billion plan to buy Sandoz's United States generic oral solids and dermatology businesses because approval for the transaction from the United States Federal Trade Commission was not obtained within anticipated timelines.
Carlisle Companies Inc–Draka Fileca SAS ^e	On 19 June 2020, Carlisle Companies (United States) announced the termination of the \$81.85 million plan to acquire Draka Fileca (France) because regulatory approval was not received for the transaction prior to the expiration of the parties' agreed time period to satisfy closing conditions.
Millicom International Cellular AS–Telefónica de Costa Rica TC SA ^f	On 2 May 2020, Millicom International Cellular (Luxemburg) withdrew its \$570 million plan to acquire the entire share capital of Telefónica de Costa Rica (Costa Rica) from Telefónica SA (Spain), stating that the pending regulatory approvals for the transaction had not been issued by 1 May 2020.
Shanghai Electric Power Co Ltd–K-Electric Ltd ^g	On 27 June 2020, Shanghai Electric Power (China) withdrew its proposed \$1.7 billion acquisition of a majority stake in K-Electric (Pakistan). The timeline for concluding the deal, which had been pending for almost four years, expired on 26 June 2020, by which date the Securities and Exchange Commission of Pakistan had failed to grant approval for the transaction.
QT Vascular Ltd–Tengri Coal And Energy Pte Ltd ^h	On 22 November 2020, QT Vascular (Singapore) announced that the \$818 million conditional sale and purchase agreement of Tengri Coal (British Virgin Islands) had ceased because the parties failed to obtain the Singapore Exchange's approval within three months from the date of the agreement.

Source: UNCTAD.

- ^a <https://www.afr.com/companies/manufacturing/china-mengniu-takeover-of-lion-dairy-collapses-20200825-p55p0w>.
- ^b <https://www.dwpv.com/en/Insights/Publications/2021/Government-Blocks-Foreign-Acquisition-of-Gold-Miner>.
- ^c <http://mwe.com/insights/radar-specialist-german-government-prohibits-takeover-by-chinese-investor/>.
- ^d <https://www.gov.uk/cma-cases/prosafe-se-floatel-international-limited-merger-inquiry>;
<https://www.wired-gov.net/wg/news.nsf/articles/Offshore+accommodation+merger+abandoned+14022020091500?open>.
- ^e <https://www.reuters.com/article/us-tachosil-m-a-johnson-johnson-abandons-deal-for-takedas-tachosil-surgical-patch-idUSKCN21S1XG>.
- ^f <https://www.globalcement.com/news/item/11180-namibian-competition-commission-blocks-sale-of-ohorongo-cement-to-west-china-cement; https://m.marketscreener.com/quote/stock/WEST-CHINA-CEMENT-LIMITED-6727622/news/West-China-Cement-nnbsp-Namibia-competition-watchdog-blocks-West-China-Cement-s-Schwenk-deal-31060294/>.
- ^g <https://www.reuters.com/article/us-america-movil-telefonica-el-salvador-idUSKBN25U3J>.
- ^h <https://www.yicaglobal.com/news/china-kinetic-medical-plummets-to-near-nine-month-low-as-temasek-hillhouse-pull-out>.
- ⁱ <https://www.ogi.com/general-interest/article/14176155/total-cancels-deal-to-acquire-ghana-assets-from-occidental>.
- ^j https://news.futunn.com/en/post/7429186?report_type=stock&report_id=14631998&seo_redirect=1&level=2&data_ticket=161778864321632.
- ^k <https://www.pharmalive.com/after-failing-to-gain-fc-approval-sandoz-and-aurobindo-call-off-1-billion-deal>.
- ^l <https://www.businesswire.com/news/home/20200619005451/en/Carlisle-Companies-Announces-the-Termination-of-Its-Acquisition-of-Draka-Fileca>.
- ^m <https://nextvnews.com/telefonica-to-sue-millicom-for-not-acquiring-its-operations-in-costa-rica/>;
<https://ml-eu.globenewswire.com/Resource/Download/0ea9769e-ccf7-45c6-8324-685eb4cd5154>.
- ⁿ <https://www.thenews.com.pk/print/678263-china-pulls-out-of-ke-s-buyout-deal>.
- ^o <https://www.businesstimes.com.sg/companies-markets/qt-vascular-scaps-s1b-rto-plan-shares-fall-amid-heavy-volume>.

B. INTERNATIONAL INVESTMENT POLICIES

1. Trends in IIAs: bilateral consolidation and acceleration of regional rulemaking

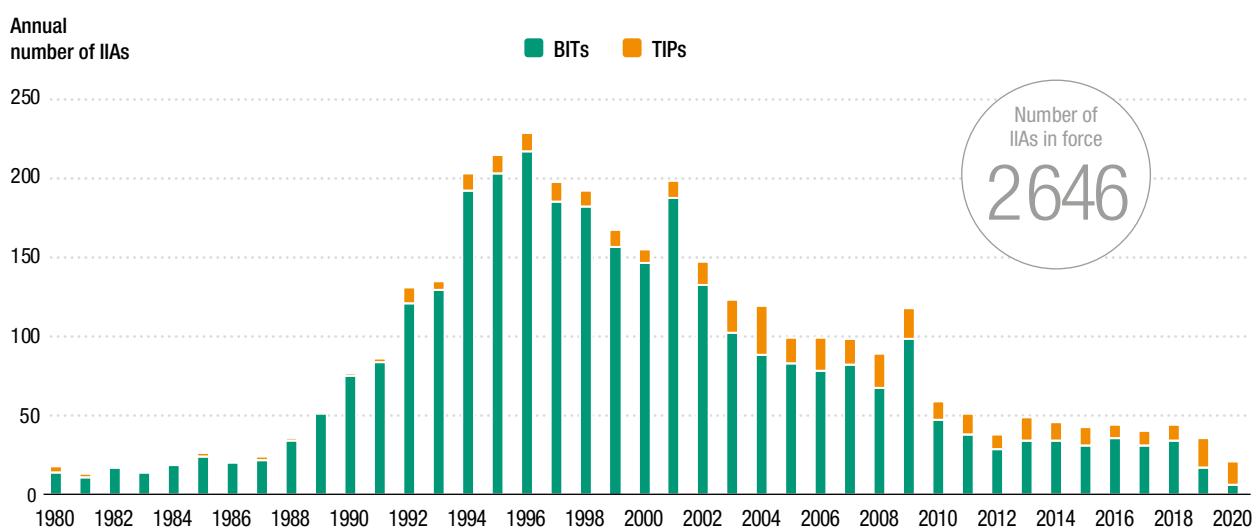
Several notable developments took place in 2020 and 2021 that continued to rationalize the international investment agreement (IIA) regime, by consolidating bilateral investment policymaking and accelerating regional rulemaking. These developments include the entry into force of the EU agreement to terminate all intra-EU bilateral investment treaties (BITs) and the emergence of new megaregional IIAs, as well as other developments that continue to influence international investment rules such as multilateral discussions for the reform of the ISDS system.

a. Developments in the conclusion and termination of IIAs

In 2020, countries concluded 21 IIAs, over half of which were rollover agreements concluded by the United Kingdom. As in 2019, the number of effective treaty terminations in 2020 exceeded that of new IIAs, with 42 terminations.

In 2020, countries concluded at least 21 new IIAs: 6 BITs and 15 treaties with investment provisions (TIPs). Of these 21 IIAs, 12 were rollover agreements concluded by the United Kingdom to maintain existing trade and investment relationships with third countries following its withdrawal from the EU. In addition, at least 18 IIAs that had already been concluded entered into force in 2020, bringing the total to at least 2,646 IIAs in force by the end of the year (figure III.3).

Figure III.3. | Number of IIAs signed, 1980–2020



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 terminations exceeded the number of newly concluded IIAs: at least 42 IIA terminations entered into effect in 2020 (“effective terminations”), of which 10 were unilateral terminations, 7 were replacements (through the entry into force of a newer treaty), 24 IIAs were terminated by mutual consent, and 1 expired. Of the 42 terminations, 20 were the consequence of the entry into force of the agreement to terminate all intra-EU BITs on 29 August 2020 (section c). Moreover, as in 2019, India was particularly active in terminating treaties, with six BITs terminated, followed by Australia with three, and Italy and Poland with two each. By the end of the year, the total number of effective IIA terminations reached at least 393, bringing the IIA universe to 3,360 (2,943 BITs and 417 TIPs).⁴

The 15 TIPs concluded in 2020 for which texts are available can be grouped into three categories.

1. Three agreements with obligations commonly found in BITs, such as substantive standards of investment protection:
 - Canada–United Kingdom Trade Continuity Agreement
 - Regional Comprehensive Economic Partnership (RCEP)⁵
 - Republic of Korea–Indonesia Comprehensive Economic Partnership Agreement (CEPA)
2. Eight agreements with limited investment provisions (e.g. national treatment (NT) and most-favoured-nation (MFN) treatment with regard to commercial presence or the right of establishment of companies) or provisions on the free movement of capital relating to direct investments:
 - EU–United Kingdom Trade and Cooperation Agreement (TCA)
 - United Kingdom–Viet Nam Free Trade Agreement (FTA)
 - Moldova–United Kingdom Strategic Partnership, Trade and Cooperation Agreement
 - Singapore–United Kingdom FTA
 - Egypt–United Kingdom Association Agreement
 - North Macedonia–United Kingdom Partnership, Trade and Cooperation Agreement
 - Japan–United Kingdom Comprehensive Economic Partnership Agreement (CEPA)
 - Ukraine–United Kingdom Political, Free Trade and Strategic Partnership Agreement
3. Four agreements that establish a process for negotiation or an institutional framework to promote and cooperate on investment but do not contain substantive investment protection provisions:
 - Turkey–United Kingdom FTA
 - Fiji–United States Trade and Investment Framework Agreement
 - Kenya–United Kingdom Economic Partnership Agreement
 - Côte d’Ivoire–United Kingdom Stepping Stone Economic Partnership Agreement

b. Developments related to megaregional IIAs

Megaregional IIAs have been proliferating in recent years, with possible significant implications for future international investment rulemaking.

Megaregional agreements are broad economic agreements among a group of countries that together carry significant economic weight and in which investment is only one of several subjects addressed. A review of selected recent megaregional IIAs – the Sustainable Investment Protocol of the African Continental Free Trade Area (AfCFTA); the EU–United Kingdom TCA; the China–EU Comprehensive Agreement on Investment (CAI); the RCEP;

the United States–Mexico–Canada Agreement (USMCA); and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) – reveals variations in the way they approach investment obligations. At the same time, all converge towards including reform-oriented provisions aimed at ensuring a balance between investment protection and the right of States to regulate (table III.3).

They regulate investment protection and liberalization in different ways because of variations in how the parties approach investment provisions. Most importantly, recently concluded megaregional IIAs include many of the IIA reform approaches identified in UNCTAD's Investment Policy Framework for Sustainable Development (UNCTAD, 2015)

Table III.3. Selected recent megaregional IIAs at a glance

Megaregional IIA	IIA reformed provisions	Economic significance			
		Population (Number)	GDP (Trillions of dollars)	Total FDI stock covered (Billions of dollars)	Bilateral investment relationships created
China–EU CAI	<ul style="list-style-type: none"> NT and MFN pre- and post-establishment with “in like situation” comparator MFN exception excluding ISDS Specific section on investment and sustainable development No ISDS 	1.9 billion	30	188	27
EU–UK TCA	<ul style="list-style-type: none"> NT and MFN pre- and post-establishment with “in like circumstances” comparator No FET clause No expropriation clause No ISDS Commitment to enhance the contribution of investment to sustainable development 	513.5 million	18.4	1 684	27
RCEP	<ul style="list-style-type: none"> Refined definition of investment NT and MFN pre- and post-establishment with “in like circumstances” comparator Qualified FET Indirect expropriation defined Transfer-of-funds exceptions Security exception Investment promotion and facilitation provisions No ISDS 	2.3 billion	26.3	2 690	105
USMCA	<ul style="list-style-type: none"> Refined definition of investment NT and MFN pre- and post-establishment with “in like circumstances” comparator Qualified FET Indirect expropriation defined Transfer-of-funds exceptions Reference to environment, health and CSR Limited ISDS scope Tailored ISDS arrangements (only between the United States and Mexico) 	500 million	24.3	2 181	3
CPTPP	<ul style="list-style-type: none"> Refined definition of investment NT and MFN pre- and post-establishment with “in like circumstances” comparator MFN exception excluding ISDS Qualified FET Indirect expropriation defined Transfer of funds exceptions Reference to environment, health and CSR Limited ISDS scope Tailored ISDS arrangements 	499 million	10.6	1 230	55

Source: UNCTAD, calculations based on publicly available data.

Note: The AfCFTA Protocol on sustainable investment is not included as negotiations are ongoing and no text has been adopted yet.

and UNCTAD's Reform Package for the International Investment Regime (UNCTAD, 2018), which continue to shape investment policymaking. Regarding ISDS, there is an increasingly cautious approach, with some megaregional IIAs excluding ISDS altogether (the RCEP, the CAI and the EU–United Kingdom TCA)⁶ while others preserve ISDS with certain exceptions or tailored arrangements (the USMCA and the CPTPP).

The trend toward megaregional IIAs is resulting in a smaller number of IIAs but with multiple parties, significantly expanding the investment treaty network as each of them creates multiple bilateral IIA relationships (see table III.3). These megaregionals merit attention because of their sheer size, among other reasons (*WIR14*). The following paragraphs summarize the key developments for these agreements:

Negotiations of the “Sustainable Investment Protocol” under the African Continental Free Trade Area:

Trading under the AfCFTA officially started on 1 January 2021, after being postponed from 1 July 2020 because of the pandemic. The AfCFTA Agreement was signed on 21 March 2018 and entered into force on 30 May 2019; as of February 2021, 36 countries had ratified it. Negotiations of the Protocol on Sustainable Investment started on 31 March 2021. The negotiations were initially expected to be completed in December 2020, but the deadline could not be met on account of the pandemic. The new deadline for the conclusion of the negotiations is December 2021.⁷ The Negotiating Principles for the AfCFTA Protocol on Sustainable Investment refer to UNCTAD's work on IIA reform and mention the Investment Policy Framework for Sustainable Development (UNCTAD, 2015) and the IIA Reform Accelerator (UNCTAD, 2020e). The substantive content of the Protocol is likely to be inspired by the Pan-African Investment Code as well as other African and international investment agreements and instruments.⁸ UNCTAD is providing technical assistance and capacity-building support to the African Union in the process leading to the conclusion of the Protocol.

Agreement in principle for the China–EU Comprehensive Agreement on Investment⁹

was reached on 30 December 2020. The agreement contains a section dedicated to investment liberalization, providing for NT and MFN treatment for investors and covered enterprises in like situations with respect to their establishment and operation. Exceptions to the MFN provision exclude the importation of substantive provisions and dispute settlement procedures from other IIAs. The CAI does not include all investment protection standards commonly found in BITs or an investment dispute settlement mechanism. Instead, it provides for a State–State mechanism for avoiding and settling disputes between the parties using a two-step approach consisting of consultations and recourse to an arbitration panel. The parties agree to continue the negotiations with a view to negotiate an agreement on investment protection and investment dispute settlement within two years of the signature of the CAI. The agreement includes a specific section on sustainable development which includes commitments on labour and environmental protection, as well as provisions on a separate and dedicated mechanism to address differences.

EU–United Kingdom Trade and Cooperation Agreement: The EU and the United Kingdom concluded a TCA to govern their future relationship on 30 December 2020. The agreement consists of three main pillars: (i) an FTA covering, among other things, trade in goods and services, investment liberalization, competition, State aid, fisheries, energy and sustainability; (ii) a new partnership on citizens' security establishing a framework for law enforcement and judicial cooperation in criminal and civil law matters; and (iii) an overarching governance framework providing for binding enforcement and dispute settlement.¹⁰ The chapter on investment liberalization includes NT and MFN treatment of investors and covered enterprises with respect to their establishment and operation.

It does not include investment protection provisions such as fair and equitable treatment (FET) or expropriation and does not provide for ISDS. Also of direct relevance to investment regulation, the agreement contains a level playing field and rebalancing mechanism which includes a non-regression clause in the chapters dealing with labour and social standards as well as environment and climate, ensuring that the current levels of protection will continue to be upheld.

Regional Comprehensive Economic Partnership: The RCEP Agreement was signed on 15 November 2020. The negotiations were initiated in 2012, originally including India, which opted out in 2019. The agreement contains a chapter on investment that features reform-oriented provisions such as the inclusion of a refined definition of investment, specifying in a non-exhaustive manner the characteristics that a covered investment should have (such as commitment of capital or other resources, expectation of gain or profit, and the assumption of risk) and the forms that an investment may take. Provisions on investment promotion and facilitation are included, such as simplifying procedures for investment approvals and establishing one-stop investment centres to provide assistance and advisory services. The chapter does not provide for ISDS; the parties are to enter into discussions on ISDS no later than two years after the date of entry into force of the agreement and conclude them within three years of the commencement of the discussions. In addition to specific provisions on investment, RCEP coverage of non-investment issues will also have an impact on international investment. This includes for example the RCEP's rules-of-origin regulations and their impact on regional value chains.

Entry into force of the United States–Mexico–Canada Agreement: On 1 July 2020 the USMCA entered into force following its ratification by the United States on 29 January 2020, Mexico on 19 June 2019 and Canada on 13 March 2020. The USMCA replaces the North American Free Trade Agreement (NAFTA), which was signed in 1992. The agreement features reform-oriented language, including its preamble, which recognizes the States' right to regulate in areas such as health, safety and the environment. It limits the definition of investment to assets with the characteristics of an investment and provides explicit exclusions. The parties reaffirm in the treaty the importance of corporate social responsibility (CSR) guidelines. Among the major changes brought about by the new agreement are the revised ISDS provisions, which limit the application of ISDS exclusively to disputes between the United States and Mexico and narrow the claims that investors can bring under the provision. In addition to investment provisions, other clauses on rules of origin and labour costs may have an impact on Mexico's attractiveness as an investment location for North American manufacturing value chains.

Comprehensive and Progressive Agreement for Trans-Pacific Partnership: The CPTPP, which entered into effect on 30 December 2018, is a treaty concluded between Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Viet Nam. In February 2021, the United Kingdom formally requested the commencement of negotiations on its accession to the CPTPP.¹¹ With respect to investment (chapter 9 of the agreement), the traditional ISDS model remains in force. However, the parties agreed to suspend the application of the provisions relating to "investment agreement" (investor–State contract) and "investment authorization", including for the submission of ISDS claims (i.e. limiting the submission of claims to the breach of a treaty obligation). There is therefore narrower scope for challenging government measures, as claims by private companies in relation to investment contracts and approvals are now excluded. Multiple side letters were signed on a bilateral basis between participating countries, to terminate existing BITs, to exclude the application of ISDS provisions or to provide for tailored ISDS arrangements, among other matters. The agreement also includes specific measures to assist small and medium-sized enterprises in taking full advantage of the opportunities it creates.

c. Other developments related to investment rulemaking

Other notable developments were either a continuation of the trends towards the reform of the international investment regime observed in recent years or directly related to the COVID-19 pandemic.

Modernization of the Energy Charter Treaty: The first three rounds of negotiations on the modernization of the Energy Charter Treaty (ECT) took place on 6–9 July, 8–11 September and 3–6 November 2020, respectively. Pursuant to the agreed list of topics for modernization, the first round of negotiations saw discussions on, among others, the definition of investment and investor, clarification of most constant protection and security, compensation for losses, definition of FET and the right to regulate. The topics addressed in the second round of negotiations included dispute settlement (e.g. frivolous claims, valuation of damages and third-party funding) as well as sustainable development and CSR, and the discussions of the third round centred on pre-investment, regional economic integration organizations and obsolete provisions. In relation to the modernization of ISDS provisions in the ECT, a group of nearly 100 representatives from the European Parliament as well as national parliaments signed and issued a declaration calling on “EU negotiators to ensure that the provisions in the ECT that protect foreign investment in fossil fuels are deleted and thus removed from the ECT” and for “ISDS provisions (...) to be scrapped or fundamentally reformed or limited.”¹² Five rounds of negotiations are scheduled for 2021.¹³

Entry into force of the EU agreement for the termination of intra-EU BITs:

On 29 August 2020, the Agreement for the Termination of Bilateral Investment Treaties between the Member States of the EU entered into force following receipt by the Depositary of the second instrument of ratification. Twelve more countries have since ratified the agreement, and Spain is provisionally applying it.¹⁴ The agreement, which had been signed by 23 EU Member States on 5 May 2020,¹⁵ implements the March 2018 judgment of the Court of Justice of the EU in the Achmea case, which found that investor–State arbitration clauses in intra-EU BITs are incompatible with EU law. Annex A of the agreement contains a list of 124 intra-EU BITs that will be terminated, i.e. removed from the EU legal order, upon entry into force of the agreement for the relevant Member States, and clarifies that their sunset clauses will also be terminated. Annex B lists 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.¹⁶ The agreement does not cover intra-EU proceedings on the basis of Article 26 of the ECT. It indicates that the EU as a group and its Member States will address this matter at a later stage.

Investment Facilitation for Development negotiations at the World Trade Organization:

On 25 September 2020, participants in the structured discussions on investment facilitation for development at the World Trade Organization (WTO) began formal negotiations. The objective of the negotiations is to draft concrete proposals for specific provisions based on an “informal consolidated text”. Within the context of these negotiations, investment facilitation is understood as the creation of a more transparent, efficient and investment-friendly business environment by making it easier for domestic and foreign investors to invest, conduct day-to-day business and expand their existing investments.¹⁷ The objective is to achieve a concrete outcome by the 12th WTO Ministerial Conference scheduled for the week of 29 November 2021, to be held in Geneva, Switzerland.

Western Balkans regionally accepted standards for negotiating IIAs:

On 10 November 2020, six economies of the Western Balkan region, with the support of the Regional Cooperation Council, endorsed the Regionally Accepted Standards for Negotiating International Investment Agreements, which set a common baseline for

the negotiation of future investment agreements involving Albania, Bosnia and Herzegovina, Kosovo (United Nations Administrative Region, Security Council resolution 1244 (1999)),¹⁸ Montenegro, North Macedonia and Serbia. The standards were developed in line with the Regional Investment Reform Agenda, whose goal is to achieve greater alignment of the investment policies in the six economies with EU standards and international best practices, as well as with latest trends in investment policymaking.¹⁹ Some of the key provisions in the standards include qualified MFN treatment only in “like situations” and the exclusion of ISDS procedures in other IIAs from the scope of the MFN obligation; a qualified FET standard with a closed list of actions constituting FET violations; protection against expropriation (direct and indirect), with a carve-out for legitimate public policy measures; transfer of funds with accompanying exceptions; provisions on the protection of the right to regulate; sustainable development-related provisions such as clauses on “not lowering of standards” and CSR; and dispute settlement, with a limited scope for ISDS and improvements to the arbitral process (e.g. transparency, no-U-turn clause and disclosure of third-party funding).

African Union declaration on the risks of investor–State arbitration for COVID-19-related measures:

During the 14th meeting of African Union Ministers for Trade, held on 24 November 2020, the ministers adopted the Declaration on the Risk of Investor–State Dispute Settlement with Respect to COVID-19 Pandemic Related Measures.²⁰ It highlights the “potential for disputes arising between investors and states under investment treaties in relation to the measures taken by African governments to respond to the COVID-19 pandemic, as highlighted by a number of organizations including UNCTAD and the African Development Bank (AfDB)”. It also expresses concern over the high costs associated with ISDS and the need to ensure that public budgets are directed towards responding to the pandemic. On this basis, the declaration, among other things, invites African Union Member States to explore all available options under international law to mitigate the risks of ISDS claims, including through a mutual temporary suspension of ISDS provisions in investment treaties with respect to COVID-19-related measures. It requests Member States to consider renegotiating their investment treaties by integrating provisions better suited to exceptional situations in accordance with new trends at the regional and international levels. It also requests the African Union Commission to provide support to Member States in the ongoing negotiations within different organizations that are working towards the development of legal instruments to address the risks of ISDS for COVID-19-related measures.

UNCITRAL Working Group III on ISDS reform: The United Nations Commission on International Trade Law (UNCITRAL) Working Group III resumed its 38th session in Vienna, Austria on 20–24 January 2020. In this session, the deliberations addressed three possible reform options: a stand-alone review or appellate mechanism, a standing multilateral investment court and selection of arbitrators. The 39th session, on ISDS reform, convened in a hybrid format (in person and virtually) in Vienna on 5–9 October 2020. The Working Group considered reform options for dispute prevention and mitigation as well as other means of alternative dispute resolution; reflective loss and shareholder claims; multiple proceedings, including counterclaims; security for costs and means to address frivolous claims; treaty interpretation by States parties; and a multilateral instrument on ISDS reform. In 2021, the Working Group held its 40th session in Vienna virtually on 8–12 February 2021 and resumed on 4–5 May 2021. The core of the discussions revolved around establishing a workplan for the next five to six years.

The ICSID’s Fourth Working Paper on Rule Amendments: In February 2020, the International Centre for Settlement of Investor Disputes (ICSID) released its latest working paper with proposed amendments to its procedural rules for resolving international

investment disputes, reflecting input received on the previous working paper, published in August 2019. Once in effect, the updated rules will, among other things, reduce the time and costs of ICSID proceedings, expand the range of dispute settlement mechanisms available to parties through new mediation rules and updated conciliation and fact-finding rules, enhance transparency and broaden access to the Additional Facility Arbitration and Conciliation Rules.²¹

2. Trends in ISDS: new cases and outcomes

The total ISDS case count had reached over 1,100 by the end of 2020, with at least 68 new arbitrations initiated in 2020. Most investment arbitrations were brought under IIAs signed in the 1990s or earlier.

a. New cases initiated in 2020

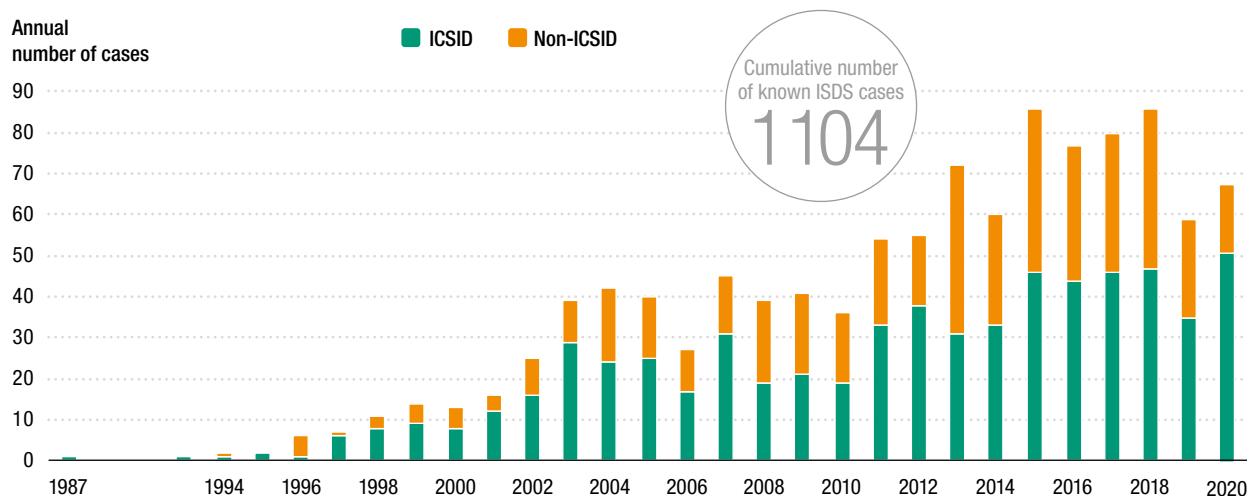
The number of new ISDS cases remained high. In 2020, at least 68 new treaty-based ISDS cases were initiated.

In 2020, investors initiated 68 publicly known ISDS cases pursuant to IIAs (figure III.4). As of 1 January 2021, the total number of publicly known ISDS claims had reached 1,104. As some arbitrations can be kept confidential, the actual number of disputes filed in 2020 and previous years is likely to be higher. To date, 124 countries and one economic grouping are known to have been respondents to one or more ISDS claims.

(i) Respondent States

The new ISDS cases in 2020 were initiated against 43 countries. Peru and Croatia were the most frequent respondents, with six and four known cases respectively. Four economies – Denmark, Norway, Papua New Guinea and Switzerland – faced their first known ISDS claims. As in previous years, the majority of new cases (about 75 per cent) were brought against developing countries and transition economies.

Figure III.4. | Trends in known treaty-based ISDS cases, 1987–2020



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.

(ii) Claimant home States

Developed-country investors brought most – about 70 per cent – of the 68 known cases in 2020. The highest numbers of cases were brought by investors from the United States (10 cases), the Netherlands (7 cases) and the United Kingdom (5 cases).

(iii) Intra-EU disputes

About 15 per cent of the 68 known cases filed in 2020 were intra-EU disputes (nine cases). Five of these nine disputes were brought on the basis of intra-EU BITs; the remaining four cases invoked the ECT. The EU-level developments to foreclose intra-EU disputes based on BITs between EU Member States and the ECT have so far not stopped new ISDS cases from arising.

(iv) Applicable investment treaties

About 65 per cent of investment arbitrations in 2020 were brought under BITs and TIPs signed in the 1990s or earlier. All but two remaining cases were based on treaties signed between 2000 and 2011. The ECT (1994) was the IIA invoked most frequently in 2020, with seven cases, followed by the Arab Investment Agreement (1980) and the Organization of the Islamic Conference (OIC) Investment Agreement (1981) with four cases each. Looking at the trend in the past five years (2016–2020), about 20 per cent of the 370 known ISDS cases initiated in this period have invoked the ECT (41 cases), NAFTA (14 cases) or the OIC Investment Agreement (13 cases).

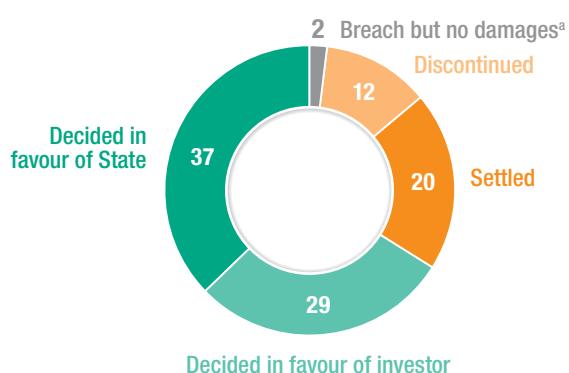
b. ISDS outcomes

(i) Decisions and outcomes in 2020

In 2020, ISDS tribunals rendered at least 52 substantive decisions in investor–State disputes, 31 of which were in the public domain at the time of writing. Eleven of the public decisions principally addressed jurisdictional issues (including preliminary objections), with eight upholding the tribunal's jurisdiction and three declining jurisdiction. The remaining 20 public decisions were rendered on the merits, with 6 holding the State liable for IIA breaches and 14 dismissing all investor claims.

In addition, four publicly known decisions were rendered in annulment proceedings at the ICSID. Ad hoc committees of the ICSID rejected the applications for annulment in three cases; in one case, the award at issue was annulled in its entirety.

Figure III.5. | **Results of concluded cases, 1987–2020 (Per cent)**



(ii) Overall outcomes

By the end of 2020, at least 740 ISDS proceedings had been concluded. The relative share of case outcomes changed only slightly from that in previous years (figure III.5).

Source: UNCTAD, ISDS Navigator.

^a Decided in favour of neither party (liability found but no damages awarded).

3. Taking stock of IIA reform

Reform-oriented clauses continue to significantly permeate IIAs concluded in 2020.

All IIAs concluded in 2020 contain reform-oriented provisions aimed at preserving regulatory space and promoting sustainable investment. In particular, all 9 reviewed IIAs (table III.4) contain at least 8 reform features, one IIA contains 10 reform features, and 2 IIAs meet all 11 reform features. Four of the five action areas identified by UNCTAD continued to be the subject of heightened reform with a nearly equal level of focus: i.e. preservation of regulatory space; investment dispute settlement reform; responsible investment through, among other things, more sustainable development-oriented provisions; and investment promotion and facilitation.

Table III.4. Reform-oriented provisions in IIAs concluded in 2020

	1	2	3	4	5	6	7	8	9	10	11
Brazil–India BIT	■	■	■	■	■	■	■	■	■	■	■
Canada–United Kingdom Trade Continuity Agreement	■	■	■	■	■	■	■	■	■	■	■
Hungary–Kyrgyzstan BIT	■	□	■	■	■	■	■	■	■	■	□
Japan–Morocco BIT	■	■	■	■	■	■	■	■	□	■	■
RCEP	■	■	■	■	■	■	■	□	□	■	■
Japan–Côte d'Ivoire BIT	■	□	■	□	■	■	■	■	□	■	■
Mexico–Hong Kong, China SAR BIT	□	■	■	■	■	■	■	■	■	■	■
Israel–UAE BIT	■	■	■	■	■	■	■	■	□	■	■
Korea–Indonesia Comprehensive Economic Partnership Agreement	■	■	■	■	■	■	■	■	□	■	□

■ Yes □ No

Selected aspects of IIAs

The scope and depth of commitments in each provision varies across IIAs.

- 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 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: Based on nine IIAs concluded in 2020 for which texts are available, not including “framework agreements” that lack substantive investment provisions or agreements with limited investment-related provisions.

Preservation of regulatory space. Safeguarding States' policy space continued to be remained a driving concern behind the reform features contained in the IIAs concluded in 2020. All nine reviewed IIAs include limitations to the FET obligation, clarify or omit indirect expropriation, provide for detailed exceptions to the free-transfer-of-funds obligation, contain general exceptions (e.g. to protect human health or to conserve exhaustible natural resources) and omit umbrella clauses. Moreover, seven of the nine IIAs circumscribe the treaty scope by, for example, excluding certain types of assets from the definition of investment.

Responsible investment. In IIAs concluded in 2020, the commitment of States to ensure that investment is responsible translated into the systematic incorporation of provisions that promote responsible development. Eight of the nine IIAs reviewed make reference to the protection of health and safety, labour rights, and environment or sustainable development and provide for general exceptions as well. Six of the nine IIAs explicitly recognize that parties should not relax health, safety or environmental standards to attract investment, while five include provisions for the promotion of CSR.

Investment dispute settlement reform. Reforming ISDS remained a priority in IIAs concluded in 2020. Eight of the nine IIAs reviewed contain at least one type of limitation to that omit ISDS altogether.²² Other types of limitations commonly observed in IIAs concluded in 2020 involve time periods to submit claims and fork-in-the-road provisions.

Investment promotion and facilitation. In keeping with recent trends, IIAs concluded in 2020 continued to largely include specific proactive provisions on investment promotion and/or facilitation. Eight of the nine IIAs reviewed feature such provisions, which range from facilitating the entry, sojourn and residence of investors and enhancing exchange of information on investment opportunities, to providing for the establishment of an ombudsperson or facilitator.

Gender equality and women's empowerment. Provisions aimed at ensuring gender equality in IIAs remain rare. United Nations Sustainable Development Goal (SDG) 5 aims to "achieve gender equality and empower all women and girls".²³ Since foreign investment is recognized as an important way to achieve the SDGs (*WIR14*), IIA reform should take into account gender equality and women's empowerment (UNCTAD, 2014). A gender-inclusive IIA could, for instance, encourage the contracting parties to promote investments that contribute to gender equality and women's empowerment, whether in its preamble or as part of its investment promotion provision. Investment could be protected against gender-based discrimination in the context of NT, MFN or FET clauses. Investors could be encouraged, as part of CSR provisions, to ensure gender equality and inclusiveness in their activities. In addition, ISDS clauses could establish requirements to ensure gender diversity in the appointment of arbitrators.

To support and accelerate ongoing IIA reform efforts, UNCTAD launched the *IIA Reform Accelerator* on 12 November 2020 (UNCTAD, 2020e). The Accelerator is a tool to assist States in modernizing the existing stock of old-generation investment treaties. It operationalizes the idea of gradual innovation by focusing on the reform of the substantive provisions of IIAs in selected key areas. The Accelerator focuses on eight IIA provisions that are most in need of reform in line with the SDGs and the State's right to regulate: (i) definition of investment, (ii) definition of investor, (iii) NT, (iv) MFN treatment, (v) FET, (vi) full protection and security, (vii) indirect expropriation and (viii) public policy exceptions. For each provision, the IIA Reform Accelerator identifies sustainable development-oriented policy options, building on UNCTAD's Investment Policy Framework for Sustainable Development (UNCTAD, 2015), and proposes ready-to-use model language that reflects these options. The Accelerator further illustrates how these options have been used in recent IIAs and model BITs. Explanations accompany the model formulations to highlight their objective, provide background and explain how various reform options can be combined.

The reform-oriented formulations can be used directly at the national, bilateral, regional and multilateral levels to interpret, amend or replace old-generation treaties.

In addition, UNCTAD organized in November 2020 its Annual IIA Conference, focusing on “IIA Reform in Times of COVID-19”, gathering more than 300 participants from government, the private sector, civil society and academia. They recognized that the pandemic and the ensuing economic crisis posed great challenges but also provided a new impetus for reform of the IIA regime. The Virtual IIA Conference 2020 echoed the need to ensure that the IIA regime promotes and facilitates investment for sustainable development and that it safeguards the right of States to regulate to protect public health in the post-pandemic era.

* * *

Parallel to the ongoing IIAs reform is the new round of global tax reform, which may exert a far-reaching impact on global investment patterns and investment policies. Some implications are highlighted in box III.2. A key emerging issue that merits major efforts for research and policy analysis is the ever-growing interaction between industrial policy and investment and tax policy regimes. The recent worldwide proliferation of industrial policy (UNCTAD, 2018) has intensified such interactions. This has triggered extensive realignments of trade, investment and tax policies (Owens and Zhan, 2018). It poses challenges and opportunities for the effort towards a coherent international approach to trade, investment and tax policies, as well as the opportunity for synergies for sustainable development. The new holistic policy approach to investment in the health sector (section C) is a case in point.

Box III.2. Ongoing tax reforms: implications for investment and investment policy

The global tax landscape is in transition, with significant implications not only for tax revenues in home and host countries of international investment, but also for global investment patterns, investment promotion strategies and SDG financing. As the initiatives under discussion will affect both national and international investment policies, they need to be fully understood by policymakers, particularly in developing countries.

Among the key reform proposals, tax policymakers are negotiating the adoption of a *minimum tax for the largest MNEs*. The global minimum tax proposal of at least 15 per cent adopted by the G7 on 5 June 2021 will be presented to the G20 and the OECD Inclusive Framework on Base Erosion and Profit Shifting. The G7 also committed to reform the allocation of taxing rights, with countries awarded taxing rights on at least 20 per cent of profit exceeding a 10 per cent margin for the largest and most profitable MNEs. Among the key implications, an international minimum tax is expected to (i) discourage MNEs from shifting profits and tax revenues to low-tax countries and also lead to less conduit investment through tax havens; (ii): reduce tax competition and the race to the bottom that has lowered tax revenues in many countries over the past three decades, particularly in developing and transition economies; and (iii) necessitate reviews of tax incentive regimes adopted by countries to attract investment.

In addition, corporate tax transparency obligations are likely to increase with a new EU provisional political agreement that will require public country-by-country reporting (disclosure of income tax information by certain undertakings and branches) by MNEs with activities in member States and in selected third countries. Although the proposal is still under consideration and will require political endorsement, MNEs with a presence in the EU will now be subject to a higher level of tax transparency. The proposal should be viewed as part of the general trend to improve tax transparency around the world. Other tax developments with significant investment policy implications include negotiations on proposals to tax the digital economy, which could introduce new complexities for remote investors.

These developments may create friction with the IIA framework, as State obligations under IIAs can interact with tax regulatory action intended to raise revenue, eliminate double taxation or limit opportunities to engage in tax avoidance or evasion. They can hence expose States to tax-related claims brought under their ISDS mechanisms (for how to handle this interaction, see UNCTAD's “A guide for tax policymakers: IIAs and their implications for tax measures”).

These issues are relevant for all countries, but developing and emerging economies are particularly exposed, as tax measures are an important part of the industrial policy and investment promotion toolkit. Keeping abreast of reforms and assessing potential impacts on the local economy will be key to enable these economies to participate effectively in the process of tax reform. Greater coordination and cooperation between tax and investment policymakers will also be crucial to ensure investment policy responses that optimize the impact of tax reforms on national investment climates.

Source: UNCTAD.

C. INVESTMENT IN THE HEALTH SECTOR

1. Investment policy response to the COVID-19 pandemic: an overview

The outbreak of the pandemic has triggered a significant increase in investment policy measures in the health sector, including increased screening, but also new investment incentives. It has also highlighted the need to safeguard sufficient regulatory space in IAs and to support LLMICs in building productive capabilities in health.

The ongoing pandemic has created enormous challenges for national health systems and policies. It has tested the resilience of global value chains for medical goods, revealed the weaknesses and fragility of many national health systems, and highlighted the urgent need to invest more in health (see chapter V).

The outbreak of the pandemic has also prompted a significant increase in foreign investment policy measures in the health sector. On the basis of a survey of 70 economies carried out by UNCTAD, which covered developed (24), developing (41) and transition (5) economies in all regions of the world,²⁴ no country has introduced new *FDI entry restrictions* in the health sector or lifted existing ones since the beginning of the pandemic. However, almost one third of these economies have introduced new or reinforced existing *screening procedures* for foreign investment in the sector.

Most of the health-related investment screening identified in the UNCTAD survey resulted from policy measures introduced in developed countries in 2020 (72 per cent of all screening measures) or in the first quarter of 2021 (50 per cent). At least 18 countries – Australia, Austria, Canada, Czechia, France, Germany, Hungary, India, Italy, Japan, Malta, New Zealand, Poland, the Russian Federation, Slovakia, Slovenia, Spain, and the United Kingdom – as well as the EU have in place some type of investment screening mechanism that allows them to block foreign acquisitions specifically in the health and life science sectors.

On the promotion side, at least six countries in the UNCTAD survey have introduced new *investment incentives* in the health sector in response to the pandemic. These include incentives to foster digital medical technologies, especially telemedicine and e-health applications, and also incentives for the manufacturing of medical equipment and supplies (e.g. protective gear), as well as grants and loans for medical and pharmaceutical research related to the pandemic (box III.6).

Adapting to the new reality, in the first phase of the pandemic, IPAs have not only digitalized their services and outreach modalities,²⁵ but also actively supported companies in shifting resources to the health sector and retooling production lines towards health equipment and materials, such as ventilators and masks. The support includes assistance in building supply chains, and facilitation of work permits and certification for companies producing essential goods and services (UNCTAD 2020g). Over the course of 2020, IPA activities progressively shifted from crisis management relating to the pandemic towards active investment promotion as a key component of recovery strategies (UNCTAD, forthcoming c).

At the international level, IIAs can help by promoting, facilitating and protecting investment in health, but they may also come into play in relation to policy responses taken by governments to address the economic impact of the pandemic. Some of these policy measures could potentially create friction with IIA obligations. This highlights the need to safeguard sufficient regulatory space in IIAs to protect public health and to minimize the risk of ISDS proceedings.

The pandemic has also highlighted vulnerabilities in global supply chains and in productive capabilities in health, which has prompted governments to consider what needs to be done for post-pandemic recovery and resilience. In this regard, the UNCTAD survey found that, although the range of tools employed varies significantly depending on the region and level of development, most countries actively try to encourage investment in health and that restrictions to entry are rare (section C.2). An open investment policy regime alone, however, will not suffice to attract the levels of investment required to ensure health and well-being for all by 2030. A more holistic approach is needed, particularly in LLMICs.

LLMICs face five major challenges that limit their capacity to host medical industries with adequate portfolios of medicines or vaccines, health infrastructure or services. These challenges are (i) lack of capital, technology and skills; (ii) low regulatory capacity and weak health-care systems; (iii) weak policy coherence and enabling policy frameworks; (iv) small markets and unstable demand; and (v) poor infrastructure and related services. In this context, UNCTAD's action plan for building productive capacity in health proposes 10 main action areas for establishing an adequate ecosystem at the national, regional, and international levels and mobilizing the amount of investment needed to achieve SDG 3 (section C.3).

2. Investment policies and the health sector

In response to the pandemic, countries have been reassessing their overall national and international policies affecting investment in the health sector.

This section provides an overview of national and international policies concerning foreign investment in the health sector. In this section, the term “health sector” covers (i) the manufacturing component (e.g. the production of medical goods, such as medical devices, medical equipment and pharmaceuticals), (ii) the infrastructure component (e.g. the construction of medical facilities such as hospitals and health centres) and (iii) the services component (e.g. research and development (R&D), the provision and export of medical services or medical tourism).²⁶ Table III.5 summarizes key policies affecting investment in the health sector at the national and international levels, which are presented in more detail in the following subsections.

a. National policy

Among the 70 economies with specific investment policies in the health sector surveyed by UNCTAD, outright entry restrictions are relatively rare, but FDI screening has recently proliferated. On the promotion side, most countries encourage both domestic and foreign investment in all segments of the health sector, but the tools used vary by region and level of development.

Entry restrictions to foreign investment in the health sector are primarily found in Asia and affect mostly health infrastructure. The pandemic, however, has resulted in additional scrutiny of FDI in the health sector, especially in developed economies, often motivated by national security considerations. Measures to encourage investment in health, in contrast,

Table III.5.

Key investment policies in the health sector

Industry	Entry and admission	Investment promotion and facilitation	Investment incentives	International policies
Manufacturing	<ul style="list-style-type: none"> FDI ceilings^a Conditional entry^a FDI screening^b 	<ul style="list-style-type: none"> Investor targeting SEZs Health clusters^b Enhanced facilitation 	<ul style="list-style-type: none"> Health-sector specific (e.g., grants, subsidies and tax exemptions) As part of general manufacturing regimes 	<ul style="list-style-type: none"> Protection of IP rights (TRIPS) Investment protection (IIAs) Access to ISDS (IIAs)
Health infrastructure	<ul style="list-style-type: none"> FDI ceilings^a Conditional entry^a Approval procedures^a FDI screening^b 	<ul style="list-style-type: none"> Investor targeting 	<ul style="list-style-type: none"> Health-sector specific (e.g., land incentives) As part of strategic investment regimes 	<ul style="list-style-type: none"> Investment protection (IIAs) Access to ISDS (IIAs)
Health services	<ul style="list-style-type: none"> FDI bans^a FDI ceilings^a Conditional entry^a FDI screening^b 	<ul style="list-style-type: none"> Enhanced facilitation Medical fairs SEZs Health clusters^b 	<ul style="list-style-type: none"> Health-sector specific (grants, subsidies, and tax exemptions) As part of general innovation support regimes 	<ul style="list-style-type: none"> Market access and national treatment (some IIAs; GATS) Investment protection (IIAs) Access to ISDS (IIAs)

Source: UNCTAD.

Note: GATS = General Agreement on Trade in Services, IIA = international investment agreement, SEZ = special economic zone, TRIPS = Agreement on Trade-Related Aspects of Intellectual Property Rights.

^a Applies primarily in developing countries.

^b Applies primarily in developed countries.

are widespread and target primarily the manufacturing of pharmaceuticals and medical devices. Incentives are a common instrument in all regions to promote investment in all health-sector segments. Other investment promotion tools such as investor targeting, sector-specific facilitation or dedicated special economic zones (SEZs), however, are typically deployed primarily to target manufacturing and the provision of health services; these promotion tools are also less frequently used in Africa and transition economies.

(i) Entry and admission

Control over FDI entry in the health sector falls within two main categories: outright restrictions and screening.

Entry restrictions: Of the 70 countries reviewed by UNCTAD, 18 impose FDI entry restrictions in at least one of the three health segments analysed. All the FDI entry restrictions identified were in developing countries. Most of these restrictions are in Asia and the Pacific (11 countries), followed by Africa (4 countries), and Latin America and the Caribbean (3 countries) (table III.6).

Health-care facilities and medical services stand out as the most restricted subsector (15 countries), as entry restriction measures typically aim to avoid crowding out small local hospitals and clinics. Entry restrictions in pharmaceuticals production and biotechnology (13 countries) mostly seek to ensure the participation of local investors. Nine countries have adopted FDI entry restrictions in the production of medical equipment.

Entry bans: Only one country has legally banned FDI in the entire health sector (*Cuba*, although the Council of Ministers can approve FDI in specific health sector projects). The other bans, adopted in six countries, apply to FDI in health-care facilities and medical services in specific subsectors, activities or regions. For instance, these prohibitions concern foreign investment in small hospitals (*Indonesia, the Lao People's Democratic Republic, Malaysia*) or basic health services or nursing homes (*Ethiopia, Indonesia, Myanmar*), or apply in certain regions or areas of the country (*Egypt, the Lao People's Democratic Republic*).

FDI ceilings: Eleven countries maintain foreign ownership ceilings or joint venture requirements in one or more segments of the health sector. Of these, the production of pharmaceuticals is the most frequently affected, with eight countries imposing foreign

Table III.6. FDI entry restrictions in the health sector

Country	Manufacturing of medical equipment	Manufacturing of pharmaceuticals and biotech (and related R&D)	Health-care facilities and medical services
Algeria		FDI ceilings	
Barbados		FDI ceilings	
China			FDI ceilings
Côte d'Ivoire	FDI ceilings	FDI ceilings	FDI ceilings
Cuba ^a	FDI ban	FDI ban	FDI ban
Egypt			FDI ban (regional)
Ethiopia			FDI ban (basic health services)
India		FDI ceilings ^b	
Indonesia	FDI ceilings (testing institutions)	FDI ban (traditional medicines) FDI ceilings (pharmaceuticals)	FDI ban (small hospitals, basic health services, nursing homes) FDI ceilings (others)
Lao People's Democratic Republic		FDI ceilings	FDI ban (small hospitals, rural areas)
Malaysia			FDI ban (small hospitals) FDI ceilings (others)
Mongolia	Conditional entry (minimum capital requirement)	Conditional entry (minimum capital requirement)	Conditional entry (minimum capital requirement)
Myanmar	FDI ceilings (brownfield FDI)	FDI ceilings (brownfield FDI)	FDI ban (nursing homes, domestic labs) FDI ceilings (others)
Philippines	Conditional entry (export requirement)	Conditional entry (export requirement)	FDI ceilings
Thailand ^c	FDI ceilings	FDI ceilings	FDI ceilings
United Arab Emirates	Conditional entry (minimum capital requirement)	Conditional entry (minimum capital requirement)	Conditional entry (minimum capital requirement)
Venezuela, Bolivarian Rep. of	Conditional entry (minimum capital requirement)	Conditional entry (minimum capital requirement)	Conditional entry (minimum capital requirement)
Viet Nam			Conditional entry (minimum capital requirement)

Source: UNCTAD.

^a Despite the ban, the Council of Ministers can approve foreign investment opportunities in specific projects in the health sector and several of them are highlighted in the "Cuba Portfolio of Opportunities for Foreign Investment 2020–2021.

^b Brownfield FDI in pharmaceuticals above 74 per cent of ownership must receive prior government approval.

^c Foreign majority ownership in hospitals, specialized centres, distribution and marketing of pharmaceutical products, medical equipment, and medical R&D must receive prior government approval.

investment caps (*Algeria, Barbados, Côte d'Ivoire, India, Indonesia, the Lao People's Democratic Republic, Myanmar, Thailand*). Whereas in some countries foreign equity restrictions apply to the entire pharmaceutical sector (e.g. *Algeria*, the *Lao People's Democratic Republic*), in others they apply only to specific segments (e.g. in *India*, where they are limited to patent medicines) or activities (e.g. in *Barbados*, where the cap affects only the medical cannabis industry).

FDI caps also apply to medical infrastructure and the provision of medical services, either as general joint venture requirements (e.g. *China, Côte d'Ivoire*) or, particularly in Asian countries, in the form of specific equity caps (e.g. *Indonesia*,²⁷ *Malaysia*,²⁸ *Myanmar*²⁹).

Foreign ownership caps in the production of medical equipment are applied in only four countries (*Côte d'Ivoire, Indonesia, Myanmar* and *Thailand*).

Conditional entry: A few countries set minimum capital requirements or other conditions for foreign investment in the health sector. Minimum capital requirements are the most common entry condition and apply either to foreign investment beyond health (e.g. *Mongolia*,

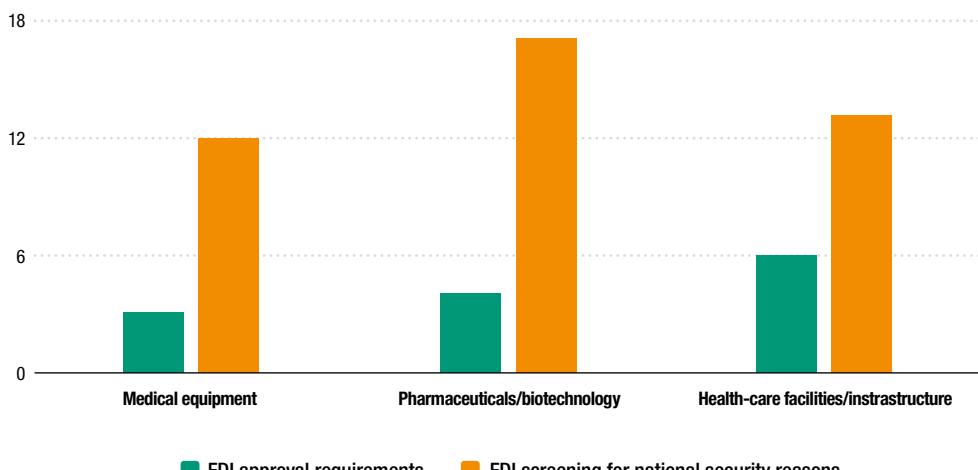
the Bolivarian Republic of Venezuela) or to FDI in specific segments of the health sector (e.g. the United Arab Emirates, Viet Nam). An export performance requirement is imposed on foreign ownership in the health sector in the Philippines.³⁰

FDI screening: Outright FDI prohibitions in the health sector remain relatively rare; however, national security considerations have resulted in a proliferation of foreign investment screening mechanisms recently (see section 1 and box III.3), largely in developed countries and emerging economies (UNCTAD, 2021b). While FDI screening affects all health subsectors, it is most prominent in the manufacturing of pharmaceuticals and in biotechnologies (figure III.6). In health-care facilities and infrastructure, many review regimes cover not only the facilities where medical services are offered – e.g. hospitals, clinics, care centres, laboratories — but also the critical IT infrastructure needed to run these facilities, process personal and medical data, or enable the remote provision of services.

General approval procedures for foreign investment are less common than screening for national security purposes (see figure III.6). At least six countries review all inbound investment – all in developing economies (two in Africa and four in Asia). These procedures are not limited to national security considerations, but are often designed to confirm that investors meet certain performance obligations or minimal capital requirements. In practice, these procedures apply mostly to the foreign construction and management of health-care facilities.

Screening mechanisms fall under four categories. First, some screening mechanisms specific to investments in the health sector were introduced as a response to the pandemic and are intended to be temporary (e.g. Hungary, Italy, Poland, Slovenia, Spain). Second, some pre-existing screening regimes were broadened during the recent epidemic to include health considerations. In addition, some countries' existing mechanisms already screen FDI for national security purposes across all sectors, not specifically health and life science projects (e.g. China, the United States). Finally, certain investment legislation includes general safeguards restricting foreign investment that threatens public health, often along with national security, public order and environmental protection. UNCTAD's Investment Laws Navigator lists at least 16 jurisdictions with such limitations (e.g. the Central African Republic, Nicaragua, and the Lao People's Democratic Republic).

Figure III.6. Specific investment screening and approval procedures in health and life science sectors (Number of countries)



Source: UNCTAD.

Box III.3.**Examples of specific investment screening and approval procedures in health and life sciences**

In May 2020, *Slovenia* introduced a temporary screening mechanism that applies to, among other things, critical infrastructure in health, critical technologies and dual-use items – including biotechnology; health, medical and pharmaceutical technology; and supply of critical resources, which also includes medical and protective equipment.

In July 2020, a newly adopted Investment Control Act entered into force in *Austria*. The law introduces review of foreign investment in business activities including R&D of pharmaceuticals, vaccines, medical devices and personal protective equipment; critical infrastructure in health; supply of pharmaceuticals and vaccines, medical devices and personal protective equipment (including R&D in these areas); and biotechnology.

In the *United Kingdom*, the Enterprise Act 2002 was amended in 2020 to provide that foreign acquisitions meeting certain ownership thresholds are to be screened against “the need to maintain [...] the capability to combat, and to mitigate the effects of, public health emergencies”.

In *Myanmar*, since the adoption of the Myanmar Investment Law of 2016, foreign investment in “medical, bio or similar technologies” is considered strategic and subject to approval by the Myanmar Investment Commission.

In *Tunisia*, investment in manufacturing of pharmaceuticals and in constructing and managing health institutions and blood centres are subject to approval (Decree 417 of 11 May 2018).

Source: UNCTAD.

(ii) Investment promotion and facilitation

Most countries consider the development and provision of health care a core policy objective. It includes improving and facilitating affordable access to health services, as well as producing medical products and pharmaceuticals. Therefore, countries typically encourage both domestic and foreign investment in all segments of the health sector, including manufacturing, health infrastructure and health services (including R&D and the provision of medical services). In this regard, a recent monitoring of the online activities of 188 national IPAs by UNCTAD found that 73 per cent of IPAs based in developed countries, 42 per cent of those based in developing countries and 32 per cent of those in the least developed countries (LDCs) featured health care as a key area of investment. It also found that IPAs are promoting investment opportunities across a broad range of subsectors, with a particular focus on the manufacturing of medical devices, pharmaceuticals and vaccines as well as digital health and the production of personal protection equipment (PPE) (UNCTAD, forthcoming c).

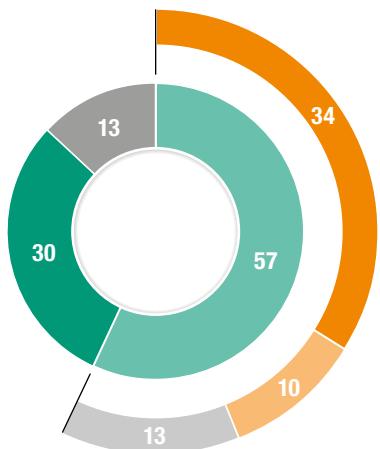
In the UNCTAD survey, at least 58 of the 70 countries promote, facilitate or incentivize investment in the health sector through specific or cross-sectoral policies. Three different types of policy instruments encourage such FDI: (i) proactive investment promotion and enhanced facilitation measures, such as actions by IPAs or other government institutions to attract or facilitate foreign investment specifically in the health sector; (ii) SEZs and clusters dedicated to investment in the health sector and (iii) financial, fiscal and regulatory incentives for investors in the health sector.

Investment promotion and enhanced facilitation: Proactive investment promotion activities and enhanced investment facilitation are widely used in developed as well as developing countries, particularly in Latin America and the Caribbean, and in transition economies. Conversely, health-sector SEZs or clusters are mostly found in developed countries and are notably scarce in Africa (figure III.7). There are notable exceptions, such as Ethiopia.

At least 30 countries in the UNCTAD survey encourage FDI in the health sector through targeted promotion and enhanced facilitation. The measures include IPAs targeting the medical industry and life sciences as priorities to attract FDI; organizing campaigns to promote medical tourism and the export of medical services, as well as medical fairs

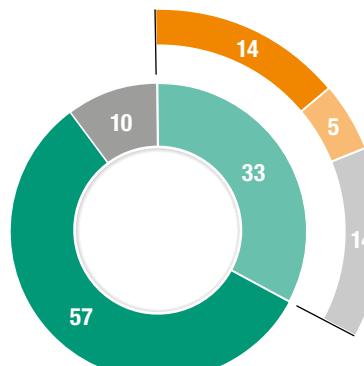
Figure III.7. | Investment promotion measures in the health sector: distribution by country group (Per cent)

a. Promotion/enhanced facilitation



Source: UNCTAD.

b. Special economic zones



■ Developed ■ Latin America and the Caribbean ■ Transition
■ Developing ■ Africa ■ Asia

and sector-targeted events; facilitating partnerships with local companies; and offering dedicated permitting and support to establish specific projects in the sector (box III.4). IPA activities involve reaching out to a wide spectrum of investors, including private companies, followed by institutional investors and impact investors, as well as diaspora (UNCTAD, forthcoming c).

Countries in Latin America and the Caribbean, North America and Asia rely broadly on targeted FDI promotion and enhanced facilitation measures, but these measures are less frequently used in Africa. At least eight countries in the survey recognize medical tourism as a key sector to be promoted, facilitating visas and extending other benefits to patients and health-care facilities. Medical fairs targeting foreign investors are periodically organized in Brazil, Chile, Germany, Malaysia, Mexico and Singapore.

Box III.4.

Examples of targeted promotion/enhanced facilitation measures for investment in the health sector

Canada's IPA, Invest in Canada, lists life sciences, pharmaceuticals, R&D, medical devices and medical laboratories, among the priority sectors for investment promotion.

Costa Rica's IPA, CINDE, includes the life sciences sector (including medical devices, biotechnology and pharmaceuticals) among the six priority sectors for FDI attraction. The country produces and exports medical devices and is home to major medical device companies.

Jamaica's IPA, JAMPRO, actively targets FDI in medical devices, pharmaceuticals and the production, processing and distribution of medical products derived from cannabis. The country's strategy also includes promoting medical tourism and positioning Jamaica as one of the global health and wellness tourism centres.

China included pharmaceuticals and medical devices in the Catalogue of Encouraged Industries for foreign investment in 2019.

Thailand included the health-care industry as a priority sector for investment in its Thailand 4.0 policy. The Board of Investment actively promotes health-sector investment to position Thailand as the medical hub of Asia.

Finland's Smart Life programme (2019–2022) offers innovation funding and network opportunities, as well as internationalization and export services for the digital transformation of the health and well-being sectors.

Mauritius Economic Development Board promotes the country's attractiveness as a medical hub and targets FDI in investment opportunities in life sciences, medical tourism and medical education.

Source: UNCTAD.

Investment incentives: Forty-seven countries in the UNCTAD survey offer incentives that directly or indirectly benefit domestic and foreign investment in the health sector. Of these, 39 have adopted incentives targeting specific segments, such as the medical and pharmaceutical industries or health services for the local or export markets. Incentives include tax benefits, import duty exemptions and grants for medical research or medical device production (box III.5). Many incentive programmes aim at facilitating the positive spillovers of foreign investment to strengthen local health-care systems and economies through skill development, technology transfer and cooperation with local partners (UNCTAD, forthcoming c).

At least 22 countries in the UNCTAD survey provide incentives for the *manufacturing of medical goods, including pharmaceuticals and medical devices*. These incentives take the form of grants, subsidies and tax exemptions. In addition, companies operating in the health sector may also benefit from general incentive schemes promoting manufacturing industries, particularly in developing countries.

In addition, eight countries provide incentives for investment in *health-care infrastructure*, covering not only the construction but also the operation and management of hospitals, clinics and health centres by the private sector or through public-private partnerships. Nine countries incentivize *R&D in the health sector* as part of general schemes to promote technology-intensive industries or through specific incentives such as grants for medical research.

In addition, as mentioned above, at least six countries in the UNCTAD survey have introduced new investment incentives in the health sector in response to the pandemic (box III.6).

Box III.5.

Examples of targeted promotion/enhanced facilitation measures for investment in the health sector

Australia offers R&D grants to companies established in the health sector, consisting of payments of 30 cents per dollar spent on eligible R&D activities, above a base level.

The *United States* provides incentives at both federal and state levels. Federal government programmes include R&D support for small businesses in the health sector and grants to promote U.S. innovation and industrial competitiveness by advancing measurement science, standards and technology.

France has several public funds dedicated to supporting medical technology and research. Biothérapies Innovantes et Maladies Rares is a public fund for companies working on innovative therapies targeting rare diseases. The fund Accélération Biotech Santé supports companies, mainly at the seed stage, that develop therapeutic products and medical devices in the field of human health, as well as small and medium-size enterprises, technology platforms, and scientific or technological service providers. The fund InnoBio helps companies, technology platforms, and scientific or technological service providers that are directly or indirectly involved in developing innovative life science and health products, in the pre-clinical or clinical phase.

In *Kazakhstan*, the Government can conclude an investment priority contract with companies constructing, running and/or investing in a sanatorium or hospital, offering tax preferences, custom duties exemptions, government grants (up to 30 per cent of all costs) and investment subsidies.

Nigeria offers free capital repatriation and income tax exemptions to local and foreign companies with “pioneer status” involved in the manufacturing of pharmaceuticals and personal protective equipment, as well as medical and dental equipment.

The *Philippines*’ Board of Investments offers a range of incentives to investors in health care and wellness services, including both fiscal incentives (e.g. a four-year income tax holiday on income derived from serving foreign patients and tax- and duty-free importation of medical equipment), as well as non-fiscal incentives (e.g. on the recruitment of foreign nationals and special residency visas for investors).

Source: UNCTAD.

Box III.6.**The COVID-19 pandemic has triggered a rise in investment incentives – examples**

Czechia's COVID Technologies programme offers subsidies to firms that are willing to diversify their production through the acquisition of new technological devices and equipment. In addition, the Rise UP programme supports the introduction or expansion of capacities to manufacture health equipment such as ventilators and respirators.

Italy has allocated special funds within its Development Contract programme to support investment in biomedical and telemedicine activities, particularly those connected to the production of medical equipment and devices, as well as technologies and services to prevent health emergencies.

Ghana's Ministry of Finance and Central Bank have engaged with commercial banks to mitigate the impact of the pandemic. The agreed support includes a syndication facility of 3 billion to support various industries, including pharmaceuticals. The Government also announced an expansion of its domestic procurement of pharmaceuticals as well as a programme to support the domestic production of active pharmaceutical ingredients.

Thailand has announced new incentives to accelerate investment in the medical industry, including a 50 per cent reduction in corporate income tax for another three years (the existing law already provides a tax holiday of three to eight years for qualified investors). Moreover, starting in 2020, manufacturers of medical parts or devices could be exempted from import duties on machinery. Additional tax benefits are also offered to companies producing non-woven fabric used to manufacture medical masks or medical devices.

Source: UNCTAD.

Special economic zones: At least 22 countries have established health clusters or SEZs targeting specifically the health industry or offering special benefits to companies in this sector (box III.7). SEZs dedicated to the health sector are mainly located in Asia, whereas clusters are most common in Europe and North America. Such zones and clusters typically combine the provision of incentives, targeted promotion and enhanced facilitation within a dedicated industrial area to support interactions among investors, research centres and the educational system.

Clusters dedicated to biopharmaceuticals and biotechnology are increasingly common. Knowledge-based industries benefit from the development of clusters, as physical proximity facilitates linkages and reduces the cost of innovation through shared resources and information. Germany, for example, hosts more than 30 clusters for medical technology. Songdo International Business District in the Republic of Korea was designed to foster high-tech industries such as bioengineering.

Box III.7.**Examples of SEZs and clusters dedicated to the health sector**

Brunei Darussalam has established a 174-hectare Bio-Innovation Corridor to support the development of pharmaceuticals and health supplements (halal).

Colombia has 14 health-care free trade zones and 8 health sector clusters across the country.

Germany is home to more than 30 specialized cluster networks focusing on medical technology. Dedicated cluster management teams help obtain funding for joint R&D projects, provide shared facilities and organize educational training programmes for their members.

Luxembourg's HealthTech Cluster aims at stimulating the development and commercialization of health technologies. In the spring of 2021, the Government announced the opening of a healthtech incubator within its House of Biohealth in Esch-Beval.

The *Republic of Korea's* Songdo region (part of the Incheon free economic zone) focuses on high-tech industries such as bioengineering and hosts a number of pharmaceutical companies.

Singapore has set up SEZs to promote FDI in health, with three zones prioritizing medical research. The Government also has established parks and hubs to support life sciences and R&D activities.

The *United States'* Small Business Association is investing in more than 50 regional innovation clusters throughout the country that span a variety of industries, from energy and manufacturing to health IT and biotech. The country hosts several biotech and biopharmaceutical clusters.

Source: UNCTAD.

b. International policies

International policies relevant to the health sector address market openness, intellectual property (IP) protection, and the promotion and protection of foreign investments. The main instruments are the General Agreement on Trade in Services (GATS), the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS) and IIAs. The central challenge is to balance openness and investment protection with safeguarding of national policy space to pursue legitimate public health objectives.

(i) GATS

On the international level, a number of treaties include market opening commitments with respect to investments in the health sector. These commitments primarily provide market access and non-discrimination obligations for trade in health services. The GATS is the most prominent treaty that includes such obligations. These commitments are country-specific and inscribed in the services schedule of each WTO member.

Generally, services can be traded through different modes of supply. Mode 3 is the supply of a service by a foreign service supplier through a commercial presence in the territory of another treaty party, largely similar to foreign investments covered under IIAs. Overall, however, few of the 164 WTO members have entered commitments to provide market access and NT for health services and health-related professional services. Figure III.8 details commitments relating to hospital services.

In addition to hospital services, 25 WTO members (15 per cent) have entered full or partial market access and NT commitments under mode 3 in the category of other human health services. A total of 46 WTO members (28 per cent) have scheduled mode 3 obligations for professional medical and dental services. The services schedules of 19 WTO members (12 per cent) cover the mode 3 supply of services provided by midwives, nurses, physiotherapists and paramedical personnel. Where no such commitments have been entered into, countries are not required to grant market access or NT to foreign service suppliers. WTO members are free to exceed these GATS commitments in their bilateral or regional FTAs, subject to GATS Article V, or by unilaterally further opening their markets to investment in health services on an MFN basis.

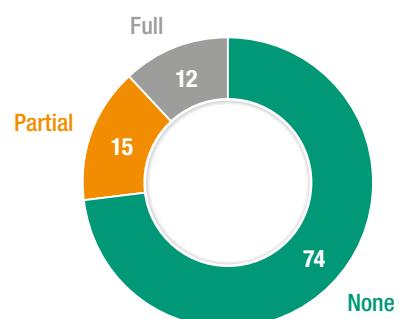
(ii) TRIPS Agreement, public health and investment in the health sector

IP rights protection, as elaborated under the TRIPS Agreement, is one important policy domain in the production and supply of vaccines, pharmaceuticals and diagnostics. The TRIPS Agreement provides for an international minimum standard for the protection of IP rights that are applicable in all of the 164 WTO member countries. WTO members have adopted the Doha Ministerial Declaration in 2001, which affirmed the rights of countries to use flexibilities available within the TRIPS Agreement, including in health emergencies, such as the COVID-19 crisis.

The TRIPS Agreement provides various flexibilities applicable to all countries with important implications for the health sector. These flexibilities include leeway to define (i) the scope of inventions and eligibility criteria for patent protection, (ii) the level of

Figure III.8.

Country market access and national treatment commitments under GATS for hospital services (mode 3) (Per cent)



Source: UNCTAD.

disclosure required in patent applications and (iii) limitations to the exclusive rights to allow, for example, parallel importation of ingredients or finished products, and use in regulatory approval processes for medicines (UNCTAD, 2011a). Patent laws of Argentina, India and the Philippines, for example, reduce the conditions under which new forms or new use of a known pharmaceutical substance can receive patent protection.³¹ The approach is designed to encourage local industry to engage in incremental innovation and adaptation.

If a voluntary license to allow the generic manufacturing or importation of medicines cannot be secured, a compulsory license can be granted, on a case-by-case basis and against an adequate remuneration (see also box III.7). The use of the compulsory license must be primarily for domestic consumption and in certain cases for export to countries with limited or no pharmaceutical manufacturing capacity, in accordance with the strict procedures established for this purpose. These conditions for compulsory license are relaxed during a national emergency or to enforce competition law (UNCTAD, 2011a). A compulsory license against a product patent is not necessarily sufficient to overcome the challenges arising from other IP rights for the production of pharmaceuticals and vaccines. The protection of undisclosed information, including test data for pharmaceuticals and vaccines and process-related trade secrets, copyright and industrial designs, may also be important. Another option to address a national emergency is to use the provisions under the Agreement establishing the WTO that provide for the possibility of a temporary waiver from the obligations of the TRIPS Agreement, covering not only patents but also other IP rights and generally applicable principles.³² Temporary waiver, however, requires negotiation to secure the agreement of all WTO member states, which may result in additional conditions on its use. A 2003 waiver to facilitate the export of pharmaceuticals produced under compulsory licenses, for example, is criticized for having adopted numerous conditions that limited its utilization.³³ Furthermore, countries may still have to resolve challenges arising from domestic law, such as the legality of suspending IP rights already granted in accordance with domestic law. Aside from the legal issues, countries must have a certain level of technological capacity to utilize the waiver. Since the suspension of the IP rights reduces the incentive for the IP right holders or their licensees to collaborate for transfer of technology and know-how, countries must identify the means to build the necessary capacity to utilize the waiver.

In the context of building a domestic pharmaceutical sector, LLMICs were allowed to delay the protection of pharmaceutical patents altogether until 2005. The success of the Indian pharmaceutical sector is credited to the use of this flexibility.³⁴ Currently, the transition period is available for the benefit of the least developed countries (LDCs) until 2033 (WTO, 2015). Among LDCs, Bangladesh demonstrated its ability to use this flexibility when one of its pharmaceutical companies, Beximco Pharma, launched in 2015 a generic version of a hepatitis C drug that had been developed by Gilead Sciences.³⁵ When it comes to COVID-19 vaccines, however, a vaccine producer in Bangladesh, Incepta Pharmaceuticals, preferred to cooperate with vaccine developers to manufacture the already-approved vaccines, rather than work on its own to develop manufacturing processes that meet the regulatory standard, which it perceived would be more challenging.³⁶

The extent to which countries can benefit from this flexibility depends on various factors, including the capacity of the local pharmaceutical industry to manufacture pharmaceutical products and the capacity of IP offices to examine patents, as well as the ability of the judiciary and the competition authorities to apply substantive laws and global practices. In several countries, the standards for the protection of IP rights are upgraded under bilateral and regional FTAs, for example, to provide additional years of protection for pharmaceutical patents and exclusivity of test data for pharmaceuticals and vaccines. Yet countries still enjoy flexibility within these higher standards; they may, for example, determine what pharmaceutical products are eligible for extended periods of protection or which type of test data are eligible for exclusivity protection.³⁷

UNCTAD has developed guidelines and a case law database on how countries can use the IP rights system to stimulate local production of pharmaceuticals and promote coherence between industrial and public health policies (UNCTAD, 2011a and 2020c). Countries need to strike an appropriate balance between implementing proactive IP policy to attract foreign technology and using TRIPS flexibilities. In doing so, they should strive to address current challenges for the manufacturing sector, advance coherent policies and implement actions necessary to boost domestic productive capacity, as discussed in section 3.

(iii) International investment agreements

Most IIAs do not take a sectoral approach to the promotion and protection of investments, instead broadly covering all kinds of assets. As a consequence, they do not specifically promote investments in the health sector. A number of recently concluded BITs and investment chapters of FTAs do, however, carve out regulatory space for domestic health-related measures.

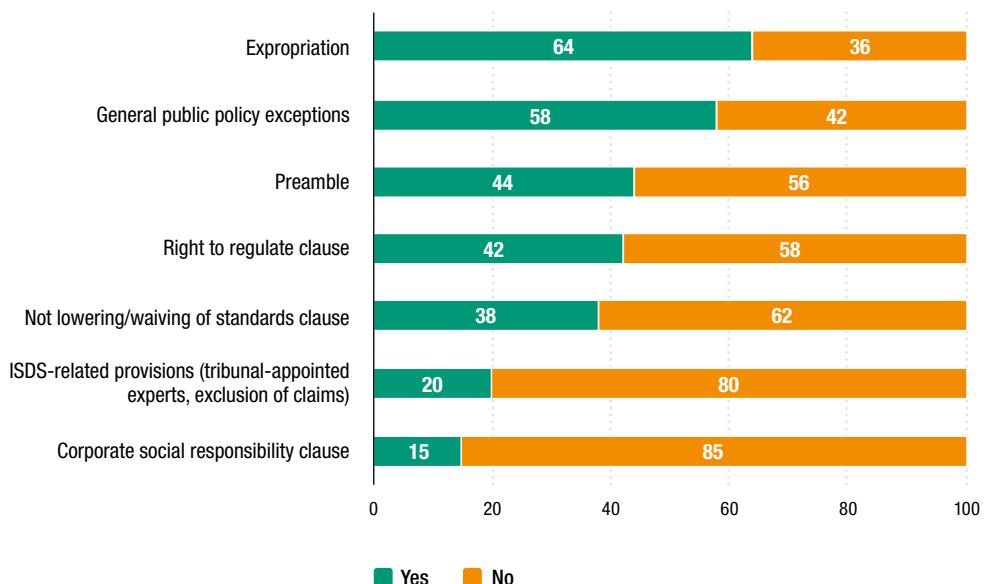
More than 3,000 IIAs, representing more than 90 per cent of all IIAs, were signed between 1959 and 2011 (*WIR19*). The vast majority of these old-generation IIAs remain in force today, and few of them explicitly refer to public health at all. In stark contrast, new-generation IIAs (those concluded since 2012) far better acknowledge public health as a legitimate regulatory objective. For example, more than 92 per cent of IIAs concluded since 2018 contain at least one explicit reference to health in the operative part of the treaty (figure III.9). Generally, these references to health seek to preserve domestic regulatory space by various means:

- Clarifying that measures adopted in the pursuit of public health do not constitute expropriation
- Including public policy exceptions for measures adopted in pursuit of public health
- Referring in preambles to the importance of regulatory space for protecting public health
- Including right-to-regulate clauses
- Including not-lowering-of-standards clauses prohibiting the relaxation of domestic health regulations to attract investment
- Specifying that ISDS tribunals may appoint experts to draw up reports on factual issues concerning health or exclude claims relating to measures that seek to protect public health
- Including CSR clauses imposing a “best efforts” obligation on investors to refrain from seeking special exceptions from the host State’s regulatory framework relating to health

The IIA regime also touches on issues of compulsory licensing, as most investment treaties cover IP rights as protected investments. Compulsory licensing has recently received more attention, in the context of allowing generic manufacturing or importation of medicines in light of the pandemic (box III.8).

New-generation IIAs do not specifically promote health investments. Yet, by rebalancing the dual objectives of investment protection and regulatory freedom, they afford States the flexibility to promote and facilitate investments in health on the domestic level without the risk of violating their IIA commitments.

In addition to safeguarding regulatory space, some IIAs (modern FTAs) often include an investment chapter as well as a separate services chapter. Similar to the GATS, these services chapters generally take a different approach than the broad coverage of investment in BITs. Services chapters include commitments on a sectoral basis to allow access to foreign investors, including for health-related services. These chapters can thus be more specific in their approach to promoting investment in health.

Figure III.9.**Provisions referencing public health in IIAs concluded between 2018 and 2020 (Per cent)**

Source: UNCTAD, IIA Navigator.

Note: This survey covers all IIAs signed from 2018 to 2020 for which texts were available that contain substantive provisions on investment protection. In total, 55 IIAs were analysed.

However, they do not include the same treatment standards as BITs or investment chapters and do not provide access to ISDS. Instead, services chapters include specific commitments related to market access (e.g. the prohibition to impose restrictions on the number of service suppliers) and NT of foreign service suppliers. Together, the different treaty obligations found in services chapters on the one hand, and in investment chapters and BITs on the other, complement each other to provide an effective framework for the promotion and protection of investment in health.

Either these commitments in services chapters are inscribed in the respective schedules of each party to an FTA (the positive list approach, similar to the GATS), or exceptions to market access and NT are set out in the annexes to the treaty (the negative list approach).

Box III.8.**Compulsory licensing and international investment agreements**

The conditions for granting compulsory licenses for product or process patents are internationally regulated under the TRIPS Agreement. The IIA regime also touches on issues of compulsory licensing, however, as most investment treaties cover IP rights as protected investments. Foreign investors could challenge a compulsory licensing measure issued against their patents in ISDS proceedings. Less than 2 per cent of IIAs signed between 1959 and 2011 explicitly exclude compulsory licensing from the expropriation provision. Before the entry into force of the TRIPS Agreement in 1995, States may not have seen the need to do so in their IIAs. However, many of these old-generation IIAs (whether pre- or postdating the TRIPS Agreement) remain in force, and the absence of explicit carve-outs can more easily lead to investment disputes, the outcome of which will depend on exact treaty language and the interpretation adopted by the tribunal. To remedy this uncertainty, new-generation IIAs more frequently exclude compulsory licensing from the entire IIA or from the scope of the provision on expropriation, provided that the compulsory licensing measure was taken in conformity with the TRIPS Agreement.

Source: UNCTAD.

Box III.9.**Investor–State dispute settlement and health-related investments**

In total, at least 33 known ISDS cases directly related to public health have been initiated against developed countries (13) and developing ones (20). These cases cover a variety of issues. Their link to public health may arise from the nature of the investment itself (e.g. an investment in a water and sewerage infrastructure project or in pharmaceutical patents). In other cases, the regulatory action taken by the defendant established the link to health. For example, a regulatory measure may be implemented to protect public health either exclusively (e.g. measures that seek to curb the prevalence of smoking) or as one of several interrelated objectives (e.g. a prohibition on using certain pesticides for the protection of the environment and human health).

In 30 cases, investors relied on IIAs signed in the 1990s or earlier; the FET and indirect expropriation standards were most frequently invoked in these proceedings. National authorities were successful, either on jurisdictional grounds or on the merits, in 18 of 33 cases (55 per cent). Investors succeeded in 13 cases (39 per cent). In two cases, liability was found but no damages were awarded. Claims and outcomes in health-related cases thus do not significantly differ from outcomes in other ISDS proceedings.

Source: UNCTAD.

Data from UNCTAD's International Investment Agreements Navigator³⁸ show that 28 per cent of 417 TIPs extend coverage to the pre-establishment phase of the investment and therefore include liberalization commitments. The vast majority of these TIPs partially liberalize the mode 3 provision – that is, supply by a foreign service provider through a commercial presence – of one or multiple health-related services by at least one of their parties. Services that have a direct bearing on investment in health are hospital services, other human health services and health-related professional services (medical and dental services as well as services provided by midwives, nurses, physiotherapists and paramedical personnel). Other relevant services include, for example, R&D services in natural sciences, health insurance services and sanitation services.

Although IIAs can shape investment in health, they can also interact with measures taken by States to mitigate the impact of the pandemic. The enormous challenges facing national health systems and policies have highlighted possible tensions between measures taken to mitigate the impact of the pandemic and existing IIA obligations, which could result in investment disputes. In the past, ISDS cases directly related to public health have been initiated against both developed and developing countries (box III.9).

To ensure better synergies between IIAs and public health policies, future agreements could include provisions that proactively encourage and facilitate health-related FDI, while maintaining or strengthening existing safeguards that protect the host States' right to regulate to pursue public health objectives.

3. Action plan for building productive capacity in health³⁹

Limited productive capacities in many LLMICs hinder their ability to attract investment in the health sector and host medical industries. A holistic action plan can address the major challenges facing investment in health in these economies.

The pandemic has revealed the vulnerability of global supply chains and highlighted the importance of a robust health manufacturing sector both for public health and for the national economy. Not all countries host pharmaceuticals and vaccine manufacturing industries with large product portfolios, or world-class health infrastructure and services. The challenge is not related to investment restrictions, as the policy framework is generally conducive to investment in health in most countries, despite restrictions put in place to safeguard legitimate concerns regarding public health and national security (section 2). Nor is it about population size: Israel, for example, hosts Teva Pharmaceutical Industries, the largest manufacturer of generics in the world and an important player in the production

of active pharmaceutical ingredients. Neither is the level of economic development an insurmountable obstacle, since Bangladesh, though an LDC, satisfies most of its needs for medicines through local production. Rather, the challenges emanate from the development of the domestic and regional ecosystem for investment in the health sector. Since the 1980s, Bangladesh has been consistently implementing measures to support the development of the local pharmaceutical industry (UNCTAD, 2011b). Over time, the measures helped to improve the business environment, including the availability of skilled personnel and streamlining of trade and industrial regulations. This section discusses the five main challenges that LLMICs face to build productive capacity in the health sector, and 10 policy actions necessary to address these challenges.

a. Five main challenges

(i) Lack of capital, technology and skills

In the technology-intensive health sector, investment requires sufficient capital to acquire adequate technology and skills to meet applicable standards (such as the current pharmaceutical good manufacturing practice) for health facilities, laboratories, the distribution network and also health professionals. The capital, skills and know-how required are not readily available in many countries. Commercial banks are often hesitant to provide loans to projects in health, pharmaceuticals and vaccines production, all considered highly risky.

(ii) Low regulatory capacity and weak health-care system

In many LLMICs, national medicines regulatory authorities (NMRAs) lack the financial, human and technological resources to enforce adherence to the standards for health services, laboratories, distributors and manufacturers. In addition, a weak health system means poor diagnosis, poor adherence to treatment standards and inadequate reporting of adverse side effects. Low regulatory capacity and weakness in the health-care system discourage potential investment by standard-compliant investors, raising concerns about unfair competitive advantage from non-compliant firms that can produce or provide services at lower cost, or about improper handling and distribution of products.

(iii) Weak policy coherence and enabling framework

Investment into the health sector involves a complex network of investors, technology holders and input suppliers, all of which are subject to various standards. Encouraging investment requires coherence between public health and industrial development policies, including trade and tariff policies, competition regulation, investment policy and IP laws. As an example, although public health policy demands tariff-free importation of essential medicines, tariff and value added taxes on inputs or a sluggish customs-clearing process could affect the attractiveness of a country for foreign investment into the manufacturing sector.

(iv) Small markets and unstable demand

Many LLMICs have relatively small populations and weak purchasing power. In the absence of regulatory access to an export market or membership in an FTA, LLMICs with relatively small market sizes would struggle to develop a health industry dependent on scale and value. Lack of regional cooperation for pooled procurement, harmonization of medicines regulations and free movement of goods and services further fragment the markets of LLMICs, especially in pharmaceuticals and vaccines manufacturing, thus eliminating an opportunity to combine purchasing power and demand. As a result, local firms often do not use their full capacity.

(v) Poor infrastructure and related services

As in other sectors, poor infrastructure makes investment in the health sector challenging and costly. Such infrastructure includes constraints in energy supplies, digital technology, water supply and waste treatment, and transport and customs facilities for the handling of sensitive ingredients or finished products. More specific to the sector, weak health systems mean poor information, including supply and demand data for assessing investment viability, and weak testing and conformity assessment infrastructure for supporting manufacturing. Moreover, LLMICs may not have invested in the specific infrastructure necessary to support health science as well as pharmaceuticals and vaccines manufacturing, such as e-health systems, human genomic databases, big data and artificial intelligence, among others.

b. Ten actions

Addressing these five main challenges requires creating or improving an ecosystem of coherent policy, regulatory institutions and infrastructure, skills and technology that supports the development of the health, pharmaceutical and vaccines sector. Following are 10 actions that, when combined, would facilitate this development.

(i) Invest in skills development and technological capacity

Skills, including technological know-how, are crucial to the development of the health-care, pharmaceutical and vaccines sector. First, universities need to align academic training with industrial practices and regulatory standards. Chulalongkorn University in Thailand, for example, offers an advanced programme with a specialization in industrial pharmacy and comprehensive practical training.⁴⁰ Second, countries can facilitate the transfer of know-how from technology developers and foreign experts, the promotion of joint ventures and further liberalization of professional services. Invest Barbados promotes a training grant for personnel in medical transcription. Israel's IPA and its "Global enterprise programme" encourages partnerships between multinational enterprises and start-ups through financial support to promote international collaborative R&D partnerships between Israeli and foreign companies (UNCTAD, forthcoming c).

(ii) Share technologies to enable affordable mass production

Countries need to establish stronger linkages among domestic producers, foreign investors and domestic research institutions – among other ways, through voluntary IP licensing. Sharing of technologies is especially important for vaccines and other complex products, where process technology and know-how play significant roles in making products that meet regulatory standards. A recent example involves AstraZeneca, a British–Swedish pharmaceuticals company, that licensed Siam Bioscience, a public-private partnership based in Thailand, to produce its COVID-19 vaccines. The commitment of the Government of Thailand to procure locally, with a view that Thailand can emerge as a regional vaccine production hub, contributed to the feasibility of the IP licensing.⁴¹ Various initiatives can contribute to creating linkages between foreign technology providers and domestic institutions, e.g. the Medicines Patent Pool, the Coalition of Epidemic Preparedness Innovations and philanthropy programmes in the R&D-based pharmaceutical industry.

(iii) Improve access to finance and tap into impact investment

Commercial banks and private investors may be reluctant to invest in the health sector in general because of the risks associated with the complex regulatory environment and the longer investment horizons or because they do not have the capacity to assess investment projects in the sector. Governments thus need to provide alternative means of financing

health sector projects. For example, since 2017, the Ghanaian Export-Import Bank has offered long-term finance at concessionary rates to pharmaceuticals producers to help them build state-of-the-art factories and/or retool existing facilities to bring them up to good manufacturing practices.⁴²

Impact investment (investment made with the objective of creating a positive social or environmental impact) has been expanding globally. At the end of 2019, the global value of impact investment was estimated at \$715 billion (GIIN, 2020). Pro-active and targeted policies to access impact investment funds can help mobilize necessary financial resources. A Swedish asset investor recently contributed \$319 million to a social bond issued by the International Finance Corporation to help LLMIC-based producers involved in the production of medical equipment and pharmaceuticals. Intergovernmental organizations, such as UNCTAD and its World Investment Forum can play a key role in mobilizing impact investors to facilitate investment in social bonds (see chapter V).

(iv) Build partnerships to initiate “lighthouse” projects

Successful short-term projects relying on simple technologies, especially in the production of test kits, personal protective equipment, medical supplies and mosquito nets, can provide stepping stones to attract subsequent investment in more ambitious projects, such as the production of treatments, diagnostics and, to the extent possible, vaccines. IPAs can partner with development banks, impact investors and social entrepreneurs to fund initial “lighthouse” projects in the health sector. South Africa’s response to the pandemic involved the strengthening of productive capacity and collaboration in health care. In the past year, interventions by the country’s IPA, Invest SA, included identifying companies to collaborate to repurpose their facilities and activities towards the manufacturing of products to fight the pandemic, as well as facilitating access to finance for existing domestic manufacturers to ramp up their production of key health products (UNCTAD, forthcoming c).

(v) Provide investment incentives to improve local firms’ sustainability

Various financial and fiscal incentives have been designed to encourage investment in the health sector (box III.4). In addition, government procurement can be introduced to support local producers. In Ethiopia, for example, government procurement provides a 25 per cent price advantage to local pharmaceuticals manufacturers, compared with international suppliers. Uganda made an advance purchase commitment that supported the establishment and successful operation of a pharmaceutical company specializing in HIV/AIDS products (UNCTAD, 2011b). The approach can help kick-start the manufacturing of new products, such as COVID-19 vaccines, when the market is unpredictable and companies need guaranteed purchases.

(vi) Upgrade and streamline regulations and administration

The health and pharmaceutical sector attracts stringent regulations. In many countries, upgrading the capacity of NMRAs is a challenge. The Southern African Development Community (SADC) initiated the Collaborative Medicines Registration Procedure (ZaZiBona) to support NMRAs and harmonize varying levels of capacity and diverse regulatory standards. Through ZaZiBona, SADC member states are working towards ensuring that NMRAs meet minimum standards and towards nationally and regionally integrated information management systems.

Becoming members of a multilateral system also facilitates the upgrading of regulatory systems. Brazil, for example, joined the Pharmaceutical Inspection Co-operation Scheme (PIC/S) in 2019, together with Argentina, Mexico, Indonesia, the Islamic Republic of Iran, South Africa and Thailand. PIC/S ensures that all Members comply with its standards at

all times. Participation in PIC/S drives the improvement of national systems that meet international standards.⁴³ Countries can also benefit from capacity-building programmes offered by international organizations such as the World Health Organization for regulatory institutions.⁴⁴ Digital technology tools can contribute to enhancing regulatory procedures.

(vii) Invest in infrastructure

One way of addressing infrastructure needs is through dedicated industrial parks or similar economic zones that provide centralized services, for example, central effluent treatment service; reliable electricity and water supply; and linkages with major road and railway networks. Box III.6 illustrates the use of SEZs dedicated to the health sector. India is promoting “bulk drug parks” and “medical device parks” to reduce the cost of local manufacturing in the country (UNCTAD, forthcoming c).

LLMICs also need to develop the specific infrastructure necessary to handle and distribute pharmaceuticals, vaccines and other health products. Incentives can mobilize private investment in such infrastructure. India, for example, nearly doubled its cold-storage capacity after the Government provided tax breaks and subsidies.⁴⁵

The national digital infrastructure also supports the development of new technologies. In Rwanda, innovative approaches such as the use of drones to fly needed medicines to patients in remote areas illustrate how investing in digital connectivity benefits the development of the health sector. Digital technology can also be leveraged to improve regulatory compliance and health monitoring. Next-generation medical diagnosis and treatment, such as personalized treatments and digital therapeutics, as well as drug discovery and manufacturing processes, are expected to benefit from artificial intelligence and machine learning. IPAs, in particular from developed countries, are promoting their digital infrastructure and innovation ecosystems as key determinants for investment in the sector. Invest in Estonia, for example, promotes the country's digital platform and investment in data – including one of the biggest biobanks in Europe, with biological samples and personal health information volunteered by over 20 per cent of the country's population – to position itself in a range of e-health sectors, notably personalized medicine (UNCTAD, forthcoming c).

(viii) Emphasize a regional approach to reduce cost

Regional cooperation will make the measures suggested here more feasible and sustainable. Regional economic groups such as ASEAN and the SADC, and in particular the newly created AfCFTA, can establish regional value chains to enable small economies in the region to collectively build productive capability. Different countries have different comparative advantages, and together they can participate in value chains that generate the medical supplies and medicines they need. IIAs, including regional ones, can also help create a conducive framework for investment in health by including proactive investment promotion and facilitation provisions for investments in health, as well as by ensuring sufficient flexibility to protect public health objectives through regulation.

For a regional approach to meaningfully contribute to the development of the health sector, it must remove barriers related to trade, investment and IP for trade in health products and services. The regional approach can benefit from regional initiatives for investment promotion. The regional investment strategy of the South African Development Community has identified health care as one of its priority sectors. The East African Community has developed a 10-year “Regional Health Sector Investment Priority Framework”. The strategy highlights the importance of domestic policy in member states, including facilitating better resource allocation in the health sector and ensuring financial risk protection and equity to successfully attract investment in health care in the region.

Private and public sector partnerships, as well as multisectoral collaboration have been identified as the necessary tools to achieve the ambitious investment goals (UNCTAD, forthcoming c).

Health is a highly regulated sector, and the most important contribution of a regional approach is harmonization of medicines and health regulations. Seeking marketing approval for pharmaceuticals, vaccines and other health products on a country-by-country basis affects companies' access to a regional market. To overcome this challenge, the African Medicines Registration Harmonization initiative, established by the African Union in 2009, adopted a model law that inspired harmonization of subregional regulations. Following the model law, the East African Community adopted a regional harmonization of medicines regulation in 2015. The African Union has also adopted the legal framework for the African Medicines Agency. ASEAN has also developed common standards and procedures applicable to the regulation of the pharmaceutical industry. Further integration can include mutual recognition of certifications and marketing authorization. Finally, a regional approach to procurement enables the pooling of purchasing powers, and regional drug regulation substantially eases the burden on producers, who otherwise must file and process multiple applications for the same pharmaceutical product in different countries.

(ix) Seek funding from official development assistance

National efforts to develop investment in the health sector are increasingly supported by regional coordination efforts. In 2020, for example, the Asian Development Bank extended a loan to Imexpharm Corporation (Viet Nam), to help the company sustain its production of generic medicines and overcome the global supply disruptions caused by the pandemic.⁴⁶

National and regional efforts are also increasingly supported by expanding international cooperation. As one example, the Coalition for Epidemic Preparedness Innovations and the African Union Commission have announced a project to enhance vaccine R&D, clinical trials and manufacturing in Africa.⁴⁷ Ghana also secured financial assistance from the Government of the United Kingdom to support its pharmaceutical sector by building private sector capacity and creating new partnerships for vaccines production, addressing vulnerabilities in supply chains and improving manufacturing practices.⁴⁸

(x) Ensure sustainability of efforts despite an unpredictable market

Ensuring the sustainability of an investment is a key concern in the health sector, especially where investors cannot know the scale and duration of the health problem, as in the case of COVID-19. As public health challenges continuously evolve, the health services, pharmaceuticals, diagnostics and vaccines needed in a given market also change. An international coalition of governments, development banks, impact investors and like-minded stakeholders is needed to address this market failure and to protect humankind from the next pandemic.

Building and expanding local productive capacity in the health sector cuts across multiple policy areas and requires concerted actions by all stakeholders to effectively address the five key bottlenecks. Because of the vast coverage of the sector, countries need to assess which segment to prioritize and how to build the necessary ecosystem through coherent policy, regulatory institutions and infrastructure, skills and technology. Further guidance is provided in UNCTAD's Tool Box for Policy Coherence (UNCTAD, 2017).

NOTES

- ¹ "France shields Carrefour from takeover in food security battle", Politico, 15 January 2021, <https://www.politico.eu/article/france-carrefour-takeover-food-security-battle/>.
- ² "Agnellis end Iveco talks with China FAW as Italy opposes", Bloomberg, 19 April 2021, <https://www.bloomberg.com/news/articles/2021-04-19/agnellis-end-talks-on-iveco-with-china-faw-amid-italy-opposition>.
- ³ "Italy blocked Chinese semiconductor bid, Draghi says", Bloomberg, 9 April 2021, <https://www.bloombergquint.com/business/italy-s-draghi-seeks-broader-shield-from-chinese-corporate-bids>.
- ⁴ The total number of IIA is revised in an ongoing manner as a result of retroactive adjustments to UNCTAD's IIA Navigator.
- ⁵ The 15 signatory countries include Australia, Brunei Darussalam, Cambodia, China, Indonesia, Japan, the Lao People's Democratic Republic, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, Viet Nam, the Republic of Korea and Thailand.
- ⁶ The RCEP states that the parties are to enter into discussions on ISDS no later than two years after its entry into force, and the CAI states that the parties agree to continue the negotiations with a view to negotiate an agreement on investment protection and investment dispute settlement within two years of the signature of the agreement.
- ⁷ Assembly of the African Union, Thirteenth extraordinary session (on the AfCTA), 5 December 2020, Ext/Assembly/AU/ Decl.1(XIII) Johannesburg, South Africa, <https://www.tralac.org/documents/resources/cfta/4247-au-assembly-thirteenth-extraordinary-session-on-the-afcfta-decision-and-declaration-5-december-2020/file.html>.
- ⁸ African Union, "Pan-African Investment Code", 31 December 2016, <https://au.int/en/documents/20161231/pan-african-investment-code-paic>.
- ⁹ European Commission, "EU–China Comprehensive Agreement on Investment (CAI)", <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2237>.
- ¹⁰ European Commission, "EU-UK Trade and Cooperation Agreement: protecting European interests, ensuring fair competition, and continued cooperation in areas of mutual interest", 24 December 2020, https://ec.europa.eu/commission/presscorner/detail/en/ip_20_2531.
- ¹¹ Government of the United Kingdom, "Formal request to commence UK accession negotiations to CPTPP", 1 February 2021, <https://www.gov.uk/government/news/formal-request-to-commence-uk-accession-negotiations-to-cptpp>.
- ¹² "Statement on the modernisation of the Energy Charter Treaty", 8 September 2020, Euractiv, https://www.euractiv.com/wp-content/uploads/sites/2/2020/09/Statement-on-Energy-Charter-Treaty-ENG_080920.pdf.
- ¹³ The 2021 rounds will take place on 2–5 March, 1–4 June, 6–9 July, 28–30 September, and 9–11 November (<https://www.energycharter.org/fileadmin/DocumentsMedia/CCDECS/2020/CCDEC202017.pdf>).
- ¹⁴ For information on the status of contracting parties' ratification and acceptance of approval of the agreement, see <https://www.consilium.europa.eu/en/documents-publications/treaties-agreements/agreement?id=2019049&DocLanguage=en>.
- ¹⁵ The signatories 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.
- ¹⁶ Official Journal of the European Union, Vol. 63, 29 May 2020, <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=OJ%3AL%3A2020%3A169%3ATOC>.
- ¹⁷ World Trade Organization, "Structured discussions on investment facilitation for development move into negotiating mode", 25 September 2020, https://www.wto.org/english/news_e/news20_e/infac_25sep20_e.htm.
- ¹⁸ Kosovo (United Nations Administrative Region, Security Council resolution 1244 (1999)).
- ¹⁹ Regional Cooperation Council, "Regional investment reform agenda for the West Balkans 6", 11 May 2018, <https://www.rcc.int/docs/410/regional-investment-reform-agenda-for-the-western-balkans-six>.

- ²⁰ IISD, "IISD welcomes AU Ministerial declaration on the risks of investor–State arbitration for COVID-19 measures", 21 December 2020, <https://www.iisd.org/articles/iisd-welcomes-au-ministerial-declaration-risks-investor-state-arbitration-covid-19>.
- ²¹ ICSID, "ICSID publishes fourth working paper on rule amendments", 28 February 2020, <https://icsid.worldbank.org/news-and-events/news-releases/icsid-publishes-fourth-working-paper-rule-amendments>.
- ²² The Brazil–India BIT and the RCEP are two IIAs that omit ISDS; the RCEP states that the parties are to enter into discussions on ISDS no later than two years after its entry into force.
- ²³ UN Sustainable Development Goals, <https://sdgs.un.org/goals/goal5>.
- ²⁴ The UNCTAD survey covered Algeria, Argentina, Australia, Austria, Barbados, Botswana, Brazil, Brunei Darussalam, Bulgaria, Cambodia, Canada, Chile, China, Colombia, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Czechia, the Dominican Republic, Egypt, Ethiopia, Finland, France, Germany, Ghana, Hungary, India, Indonesia, Italy, Jamaica, Japan, Kazakhstan, the Lao People's Democratic Republic, Liberia, Luxembourg, Malaysia, Malta, Mauritius, Mexico, Mongolia, Myanmar, the Netherlands, New Zealand, the Niger, Nigeria, North Macedonia, Norway, Peru, the Philippines, Poland, the Republic of Korea, the Russian Federation, Singapore, Slovakia, South Africa, Spain, Switzerland, Tanzania, Thailand, Tunisia, Ukraine, the United Arab Emirates, the United Kingdom, the United States, Uzbekistan, the Bolivarian Republic of Venezuela, Viet Nam, Zambia and the EU.
- ²⁵ IPA efforts to digitalize their services and outreach modalities include enhancing their online presence, offering specialized virtual webinars and conferences with private and public partners and conducting strategic social medial outreach (UNCTAD (forthcoming c).
- ²⁶ Insurance services are not included in the analysis. In some cases, the analysis covers different components jointly, to reflect the nature of the public policy concerned (e.g. in the case of entry restrictions, manufacturing of pharmaceuticals and biotech and related R&D are considered jointly, as are the construction of health infrastructure and the provision of health services).
- ²⁷ A 67 per cent cap applies for large hospitals, specialist medical clinics, nursing services and other hospital services.
- ²⁸ A 30 per cent ceiling applies for private hospitals (increased to 70 per cent for investors from ASEAN countries), and 49 percent for hospice, nursing home and community mental health centres.
- ²⁹ A 35 per cent cap applies for hospitals and clinics owned by domestic companies (increased to 70 per cent for investors from ASEAN countries).
- ³⁰ Up to 100 per cent foreign equity ownership is allowed in the manufacturing of medical devices, medical supplies and medicines, and in the establishment of health information management enterprises, provided an export requirement of at least 50 per cent of output is met. When located in FEZs ("ecozones"), 100 per cent foreign equity ownership is allowed provided that manufacturers export 100 per cent of production.
- ³¹ Correa, Carlos (2013). "Is Section 3(d) consistent with TRIPS?" *Economic and Political Weekly*, 48(32), 49-52.
- ³² In October 2020, India and South Africa proposed a temporary waiver from certain TRIPS obligations to discontinue the application and enforcement of IP rights to facilitate the development and production of all products necessary to the prevention, containment or treatment of COVID-19. The waiver is proposed to last for at least three years, subject to renewal. It attracted broad support from WTO members. The United States announced its support for waiving IP protections but narrowly focusing on IP rights for COVID-19 vaccines. See WTO (2020), Waiver from certain provisions of the TRIPS Agreement for the prevention, containment and treatment of COVID-19 and USTR (2021), Statement from Ambassador Katherine Tai on the Covid-19 Trips Waiver, United States Trade Representative, <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2021/may/statement-ambassador-katherine-tai-covid-19-trips-waiver>.
- ³³ Tolulope, Anthony Adekola, "Has the Doha Paragraph 6 system reached its limits?", *Journal of Intellectual Property Law & Practice*, 15(7), 525–529.
- ³⁴ He, J. (2019). "Indian patent law and its impact on the pharmaceutical industry: What can China learn from India? In: Liu, K.C., Racherla, U. (eds.), *Innovation, Economic Development, and Intellectual Property in India and China*. ARCLIA Series on Intellectual Assets and Law in Asia.
- ³⁵ "Beximco Pharma launches generic version of breakthrough hepatitis C drug", Beximco Pharmaceuticals, Dhaka, 28 June 2015.
- ³⁶ Patnaik, Priti. "Health Policy Watch", 1 April 2021.
- ³⁷ Biadgleng, Ermias, and Jean-Christoph Maru (2011). "The influence of preferential trade agreements on the implementation of intellectual property rights in developing countries: A first look", IPRs and Sustainable Development Paper No. 33, New York and Geneva: United Nations and Geneva and ICTSD.
- ³⁸ UNCTAD, International Investment Agreements Navigator, <https://investmentpolicy.unctad.org/international-investment-agreements>.

³⁹ Adapted from Zhan and Spennemann (2020).

⁴⁰ Chulalongkorn University, Faculty of Pharmaceutical Sciences. "Bachelor of Pharmacy Program, Industrial Pharmacy", https://www.pharm.chula.ac.th/pharm/index.php?main_id=39&sub_id=296&parentid=293.

⁴¹ Thepgumpanat, Panarat, and Chayut Setboonsarng, "Thai government feels heat from lawmakers over vaccine rollout", Reuters.com, 17 February 2021, <https://www.reuters.com/article/health-coronavirus-thailand-idUSL1N2KNOJH>.

⁴² GEXIM, "Ghana export-import bank's collaboration with indigenous pharmaceutical manufacturing companies for exportable products – our story", <https://www.eximbankghana.com/files/1/OCT-PHARMACEUTICAL%20SECTOR%20WRITE-UP.pdf>.

⁴³ PIC/S, "Pharmaceutical Inspection Co-operation Scheme", <https://picscheme.org/en/picscheme>.

⁴⁴ WHO, "Medicines regulatory support", https://www.who.int/medicines/areas/quality_safety/regulation_legislation/en/.

⁴⁵ Kumar Jha, Dilip, "Cold storages: Nearly 50-fold rise in projects approved by govt incentives". *Business Standard*, 14 March 2018, https://www.business-standard.com/article/markets/cold-storages-nearly-50-fold-rise-in-projects-approved-by-govt-incentives-118031300784_1.html.

⁴⁶ ADB, "ADB, Imexpharm sign loan to support generic medicine production in Viet Nam", 15 December 2020, <https://www.adb.org/news/adb-imexpharm-sign-loan-support-generic-medicine-production-viet-nam>.

⁴⁷ African Union and Africa CDC, "CEPI and the African Union join forces to boost African vaccine R&D and manufacturing", 13 April 2021, <https://africacdc.org/news-item/cepi-and-the-african-union-join-forces-to-boost-african-vaccine-rd-and-manufacturing/>.

⁴⁸ British High Commission Accra, "UK-Government supports Ghana's pharmaceutical sector", 30 October 2020, <https://www.gov.uk/government/news/uk-ghana-business-council-supports-ghanas-pharmaceutical-sector>.

CHAPTER IV

INVESTING IN SUSTAINABLE RECOVERY



INTRODUCTION

The COVID-19 pandemic has hit the global economy hard. It has been a shock to gross domestic product (GDP) worldwide, with negative growth in most countries and sharp reductions in growth in some. It has hit incomes, especially of lower-income segments of the population, increasing inequality. Its effects are spread unevenly around the world, with many developing countries – unable to provide the level of income support available in developed countries – limping through the crisis and potentially facing long-term social and economic consequences.

International production, an engine of global economic growth and development, has been seriously affected. Global trade received a big initial shock, although the decline in trade by the end of 2020 was less severe than initially feared owing to dynamism in the final quarters of the year. Global investment was hit much harder, with a decline by one third over 2019 levels and major shocks to greenfield investment in industrial and infrastructure projects – the most productive kind.

With vaccine programmes now being rolled out – albeit at very different speeds around the world – attention is shifting towards recovery priorities. The focus of both policymakers and firms is on building back better: reviving and revving up the economy in such a way that it becomes both more sustainable and more resilient to future shocks.

For firms, especially the largest multinational enterprises (MNEs) engaged in complex international production networks, a key priority is making their supply chains more resilient. Many are expanding inventories of key components, diversifying supply sources or increasing flexibility to allow the shifting of production between facilities in different locations. In some industries, especially those more exposed to policy pressures – such as pharmaceuticals or medical equipment, but also strategic growth industries – there is talk of the need to restructure international production networks, with capacity moving closer to home or spread across multiple locations, which would have important implications for cross-border investment flows in the coming years.

Governments are already fully engaged in supporting their populations and business communities through the crisis, with those in rich countries having rolled out huge rescue packages over the past year. They are now gearing up to direct new investment to growth priorities, with developed countries able to direct public funds to sizeable recovery investment packages and poorer ones relying on alternative sources of finance, such as development banks, and on initiatives to attract foreign capital. The focus of spending is on infrastructure, on growth sectors – especially the digital economy – and on the energy transition, in many cases building on or accelerating existing plans. Again, the implications for international investment flows in the coming years are likely to be significant.

This theme chapter of *WIR21* looks at the possible impact of the post-pandemic priorities of both firms and governments on global investment patterns over the coming years. It aims to identify challenges and risks that could damage the prospects for a big push of investment in sustainable development and suggests policy options to counter them. As such, the chapter serves to address General Assembly Resolution 75/207, which requests UNCTAD, through its World Investment Report, to inform the General Assembly on the impact of the COVID-19 pandemic on investment in sustainable development, and to make recommendations for the promotion of SDG investment.

In part, the chapter builds on the theme chapter of *WIR20*, which projected possible trajectories for international production and investment over the decade to 2030 through

an analysis of transformative forces including policy pressures, technology developments and the sustainability imperative. These forces continue to form the backdrop of trends discussed in this chapter which, focuses more specifically on the actions of firms and governments aimed at post-pandemic recovery.

The scope of the chapter cuts across typical international production investment in industry and investment in infrastructure (in particular through international project finance) to reflect the distinct roles played by the public and private sector, by different types of investors (MNEs, investment funds, institutional finance) and by different financing mechanisms (equity investment, debt). The two forms of international investment flows are closely intertwined (box IV.1) and exploiting synergies between them can provide a boost to sustainable recovery efforts.

Box IV.1. Two types of international investment for development

Cross-border direct investment for development encompasses two main types of flows: international production investment in resources, manufacturing and services linked to global value chains (GVCs), and international infrastructure investment in physical and social essentials such as transport systems, utilities, industrial zones, and health and education facilities. Despite their equal relevance for development, the two forms of investment are substantially different. Whereas international production investment is carried out mainly by individual MNEs, international investment in infrastructure often involves multiple investors and lenders. The modalities surrounding ownership, control and financial obligations can vary greatly for infrastructure investment depending on individual projects. Although only a part of international infrastructure investment translates into FDI, it acts akin to FDI because of its stability and long-term management interest.

International production investment has been the mainstay of most editions of the *WIR* since the early 1990s. Investment policy has traditionally pivoted around this type of investment because of its relevance for industrialization, export promotion and structural change. In recent years, investment policymakers and promotion agencies are increasingly focusing on infrastructure investment, in part because of the relevance of such investment for the SDGs. This shift in focus could intensify in the aftermath of the pandemic, which has exacerbated challenges for GVCs and deepened the SDG investment gap in developing countries.

Box table IV.1.1. Features of the two main types of international investment for development

	Production investment	Infrastructure investment
Types	<ul style="list-style-type: none"> Resource-, efficiency- and market-seeking investment in the context of GVCs 	<ul style="list-style-type: none"> Strategic-asset- and market-seeking investment less dependent on international trade
Main actors	<ul style="list-style-type: none"> MNEs 	<ul style="list-style-type: none"> Investment funds, financial institutions, development banks and MNEs
Ownership advantages	<ul style="list-style-type: none"> Technology, intellectual property, network access and managerial advantages 	<ul style="list-style-type: none"> Financial strength, risk management skills and project management reputation
Nature of intrafirm transactions	<ul style="list-style-type: none"> Trade transactions and financial flows 	<ul style="list-style-type: none"> Financial flows
Policy relevance	<ul style="list-style-type: none"> Long-standing focus of development strategy, industrial policy, investment policy and IPAs 	<ul style="list-style-type: none"> Cross-border investment a relatively recent focus in the context of the SDGs
Selected data sources	<ul style="list-style-type: none"> Balance of payments (FDI) Greenfield project announcements Foreign affiliate statistics 	<ul style="list-style-type: none"> Balance of payments (FDI, debt, portfolio) International project finance announcements Bilateral/multilateral financing commitments and disbursements

Source: UNCTAD.

The discussion in the chapter is structured as follows:

- Section A briefly looks at the behaviour of international investors during and after past crises, to inform and set expectations for likely developments as the current investment downturn subsides.
- Section B starts off the analysis of investment priorities for the recovery phase from the perspective of firms engaged in international production, exploring the possible investment implications of the drive towards more resilient global supply chains.
- Section C takes a country perspective on investment in sustainable recovery, arguing that the development of productive capacity is a helpful guide in setting investment priorities, and showing where international investment both contributes more and took the hardest hit during the pandemic.
- Section D discusses the implications of recovery investment packages that have been adopted or are being developed around the world for international project finance, especially in infrastructure sectors.
- The final section E presents policy conclusions, drawing parallels with the Big Push for investment in the SDGs long advocated by UNCTAD.

A. FDI AFTER THE PANDEMIC: PARALLELS WITH PAST CRISES

The experience of past FDI downturns shows that, whereas financial flows and transactions may rebound relatively quickly, a real investment recovery could take some time to gather speed. Policy responses are important factors shaping the post-crisis investment landscape.

The last major global crisis that offers parallels to the COVID-19 pandemic in terms of its impact on global FDI flows was the global financial crisis (GFC). That crisis, in addition to causing a short-term shock for FDI, also coincided with a shift in its long-term trajectory. In the decade since then, FDI growth was significantly lower than before the crisis. Numerous other crises – regional and global, financial, debt or currency related, and with varying economic repercussions – have affected FDI and the operations of MNEs over the last few decades. The experience from these crises, with respect to their impact on investment on the one hand, and the role of investment during recovery phases on the other, can offer some lessons for harnessing its potential for sustainable recovery (table IV.1).

Table IV.1. FDI and global crises: 10 facts

1	FDI flows react more strongly to crises than trade and GDP and take both more time and more (policy) effort to recover.
2	FDI flows are, nevertheless, more stable and resilient than other international financial flows and external sources of finance for developing countries (such as portfolio flows or bank loans).
3	International deal activity (including both project finance and M&As) falls further and takes longer to recover than domestic deal activity.
4	Greenfield investment and international project finance, important for developing productive capacity, take relatively longer to recover than the financial and transactions components of FDI.
5	Recovery of investment in lower-income developing countries can take relatively long due to both their greater reliance on greenfield projects and investors' more risk-averse behaviour after crises.
6	M&As during crises include opportunistic purchases but also transactions necessary for corporate restructuring.
7	MNEs and their foreign affiliates adjust to crises and recover relatively quickly compared with smaller domestic firms.
8	The presence of resilient MNEs in host countries can support faster recovery from crises, depending on linkages with domestic suppliers.
9	Most post-crisis policy interventions have aimed at facilitating or stimulating FDI (rather than restricting it), to support recovery.
10	FDI downturns can presage a shift in sectoral patterns and types of investment.

Sources: UNCTAD, based on various sources (see also box IV.2).

There is a significant body of research on the impact of the GFC as well as other global and regional crises on FDI and on the role played by FDI during and after crises. It shows that (i) investment responds to crises and economic distress in a way that is different from other capital flows; (ii) its response varies depending on the development status of economies, and it varies by industry and type of investment; and (iii) policies on investment during and after crises can be crucial in determining the scale and scope of the contribution of FDI to the recovery. This section offers a brief complementary analysis on the differential effects of crises on greenfield investment and project finance, the two types of investment that will be most important for sustainable recovery, and a perspective that is largely missing from existing research (box IV.2).

Box IV.2 FDI during and after global crises: existing research

A significant body of research looks at the response of MNEs to global crises and the resulting patterns of FDI. The literature can be divided into three strands: (i) FDI patterns and responses from a macroeconomic perspective, (ii) FDI and MNE behaviour and (iii) FDI and policy responses.

The first strand of literature analyses FDI as a financial flow affected by macroeconomic crises. FDI is the largest source of external finance for many developing countries, and in recent years, especially during financial crises, has been more stable than portfolio investment and bank lending. Most studies find that FDI is steadier and more resilient than other financial flows because of its link with productive capacities, and the inherent sunk costs (for the Asian financial crisis, see Thompson and Poon, 2000; Athukorala, 2003; Aguiar and Gopinath, 2005; Doraisami, 2007; for the GFC, see Vintila, 2011; Rugman, 2013; Lund et al., 2018). However, there is evidence showing that FDI was affected more than macroeconomic variables such as GDP or trade (for the Asian crisis, see Doraisami, 2007; Thangavelu, Yong and Chongvilavivan, 2009; for the GFC, see Lund et al., 2018).

The second strand of literature looks at investor and MNE behaviour. It studies FDI from the business perspective, especially in relation to the role of MNEs during economic crises and in the recovery phase. For example, there is some evidence of MNEs from developed regions engaging in opportunistic acquisitions in emerging markets during financial or currency crises that do not affect their home markets (Krugman, 2000). Cross-border mergers and acquisitions (M&As) may play a role in restructuring economic activities for the post-crisis period, when M&As save the acquired firms and protect their activities in the aftermath of financial crises (Zhan and Ozawa, 2001). But other studies find both stabilizing and de-stabilizing effects. Moon et al. (2011) show a stabilizing role of FDI during the GFC, as MNEs bring both tangible and intangible benefits to host countries. Yet, Doraisami (2007) observes that FDI contributed to vulnerability rather than stabilizing the economy in Malaysia. Alfaro and Chen (2012) conclude that, although the footloose operation of MNEs may contribute to the volatility, vertical production and financial linkages may reduce the negative impact of the crisis in host countries. Enderwick and Buckley (2020) focus on the decision of relocation and regionalization as a result of crises, suggesting that a more regionally based world economy offers a better balance between efficiency and resilience FDI in supply chains. In this case, the costs of location shifting might be mitigated through emerging technologies.

The third strand of literature investigates policy responses during economic crises. Studies look at the need for reforming investment policies and promoting investment (Thomson and Poon, 2000), the role of investment liberalization and facilitation in the aftermath of the Asian crisis (Plummer and Cheung, 2009), the importance of the regulatory environment (Dornean, Isan and Oanea, 2012), and the need for industrial policy for upgrading productive activities (Szent-Iványi, 2016). Edgington and Hayter (2001) underscore the role of post-crisis FDI policies that actively sought foreign capital for recovery after the Asian financial crisis. Several studies look at changes in the sectoral composition of FDI post-crisis, including those driven by policy, and conclude that crises can be a turning point (for Asia, Edgington and Hayter, 2001, and Thangavelu, Yong and Chongvilavivan, 2009; for Eastern Europe, Szent-Iványi, 2016; for the Russian Federation, Khutko, 2020). Teigland, Lhermitte and Bax (2020) investigate the mitigating effects of stimulus and recovery programmes on FDI during the COVID-19 crisis. Kowalski (2020) analyses the policy measures adopted in response to health crises and concludes that they may accelerate the move towards less openness to FDI.

Two areas remain relatively unexplored in the literature. First, despite the different roles played by cross-border M&As and greenfield investments in restructuring economic activities (Nocke and Yeaple, 2008), most studies use FDI data and relatively few are based on greenfield and international project finance data, which can be more relevant for the analysis of the impact of crises on investment in productive capacity. Second, analyses of how FDI shapes the economy after economic crises in developing and least developed countries are limited. Brambilla-Macias and Massa (2010) argue that some of the detrimental economic effects of the GFC filtered through to Sub-Saharan Africa through FDI. Future studies will likely focus on how FDI evolves in the face of financial crises and its potential contribution to a sustained and inclusive recovery.

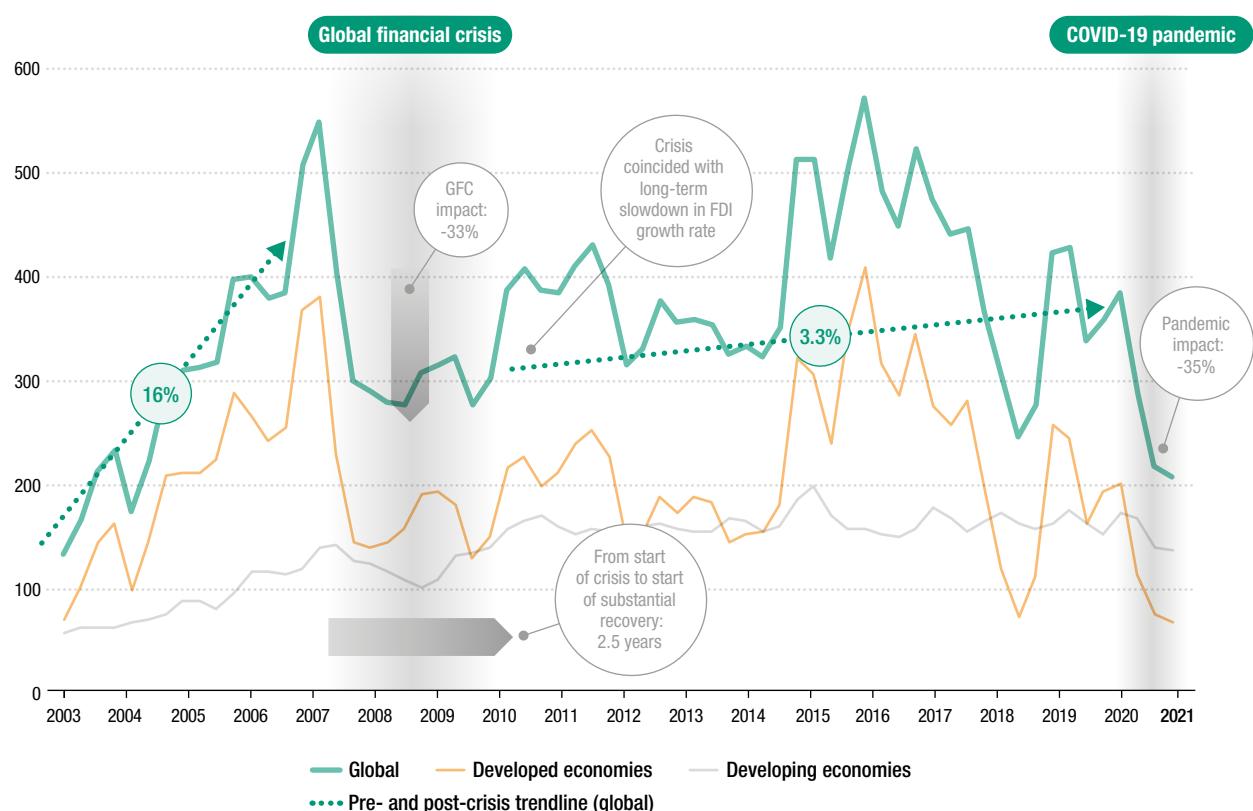
Source: UNCTAD.

Investment responses to the global financial crisis and the COVID-19 crisis show both similarities and differences that vary by the type of investment.¹ FDI, in addition to investment in new productive capacity, also contains intrafirm financial flows and merger and acquisition (M&A) transactions, especially in developed countries. However, the distinction between FDI and portfolio investment had eluded many commentators and research on the GFC (Rugman, 2013). These correlate closely with financial markets and often are more reactive to short-term economic conditions. Greenfield investment is more attuned to real economic trends and directly affects tangible activities. It is thus particularly important for developing countries. International project finance, often used for large infrastructure projects that require multiple investors, tends to include a sizeable debt component that is affected by interest rates and financial market trends. Yet, like greenfield investment, it is more closely linked to the real economy. Also, because it is often directed towards long-term projects, it has long gestation periods that cause delayed responses to crises.

1. Foreign direct investment

Although the GFC started as a financial market crisis, it had significant repercussions for FDI globally and offers some parallels to the COVID-19 pandemic (figure IV.1). The current crisis, like the GFC, has resulted in a steep decline – by about one third – in global FDI. And, although the pandemic has significant economic ramifications for developed and developing countries alike, as in the GFC the fall in FDI has been more severe in developed countries because of the larger size of the financial and M&A components.

Figure IV.1. | FDI inflows during crises, long-term quarterly trend (Billions of dollars)



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

Note: The start and end points of the global financial crisis coincide with the first liquidity intervention by central banks in the United States and the EU and the official designation of the end of the recession by the United States Government, respectively. Marks for years are at the first quarter (Q1) for each year.

Despite the similarities between the two crises in their effect on FDI, there are several key differences and some aspects for which making a comparison would be premature. For one, FDI was on an upward trajectory before the GFC, whereas heading into the pandemic the trend was generally flat. This could make the time it took for FDI to start its recovery after the GFC (about 2.5 years) an unreliable predictor for the start of a substantial recovery in the current context.

Another key difference arises from the different nature of the two crises. FDI is normally a relatively stable external source of finance in most economies, reacting to oscillations in financial markets, interest rates and exchange rates in a muted way and with a lag – certainly compared with portfolio investment flows and loans. In fact, the trough in FDI flows after the GFC was reached about 18 months after the start of the crisis. In the case of the pandemic, lockdown measures, site closures and travel restrictions affected FDI from the onset.

The experience from past crises suggests that the FDI recovery post-pandemic could take some time to gather speed. An analysis of five global and regional crises before the GFC shows that when the initial fall in FDI was limited the recovery was swift, but in the case of more significant FDI declines the downturn was protracted, lasting well beyond the point where GDP had recovered to pre-crisis levels (Poulsen and Hufbauer, 2011).

2. Mergers and acquisitions

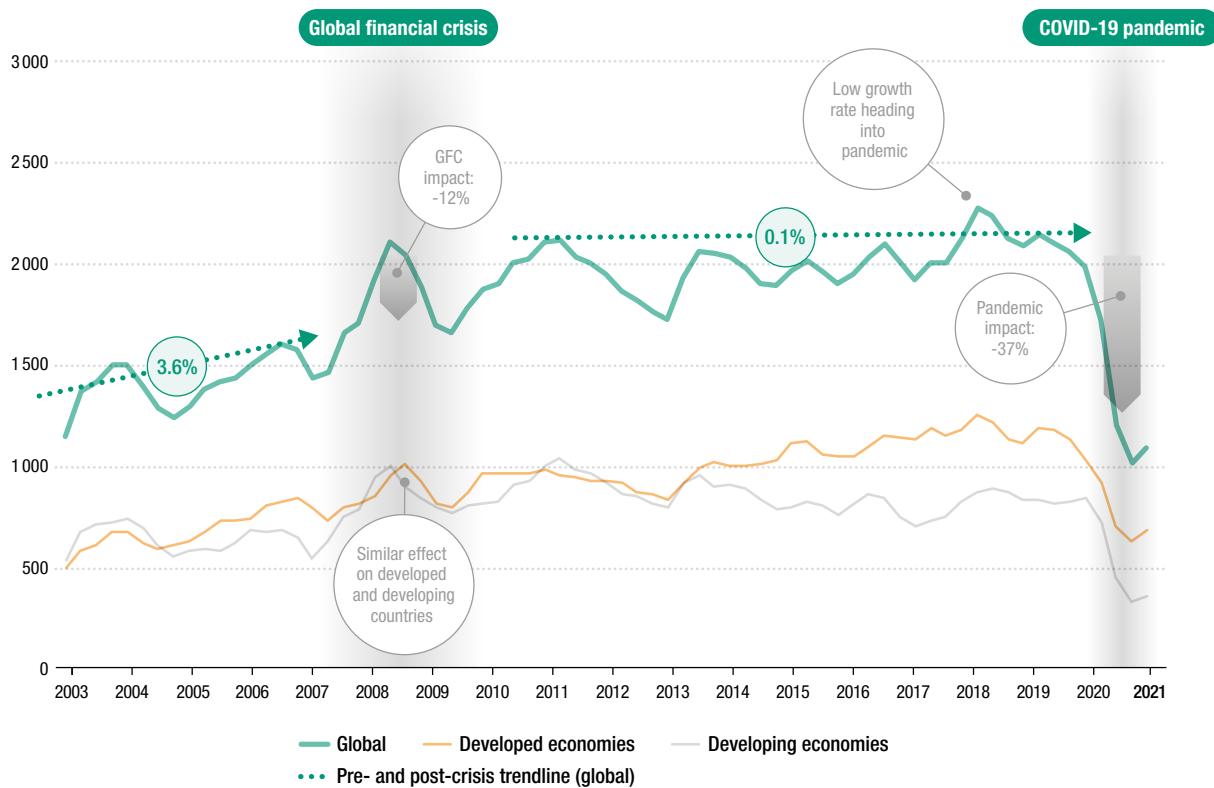
M&A transactions, a significant part of FDI flows in developed economies, tend to react immediately to crises in financial markets. During the GFC the number and value of deals fell sharply, with cross-border deals declining more than domestic ones because of added uncertainty. With M&As, there are contrasting forces at play. Economic and financial conditions push M&A volumes down during times of economic distress, but corporate restructuring, asset sales and opportunistic purchases can push volumes up. The devaluation of companies and falls in exchange rates can make assets cheaper to purchase, leading to fears of fire sales. For example, during the Asian financial crisis, a string of acquisitions led to political concerns and concrete measures to protect assets. Although acquisitions increased in a few countries during the Asian crisis, the fluctuations in the overall number of deals in the region were not significantly higher than in other regions or during other periods (*WIR98*). However, individual transactions can become highly visible because of their strategic implications, especially in sensitive or strategic industries.

Although the number of M&A deals fell sharply after the pandemic started, their recovery was relatively swift, unlike after the GFC, which led to a more sustained downturn on account of its greater impact on financial markets. As in previous crises, there is no evidence today of fire-sale FDI at scale, despite some notable acquisitions and upticks in M&A activity in digital and pharmaceutical industries in some economies. Opportunistic acquisitions by MNEs are more common in asymmetric crises such as the Asian financial crisis; although the pandemic has had uneven effects across regions, it has brought economic hardship across the board. Nevertheless, the trend towards increased scrutiny of investment in strategic sectors, which was already underway before the pandemic, has now accelerated.

3. Greenfield investment

Greenfield projects directly affect the stock of physical capital and productive capacities, more so than other forms of investment. How they react during crises is thus of special relevance for developing countries. The drop in greenfield projects in manufacturing during the GFC was noticeable but not significantly outside the band within which the trend moved before the crisis (figure IV.2).

Figure IV.2. | Greenfield project announcements in manufacturing, long-term quarterly trend (Number of projects)



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

Note: Marks for years are at the first quarter (Q1) for each year.

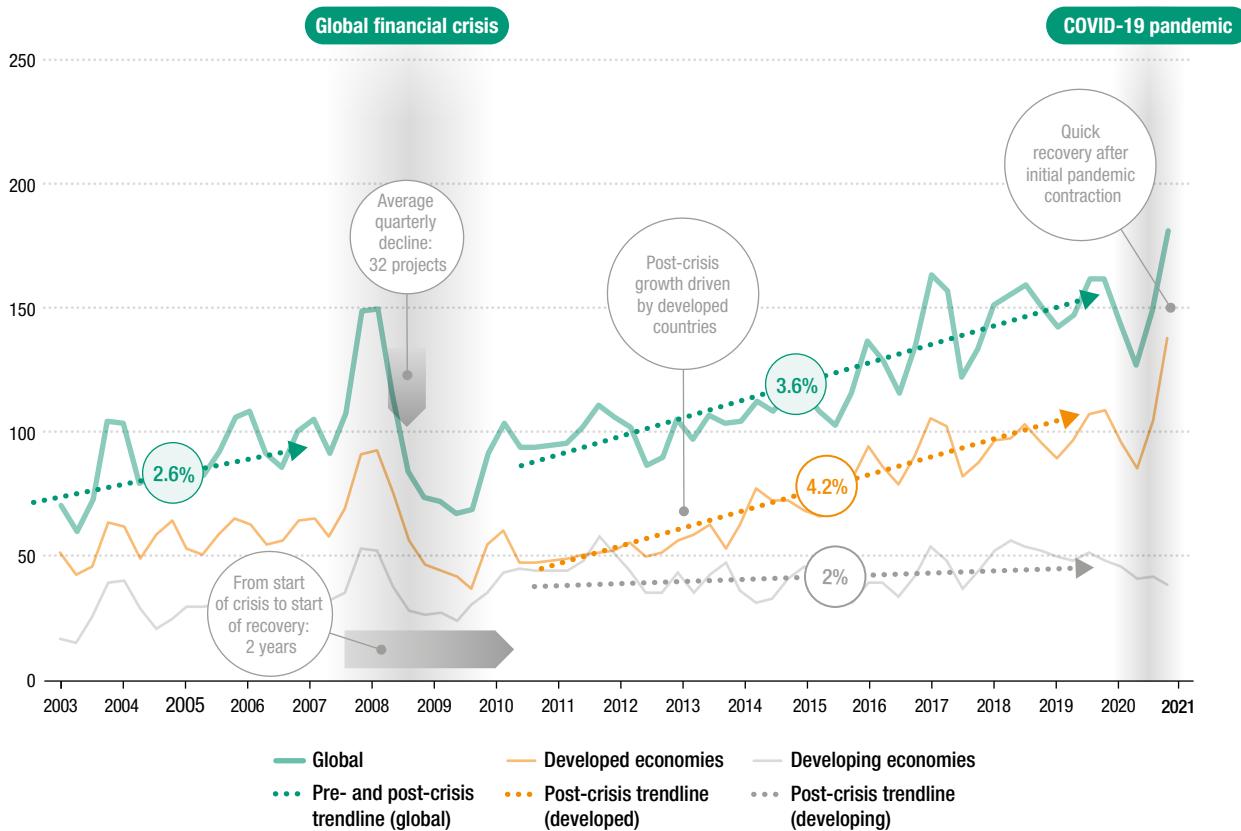
It was mostly noticeable for the four consecutive quarters of negative growth that started during the crisis. The structural loss was very limited and largely compensated by a brief growth spurt in the two years following the low point. However, growth stagnated for the rest of the decade, as it continued at a significantly lower level than before. The limited growth that remained was mostly concentrated in developed countries, with the trend line for developing countries virtually flat.

In comparison with the impact of the GFC, the decline in greenfield investment project announcements in manufacturing due to the pandemic is dramatic in both its magnitude (-37 per cent) and its immediateness. As in the GFC, the immediate decline in greenfield investment is similar for developed and developing countries (in contrast to the asymmetric effect of the crisis on total FDI).

4. International project finance

The number of international project finance deals dropped abruptly during the GFC. The time between the start of the crisis and the start of a substantial recovery was similar (slightly shorter) to that for broader FDI flows (figure IV.3), confirming that international project finance behaviour combines characteristics of both greenfield investment and the financial and transaction components of FDI. Unlike its effect on FDI flows and greenfield projects, the GFC did not result in a long-term contraction in the growth rate of international project finance – in part because this form of investment financing is a relatively young phenomenon and the use of the mechanism for large infrastructure and other projects

Figure IV.3. | International project finance deals, long-term quarterly trend (Number of projects)



Source: UNCTAD, based on data from Refinitiv SA.

Note: Marks for years are at the first quarter (Q1) for each year.

is still in its growth phase. However, most growth after the GFC again appeared to be concentrated in developed countries, whereas project numbers in developing countries stagnated. This can be explained, on the one hand, by the more limited fiscal space in developing countries to fund infrastructure projects and, on the other hand, by increased risk aversity – common after a shock – on the part of international project financiers.

Currently, although a dip due to the pandemic was noticeable in Q1 and Q2 of 2020, the drop is not comparable to the GFC in both intensity and duration, with growth having resumed in Q3 and Q4 and with no substantial deviation from the trend line. However, the trend in developing countries turned from stagnant to negative. The deeper impact of the GFC on international project finance compared with that of the pandemic can be explained by the link of this type of investment with financial markets, which remained subdued for longer during the earlier crisis. In contrast, the fiscal and monetary interventions in developed countries in response to the pandemic have boosted financial markets, translating into higher international project finance flows.

5. Investment policies

Large-scale interventions by governments around the world to stabilize economies during crises are an important factor shaping the investment landscape, either indirectly or directly (table IV.2). Macroeconomic interventions affect the fundamentals of investment. Investment-related policies, such as trade controls, production mandates or financial support for businesses affect the investment climate. Investment-specific policies directly

address the entry and operations of foreign firms. They may include investment promotion and facilitation measures, on the one hand, or restrictions and safeguards against opportunistic acquisitions in strategic or sensitive sectors, on the other. Comparing past crises with the current one reveals a significant overlap of investment policy responses, direct and indirect, as well as several key differences.

Table IV.2. Policy responses to crises with an impact on investment – a comparison

	Past crises	COVID-19 crisis
Macro policy context		
Monetary policy	Interest rate adjustments, reform and strengthening of financial systems (Asian financial crisis and other national/regional crises) Monetary easing, financial market stability (GFC)	Monetary easing, low interest rates; asset purchase programmes; long-term refinancing windows
Capital and foreign exchange	Foreign exchange and capital controls to stabilize currencies	Currency swaps, liquidity programmes; currency controls in some developing economies
Fiscal policy	Expansionary fiscal policies (Asian financial crisis) Fiscal stimulus, including transfers to the private sector, equity injections and bond purchases (GFC)	Fiscal stimulus, including additional spending, tax exemptions or deferrals; liquidity and income support; loan guarantees
Investment-related policy areas		
Trade	Temporary behind-the-border measures, mostly non-tariff measures to protect domestic industries; use of regional and interregional trade facilitation agreement mechanisms	Export bans and import facilitation in strategic sectors such as health; border closures for sanitary reasons
State support	State aid and bailouts, especially to activities “too big to fail”; government guarantees for impaired financial assets and bank deposits; temporary tax reductions for crisis-hit firms	Government guarantees for impaired financial assets and bank deposits; temporary tax reductions for crisis-hit firms; increased public investment in infrastructure
State investment (nationalization)	Temporary infusion of capital or acquisition of assets, and nationalizations in banking and selected high-employment manufacturing industries	Temporary acquisition of equity in companies in crisis-affected activities; nationalizations less frequent
Mandatory production	..	Health-related mandatory production measures
Competition policy	Measures against fire sales and to strengthen competition (mostly Asian financial crisis)	Measures to protect key sectors and essential security interests against non-desired acquisitions
Intellectual property measures	Measures to counter the slowdown of R&D activities and new patents	General authorization of non-voluntary licensing to speed up R&D; IP-holder-specific non-voluntary licensing to enable imports of medication
Investment-specific policies		
Liberalization	Relaxation of ownership rules, mode of entry and financing of operations to attract more FDI and to accelerate recovery, in some cases related to structural adjustment programmes (Asian financial crisis); only some countries increased restrictions (e.g. Argentina and Brazil in the GFC)	Liberalization efforts, largely limited to developing countries, reach a historical low point
Facilitation	Easing entry conditions and procedures to accelerate recovery from crisis, especially in export-oriented industries	Focus on the alleviation of administrative burdens and bureaucratic obstacles for firms; guidance through COVID-19-related measures; accelerated digitalization of facilitation services
Promotion and aftercare	Encouragement of investment in non-financial activities, strengthening targeting in export-oriented industries and selected value chains	Administrative and operational support during the crisis; acceleration of digitalization of services and remote services; more aftercare
Incentives	Provision of mostly fiscal incentives to non-financial activities coupled with performance requirements, targeting global value chains, especially in the automotive and electronics industries	Tax support for both foreign affiliates and their domestic suppliers through facilitation of tax filing and more benefits; financial and/or fiscal incentives to produce COVID-19-related medical equipment; incentives for conversion of production lines; sectoral focus on health and tech
Regulations and performance requirements	Regulations discouraging financialization and encouraging higher value added and more export-oriented activities	On health-related, resilience and sustainable development considerations, leading to a rise in local content policies in several developing countries
Restrictions	Foreign investment restrictions against fire sales (Asian financial crisis); restrictions on FDI in financial sector (GFC)	Introduction or reinforcement of FDI screening mechanisms across developed countries and economies in transition reach a historical high point, related to national security concerns over sensitive assets, heightened by the pandemic

Sources: UNCTAD Investment Policy Monitor (various editions); IMF country reports (various issues); IMF World Economic Outlook (various issues); OECD (2020).

Note: GFC = global financial crisis. This table synthesizes measures adopted in all countries, but with a special focus on developing and transition economies.

An apparent common investment policy feature across crises is an initial impulse towards some degree of protection of domestic industry. After the GFC, the G20 played an important role in calling for continued openness to ensure that international trade and investment could support the recovery. The pandemic, in contrast, came at a time when the directional trend in global trade and investment policy was already shifting towards more protectionism, and with new vulnerabilities exposed, the call for continued openness could prove more precarious. For certain strategic industries, including innovation-driven industries as well those related to health care, the pandemic has led to the enactment of new investment barriers.

At the same time, the pandemic response also includes many investment facilitation mechanisms. These include, for example, the streamlining of investment approval procedures, a shift towards online tools and e-platforms to expedite administrative procedures for investment, pandemic-specific services of investment promotion agencies (IPAs), and incentive schemes for health-related R&D or the production of medical supplies, as well as guarantees for suppliers in value chains (*WIR20*). The experience after past crises suggests that, apart from the short-term and context-specific investment policy responses to crises, some investment policy effects may persist for some time.

In conclusion, evidence on past crises shows that FDI tends to be more stable and resilient than other financial flows but, depending on the intensity of the crisis, FDI flows may not return to pre-crisis levels for some time. Nonetheless, a recovery period does offer opportunities to facilitate shifts in investment towards more sustainable development-oriented assets and activities: several past crises brought about sectoral changes in FDI driven by policy stimulus.

Past crises also show that FDI responds differently in developing regions than in developed economies. The immediate fall in flows is less pronounced in the former due to the lower share of the financial component of investment, but the longer-term effect on greenfield projects can weigh on development and the return to healthy growth take longer.

Finally, MNEs adjust to shocks relatively quickly; international production indicators including foreign sales, assets, employment and capital expenditures by MNEs suffered less in past crises than FDI flows – a situation that holds true also in the current FDI downturn. That adds to the stability that the presence of foreign affiliates can provide to a host country, especially if there are significant linkages with the local economy.

B. INVESTING IN RESILIENCE

1. Resilient global supply chains

Supply chain resilience has become a top priority for policymakers and for firms. MNEs can improve supply chain resilience through network restructuring (involving investment and divestment decisions), supply chain management solutions and sustainability measures.

The policy debate on investment in sustainable recovery is characterized by the desire to “build back better” and to make the global economy more resilient to shocks. Increasing resilience relies to a large extent on the efforts of MNEs to address vulnerabilities in their global supply chains. It is therefore important to factor in the business perspective to understand their likely course of action.

Notwithstanding a shift in business focus from efficiency to resilience (Antràs, 2020; Javorcik, 2020), policymakers and firms have different perspectives on resilience. The former prioritize economic and social resilience, equating it with reduced global interdependence; the latter rely on the resilience of international production networks for their efficiency and competitiveness.

This section provides a framework for the analysis of the strategic options open to MNEs to achieve greater supply-chain resilience. The focus is on the assessment of the likelihood of their response translating into changes in investment volumes and patterns due to the restructuring of international production networks, including reshoring, nearshoring or diversification. Production network restructuring applies to internalized MNE production processes but can also be extended to external suppliers and outsourced operations, where reshoring equates to local supply and diversification to multisourcing.

Network restructuring is only one of multiple options available to MNEs to build more resilience in their global supply chains. MNE choices will be driven by cost-benefit considerations and depend on the prevalent international production profiles of firms in different industries and on their business fundamentals (capital and labour intensity). Growth prospects (i.e. the need for new investments) and exposure to potentially disruptive policy and technology trends will also affect the cost-benefit balance.

This framework puts manufacturing at the centre of the discussion. It also addresses issues relevant to services. Whereas physical supply-chain shocks, such as natural disasters or the current pandemic, directly affect the functioning of supply-chain networks in manufacturing, new systemic risks are emerging, such as cybersecurity risks, with potentially disruptive impacts on supply chains in the services sector, as witnessed by the recent ransomware attack that crippled a major oil pipeline in the United States.

This section builds on the discussion of the future of international production in *WIR20*, which projected several trajectories for international production in the decade to 2030 based on technology, policy and sustainability trends. These macro trends are contextual conditions in this section. The focus is on how the business response to the pandemic is expected to affect MNE location decisions and, in turn, international production networks. Focusing on business priorities adds the resilience dimension to the driving forces that are shaping the future of international production and further qualifies the direction, timing and intensity of future trajectories.

a. A business perspective on resilience

MNEs build their international production networks with the aim to maximize economic performance. Whether it is cost reduction, market expansion or access to raw materials or factors of production, the driving force of MNE location decisions is ultimately operational efficiency and bottom-line results. This has led to the long, complex and geographically fragmented networks of production sites and suppliers that characterize modern global supply chains. Concerns about the fragility of this system of international production are not new. They are periodically reignited by new supply-chain shocks.

In the 10 years before the pandemic, several exogenous shocks led to sizeable disruptions in international production, with global supply chains acting as long-distance transmitters and even amplifiers. For example, the floods in Thailand in 2011 caused greater production losses to Japanese producer Toyota than the contemporaneous Fukushima disaster (Haraguchi and Lall, 2015).

Recently, the blockage of the Suez Canal by a container ship caused major disruptions to international trade in goods – affecting about one tenth of global manufacturing trade and leading to supply shortages of many products.²

Supply-chain resilience is now a top strategic priority for countries and MNEs. The pandemic first and foremost uncovered failings in the international supply chains of health-care equipment and medicines. These were due in part to exogenous challenges in the market (demand peak) and policy (trade restrictions), but also to the inherent fragilities of health-care supply chains. These failings were exemplified by the prolonged global shortage of personal protective equipment after the outbreak of the pandemic. The industry's initial inability to respond promptly and effectively to the demand shock was emblematic of the configuration of its global production networks, characterized by internationally fragmented and vertically concentrated supply chains, with half of the global supply of protective masks provided by China, and a “just-in-time” business model prioritizing lean production and low inventories (Gereffi, 2020).

Beyond health care, the pandemic triggered supply-chain problems in virtually all manufacturing industries. It exposed the role of GVCs in spreading disruptions across the globe, with lockdown measures in one country affecting production in another through shortages in the supply of critical inputs, and with blockages in logistics due to limited mobility affecting exchanges of intermediate inputs between actors in global production networks. In the automotive industry, for example, a shortage of parts coming from China forced Korean carmaker Hyundai to temporarily shut down all its car plants in the Republic of Korea (Baldwin and Weder Di Mauro, 2020).

Firms are well aware of the need to act. Surveys among corporate executives confirm a perception of fragility in their global supply chains and provide a clear indication of a shift in future international production strategies towards greater resilience (table IV.3). Over 70 per cent of enterprises attest to having experienced supply-chain fragility during the pandemic. To counter the crisis, between 40 per cent and 70 per cent profess to have planned responses (additional investment, changes in supply-chain structure, consolidation of home operations) to improve resilience. Only a minority considers relocation of production a realistic option. In one survey a third of respondents mentioned plans to diversify away from China as a production location; in another, about 15 per cent indicated that they were considering reshoring production; and in a third survey some 40 per cent of respondents expected more nearshoring in the short run.

Table IV.3.

Business surveys: the pandemic and supply-chain resilience

Survey company (Number of firms surveyed)	Direct impact due to the pandemic	Implemented response to the pandemic	Planned response to the pandemic
Capgemini (1,000)	About 70 per cent of companies surveyed needed at least three months to recover from the initial shock	57 per cent of companies are increasing investment to improve supply chain resilience	68 per cent of companies indicate that, in light of the pandemic, they would prefer to buy local
Euler Hermes–Allianz (1,181)	94 per cent suffered a supply chain disruption		15 per cent would consider reshoring the production
Gartner (260)	21 per cent believe that they have a highly resilient structure as of today	33 per cent plan to move or have moved production outside China	55 per cent expect to have a highly resilient network in the next two to three years
IBM (> 500)		25 per cent have postponed or canceled a project due to the pandemic (in particular in electronics, petroleum and travel)	60 per cent expect to consolidate operations in their home country (while only 27 per cent consider consolidating their overseas activities) 49 per cent believe that cross-border trade will increase in the next three years 41 per cent anticipate more nearshoring of their activities
PwC (2,814)	73 per cent surveyed were negatively affected by the crisis	62 per cent used a crisis response plan	70 per cent plan to increase resilience through additional investment

Sources: UNCTAD elaboration based on a non-exhaustive list of business surveys (Capgemini Research Institute, 2020; Euler Hermes–Allianz, 2020; Gartner, 2021; IBM: Dencik et al., 2020; PwC, 2021).

b. MNE resilience strategies

From the perspective of multinational firms, supply-chain resilience can be improved through strategies that form three pillars: production network restructuring, risk management solutions and sustainability enhancement measures (figure IV.4).

The first pillar, **production network restructuring**, involves production location decisions and, consequently, investment and divestment decisions. It implies the redesigning of global supply chains in two directions: reshoring and nearshoring, and diversification.

- *Reshoring and nearshoring* address the need to limit complexity and interdependence in global supply-chain networks. It does so by reducing the length of GVCs, physically confining the manufacturing footprint and the supplier base domestically or regionally, to minimize exposure to risks and ripple effects across highly integrated production networks.
- *Diversification* leverages complex networks as a means to avoid excessive concentration and to build redundancy into the system, with the goal of diversifying supply, operations and distribution channels, increasing options for resilience and moving production closer to markets.

Both resilience-seeking options – centralization or decentralization – have major implications for international production and FDI. Reshoring is associated with disinvestment, with a negative impact not only on future FDI flows but also on existing stock. Diversification would bring changes to the nature of FDI, with a shift from efficiency-seeking to market-seeking investment.

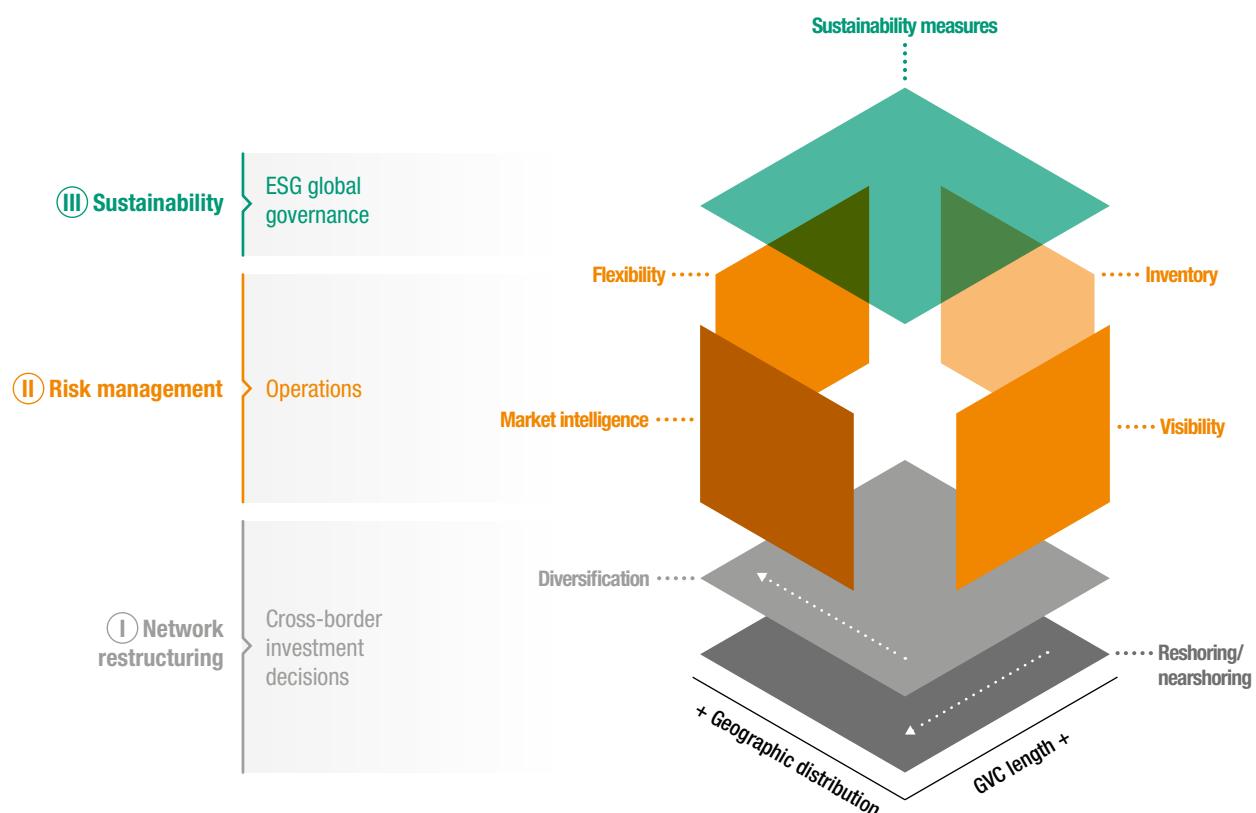
Network restructuring, in particular the risk of broad-based reshoring, has been in the spotlight since the outbreak of the pandemic.³ Reshoring is perceived by home countries as the obvious way to mitigate exposure to systemic risks. For host countries, particularly developing economies, reshoring implies divestment of efficiency-seeking FDI and reduction of opportunities for future reinvestment, while diversification means more opportunities for FDI.

The second pillar is **risk management solutions**. Instead of restructuring their production network, businesses have the alternative option to strengthen the capacity of their networks to absorb shocks. For this purpose, firms can resort to various supply-chain risk management solutions. As risk management is part of firms' standard operations, they will naturally be inclined to first rely on the following tools:

- *Visibility* and transparency refer to the capacity to monitor supply-chain events to identify patterns, make informed and timely decisions – including through simulations and contingency planning – and take proactive measures to limit the impact of disruptions. New industrial digital technologies support visibility and transparency by enhancing traceability and authentication.
- *Flexibility* is the capacity to reconfigure production lines, distribute production across sites, switch between make or buy decisions, and access alternatives in transportation and logistics.
- *Sufficient backup inventory* represents a critical buffer to minimize the impact of disrupted supplies.
- *Market intelligence* and forecasting address demand-side risks by anticipating large demand fluctuations.

From a business perspective, these measures are less demanding than network restructuring. They may call for substantial investment in technology to enhance value chain control and coordination; they may require increases in productive capacity to meet buffer requirements; they may even imply a shift in operating models from “just-in-time” to

Figure IV.4. | An integrated framework of MNEs’ resilience strategies



Source: UNCTAD.

“just-in-case” (Brakman et al., 2020). However, they do not entail structural relocation of massive physical assets. The impact on FDI is thus less significant than for production network restructuring, limited to the indirect impact of supply-chain digitalization on aspects such as the distribution of value added across locations, asset lightness and outsourcing decisions (*WIR20*). Nevertheless, risk management solutions are less effective for addressing the challenges posed by arising geopolitical rivalry and systemic competition.

The third pillar is **sustainability**. Resilience in supply chains goes hand in hand with sustainability. On the one hand, reinforced resilience measures are needed to address systemic risks caused by sustainability issues. On the other, sustainable business practices are important levers to improve supply-chain resilience by mitigating environmental, social and governance (ESG) risks. The FDI impact of sustainability practices can be significant, affecting the economics of international production at different levels: from introducing cross-border differences in environmental standards and regulations to inducing market-driven changes in products and processes, to changing the design of global supply chains towards more local and sustainable configurations or reorienting investment towards SDG sectors.

MNE resilience strategies are an integrated package rather than an option menu – a package in which the three pillars and their components interact with each other.

2. Implications for global investment

Network restructuring is costly and not a short- or medium-term solution for most firms that have complex global supply chains. In the longer term, resilience will become more important in location decisions, potentially leading to a gradual rebalancing of international production networks. In the short term, reshoring, relocation and diversification are likely to accelerate only as a result of political pressure or concrete policy interventions.

a. Supply-chain risks and network restructuring

MNEs face growing vulnerabilities due to the massive expansion of their global supply chains over the past decades. These are mainly related to their *geographic coverage*, adding “discrete” sources of risks; *interdependence*, enhancing systemic impact through contagion and ripple effects; and *concentration*, magnifying the value at risk. Production network restructuring can limit the exposure to one or more sources of systemic risks.

Reshoring reduces the length of the production process, enabling the shift from internationally specialized to more local and shorter supply chains. It directly mitigates exposure to systemic risks, across and between borders, by reducing the number of countries contributing to the production process, their interdependence and the role of international trade in the exchange of intermediate inputs. Simpler and shorter value chains are also more manageable from an operational perspective (Srai and Ané, 2016).

The transition from longer to shorter supply chains thus reduces two of the three sources of fragility in global supply chains: geographic coverage and interdependence. However, reshoring and nearshoring imply the concentration of risks domestically and regionally. This reduces the probability that production is hit by a systemic shock, but it increases the value at stake if an adverse event does occur. In addition, it renders less effective some risk management measures that leverage diversification and market proximity, such as flexibility and market intelligence.

Diversification implies a shift from concentrated production processes to localized and geographically distributed production, closer to final markets. Distributed production is often enabled by Industry 4.0 technologies such as additive manufacturing (Laplume et al., 2016;

Srai et al., 2020; *WIR20*). Geographic distribution mitigates frailties related to concentration and interdependence. It also increases flexibility, allowing the switching of production across sites, and possibly enhances market intelligence through proximity.

On balance, from a pure risk management perspective, diversification is preferable to reshoring. Whereas the latter builds resilience through simplification and subtraction of risks, the former builds resilience through redundancy and addition of options. Diversified production networks are more flexible and better equipped to cope with unexpected shocks, but they also require additional investment and efforts in coordination and control to manage higher complexity. Reshoring and diversification are, fundamentally, the two options available to MNEs for restructuring global production networks, not only for resilience reasons but also in response to other shocks, such as a rise in trade tariffs (Balistreri et al., 2018).

b. Network restructuring costs and benefits, by industry

A sharper focus on resilience will not change the way businesses make their strategic choices. Location decisions will still be based on considerations of (economic) cost and (risk) benefit. What will change is the relative weight of the two sides of the equation, with MNEs expected to relinquish some cost efficiency to secure resilience gains.

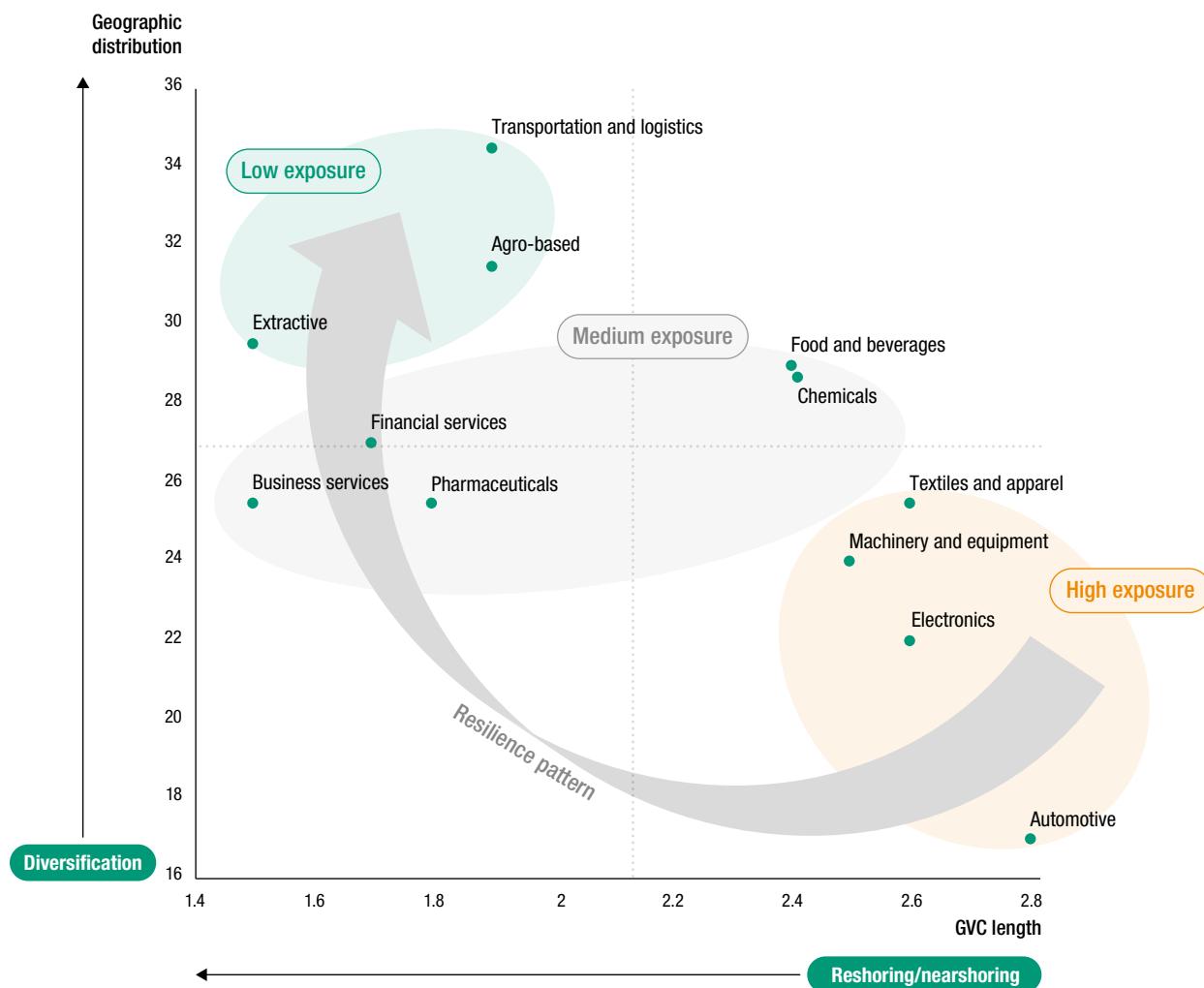
Cost-benefit considerations are MNE-specific. However, several standard features of the system of international production, both on the risk side and on the cost side, make it possible to provide a high-level assessment of the likelihood of network restructuring measures across industries.

UNCTAD framework for the analysis of international production configurations (*WIR20*: chapter IV.B) maps industries by the length and geographic distribution of their GVCs. Length is measured by the number of cross-border intermediate production steps. Geographic distribution reflects the degree of participation in the production process across countries, as measured by the relative concentration of value added. A higher geographic distribution of value added is associated with redundancy, either through multi-sourcing or replicated production. Network restructuring for resilience could be traced as a broad diagonal move from long and concentrated configurations to short and distributed ones (figure IV.5) – a move enabled by reshoring/nearshoring (reducing exposure on the dimension of length) and diversification (reducing exposure on the dimension of geographic distribution).

Mapping the position of industries according to their archetypical supply-chain configuration provides a high-level assessment of their exposure to risk. The industry aggregations analysed account for about 60 per cent of the total announced value of greenfield investment (2015-2019). The most exposed include the typical GVC-intensive industries – automotive, electronics, machinery and equipment, and textiles and apparel. These account for about 20 per cent of greenfield investment across all industries, but almost 50 per cent when considering manufacturing investment only. They typically are a mainstay of industrialization strategies in developing economies and play a larger role in international production and development than their investment size suggests. A push towards production network reconfiguration in these industries could have important development implications.

In the cluster of industries characterized by medium exposure, one group (food and beverages and chemicals) is characterized by long but regionally diversified production networks. These are regional processing industries, typically organized in regional value chains, replicating on a local scale the long and vertically specialized GVC model. Another group of industries has shorter and concentrated global supply chains, where operations are distributed but the bulk of value is shared among a few locations.

Figure IV.5. | Network configurations by industry (selected industries)



Source: UNCTAD.

Note: GVC length is measured by the number of production stages involved in a specific GVC. Geographic distribution reflects the degree of concentration of value added and is measured as the average of the number of countries that account for 80 per cent of global value added in gross export and the number of countries that account for at least 0.5 per cent of global value added in gross exports. Values are reported in *WIR20* (table IV.4).

This structure is consistent with more knowledge-intensive industries, such as pharmaceuticals, but also with services industries characterized by few high value adding hubs and many operational spokes. This cluster includes some of the industries subject to stronger policy pressure to restructure.

Industries with low exposure are either upstream industries contingent on natural resources that cause dispersed production (extractive and processing industries, and agriculture-based industries), or lower value added proximity services instrumental to local operations or delivery (service industries such as transportation and logistics, and retail and wholesale). These activities typically have short value chains and value added generated by location-specific assets.

The set of GVC-intensive industries – the group most exposed to supply-chain risk – is also characterized by the highest economic barriers to production network restructuring. All these industries have highly (cost-)efficient network configurations, as reflected also by the capital and labour intensity of their typical investment project (table IV.4a).

Table IV.4a.

Relevant business indicators by industry, 2015–2019 (Selected industries)

Exposure level	Industry	Share of total value of announced cross-border greenfield investment (%)	Capital intensity	Labor intensity
			Average investment size (Millions of dollars)	Average number of jobs per million dollars invested (Number)
High-risk exposure	Automotive	8	58	4.6
	Electronics	6	45	4.3
	Machinery and equipment	2	15	5.5
	Textiles and apparel	3	16	6.7
Medium-risk exposure	Business services	9	19	3.8
	Chemicals	13	116	1.1
	Financial services	3	25	2.6
	Food and beverage	3	43	3.6
Low-risk exposure	Pharmaceuticals	2	36	2.4
	Agro-based	0	40	5.0
	Extractive industries	4	391	0.7
	Transportation and logistics	5	57	1.9

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

Table IV.4b.

Relevant business indicators by sub-industry, 2015–2019 (High-risk exposure industries)

Industry	Sub-industry	Share of total value of announced cross-border greenfield projects in the industry (%)	Capital intensity	Labor intensity
			Average investment size (Millions of dollars)	Average number of jobs per million dollars invested (Number)
Automotive	Components	28	36	7.0
	OEM	54	134	3.1
Electronics	Batteries	13	159	3.1
	Communications equipment	10	21	8.5
	Computer	4	15	8.6
	Household appliances	3	32	7.3
Machinery and equipment	Semiconductors	30	194	1.4
	Engines and turbines	11	34	4.2
	Industrial equipment	68	13	6.1
Textiles and apparel	Medical devices and equipment	21	19	4.6
	Apparel	88	14	6.2
	Textiles	12	51	9.2

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

Capital-intensive industries, such as automotive and electronics, leverage economies of scale generated by concentrated and specialized production hubs to optimize operational efficiency and costs of supply. Labour-intensive industries, such as textiles and apparel, exploit labour-cost differentials across countries to minimize costs of production. As a result, capital-intensive industries are more exposed to reshoring pressures, preserving economies of scale at the cost of efficiencies from international arbitrage opportunities. Labour-intensive industries lean towards diversification and redundancy, affecting economies of scale but opening possibilities to capture further location cost advantages.

Yet, even if firms may be able to absorb shocks to variable costs, the impact on fixed costs and the inability to recuperate sunk costs add a critical factor preventing network restructuring as a short- or medium-term solution (Antràs, 2020). The physical relocation of fixed (tangible) assets incurs sunk costs associated with dismissing productive capacity and financing costs associated with the establishment of new facilities, particularly for more capital-intensive activities. Overall, network restructuring measures to build resilience expose MNEs in GVC-intensive industries to significant, and potentially prohibitive, pressure on costs.

Some industries facing less extreme cost-benefit trade-offs – for example industries characterized by relatively smaller investment size (machinery and equipment) – are more likely to undergo some reconfiguration. The pharmaceutical industry may also be exposed to business and policy pressure for relocation.

Overall, most industries are unlikely to embark on a systematic and broad-based process of network restructuring in the absence of policy pressures or incentives in that direction. But there is some heterogeneity (table IV.4b). Focusing on industries with the highest risk exposure: in the automotive industry, the manufacturing of components is less capital intensive than original equipment manufacturing, suggesting a more fragmented and commodified production process. In electronics the dichotomy is even more pronounced, with relatively small-scale investment projects in the manufacturing of computers, communication equipment or household appliances, and highly capital-intensive projects in semiconductors and batteries. Mass production and high concentration put these industries among those most exposed to policy monitoring as witnessed, for example, by an executive order issued in February 2021 in the United States that aimed to address vulnerabilities in the supply chain for essential goods, including critical minerals, pharmaceuticals, semiconductors and batteries for electric vehicles. Machinery is also a broad industrial category, ranging from relatively highly capital-intensive projects in engines and turbines to smaller-scale investment in manufacturing of equipment, including industrial equipment as well as medical devices. This is another industry under strong pressure to address supply-chain vulnerabilities.

A cost-benefit analysis based on business considerations demonstrates the complexity of reconfiguring MNEs' international production networks in response to the pandemic. In the short term, supply-chain restructuring – reshoring, relocation, diversification – is likely to become a reality only as a result of political pressure or concrete policy interventions, and where incentives or subsidies change the economic equation. Public support can subsidize capital investment to fully or partially offset sunk costs associated with relocation of fixed assets. Any such interventions will prioritize supply chains for essential goods in the health-care sector and for strategic growth sectors.

In the absence of policy drivers, most MNEs are likely to focus on enhancing supply-chain risk management practices that do not involve production network reconfiguration. Increasing inventories is one of the most common measures. Especially in industries that have pushed harder on just-in-time business models, such as the automotive industry, there are strong pressures to increase safety stocks.⁴

The longer-term effects of the search for increased resilience will be more significant. They will become part of the broader transformation process already set in motion before the pandemic because of technology, policy and sustainability trends. This process is expected to steer GVCs towards more reshoring, regionalization and distributed manufacturing (WIR20; Enderwick and Buckley, 2020).

In conclusion, the move towards more resilient global supply chains will not manifest itself in the form of short-term emergency restructuring but as a long-term gradual rebalancing, with resilience becoming a more important consideration in location decisions for new international investments. The business case for rebalancing is more credible than that for restructuring. New investments are not affected by sunk costs, and potential losses on variable costs are limited to incremental volumes. Thus, the drive to increase supply-chain resilience will not lead to a “rush to reshore” but could become a “drag on development”, with new investments in international networks no longer looking for locations offering low-cost factors of production to the same degree.

C. INVESTMENT PRIORITIES FOR SUSTAINABLE RECOVERY

1. Focusing investment on productive capacity

Setting priorities for promoting investment in sustainable recovery implies focusing on infrastructure and industries that are key to recuperate lost ground and restart growth in productive capacity.

Policymakers worldwide have pledged to build back better after the pandemic, to work towards more resilient economies and to put sustainable development centre stage. Stimulus plans and recovery investment packages in economies that can afford them and post-pandemic development strategies in economies with fewer means focus on physical and social infrastructure, on digital development and on the energy transition. These are sound investment priorities: (i) they are very much aligned with SDG investment needs; (ii) they concern sectors in which public investment plays a naturally bigger role, making it easier for governments to act; and (iii) they are known to have a high economic multiplier effect, i.e. each dollar of investment yields more growth benefits. The last point is especially relevant given that a key function of recovery spending is to provide demand-side stimulus.

In considering investment priorities for sustainable recovery and the role of private investment, and international private investment flows in particular, it is nevertheless worth casting a wider net. The COVID-19 pandemic has brought the productive capacities agenda to the fore. It has disproportionately affected those working in low-productivity sectors, which worsens inequality, reverses gains in poverty reduction and increases vulnerable employment (Andreoni and Chang, 2021).

The productive capacity of an economy depends on many diverse factors. The concept refers to the productive resources, entrepreneurial capabilities and production linkages that together determine a country's ability to produce goods and services that will help it grow and develop.⁵ Productive capacity is of critical importance for all countries, at all income levels, as a key ingredient for economic growth and development.

Productive capacity can be broken down into several component factors. This report uses UNCTAD's Productive Capacities Index (PCI) to identify investment types relevant for each component (table IV.5). The PCI covers 193 economies for the period 2000–2018, capturing the set of productive capacities and their specific combinations across 46 indicators and 8 components, 7 of which are relevant for investment.⁶ As such it provides a useful framework to map investment relevant for building productive capacities.

Although the components of productive capacity are similar for all countries, their relative importance and hence priorities for investment depend on stages of development. Investment in productive capacity can come from many sources. Amid resource constraints caused by the pandemic, which are affecting developing economies particularly severely, foreign private investment in productive capacities will have a significant role to play for a sustainable recovery.

Table IV.5. | Investment in productive capacity

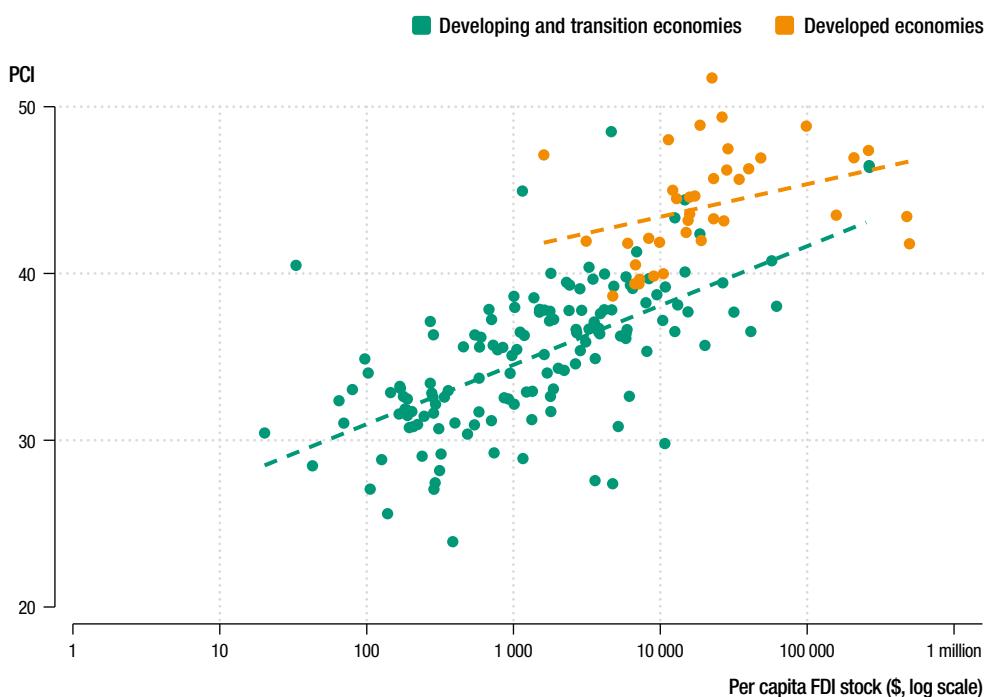
Component	Scope of investment
Energy	Electricity generation and distribution
Human capital	Education, health and water and sanitation
ICT	Telecom and digital infrastructure
Natural capital	Agriculture, resources, and processing industries
Private sector development	Financial and business services
Structural change	Industrial upgrading
Transportation	Connectivity infrastructure

Source: UNCTAD.

Note: Investment in productive capacities encompasses a wide array of elements. This report uses a framework that divides investment in productive capacity in seven distinct components (see UNCTAD, 2020 and <https://pci.unctad.org>) and aligns them with sectors of greenfield and international project finance investment.

Foreign investment in productive capacities can be particularly effective in developing economies because it embodies both tangible and intangible assets such as know-how, technology and access to networks that enhance the impact of the investment. Figure IV.6 shows how the correlation between productive capacity and FDI is significantly stronger in developing economies than in developed ones. Notwithstanding the importance of other sources of investment in productive capacity, this section focuses on the roles of greenfield FDI and international project finance in sustainable recovery.

Figure IV.6. | Correlation between productive capacity and FDI stock



Source: UNCTAD.

2. Investment trends in productive capacities

Investment in several areas where FDI can make an important contribution to the growth of productive capacity has been hard hit during the pandemic, especially in structurally weak economies.

The pandemic has had a major negative effect on investment in productive capacities. All components of the PCI received lower foreign investment in 2020 than in 2019, with the exception of ICT, where investment increased with the acceleration in digital adoption (figure IV.7).

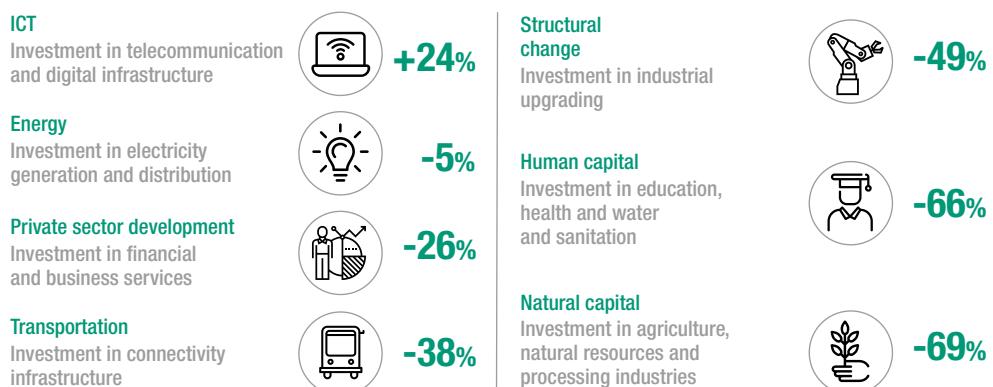
The pandemic has severely affected new greenfield investment in productive capacity sectors, especially in developing economies and least-developed countries (LDCs). This compounds a persistent investment gap, after a substantially flat pre-pandemic trend in the value of greenfield projects relevant for productive capacities (table IV.6).

The increase in investment in ICT was driven mostly by developed economies, whereas developing economies saw only a mild 4 per cent increase. Example projects include the construction of a cloud region in Poland by Google (\$1.8 billion) and the expansion of a 4G network in Nigeria by MTN (\$1.6 billion). Investment in the energy component of productive capacity fell by less than investment in other sectors; again, the milder decline was mostly due to robust investment in developed economies supported by several megaprojects in renewable energy, while developing economies suffered a 44 per cent fall.

Investment in agriculture and resource processing, relevant for the development of the natural capital component in the productive capacity index, saw the largest decline during 2020. This was due to both demand-side constraints as a large part of the world experienced economic contraction and to supply-side bottlenecks caused by the closure of project sites and mobility restrictions.

The human capital component, which encompasses education, health care, and water and sanitation infrastructure and services, may see more potential following the pandemic. Cross-border greenfield investment in this component is still small as a share of total investment in productive capacity. The health-care sector, in particular, is one in which private investment increasingly complements public investment.

Figure IV.7. | Pandemic impact on investment in productive capacity: a snapshot



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

Note: Trends in energy and transportation are based on international project finance data. Trends in all other components of PCI are based on greenfield data. Tables IV.7 and IV.8 present in detail the trends for all components from both sources.

Table IV.6.

Greenfield investment announcements in productive-capacity sectors, 2019 and 2020

Sector	Total				Developing and transition economies			
	Pre-pandemic trend (%)	2019 (Billions of dollars)	2020 (Billions of dollars)	Pandemic impact (%)	Pre-pandemic trend (%)	2019 (Billions of dollars)	2020 (Billions of dollars)	Pandemic impact (%)
Total								
Value	-9	346	249	-28	6	222	128	-43
Number of projects	2	4 477	3 428	-23	-24	1 989	1 362	-32
<i>Energy</i>								
Value	37	113	99	-12	81	61	41	-33
Number of projects	27	560	529	-6	73	255	171	-33
<i>Human capital</i>								
Value	14	5.9	2.3	-61	-17	3.9	1.6	-59
Number of projects	27	336	119	-65	-7	146	96	-34
<i>ICT</i>								
Value	32	44	62	41	-24	23	28	21
Number of projects	10	1 528	1 282	-16	-22	561	468	-17
<i>Natural capital</i>								
Value	-8	116	41	-65	-8	90	32	-64
Number of projects	-20	261	155	-41	-20	149	97	-35
<i>Private sector development</i>								
Value	-43	24	19	-19	-44	16	13	-19
Number of projects	-33	1 028	716	-30	-40	516	331	-36
<i>Transportation</i>								
Value	-0.2	43	26	-39	-7	28	12	-57
Number of projects	-0.1	764	627	-18	-14	362	199	-45

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

Note: Pre-pandemic trend refers to the change in average annual investment in the 2015–2019 period compared with the 2010–2014 period.

International project finance is a key source of investment in productive capacity, especially for large-scale projects in energy, transport infrastructure and natural capital. The impact of the pandemic on investment in productive capacity through international project finance has been less severe than the impact on greenfield investment. Nevertheless, in developing economies, the number of new projects fell significantly, especially compared with the robust growth seen before the pandemic (table IV.7).

The acceleration in digital adoption during the pandemic led to an increase by almost half in project finance in ICT. Yet, as in greenfield investment, this was driven entirely by developed economies while developing economies experienced a 43 per cent decline. Investment in energy projects in developing countries increased because of a few large renewable energy projects, including the La Gan Offshore Wind project in Viet Nam. Saudi Arabia also unveiled a multibillion-dollar project with significant participation by foreign investors for the development of a hydrogen gas plant fueled by renewable sources. Finally, investment in transport infrastructure projects decreased in value significantly worldwide and almost halved in developing economies.

Table IV.7.

International project finance in productive-capacity sectors, 2019 and 2020

Sector	Total				Developing and transition economies			
	Pre-pandemic trend (%)	2019 (Billions of dollars)	2020 (Billions of dollars)	Pandemic impact (%)	Pre-pandemic trend (%)	2019 (Billions of dollars)	2020 (Billions of dollars)	Pandemic impact (%)
Total								
Value	-6	501	313	-38	-11	183	159	-13
Number of projects	47	1 140	1 131	-1	34	526	463	-12
<i>Energy</i>								
Value	26	177	168	-5	39	69	85	23
Number of projects	94	826	852	3	80	338	311	-8
<i>Human capital</i>								
Value	-26	8.4	3.5	-58	34	1.7	0.4	-76
Number of projects	-13	37	30	-19	14	13	13	0
<i>ICT</i>								
Value	177	20	30	46	53	9.8	5.6	-43
Number of projects	82	29	40	38	-22	8	7	-13
<i>Natural capital</i>								
Value	-5	202	53	-74	10	52	42	-20
Number of projects	-5	170	142	-16	-4	118	98	-17
<i>Transportation</i>								
Value	-41	93	58	-38	-49	50	27	-47
Number of projects	-8	78	67	-14	-6	49	34	-31

Source: UNCTAD, based on data from Refinitiv SA.

Note: Pre-pandemic trend refers to the change in average annual investment in the 2015–2019 period compared with the 2010–2014 period.

Productive capacity investment trends in LDCs are highly volatile because of the small number of projects. The decrease in 2020 was especially visible in greenfield investment (-62 per cent to \$16 billion); in project finance, values increased slightly (6 per cent to \$24 billion), driven by a few megaprojects in transport infrastructure and energy (table IV.8). For example, Railnet International (United States) initiated a project worth \$11 billion for the construction of a railway line in Zambia. In Ethiopia, Lotus Energy (Australia) launched a hybrid solar power plant project and a waste-to-energy plant project. In the Lao People's Democratic Republic, a \$1.7 billion clean-coal power project with investment from Singapore was launched. The energy and ICT sectors saw increases in greenfield investment in LDCs. Greenfield investment announced in energy rose because of three projects totaling \$3.4 billion by a single Chinese investor in Myanmar. In ICT, China Mobile started a \$1 billion project to set up a mobile data network in Nepal.

For LDCs, the decline in manufacturing investment is especially relevant given its importance for structural change.⁷ Structural change is at the core of the productive capacities construct and crucial for sustainable economic development. For lower-income developing economies, structural change fundamentally entails transitioning into manufacturing industries and away from an exclusive reliance on natural resources. The need for many countries to address productive capacity bottlenecks has led to a growing number of countries pursuing structural change through industrial policies (*WIR18*), including through the establishment of special economic zones (*WIR19*). For these policies to be effective,

Table IV.8. Investment in productive capacity in LDCs, 2019 and 2020

Sector	Greenfield investment			International project finance		
	2019 (Billions of dollars)	2020 (Billions of dollars)	Pandemic impact (%)	2019 (Billions of dollars)	2020 (Billions of dollars)	Pandemic impact (%)
Total	20	11	-44	23	24	4
Energy	3.5	6.4	83	7.1	12	66
Human capital	0.2	0.01	-95	0	0.01	-
ICT	0.3	1.9	533	2.1	0	-100
Natural capital	11.3	1.7	-85	8.9	1.0	-89
Private sector development	0.8	0.6	-25	-	-	-
Transportation	3.8	0.6	-84	5.0	11	126

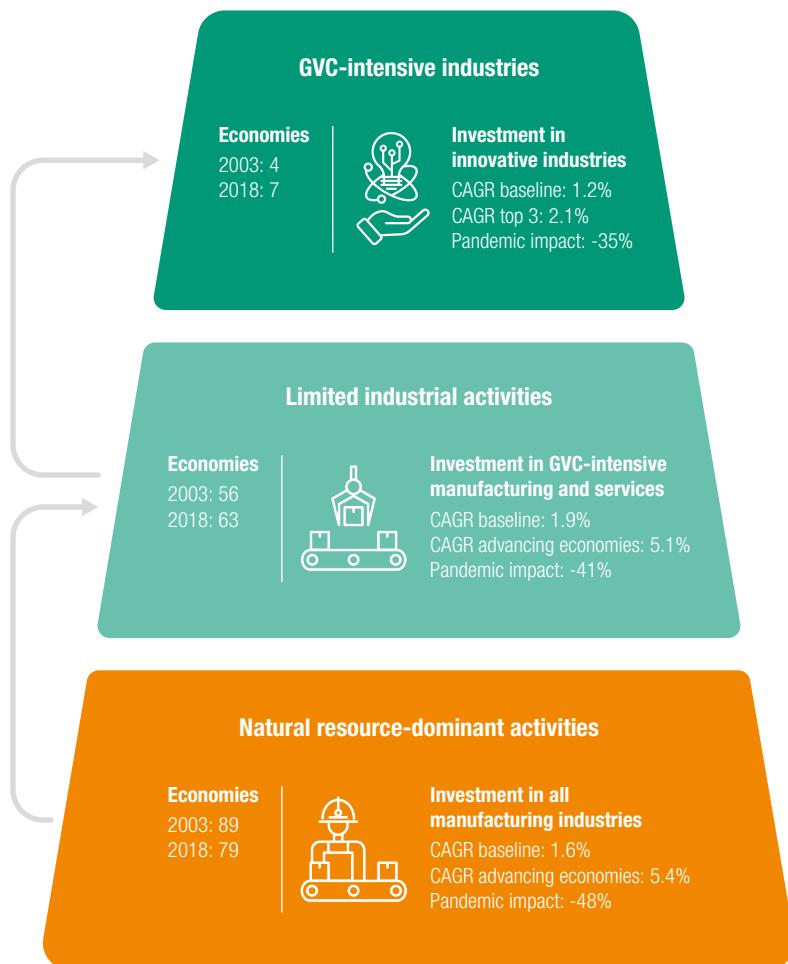
Source: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fdimarkets.com) for announced greenfield FDI projects and Refinitiv SA for international project finance deals.

it is fundamental to attract FDI oriented to structural change. All investment that facilitates a move to higher value added activities can be classified as structural change investment. Its scope thus varies depending on the existing capacity for domestic value addition in each economy.

Foreign investment is closely correlated with structural change, as illustrated by the higher levels of FDI in developing economies that have made significant progress in industrialization over the past two decades. The analysis in figure IV.8 considers trends in investment related to structural change in developing economies from 2003 to 2018. Developing economies are grouped into three categories on the basis of their dominant economic activities, using the thresholds in UNCTAD's PCI in 2003 and 2018.⁸ The analysis shows which economies graduated to higher levels of value addition through structural change during this 15-year period and compares the FDI trend in these economies with the average. What qualifies as structural change investment varies for each category and becomes narrower as countries graduate to each successive category. For economies with the lowest value-addition profile, investment in most manufacturing industries can affect structural change positively. The baseline growth rate of structural change investment for these economies from 2003 to 2018 has been low, especially considering the high investment needs. In the economies that transited upwards from this category, the investment growth rate was more than three times the baseline. For economies characterized by limited industrial activities, investment in GVC-intensive manufacturing and services is more relevant to effect structural change. As in the previous category, economies that managed to transition upwards had a significantly higher growth rate in investment targeting structural change. At the upper end of the ladder are economies already involved in higher value added GVC activities. In these countries, only FDI in innovation-intensive activities qualifies as investment related to structural change. The growth rate for structural change investment in this group was higher for the top three economies, ranked by improvement in their structural change scores compared with the baseline.

Despite the importance of FDI for structural change, efficiency-seeking investment has been stagnant over the past 15 years in many economies with the highest needs. The average annual growth rate of manufacturing investment in these economies between 2003 and 2018 was merely 1.6 per cent. The pandemic is further exacerbating the challenge of structural change for developing economies. Economies on the lowest rung of the value-addition ladder are being hit the hardest. Promoting investment in structural change should thus be an urgent priority for development policymakers.

Figure IV.8. | The role of investment in structural change in developing economies



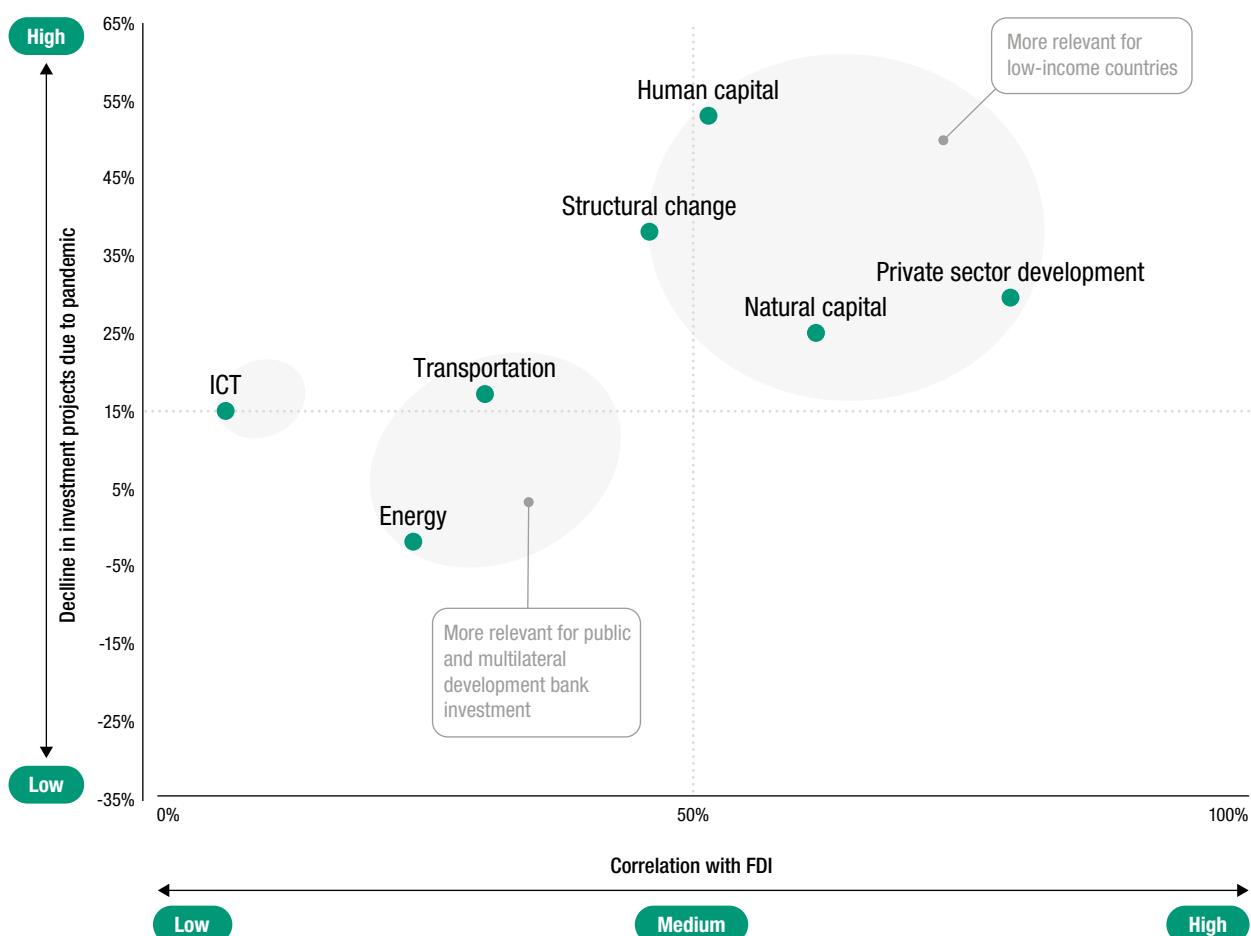
Source: UNCTAD.

Note: Labels depict three categories of developing economies based on their standing on the structural change component of UNCTAD's PCI. Compound annual growth rate (CAGR) calculated between 2003 and 2018. Pandemic impact is the decrease in structural investment in 2020 from 2019 for each group of economies. The definition of investment in structural change varies depending on the category of economy. Advancing economies are those that progressed to higher categories of the value addition ladder in 2018 compared to 2003 based on pre-determined thresholds of the structural change component of the PCI.

Figure IV.9 plots the relative importance of foreign investment in each component of the PCI against the impact of the pandemic on foreign investment. It shows that several components of the index that have been shown to benefit relatively more from FDI, in particular private sector development, structural change and human capital, have also been among the hardest hit during the pandemic.

Transport infrastructure and energy are traditionally more dependent on domestic resources, and policy factors often limit the potential for greenfield FDI. To enhance investment in these components, policymakers need to target investment from all sources, including international project finance, bilateral and multilateral financing, and official development assistance. For ICT, similarly, domestic telecommunication operators have tended to account for the largest share of infrastructure investment, although in low-income countries investment by foreign operators has played a more important role (*WIR17*) – a role that could increase in importance with the need to accelerate digital adoption in the wake of the pandemic.

Figure IV.9. | Productive capacity and investment: perspectives on sustainable recovery priorities



Source: UNCTAD, based on information from the Financial Times Ltd, fDi Markets (www.fdimarkets.com) for announced greenfield FDI projects and Refinitiv SA for international project finance deals.

Note: Decline in investment projects due to pandemic is based on the difference in the number of total greenfield and international project finance projects in each component of the PCI in 2020 compared with 2019.

* * *

In conclusion, greenfield investment and project finance in sectors key for the growth of productive capacity have been hard hit during the crisis caused by the pandemic, especially in structurally weak economies. The sectors where foreign investment plays the most important role for the development of productive capacity and that have seen the biggest declines in 2020 are those linked to human and natural capital, private sector development and structural change. Physical and digital infrastructure – priorities in most recovery plans – have not been negatively affected by the pandemic to the same degree. Although promoting investment in infrastructure, including green infrastructure and renewable energy, is an important priority, stimulating investment in international production and industry will be equally important to grow productive capacity.

D. LEVERAGING THE PUBLIC INVESTMENT PUSH

1. Support programmes for post-pandemic recovery

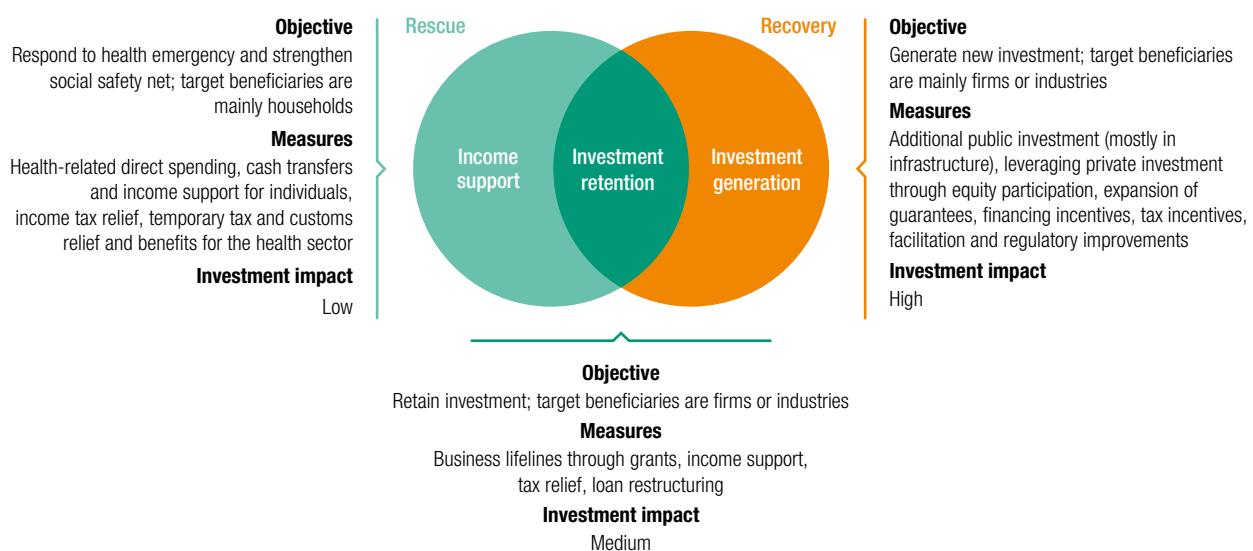
Recovery investment packages being adopted around the world are oriented in large part towards infrastructure, renewable energy and health systems. As such, they could provide a significant impulse to sustainability investment.

Around the world, national governments, regional economic cooperation organizations and multilateral institutions have adopted or are developing major economic stimulus programmes in response to the crisis caused by the COVID-19 pandemic, consisting of rescue packages (i.e. income support and business lifelines) and recovery packages (i.e. longer-term investment plans).

From an investment perspective, both rescue packages for business and investment packages play an important role in recovery, analogous to “investment retention” and “investment generation” (figure IV.10). Government measures that support firms through the crisis – whether through tax relief, subsidies, capital injections or loan guarantees – ensure that capital stocks are preserved. Packages that include public investment in infrastructure add directly to that stock.

To date, the worldwide fiscal outlays in response to the pandemic – excluding the budgetary impact of automatic stabilizers – are running to about \$16 trillion, which represents approximately 15 per cent of global GDP.⁹ Drawing on the IMF’s Fiscal Monitor and distinguishing between immediate consumption and longer-term plans, the value allocated

Figure IV.10. | An investment perspective on pandemic support programs



Source: UNCTAD.

to investment generation packages is so far limited to between \$2 trillion and \$3.5 trillion, between 10 and 20 per cent of the total value of outlays in response to the pandemic. Adding the investment retention component to the package covers more than 60 per cent of the total funding.

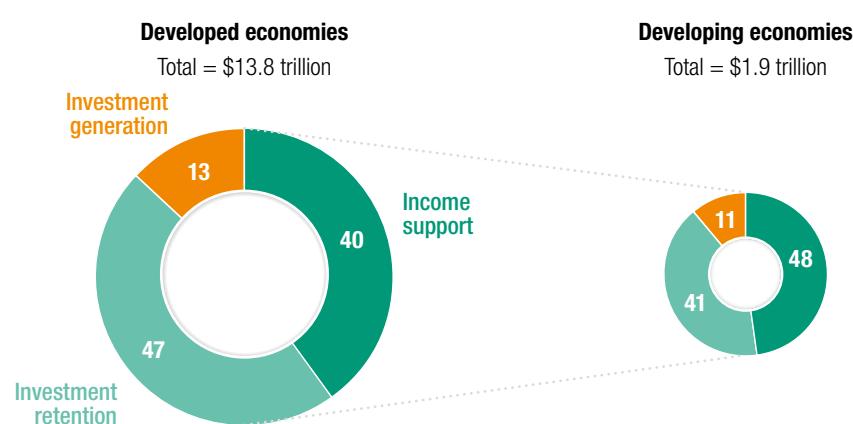
The size and composition of rescue and recovery packages differs significantly between developed and developing countries. Developing countries account only for one tenth of the total (figure IV.11).

Support programmes also vary significantly between countries, depending on fiscal space, the phase of the pandemic and the severity of its economic impact. The share of funds allocated to investment generation ranges from near zero in several countries in Latin America that are still in the midst of battling the virus to almost 20 per cent in Asian economies that have been less affected or have emerged from it. It can be expected that the relative focus on recovery investment will increase as waves of the pandemic are contained and vaccination programmes gain traction. Conversely, recurring incidences of infections could derail or delay relatively advanced plans.

The additionality of public investment announcements in many countries is difficult to assess, because many spending plans are extensions of existing plans. For instance, as part of its post-pandemic recovery strategy, the Government of India expanded the sectoral coverage of its Performance-Linked Incentives scheme, which provides support for industrial development. In Nigeria, elements of its Economic Sustainability Plan related to digital development are an acceleration of the existing programme. Accelerating infrastructure or industrial development plans ensures that investment is targeted at strategic development objectives and facilitates implementation as it makes use of existing project pipelines.

Links with pre-existing plans are evidence that recovery investment packages are not just about sustainable recovery along SDG lines. They have a strong industrial policy imprint – in both developing and developed economies. For example, in the United States, the proposed \$2.2 trillion infrastructure bill plans to allocate about a third of the total to transportation infrastructure, a tenth to manufacturing and some five per cent each

Figure IV.11. | Stimulus programs: rescue and recovery (Trillions of dollars and per cent)



Source: UNCTAD, based on IMF Fiscal Monitor (April 2021).

Note: The total of \$15.7 trillion and corresponding shares were estimated by examining the pandemic support packages of 20 major economies, plus the EU support package, which represent just 90 per cent of the total value reported by the IMF Fiscal Monitor (April 2021). These major economies include Argentina, Australia, Brazil, Canada, China, Egypt, France, Germany, India, Indonesia, Italy, Japan, Mexico, Nigeria, the Republic of Korea, the Russian Federation, South Africa, Turkey, the United Kingdom and the United States. Shares are calculated based on measures that have sufficient information (specific target and disaggregation of amount). Classification of measures is based on a taxonomy matching the description of the categories in figure IV.10.

to broadband expansion, R&D and energy transformation. China's new five-year plan, adopted early this year with the cycle coinciding with the country's emergence from the pandemic, combines investment in infrastructure and the energy transition with its dual-circulation industrial development objectives. France's Plan de Relance, at \$112 billion, allocates 36 per cent to green programmes and much of the rest to infrastructure, including industrial infrastructure.

Although investment generation – the core component of the investment push – is relatively limited so far, significant programmes aimed at stimulating longer-term investment to boost post-pandemic economic growth are still in the making (for example, the planned infrastructure investment package in the United States is not yet included in the calculations above, based on the IMF's Fiscal Monitor). In addition, many financing mechanisms in the recovery packages are aimed at leveraging additional private sector investment through public-private partnerships or project finance arrangements.

In infrastructure projects with public and private participation, on average, \$1 of public investment (in equity or direct transfer) can generate between \$2.2 and \$3 of total equity through private participation (table IV.9). This capacity to raise additional private equity is comparable across different types of infrastructure and development levels (from low-income to higher-middle-income countries). The total investment impact potential of public recovery spending can be further increased through leverage, with average debt/equity ratios in infrastructure project finance varying between 2.5 and 3.5, depending on the sector and the industry risk profile. As a result of the equity multiplier and the debt leverage, \$1 of direct public support to infrastructure projects can, under the right circumstances, mobilize \$10 of capital investment through public-private financing schemes.¹⁰ An important caveat is that these circumstances are country specific; multipliers tend to be lower in developing countries.

In this context, even the initial public investment push of \$2 trillion to \$3.5 trillion clearly has major potential for growth, depending on how much of the funding is leveraged to bring in additional private capital. A significant part will be spent through public procurement mechanisms that do not involve public-private partnerships. Under conservative assumptions that one third of the currently adopted public investment plans are deployed through various forms of partnership with the private sector, the investment potential could still reach \$10 trillion. By way of comparison, that would represent about one third of the investment gap estimated for the SDGs at the time of their adoption (*WIR14*).

Several caveats apply that will affect the ultimate size and impact of the investment push. Evidence on several major economies with detailed recovery investment programmes shows that plans often overlap with pre-existing investment targets (e.g. in industrial policies or infrastructure development plans) – i.e. they are not fully additional.

Table IV.9.

Private and public equity in infrastructure, low- and middle-income countries
(Number and per cent)

Project equity structure	Number of observations	Private equity as share of public-private funding (%)	Multiplier, ratio between private equity and public funding
Projects with public and private equity	203	67	2.0
Projects with public and private equity, and direct government support	367	55	1.2

Source: UNCTAD, based on World Bank PPI database.

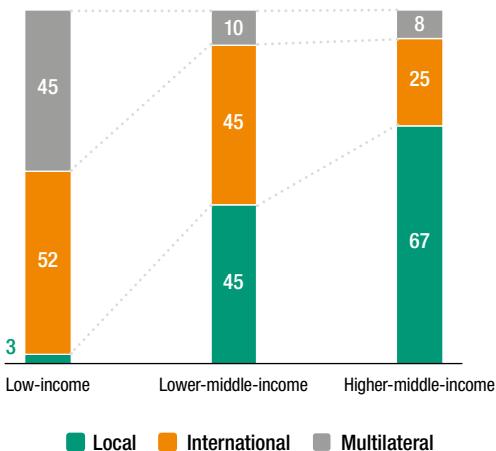
Note: Each observation is an infrastructure project located in low- and middle-income countries involving both private financing and a form of public financing. The first row considers public financing as public equity, whereas the second adds direct government support as part of public equity, following the model built by Fay et al. (2021). Direct government support may take the form of capital subsidy, revenue subsidy or in-kind contributions such as land (as defined by the PPI database).

Furthermore, typical mechanisms aimed at stimulating finance for investment (e.g. loan guarantees) are being used in large part for rescue purposes (e.g. working capital extensions). Finally, and importantly, for several programmes there is, as of yet, relatively little detail on implementation timelines, orientation and governance.

Yet, the comparison between recovery investment packages and the push for investment in SDG sectors implicit in the goals remains relevant. It certainly holds with respect to the orientation of planned recovery investment (insofar as spending details are known); the bulk is targeted at physical and digital infrastructure, renewable energy and other ways of greening economies. The obvious discrepancy with SDG investment needs remains the asymmetry between developed and developing countries. More than 90 per cent of the total recovery investment value is contained in the plans adopted by and for developed countries, and the remainder mostly by few large (upper-middle-income) emerging markets. That makes it even more important to leverage private sector participation to boost investment in lower-income developing countries, including through international project finance schemes.

In fact, in lower- and lower-middle-income developing countries, where domestic finance is scarcer, international project finance and funding through multilateral development banks – which also deploy private participation leveraging mechanisms – provide most of the debt financing in infrastructure projects (figure IV.12). Multilateral institutions have already significantly increased their assistance as part of pandemic rescue and recovery financing, although total funds available for recovery investment in low-income countries to date amount to only a fraction of the global total (table IV.10).

Figure IV.12. Source of debt, by developing status (Per cent)



Source: UNCTAD, based on the World Bank PPI database.

Table IV.10. Multilateral development bank facilities, pandemic response

Multilateral development bank	Assistance (Billions of dollars)	Details
African Development Bank	4.8	Assistance approved and implemented from March 2020 to February 2021 (Source: AfDB database).
Asian Development Bank	16.8	COVID-19-related assistance disbursed as of February 2021 (Source: ADB COVID-19 policy database).
Asian Infrastructure Investment Bank	12.0	Investments approved as of the end of 2019 (\$8.4 billion committed and \$2.9 billion disbursed). Between April 2020 and 16 October 2021, the AIIB COVID-19 Crisis Recovery Facility offers up to \$13 billion of financing to public and private sector entities facing, or at risk of facing, adverse impacts from the pandemic.
The European Bank for Reconstruction and Development	13.1	As of January 2021, invested €11 billion in 2020 through 411 projects, to 38 economies for pandemic responses. This represents a 10 per cent increase in annual business investment relative to 2019.
Inter-American Development Bank	21.6	Loans and guarantees for 2020 (as compared with \$13 billion in 2019).
World Bank	160.0	COVID-19 response financing committed April 2020-June 2021. In 2020: \$77.1 billion (\$25.4 billion in Africa, \$12.8 billion in Latin America and the Caribbean, \$9.2 billion in Central Asia, \$10.5 billion in East Asia and Pacific, \$14.4 billion in South Asia, \$4.8 billion in the Middle East and North Africa – including for projects other than pandemic response).
Total	228.4	

Source: UNCTAD, various sources as cited.

In conclusion, the COVID-19 pandemic has significantly set back progress on the SDGs over the past year. It has also caused a sharp decline in investment flows to SDG-relevant sectors and projects (see chapter I and UNCTAD's *SDG Investment Trends Monitor*). Nevertheless, the prospect of a large injection of public funds for long-term investment in sustainable recovery could provide some momentum, first to recuperate lost ground and then to accelerate progress on the SDGs. UNCTAD's Action Plan for Investment in the SDGs has long called for similar programmes, indicating priority sectors and mechanisms aimed at maximizing impact, including through the leveraging of additional private sector investment as a multiplier to complement public efforts.

Overall, given their size, the recovery investment packages – wherever they are deployed – are likely to shape global investment patterns for several years to come. The main mechanism through which this will occur is through international project finance. The next section looks at specific challenges that could arise in the effective use of international project finance to maximize its sustainable recovery impact.

2. Maximizing sustainable and inclusive impact

With most public funds directed towards infrastructure industries, international project finance will be an important vehicle for the roll-out of recovery programmes. The use of this mechanism presents an opportunity to draw in additional private sector capital, but also a set of new challenges for sustainability financing.

The large recovery investment packages being adopted in many countries and regions, and the parallels that they display with the long-advocated push for investment in the SDGs, could bode well for sustainable development financing in the coming years. The positive impact of the new investment drive will depend on five factors (table IV.11). First (factor 1), public investment recovery packages should achieve a high degree of additionality and, ideally, function as a lever to generate additional private investment. Second (factor 2), the orientation of the investment should be as much as possible towards high-impact projects, including those in developing countries.

Given the dimensions of and asymmetries in recovery spending, spillover effects are likely to be important. Countries and regions could be affected by massive recovery spending elsewhere, either as a result of macroeconomic imbalances or micro-level strains, such as upward pressures on infrastructure prices. Therefore, a third factor (factor 3) in ensuring sustainable and inclusive impact is ensuring that negative spillover effects are minimized and positive spillovers, especially to developing countries with limited financial leeway, are maximized.

Table IV.11.

Key project finance challenges for investment in sustainable recovery

Impact condition	International project finance challenge
1. Additionality	The need to safeguard existing projects with swift and efficient support
2. Orientation	Pressure on private funds to shift to lower-risk geographies and sectors
3. Spillovers	Upward pressure on the cost of financing projects in developing countries
4. Implementation	Limits to absorptive and operational capacity
5. Governance	Pressure on ESG standards

Source: UNCTAD.

A fourth factor (factor 4) is managing implementation. The efficient and effective deployment of funds will be essential to optimize stimulus effects. Much will depend on governance and on the economy's capacity to absorb investment. Many recovery investment programmes still offer little detail on implementation schedules; most rescue measures have a duration of one to two years and recovery plans three to four years, while structural transformation plans commonly have five-year time spans. Given the magnitude of spending plans, these time frames will be challenging.

Finally, the pandemic has caused financial distress for businesses around the world; the pressure on private sector participants in infrastructure projects to win bids can be enormous. Under such circumstances it is important that environmental, social and governance (ESG) standards are safeguarded (factor 5).

One of the most important mechanisms through which recovery funds will be converted into sustainable investments on the ground is project finance. This mechanism is also the principal lever through which additional private sector financial resources – accessed from global financial markets and international sponsors – can be brought in to multiply the total funds available.

In project finance, private and public partners share risks and develop large projects using a financially and legally independent special-purpose vehicle, which isolates the risks of the project in a tailor-made and self-sustainable financial structure that shields equity sponsors from much of the project risks. Equity sponsors provide as little equity as necessary and rely on debt finance to a significant degree, averaging a project debt-to-equity ratio of 70/30.¹¹ Creditors thus provide the majority of capital and, because of the non-recourse nature of projects, take on comparatively more risk than in traditional corporate finance of firms.

The current financial market environment for corporate lending is extremely friendly. Interest rates are exceptionally low, and financing volumes present all-time highs as financial markets provide debt to support corporate recovery from the pandemic (Moody's, 2021). The early months of 2021 have seen an increase by more than 25 per cent year-on-year in rated high-yield borrowing (i.e. loans and bonds), the fastest increase in decades.

However, project finance debt has several characteristics that could give rise to a new set of challenges for sustainable recovery financing (table IV.11). In particular, these will affect the pre-conditions for the maximization of sustainable and inclusive impact of recovery investment packages.

a. Factor 1: Additionality weighed against the need to support existing projects

The degree to which public recovery investment packages are additional to previous spending plans was discussed briefly in the previous section. Building recovery packages on existing plans or accelerating prior commitments may reduce additionality, but it has the advantage of consistency, strategic focus and access to an existing pipeline of planned projects.

Similar balanced considerations apply to additionality concerns that may arise specifically from the nature of international project finance. Many existing projects – at any stage in the pipeline from ideation to operation – have run into difficulties due to the pandemic, either because the parameters of their business case have changed or because their construction has been delayed or because their cash flows are affected by lockdowns and usage restrictions. Clearly, any consideration of additionality of recovery investment support must start from “not subtracting” – i.e. safeguarding where possible the existing stock of projects.

Unexpected and severe exogenous shocks like the pandemic have hurt the financial business cases of existing projects. In many, banks and sponsors will need to renegotiate the terms of loan contracts and find refinancing. Renegotiating such terms is more difficult under tighter financing conditions, which can cause delays (James and Vaaler, forthcoming). These delays could be significantly longer in developing countries and in international project finance deals.

To illustrate, recent data on the number of days from project announcement to closing on debt financing show a sharp increase for developing and transition economies from, on average, 495 days in 2019 to 812 days (figure IV.13). Developed-country projects, in contrast, closed 25 days earlier than in 2019. The strongest effect was seen in cross-border deals in developing and transition economies for which delays in deal closure almost doubled, from 562 to 973 days, indicating a tightening of financing conditions for developing-country projects.

Projects in the construction phase may be delayed operationally because of the pandemic. Among Belt and Road Initiative infrastructure projects, which have remained relatively stable throughout the crisis, 11 projects amounting to \$14.8 billion have been delayed, while 32 projects are on hold or have been cancelled entirely – although this is only a small fraction of the total (Refinitiv, 2020). Supply and procurement delays could lead to payment delays and defaults by contractors, forcing costly refinancing.

Finally, existing projects in operation are facing capacity utilization restrictions imposed by policy responses to the pandemic, decreasing the cash flows necessary for the repayment of non-recourse debt. If cash flows for a large number of projects suffer sustained pandemic-related losses, a wave of defaults and financial restructurings could be triggered.

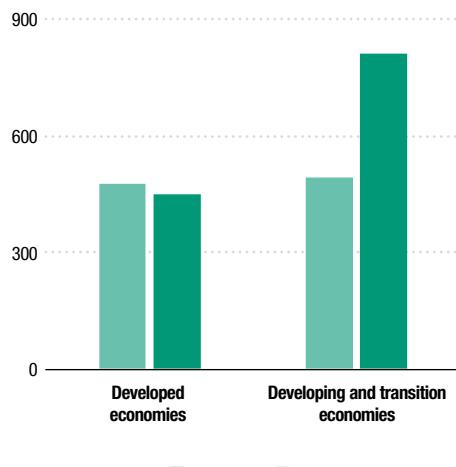
The Cameroon Nachtigal Hydropower Project, the largest project of its kind to be built on the African continent through a project finance scheme, is a recent example. The hydropower plant's construction began in 2018 and operations were scheduled to begin in 2023. However, Électricité de France, a major stakeholder, foresees significant delays in

Figure IV.13.

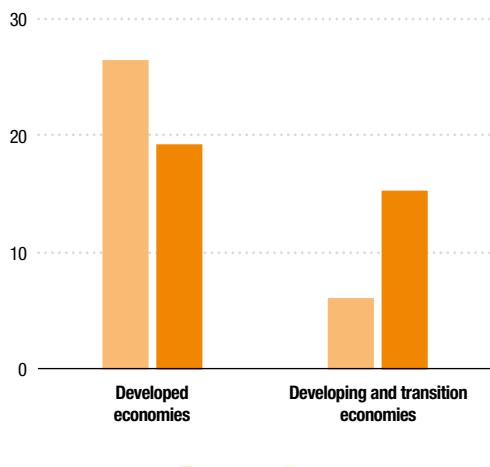
Financing delays and refinancing by region, 2019–2020

(Number of days and per cent)

a. Days to financial close



b. Refinancing rates



Source: UNCTAD, based on data from Refinitiv SA.

the project, valued at \$1.2 billion, because of the impact of the pandemic (EDF Résultats Semestriels, 2020). Project closing is now expected in June 2024 (World Bank, 2021).

If refinancing can be arranged swiftly, projects can be saved from default. Often, however, projects end up in protracted bargaining and operational stalemate. The complex contractual structures and the large number of parties involved in project finance render refinancing difficult, time consuming and costly. Refinancing delays often cause further cost escalations (Flyvbjerg, 2009). In many cases, public intervention is required to re-establish a financially feasible structure. Unnecessary cost escalations on existing projects will further reduce the additionality of recovery investment funds.

Looking at year-to-year refinancing rates in project finance, numbers at the global level are not alarming yet, although there are some asymmetries. While refinancing rates in developed countries actually declined in 2020, refinancing in developing countries almost tripled, from 5 per cent to 13 per cent of closed deals. Asia and Latin America were particularly affected, with refinancing rates of 15 per cent and 12 per cent, up from 7 per cent and 3 per cent.

Since refinancing is characterized by longer time lags, it is early to draw conclusions on the basis of this data. More sensitive indicators, such as project suspensions and ratings, provide some further evidence. Project setbacks in the Middle East and North Africa region, an important recipient of international project finance for development, show that suspensions increased from fewer than 200 projects in 2019 to 609 in 2020. Of these projects, 261 cited plan reviews and 237 cited financial issues as justifications for suspension.

In the last 12 months, Moody's reported 184 COVID-19-related rating actions in the project finance and infrastructure sector, including 32 negative actions (28 downgrades and 4 possible downgrades) and only 16 positive actions (13 upgrades and 3 possible upgrades). The hardest-hit sector has been airports, with 108 such actions. Outlook changes in the infrastructure and project finance industry reflected the negative sentiment, with 24 negative outlooks and only 5 positive outlooks (Moody's, 2021).

These leading indicators could be looming signs of refinancing needs for existing projects, which could result in a considerable part of the funds dedicated to financing new projects for recovery flowing into the necessary bailout of existing installations. To avoid protracted cost escalation and gridlock, it is pivotal to deliver fast and efficient public refinancing support. Efficient support to existing projects also has an important signaling function in the climate for international project finance, which will affect countries' capacity to attract further private sector funds in new projects.

b. Factor 2: Pressure to shift to lower-risk and lower-impact geographies and sectors

The asymmetry in stimulus between developed and developing economies risks tilting the business case for project finance deals in favour of the former, potentially diverting private resources from high-impact projects in developing countries.

The regional distribution of new project finance announcements in 2020 and early 2021 shows early signs of such a shift. Developed countries saw an increase of 13 per cent in total project numbers in 2020, while projects in developing and transition economies decreased by 6 per cent (table IV.12).¹² The asymmetry is even more marked in value terms. Although the value of projects in developed countries also decreased (by 21 per cent), values in developing and transition economies fell by 43 per cent. In times of crisis, financial institutions tend to reduce their cross-border lending disproportionately, amplifying the effect on countries with less developed financial markets and higher perceived risk. In fact, announced *international* project finance deals (those with international sponsors)

Table IV.12.

Announced international project finance deals by region, total and cross-border, 2019 and 2020 (Percentage change)

Region	Total deals, change		Cross-border deals, change	
	Value	Number	Value	Number
Total	-35	3	-42	-5
Developed economies	-21	13	-28	8
Developing and transition economies	-45	-6	-51	-18
Africa	-65	-24	-74	-39
Asia	-42	-3	-40	-2
Latin America and the Caribbean	-36	4	-48	-10
Transition economies	-34	-13	-18	-47

Source: UNCTAD, based on data from Refinitiv SA.

in developing and transition economies saw a decline of 17 per cent in number and 47 per cent in value. The reduction in cross-border lending activity could be an early sign of a “flight home” of project finance loans from developing to developed markets.¹³

In particular, African and Asian countries announced considerably fewer projects than before the COVID-19 pandemic. The value of announced project finance decreased dramatically, by 56 per cent in Africa, 42 per cent in Asia and 36 per cent in Latin America and the Caribbean. The World Bank Private Participation in Infrastructure (PPI) database, which focuses on projects in developing countries that benefit from private and public participation, shows even stronger decreases.

Country-level year-to-year project finance figures exhibit a naturally high volatility because of the large value of individual infrastructure projects. A single large project can have a significant impact on yearly values. In addition, project finance deals have long lead times for negotiation. As such, 2020 data give only an early indication of the potential redirection of private project finance investment flows. However, the data do point to the risk of high levels of recovery spending in developed markets, along with a potentially deteriorating lending environment in LDCs, redirecting projects into low-risk countries.

The pandemic has also affected project finance sectors to varying degrees. Project finance is highly dependent on predictable and stable cash flows. Some industries have been harder hit than others in their ability to generate such long-term cash flows. Urban infrastructure, for example, has taken heavy losses because of the crisis response. Where long-term prospects deteriorate, private actors could prioritize sectors with lower vulnerability to pandemic restrictions (e.g. natural resources, mining), which often have lower impact for sustainable development.

In 2020, one of the few pockets of growth in project finance was in the telecommunication sector, where the number of announced deals grew by 34 per cent. Fueled by technology changes and efforts to increase digitalization, this trend is likely to continue. For instance, Fu (2020) analyses the role of digital technologies in developing countries in enhancing the resilience of value chains, enabling social distancing and fostering new drivers of growth for post-pandemic recovery. Her findings highlight the importance of the opportunities granted by the digital economy, while exposing the gap in digital capabilities and infrastructure, as well as in the ability to invest in them. She calls for international technological and financial cooperation and policy coordination to help developing countries address

the impact of the shock and to develop their digital competencies post-pandemic. Ibeh (2020) also looks at the role of digital technologies for post-pandemic recovery zooming in Africa and puts forward policy recommendations in four areas: organizational capabilities, financing and scaling, digital infrastructure and regulatory conditions.

Renewable energy installations also continue to grow; they are now the biggest international project finance sector in terms of the number of deals, but the average value of individual projects is relatively low. However, the overall value of newly announced international project finance in other so-called SDG investment sectors – including infrastructure, utilities, water and sanitation, food and agriculture, health and education – decreased by 36 per cent, with substantial declines in developing countries in the sectors of education (-57 per cent), power (-20 per cent) and water (-33 per cent) (see chapter I). The values of announced projects in Africa, for example, decreased by 79 per cent in education, 84 per cent in health and 76 per cent in power projects. International project finance announcements across infrastructure-related sectors (excluding renewables) dropped by 62 per cent in value because of the COVID-19 crisis. The negative effect of the crisis is mirrored in PPI data, which exhibits decreases of 45 per cent in water, 79 per cent in roads and 82 per cent in other transport projects.

If vaccination programmes in lower-income developing countries continue to lag those in developed markets by as wide a margin as today, with further risks of periodic restrictive measures to cope with new flare-ups of the pandemic, private sector investors will remain reluctant to direct funds towards sectors where future cash flows are uncertain, including education, urban transport and other infrastructure.

c. Factor 3: Spillover risks: upward pressure on financing costs for projects in developing countries

In the current environment of extremely low interest rates and with vast amounts of capital available for investment in financial markets, the risk of increased financing costs for projects in developing countries appears counter-intuitive. However, low interest rates in global markets do not translate automatically to lower-cost project finance.

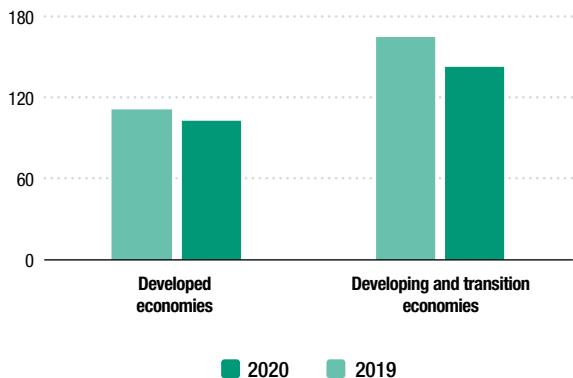
When banks provide non-recourse debt, they account for potential cash-flow risks by (i) increasing the required equity share from sponsors, (ii) increasing the premium on the interest rate and (iii) decreasing the maturity of the loan. All three measures constitute a deterioration of financing terms for sponsors and reduce the cash flows that discount to the net present values of projects.

Data on debt-to-equity ratios and loan spreads in 2020 and early 2021 still present few signs of a credit tightening in project finance. Projects financed in 2020 in both developed and developing countries recorded similar levels of debt as in 2019. Only in early 2021 did debt ratios drop from 85 to less than 80 per cent in developing and transitioning economies (while remaining stable for developed economies). Similarly, loan spreads remained broadly stable in both developing and developed countries. In fact, spreads declined from 212 to 184 basis points in developed countries and from 289 to 214 in developing countries, also because of extensive support by multilateral lending institutions and export credit agencies.

However, the uncertainty surrounding financing terms for projects going forward is becoming evident in the maturity of project finance loans (figure IV.14). Loan maturities have declined by more than 8 months in developed countries and by more than 24 months in developing countries (to about 20 months in Africa and Asia, and almost 30 in Latin America and the Caribbean). Again, some important SDG sectors were among the sectors most strongly affected by shorter loan maturities (e.g. education, 60+ months;

Figure IV.14.

Average loan maturity by region, 2019–2020 (Number of months)



Source: UNCTAD, based on data from Refinitiv SA.

health, 50+ months; water, 40+ months; and transport, 30+ months – on average). The shortening maturities in international lending could be an early sign of financial institutions reducing their overseas exposure, a reaction documented in financial research (Giannetti and Laeven, 2012; Dorobantu and Müllner, 2019).

Scarce data on the financing structures of projects in developing countries closed in 2020 reveal private commitments fell by 12 per cent and non-traditional sources were called upon to fill this gap (e.g. development finance institutions). Although government equity participation in developing countries initially decreased in 2020, in the early months of 2021 government equity shares in developing countries increased from 15 to 27 per cent, a further indication of looming financing constraints for developing countries.¹⁴

Adding to, and potentially aggravating, the deteriorating financing terms in developing countries is the perception of higher political risk by equity sponsors and creditors as a result of the pandemic. Increased policy and governance instability in countries where the pandemic is still ongoing or where rapid recovery prospects are weak will make it comparatively more difficult and costly for developing countries to attract private foreign investment (Gallagher, 2021). In the pre-pandemic era, developing countries required ownership of 20–40 per cent of total equity to signal commitment and reduce lenders' concerns of political risk (James and Vaaler, 2018). If concerns about long-term political stability increase, so will requirements for credible commitment for developing countries seeking to attract foreign investment.

Finally, the credit ratings of developing countries could be affected by recovery spending, exacerbating budgetary strains on developing countries. Often, the problems associated with credit rating revisions extend beyond the cost of finance. Most banks have internal or regulatory limits (Basel III) that restrict their non-recourse lending volumes to non-investment-grade countries. As a result, potential downgrades of sovereign credit rating in developing countries would lead not only to higher costs but also to deteriorating access to lending. The downgrade of sovereign credit ratings in countries aiming to use international project finance would result in higher costs for borrowing, shorter maturities and less favourable debt ratios (Esty, 2002). Projects rated A to AAA achieve median debt ratios of between 80 (A) and 88 per cent (AAA). A downgrade to BBB results in a loss of 8 per cent of debt (a 72 per cent debt ratio) and a downgrade to CCC in a loss of 10 per cent (a 70 per cent debt ratio). This would cause the same project to require more than double the amount of public equity to attract the required credit – in other words, the same amount of public recovery funds would buy only half the infrastructure.

d. Factor 4: Implementation challenges: absorptive and operational capacity limitations

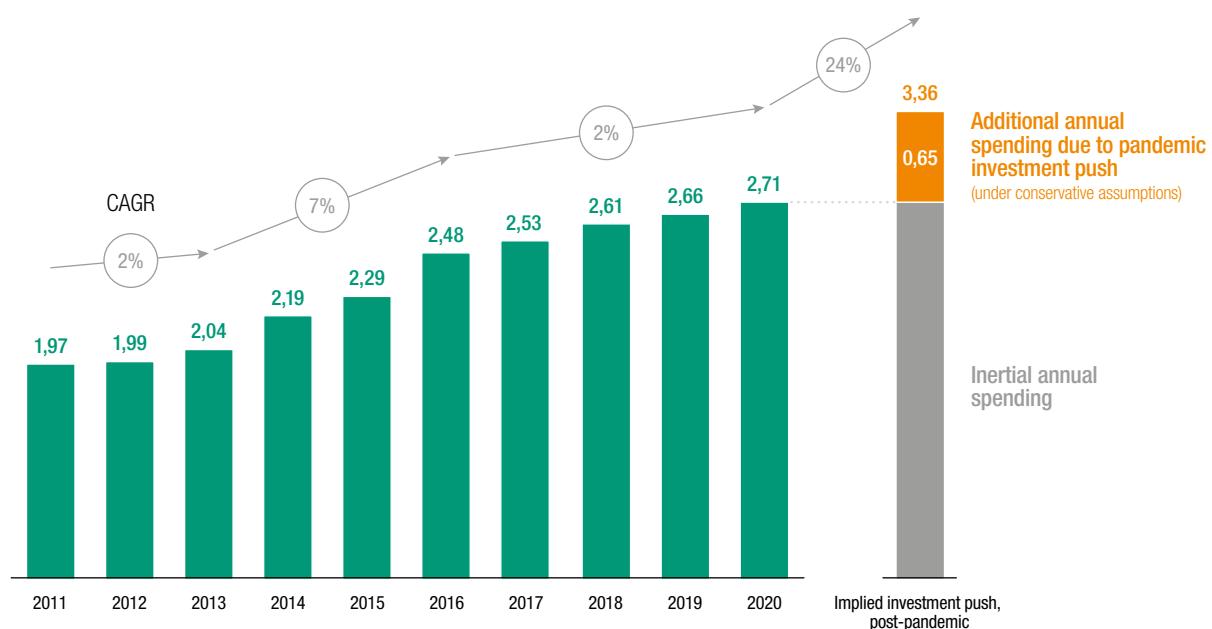
Recovery investment packages in developed countries and higher-income emerging markets will place significant stress on the absorptive capacity of economies and high demand on the delivery capabilities of companies. This has several implications. First, the sheer size of the proposed infrastructure investment injection is daunting.

Global infrastructure investment, tracked by the Global Infrastructure Hub, has averaged growth of 2.7 per cent per year over the past decade, translating into annual increments of \$50–60 billion. A growth peak of 8.6 per cent in 2016 resulted in an increase to existing spending of just under \$200 billion. As documented in the previous section, the cumulative value of infrastructure investment packages for the recovery is between \$2.0 trillion and \$3.5 trillion, with those plans that include some detail on implementation setting out timetables for rollouts over three to four years. From these numbers, it is clear that the strain on the delivery capacity of both public institutions and firms will be enormous, with the annual investment push amounting to, at a minimum, triple the growth achieved in the peak year of the last decade (figure IV.15).

The track record of most countries on efficient deployment of funds available for infrastructure investment is sketchy. Delays and cost overruns are commonplace throughout the developed and developing world, with few exceptions. Megaprojects are especially at risk, with many experiencing financial distress requiring refinancing that further adds to cost escalations (Flyvbjerg, 2011). Average cost overruns have been estimated at more than 25 per cent.¹⁵

Lengthy planning and procurement processes and procedures for tenders or for the establishment of public-private partnerships affect the speed with which government institutions can deploy funds. For example, even before the pandemic, EU structural funds available for investment in member states were taken up at a rate of less than 60 per cent of available financial resources, with some countries showing absorption rates below 40 per cent. There is evidence that, after a crisis, the institutional context matters even more for efficient project implementation.¹⁶ Given the ubiquity of project delays and cost overruns in infrastructure development, it can be expected that these findings on absorptive capacity limitations apply throughout the world.

Figure IV.15. | Total spending in infrastructure, historical and expected (Trillions of dollars and per cent)



Source: UNCTAD, based on Global Infrastructure Hub and Oxford Economics.

Note: CAGR = compound annual growth rate. The additional investment push has been computed from an average estimated value of \$2.5 trillion allocated to investment generation measures by post-pandemic stimulus packages, assuming a rollout of four years. Conservatively, the simulation does not account for the multiplier effect of public financing, which has potential to increase the total investment push to over \$10 trillion, resulting in additional annual spending of \$2.5 trillion – a doubling of the historical infrastructure spending.

These absorptive capacity constraints will have significant implications for the effective use of international project finance. Specialist infrastructure investment funds are estimated to have raised nearly \$800 billion of private finance over the last decade. More than a quarter of that total is still unspent.¹⁷ Partly as a result, private funds are being used to buy existing infrastructure assets in secondary markets, rather than for the construction of new infrastructure.

Absorptive and operational capacity issues will have further consequences, potentially adding to spillover effects for developing countries. In developed economies, public funds directed towards infrastructure can mostly be delivered by domestic companies, thus retaining capital within the country and creating domestic jobs. In the case of developing countries, however, technological capabilities for high-quality and high-tech infrastructure are often acquired externally. As discussed above, asymmetric recovery spending could reduce the willingness and capacity of project developers to pursue projects in developing countries. If high-quality sponsors flock to publicly subsidized projects in developed countries, this could cause a negative selection effect of sponsors in developing countries, leading to increased reliance on less efficient, capable or environmentally sustainable partners.

e. Factor 5: Governance risks: pressure on ESG standards

In times of high uncertainty, the nature of infrastructure investments with high sunk costs create the “hiding hand problem”: after the negotiations, once a project is underway, the bargaining position of public and private participants shifts in favour of the latter.¹⁸ When projects face financial difficulties, they require quick refinancing in order to avoid protracted gridlock and cost escalation. This characteristic of projects can be abused by opportunistic contractors to force bailouts. If project developers face financial pressure because of the pandemic, they may be incited to bid opportunistically and seek ex-post bailouts, which increases the importance of government due diligence on sponsors and proposed projects.

The disruption caused by the pandemic has changed how engineering and construction firms bid for infrastructure projects, according to 89 per cent of responding firms that took part in a recent survey. As these firms seek income and work continuity, their approach to pricing is more aggressive or below cost. In the medium to long term, this invites a higher level of risk as contractors attempt to make projects profitable (McKinsey, 2021). Such efforts could negatively affect the environmental or social outcomes of projects.

E. CONCLUSIONS AND POLICY IMPLICATIONS

The experience of the impact of past crises on FDI and the behaviour of international investors teaches that MNEs, especially the largest ones, are quite resilient and that foreign affiliates and investment projects bring a degree of stability to host economies as a result. Nevertheless, the recovery from an investment downturn can take some time to gather speed. Today, cross-border M&As, due to their closer relationship with financial market trends, have already recovered and look set to increase significantly in 2021. But greenfield investment, which has a bigger growth and employment impact and is especially important for the industrialization prospects of developing countries, are taking longer to recover. International project finance is a hybrid, influenced by financial market trends because of its debt component, but with lengthy gestation periods because of its focus on large-scale infrastructure projects.

The distinction between these three types of international investment is useful in gauging the responses to date of investment policymakers. Early reactions to the crisis caused by the COVID-19 pandemic – as in the case of past economic crises – included measures to address concerns about opportunistic M&A transactions and fire sales of companies in strategic industries. Greenfield investment in manufacturing and services has been affected by contrasting policy reactions. On the one hand, business support packages have functioned as investment retention measures, and in some countries specific investment facilitation measures have been put in place during the pandemic to support ongoing projects and continue to attract new ones. On the other hand, policy pressures towards increased supply chain resilience and greater national or regional autonomy, especially in strategic sectors and industries producing essential goods, are putting longer-term strains on (efficiency-seeking) greenfield investment. Finally, international project finance is coming to the fore now, as a key mechanism through which large-scale recovery investment packages will be deployed to leverage public funds through private sector participation.

The investment priorities of policymakers at this stage revolve around two sets of objectives, both frequently summarized under the heading “building back better”. The first, already mentioned, relates to the need to build more resilient supply chains. This became a top priority early on during the pandemic, made urgent by shortages of essential goods caused by the dispersed supply chains of pharmaceuticals and medical equipment. It was reinforced subsequently when supply chain bottlenecks caused production stoppages and factory closures also in other industries, such as the automotive industry. The resulting policy pressures are mostly just an intensification of a pre-existing trend in developed economies towards discouraging the offshoring of production and bringing back manufacturing (*WIR20*).

The second set of objectives relates to the focus of recovery investment packages on the energy transition, green technologies and industries, digital infrastructure and Industry 4.0 ecosystems, physical infrastructure, and health systems. These investment targets clearly show that the goals of the large-scale investment packages that have been or are being adopted extend well beyond demand stimulus and aim at effecting lasting change.

This chapter provides fresh perspectives on both sets of priorities. On supply chain resilience, it has put forward a framework for the analysis of the various options available to MNEs to reduce exposure to shocks and to improve their capacity to respond. It concludes that, in the absence of policy measures either forcing or incentivizing the relocation of productive assets, MNEs are unlikely to embark on a broad-based restructuring of their international production networks to improve supply chain resilience in the short term. The impact on fixed and variable costs, and possibly irrecuperable sunk costs, would be prohibitive and MNEs will first exhaust other, less costly, tools for supply chain risk mitigation.

The immediate impact on FDI patterns of a shift towards more resilient supply chains is therefore expected to be limited. Longer-term, however, with resilience considerations becoming part of investment drivers and determinants – i.e. one of the criteria in MNE decisions about investment and location – it will lead to a gradual rebalancing of international production networks towards higher levels of diversification and regionalization and, quite possibly, less offshoring.

For many countries, the gradual shift towards more resilient international production networks can present an opportunity. Closeness and stable supply routes to regional markets will become more important relative to low labour costs as investment determinants. Also, resilience-seeking diversification can lead to the inclusion of more countries in global supply chains. However, the push for supply chain resilience also presents risks, especially for countries that rely heavily on attracting efficiency-seeking FDI to grow export sectors. Although resilience is not expected to lead to a rush to reshore, the gradual process of rebalancing of international production networks could become a drag on development for some countries.

In some industries the process may be more abrupt. While policy pressures and concrete measures to push towards production relocation are not likely across the board, in strategic and sensitive sectors they are already materializing. As mentioned earlier, they are mostly an intensification and acceleration of developments that were already underway, made manifest through trade tensions and decoupling trends that pre-date the pandemic. This is where the recovery investment packages connect with the resilience drive and the push for greater self-reliance: while investment in sustainable infrastructure features prominently, almost all investment packages include clear domestic or regional objectives for industrial development.

Looking at recovery investment priorities, the chapter has argued that, although the choice to focus on physical and social infrastructure, the digital economy and the energy transition is a sound investment priority, it is worth taking a broader perspective. Investment in infrastructure, telecommunication and renewable energy has been relatively resilient during the pandemic. While the value of infrastructure investment declined, the number of projects financed held up comparatively well, and digital and renewable energy were the only sectors that registered some growth in 2020. Other sectors, across manufacturing and services industries, as measured by the decline in new investment flows, were hit much harder. A slow recovery of investment in these sectors – in which FDI often plays a relatively more important role – will dampen the demand-side stimulus effect of the infrastructure investment push and put a brake on productive capacity growth, which is key for economic dynamism in all countries, but especially for the development prospects of the poorest. Thus, initiatives to promote and facilitate new investment in industry, especially in sectors that help private sector development and structural change, will be important to complement recovery investments in infrastructure.

The sheer size of recovery investment packages is likely to affect global investment patterns in the coming years. The cumulative value of recovery funds intended for long-term investment worldwide is already approaching \$3.5 trillion, and sizeable initiatives are still in the pipeline. Taking into account the potential to use these funds to draw in additional

private funds (including equity and debt), the total “investment firepower” of recovery plans could exceed \$10 trillion. For comparison, that is close to one third of the total 15-year SDG investment gap estimated at the time of their adoption (*WIR14*).

Of course, the bulk of recovery finance has been set aside by and for developed economies and a few large emerging markets. Developing countries account for only about 10 per cent of total recovery spending plans to date. However, the magnitude of plans is such that there are likely to be spillover effects – positive and negative – to most economies. And international project finance, one of the principal mechanisms through which public funds will aim to generate additional private financing, will channel the effects of domestic public spending packages to international investment flows – including FDI, but also portfolio flows and loans.

The use of international project finance as an instrument for the deployment of recovery funds can help maximize the investment potential of public efforts. However, it also raises new challenges that are specific both to this instrument and to the circumstances under which recovery plans will be rolled out. The chapter has highlighted five factors that will determine the impact that investment packages will have on sustainable and inclusive recovery: additionality, orientation, spillovers, implementation and governance. Each presents potential pitfalls that should be addressed:

- First, it will be important to intervene swiftly and efficiently where necessary to safeguard existing projects that have run into difficulty during the crisis, in order to avoid cost overruns and negative effects on investor risk perceptions, as a basis to maximize the additionality of funds.
- Second, support for and lending to high-impact projects in developing countries will need upscaling, as the deployment of recovery funds in developed economies will otherwise tend to draw international project finance to lower-risk and lower-impact projects.
- Third, bilateral and multilateral lenders and guarantee agencies need to make efforts to counter upward pressure on project financing costs and potential credit tightening in lower-income developing countries caused by spillover effects of spending in developed countries, increased risk aversity of private sector financiers and possible ratings downgrades.
- Fourth, because recovery investment plans imply a massive increase in global infrastructure investment (at a minimum, three times the biggest annual increment of the last decade, for several years), they will require major improvements in implementation capacity, as well as project contracts that take into account increased risks of delays and cost overruns.
- Fifth, governance mechanisms and contracts need to anticipate risks to social and environmental standards on projects entered into by firms that offered aggressive pricing to ensure work continuity during the crisis or – post-pandemic – on projects that might be rushed into as a result of the expected infrastructure spending spree.

Some of the policy recommendations that follow naturally from the challenges associated with such a large boost of infrastructure investment for sustainable recovery are not new. Admonitions to focus public spending on high-impact projects that will otherwise not attract sufficient private sector funds, to ensure high standards of governance and to use public funds and official development assistance blended with private capital to maximize development impact have long been part of the policy prescription for infrastructure financing. They also feature in UNCTAD’s Action Plan for Investment in the SDGs (proposed in *WIR14* and subsequently updated in the Investment Policy Framework for Sustainable Development and then in *WIR20*). The action plan – aimed at mobilizing finance, channeling it towards sustainable development and maximizing its positive impact – focuses on much the same sectors (e.g. infrastructure, green, health) that are now central to sustainable recovery plans.

This chapter has presented three aspects of investment in sustainable recovery. The first is the need for building more resilient economies. The second is the need to promote investment not just in infrastructure but also in industry and international production. The third is the need to address the specific challenges that will arise with the roll-out of recovery investment plans – in particular because of their expected reliance on international project finance. Translating this into a framework for policymakers, the first two aspects relate to strategic priority setting, the last aspect to implementation (figure IV.16).

For policymakers, the starting point is the strategic perspective, in the form of industrial development approaches. Industrial policy will shape the extent to which firms in different industries will be induced to rebalance international production networks for greater supply chain resilience (from a firm perspective) and greater economic and social resilience (from a country perspective). Industrial policy will also be the basis for the promotion and facilitation of investment in industry. As shown in this chapter, most recovery investment packages, in both developed and developing countries, dedicate a sizeable share of funds to industrial infrastructure, digital development and new technologies.

Figure IV.16. | Investing in Sustainable Recovery: a Policy Framework

Level	Objectives	Actions	Tools (illustrative)
Strategic approach/ industrial policy	Increasing economic and social resilience Balancing industrial and infrastructure investment	<ul style="list-style-type: none"> Inducing firms to invest in more resilient supply chains Promoting and facilitating investment in strategic growth industries Boosting investment in infrastructure (including industrial), green energy, new technologies 	<ul style="list-style-type: none"> Strategic investment promotion, facilitation and regulation Building strategic pipelines of bankable projects
Implementation of recovery investment plans <small>(Addressing recovery-specific international project finance challenges)</small>	Mobilizing funds Channeling funds towards sustainable development	<ul style="list-style-type: none"> Refinancing to safeguard existing projects and maximizing additionality Orienting recovery funds towards high-impact projects and supporting developing countries Countering upward cost pressures on projects in developing countries 	<ul style="list-style-type: none"> Innovative SDG financing approaches and financial instruments Instruments to leverage public sector finance to mobilize private funds ODA-leveraged and blended financing Home-host country IPA networks SDG-oriented investment incentives Regional SDG investment compacts IPA–SDG investment development agencies SDG zones, clusters and incubators to increase absorptive capacity SDG impact indicators
	Maximizing positive impact	<ul style="list-style-type: none"> Increasing absorptive and implementation capacity Ensuring good governance to maintain high ESG standards 	

Source: UNCTAD.

* The list of tools includes selected elements of UNCTAD's Investment Policy Framework for Sustainable Development (IPFSD) and its Action Plan for Investment in the SDGs.

For developing countries, industrial development strategies are also the basis for building a viable pipeline of bankable projects. The importance of building such pipelines and the shape they should take was described in detail in *WIR14* on Investing in the SDGs. The lack of so-called shovel-ready projects in many countries remains a key barrier to attracting more international project finance. The risk now is that, in the absence of projects that have gone through the phases of design, feasibility assessment and regulatory preparation, the roll-out of recovery investment funds will incur long delays, diminishing the stimulus impact (or even becoming pro-cyclical).

At the level of execution, addressing recovery investment challenges can usefully draw on initiatives included in the Action Plan for Investment in the SDGs, at the level of funds mobilization, channelling and impact management. Refinancing projects and ensuring additionality integrates innovative SDG financial instruments and instruments to leverage public sector finance. Upscaling support for high-impact projects in developing countries cuts across blended finance mechanisms and bilateral partnerships to promote investment in sustainable development. Countering credit tightening in developing-country projects integrates SDG-oriented investment incentives. Instruments to bolster absorptive capacity for investment in sustainable development include SDG zones, clusters and incubators. And ensuring high social and environmental standards should be based on SDG impact indicators – for which UNCTAD has developed a set of core indicators for firm-level reporting (UNCTAD, 2019).

In sum, UNCTAD believes that the drive on the part of all governments worldwide to “build back better” and the substantial recovery programmes that are being adopted by many can boost investment in sustainable growth. The goal should be to ensure that recovery is sustainable, and that its benefits extend to all countries and all people.

Public recovery investment support packages are one of two sets of forces that can provide momentum to investment in sustainable development. The other is the rapid growth of sustainable finance in global financial markets. The next chapter looks at sustainability trends in the upstream part of the investment chain.

NOTES

- ¹ The three types of investment discussed in this section correspond to three data sets. FDI is based on UNCTAD's FDI database. Greenfield investments and international project finance are announced projects as reported in the FDI Markets and Refinitiv databases, respectively.
- ² "Blocked Suez Canal raises new threat to global supply chains", Nikkei Asia, <https://asia.nikkei.com/>.
- ³ Lori M. Wallach, "Is the era of hyperglobalisation at last over? The state steps in to save global economies", *Le Monde Diplomatique*, May 2020; Mohamed A. El-Erian, "Navigating Deglobalization", *Project Syndicate*, 11 May 2020; "Globalisation unwound", *The Economist*, 16 May 2020.
- ⁴ "Global chip shortage puts car supply chain under the microscope", *Financial Times*, 26 January 2021, www.ft.com.
- ⁵ The development of productive capacities has been a core part of UNCTAD's work for many years and the basis of a significant part of its technical assistance work. UNCTAD (2021) presents UNCTAD's Productive Capacities Index, which has been used to identify productive capacity investment components for this report.
- ⁶ The eighth component of the PCI relates to the strength of public institutions, less relevant in the context of private sector investment data.
- ⁷ For further details on how productive capacity gaps in LDCs and LLDCs are hampering development, please see UNCTAD (2020), *Productive Capacities Index: Focus on Landlocked Developing Countries*.
- ⁸ Developing and transition economies are placed in categories on the basis of benchmarks on the structural change component of UNCTAD's PCI: natural resource dominant activities, 0 to 18; limited industrial activities, 18 to 24; GVC-intensive activities, 24+.
- ⁹ See also the United Nations' *Financing for Sustainable Development Report 2021*.
- ¹⁰ This value is higher than but comparable to the impact of multilateral development bank financing through mobilizing additional private capital, estimated by Broccolini et al. (2019) to be about 7.
- ¹¹ Their equity investment tends to increase with higher project risk factors, which depend on investment experience, project costs and industry outlook (Vaaler, James and Aguilera, 2008).
- ¹² Closed deals (of projects announced before the COVID-19 outbreak) remained remarkably stable. In developing countries, the same number of projects (318) were realized in 2020 as in 2019. In developed countries, a small increase from 586 to 588 was recorded.
- ¹³ Such negative effects on cross-border lending in times of high uncertainty and systematic risk have been documented extensively in the financial literature (Giannetti and Laeven, 2012; Dorobantu and Müllner, 2019).
- ¹⁴ Based on the World Bank PPI half year report, <https://ppi.worldbank.org/en/ppi>.
- ¹⁵ See "How to get infrastructure right", *The Economist*, 1 January 2021.
- ¹⁶ A study on the performance of transport infrastructure projects before and after the GFC, which tested 22 EU projects completed before the financial crisis and 25 delivered afterwards, found that the quality of the institutional environment mattered more than before the crisis for on-time and on-cost delivery (Moschouli et al., 2019).
- ¹⁷ See "Is an infrastructure boom in the works?", *The Economist*, 1 January 2021.
- ¹⁸ For a recent discussion of the implications, see Müllner and Puck, 2018.

CHAPTER V

CAPITAL MARKETS AND SUSTAINABLE FINANCE



INTRODUCTION

Since its inception, the *World Investment Report* has provided analysis of direct investment and international production, focusing on the *downstream* segment of the investment chain (*WIR20*). More recently, and with a growing need to mobilize the vast sums of capital needed to meet the SDGs by 2030, the *WIR* has expanded its focus to the analysis of the global financial market ecosystem, or the *upstream* segment of the investment chain. Despite its qualitative differences from foreign direct investment (FDI), portfolio investment nevertheless offers a potential source of capital for sustainable development, and the ecosystem surrounding global capital markets is increasingly aligning itself with sustainable development outcomes, including the SDGs.

In seeking to map the contribution of the global financial market ecosystem to the SDGs, as well as offer policy recommendations for further leveraging capital markets for sustainable development, the analysis in this chapter examines three areas:

- i. *Products and services.* What products exist in the financial market ecosystem, such as equity funds, fixed-income products and derivatives, that can support a transition in investment strategies to a more sustainable approach?
- ii. *Asset owners and financial service providers.* How can asset owners, in particular institutional investors such as pension and sovereign wealth funds as well as financial service providers such as insurance companies and banks, exert a greater influence on their investees through active ownership, including engagement and voting, as well as allocate more of their portfolio to SDG sectors and developing-country markets?
- iii. *Institutions and regulators.* What has been the institutional response with regard to sustainability and the SDGs, and how can financial market institutions, such as stock exchanges or derivatives exchanges, exert their influence on financial market participants? What has been the role of regulators in enforcing sustainability disclosure and standards, and in what ways can regulation bring transparency, harmonization and greater impact to global financial markets?

The past 25 years have seen the emergence of sustainability performance as something to measure and disclose to investors. The realization has taken root that sustainability issues represent a material risk to investors, as well as a potential systemic risk to the global financial market and ultimately to society at large, as demonstrated by the dire consequences of the COVID-19 pandemic. More recently, sustainability performance and ratings have expanded from company disclosure to an emphasis on fund disclosure and asset owners, such as pension funds. The past decade has also witnessed the accelerating growth of a sustainable investment market focused on equities and bonds.

Much of this trend has been voluntary and market-driven, demanded by investors, provided by enlightened early adopters and supported by frameworks and principles, subscribed to on an elective basis. However, the analysis in this chapter suggests that the period of voluntary self-regulation is now transitioning towards a mandatory regulated sustainable investment market, which is likely to influence the future direction of the whole global financial market ecosystem. Already, the sustainable investment market appears to have reached a tipping point in terms of both the size of the market – hitting record highs in the number of products and the assets under management – and regulatory oversight,

with the notable impact of the Taxonomy for Sustainable Activities of the European Union (EU) and its regulation of sustainability-related disclosure in the financial services sector.

The inevitable evolution of this trend is full integration of sustainability performance and standardized ratings throughout the whole global financial market ecosystem. That is, sustainability ceases to be a niche investment strategy and becomes a standardized performance metric in the same way as financial performance. This will be especially important for developing countries, which have been somewhat bypassed by the growth in sustainable investment and have yet to fully benefit from the exposure of global fund portfolios or indexes to their markets.

UNCTAD has been working for more than a decade to promote the uptake of sustainability by capital markets and other financial market actors, particularly in developing countries (see for example, UNCTAD, 2019). To take this work forward, with a longer-term, post-SDG perspective, UNCTAD is launching the *Global Sustainable Finance Observatory* to facilitate the transition of sustainable investment from market niche to market norm, as described in this chapter. The Observatory will integrate the relevant instruments and outputs on a virtual platform to strengthen the assessment, transparency and integrity of sustainable finance products and services. The Observatory will work in tandem with the standards-setting processes of the financial industry and regulatory bodies to promote the full and effective integration of sustainable development (as defined by the SDGs) into all aspects of the global financial ecosystem.

A. SUSTAINABILITY-THEMED CAPITAL MARKET PRODUCTS

UNCTAD estimates that sustainability-dedicated investments – investment products targeting sustainable development-related themes or sectors – amounted to \$3.2 trillion in 2020, up more than 80 per cent from 2019. These capital market investments consist mainly of sustainable funds (over \$1.7 trillion), green bonds (over \$1 trillion), social bonds (\$212 billion) and mixed-sustainability bonds (\$218 billion). Most of this investment is domiciled in developed countries and targeted at assets in developed markets. With respect to the sustainability credentials of this investment, especially funds, questions remain about greenwashing and its impact on sustainable development. Nevertheless, the sustainable investment market's rapid expansion indicates the potential for capital markets to help fill the financing gap to attain the SDGs.

1. Sustainability-themed funds

Over the past five years, the fund industry has been rapidly embracing sustainability through the multiplication of funds and indexes dedicated to sustainability themes. In 2020 alone, sustainable funds have surged, including mutual funds and exchange-traded funds (ETFs) described in prospectuses or other filings as selecting assets that integrate sustainability, impact or environment, social and governance (ESG) factors.

a. Market trends

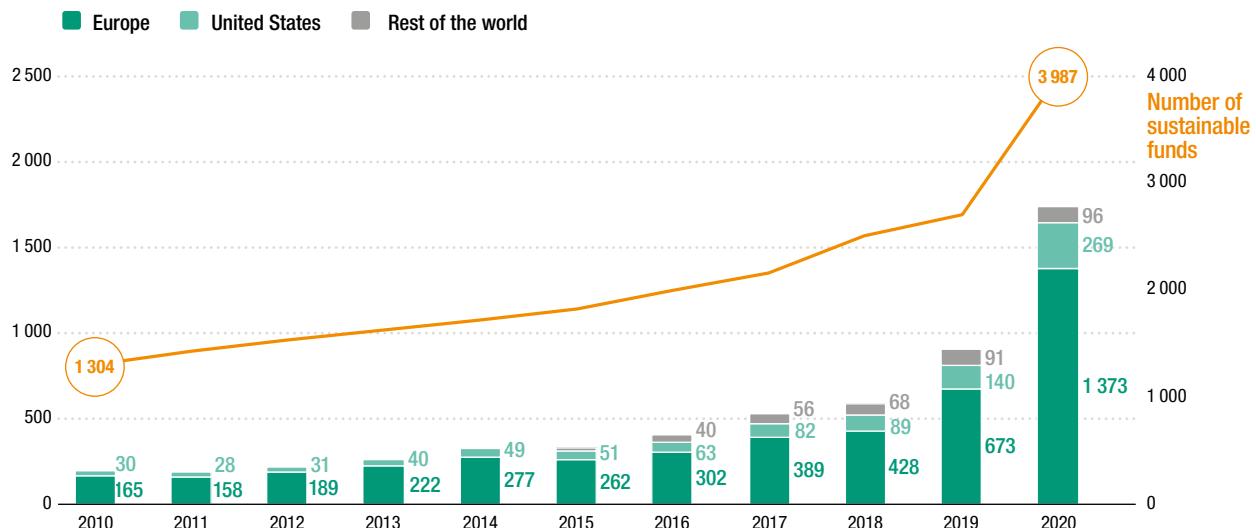
According to data from Morningstar and TrackInsight, the total number of sustainability-themed funds reached 3,987 by June 2020, up 30 per cent from 2019, with about half of all sustainable funds launched in the last five years (UNCTAD, forthcoming b). Assets under management (AUM) of sustainable funds have quadrupled in the last five years, and last year alone they nearly doubled, from roughly \$900 billion in 2019 to over \$1.7 trillion in 2020 (figure V.1). This exceptional growth held for both sustainable mutual funds and ESG ETFs (box V.1), which together now represent 3.3 per cent of the assets of all open-ended funds worldwide.¹

The universe of sustainability-themed funds comprises 3,435 mutual funds and 552 ETFs, with AUM of \$1.56 trillion and \$174 billion respectively. The asset allocations of sustainable funds are split among equity, fixed-income and mixed allocation funds, with equity funds accounting for the majority of funds by number (62 per cent). The remainder are split equally between fixed-income (19 per cent) and mixed-allocation funds (19 per cent).

Investment flows to sustainability-themed funds exhibit a similar growth trajectory. From 2016 to 2019, net inflows to these funds increased from \$33 billion to \$159 billion. Despite massive outflows from global capital markets in March 2020 following the outbreak of COVID-19, the total net inflows to sustainable funds in the first half of 2020 recovered to \$164 billion, and UNCTAD estimates that full-year net inflows reached well over \$300 billion (figure V.2). The explosion in flows to these funds demonstrates their rapidly growing

Figure V.1. Number of sustainable funds and assets under management, 2010–2020

(Billions of dollars)



Source: UNCTAD, based on Morningstar and TrackInsight data.

Note: Numbers of funds do not include funds that were liquidated; the numbers for 2020 are as of 30 June.

Box V.1.

The rise of sustainable exchange-traded funds (ETFs)

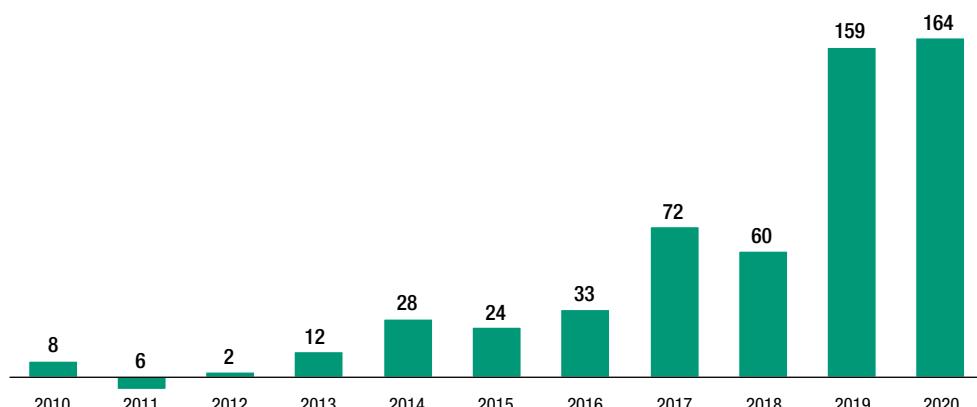
ETFs with an ESG tilt are a subset of the sustainability-themed investment funds in this report. Providers of ETFs are increasingly responding to the demand for sustainability-themed products, with a particular focus on ESG performance. Since UNCTAD's first study on ESG ETFs (UNCTAD, 2020f), the number of such funds has more than doubled – from 221 in 2019 to 552 in 2020, a much faster annual growth than in previous years.

ETFs integrate ESG performance by using one of several strategies, including (i) exclusionary screening; (ii) a general integration of ESG performance; (iii) pursuing a best-in-class ESG strategy; and (iv) thematic strategies, specifically targeting a sustainable sector, market, or theme, such as the United Nations' SDGs. Of the 552 ESG ETFs, 77 followed a themed strategy, up from 49 in 2019. This illustrates the growing attraction of themed strategies that often align with, or explicitly target, a specific SDG. Overall, 208 ESG ETFs targeted the SDGs in their investments in 2020, of which almost 90 per cent covered just three goals: SDG 13 (Climate action), SDG 7 (Affordable and clean energy) and SDG 5 (Gender equality).

In terms of the distribution of ESG ETFs by domicile, Europe accounted for a greater share in 2020 than in 2019, up from 59 per cent of funds to 67 per cent, reflecting the overall geographic distribution of the whole sustainable fund market. Only seven ESG ETFs, or just over 1 per cent of the total, were domiciled in developing countries – the same number as in 2019.

Source: UNCTAD, based on TrackInsight data.

Figure V.2. Net inflows to sustainability-themed funds, 2010–2020 (Billions of dollars)



Source: UNCTAD, based on Morningstar and TrackInsight data.

Note: Flows for 2020 are as of 30 June.

popularity as an investment vehicle. However, these net inflows remain relatively small in relation to the size of total AUM of sustainability-themed funds. This shows that the growth in their assets is driven, to a large extent, by the rise in their market value, boosted by buoyant stock markets, in particular in Europe and the United States in the last two years.²

The vast majority of sustainability-themed funds are domiciled in Europe (73 per cent), followed by North America (18 per cent); other regions, including developing countries, represent less than 10 per cent of domiciled funds. This reflects the maturity of the market and the relatively advanced regulatory environment for sustainable investment in Europe (UNCTAD, forthcoming b). The United States has the second largest share of sustainability-themed funds, while Luxembourg is by far the largest single host country, holding a market share of almost 30 per cent by assets (although domicile does not necessarily mean the fund is managed from that location).

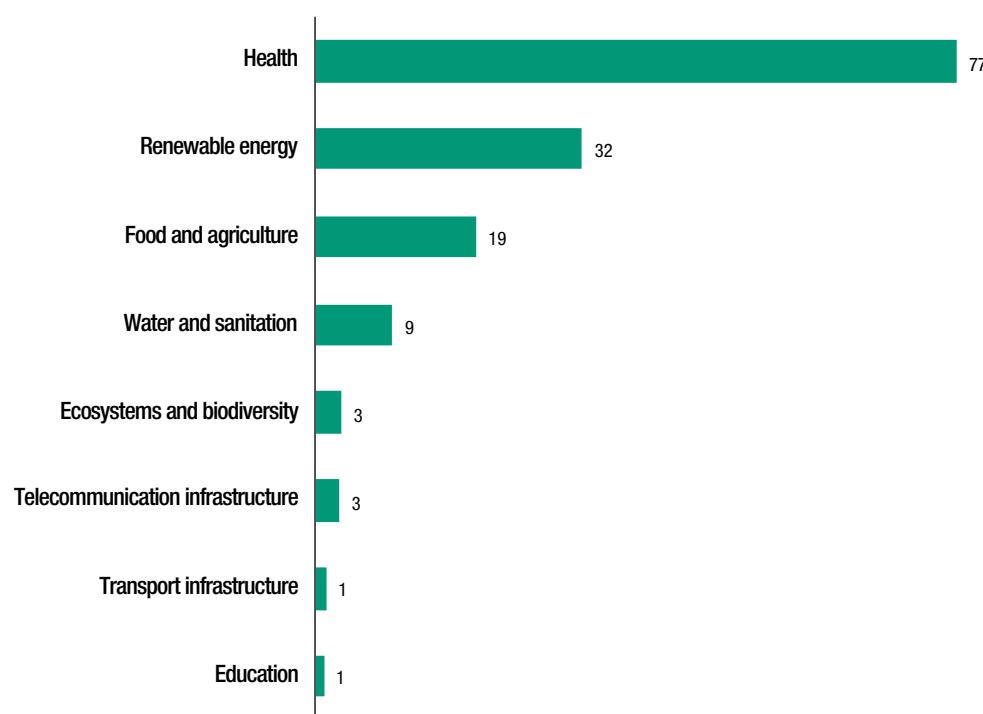
The rapid rise of sustainability-themed funds, particularly in 2020, reflects the accelerating adoption of sustainability criteria within the investment community, in particular in developed countries. Institutional investors, such as pension and insurance funds, are increasingly prioritizing sustainability in their investment decisions, particularly in view of their long-term obligations to beneficiaries and the material risks posed by climate change and other sustainability-related crises, such as the COVID-19 pandemic. They are also increasingly convinced that a pivot to sustainable investment does not necessarily entail an opportunity cost (Morgan Stanley, 2019). In the last two years, major fund providers and asset owners, such as BlackRock (United States) and Norway's Government Pension Fund, have stepped up their efforts to move towards sustainable investment, for example by announcing the divestment of carbon-related assets from their portfolios.³

b. Sustainability-themed funds and the SDGs

One of the investment strategies of sustainable funds is to target sustainability-related themes or sectors, including in the SDGs. UNCTAD's analysis of 800 sustainable equity funds for which relevant data are available found that about 27 per cent of their total assets (\$145 billion of their total AUM of \$540 billion) is deployed in eight key SDG sectors: transport infrastructure, telecommunication infrastructure, water and sanitation, food and agriculture, renewable energy, health, education and ecosystem diversity. The health sector, which covers medical services, pharmaceuticals and medical devices, is the most common and single largest SDG sector for these funds, followed by renewable energy, food and agriculture, and water and sanitation (figure V.3). Their investments in the health sector can make a critical contribution to the achievement of SDG 3 – good health and well-being (box V.2). Meanwhile, the analysis also suggests that the funds' returns did not systematically suffer a financial disadvantage for having a sustainable tilt in their portfolios. Over a period of three years, 48 per cent of sustainable funds outperformed their respective benchmarks, while 52 per cent underperformed them (UNCTAD, forthcoming b).

The benefits of sustainable funds are mainly limited to developed economies. Developing and transition economies so far remain largely absent from the sustainable fund market. In total, they host about 5 per cent of the world's sustainable funds by number and less than 3 per cent by assets. However, leading emerging markets have become important players in a wide range of SDG sectors, such as pharmaceuticals, renewable energy and green bonds. In addition, stock markets in developing and transition economies account for roughly 23 per cent of global market capitalization. These two factors suggest that developing economies have the potential to significantly grow their sustainable fund markets, and their fund markets in general.

Figure V.3. | Deployed assets across eight SDG sectors, 2020 (Billions of dollars)



Source: UNCTAD, based on Morningstar and TrackInsight data.

In addition to the regional concentration of funds in developed-country markets, their real impact and sustainability credentials also remain questionable, raising concerns about “ESG or SDG washing”. The global sustainable fund market therefore needs to address two fundamental issues to fully unleash its potential to finance sustainable development: (i) how to make sustainable funds contribute more to sustainable development in developing economies, and (ii) how to improve their sustainability credentials and address ESG- or SDG-washing concerns.

To leverage sustainability-themed funds for sustainable development, developing and transition economies need to put in place necessary industry standards and regulatory frameworks, as they did to support the growth of sustainable bonds. Incentives could also be provided for the development of and investment in sustainability-aligned indices and funds. Meanwhile, there is a need for more funds that target developing and transition economies in both developing and developed markets. Among the measures required to support this shift are improving capital market regulation and reporting in developing countries and raising standards to international norms to boost investor confidence.

To continue growing in the long term, sustainable funds need to address issues about the harmonization of standards. Meanwhile, the fund market needs to enhance credibility by improving transparency through reporting, not only on ESG issues but also on climate impact and SDG alignment. Today, more than 90 per cent of the world’s largest companies report on ESG or SDG issues (G&A,2020), but very few funds are reporting on their own sustainability performance. Fully transparent self-reporting would be a helpful first step towards more transparency and credibility, and the reporting should be supported by external auditing, as is required for companies. Meanwhile, stock exchanges can put in place relevant guidelines or demand greater sustainability performance and disclosure in their listing requirements (see section C).

Box V.2.**Fund investment in the health sector**

Good health and well-being are covered by SDG 3; they are a basic human right and are also essential for economic and social development. In 2020, direct investment and project finance in health infrastructure (e.g. hospitals) fell by 39 per cent (UNCTAD, 2021c), threatening progress on the attainment of SDG 3 and putting pressure on the health sector, especially in developing countries. The pandemic has also compounded the strain on national health systems globally (see chapter III, section C).

However, the response to the pandemic has also been increased investment by mutual funds and ETFs in other areas within the health sector, such as health care, pharmaceuticals, biotechnology, and medical devices and supplies. In 2020 and the first four months of 2021, the number of equity funds dedicated to the health sector rose by 13 per cent to 575, with AUM reaching \$350 billion.

More than two thirds of this investment is domiciled and invested in North America, which perhaps reflects private approaches to health care and health insurance. Europe accounts for 29 per cent of funds' investment in the health sector, perhaps reflecting predominantly public approaches to health care and health insurance, despite mature pharmaceutical and medical supply industries. The AUM domiciled in developing countries and invested there reached \$5.5 billion at the start of 2021, accounting for roughly 2 per cent of AUM in the health sector.

Meanwhile, sustainable funds in general also invest heavily in the health sector. UNCTAD's analysis of more than 800 sustainable equity funds, over 90 per cent of which are not in the health sector, found that about 14 per cent of these funds' assets, about \$77 billion out of \$540 billion of total assets, are invested into the health sector, by far the largest exposure among key SDG-oriented sectors such as renewable energy, agriculture and transport infrastructure.

While the trend in investment via capital markets is positive for the pandemic recovery and the attainment of SDG 3, most health sector funds described here are so far not included in mainstream sustainable fund databases such as that of Morningstar. This does not necessarily mean they are not sustainable or do not contribute to sustainable outcomes, as 16 per cent of these funds have "above average" ESG ratings, according to data provided by Conser, a Swiss sustainability data company. Instead, these funds are not counted as sustainable funds, perhaps just because they do not disclose systematic ESG integration in their investment strategy or because sustainability ratings for many of them are inaccessible. This highlights the importance of harmonizing standards for defining and qualifying sustainable funds and building up their sustainability data. In addition, there may be an advantage to use the SDGs as a benchmark for sustainability and to take a broader view of the market to better establish the level of SDG investment.

Source: UNCTAD, based on Morningstar and TrackInsight data.

2. Sustainable bond markets

The now \$1.5 trillion market for sustainable bonds (green, social and mixed) saw increased demand in every quarter of 2020, from less than \$70 billion in Q1 to close to \$180 billion in Q4, pushed by the issuance of social and mixed-sustainability bonds as national and supranational organizations and corporations financed relief efforts amid the fallout from the pandemic. The highest increase was seen in the social bond market, with a tenfold rise to \$164 billion in 2020 — or one third of the sustainable bond market (green, social and mixed-sustainability combined), up from just 5 per cent in 2019. At the same time, mixed-sustainability bonds (a mix of green and social) were valued at \$128 billion, surpassing their 2019 total by a factor of three.

The sustainable bond market — including green bonds, social bonds and mixed-sustainability bonds (a mix of green and social) — has seen enormous growth since the first green bond was launched just over a decade ago. Based on 2020's explosive growth rate, social and mixed-sustainability bonds are rapidly catching up with the green bond segment (long the leader in this area) and becoming increasingly popular tools for financing SDG related activities. Cumulatively the total amount of outstanding sustainable bonds since 2015 is estimated to be \$1.5 trillion, based on average maturity periods for these bonds.⁴

Despite an average annual growth rate of 67 per cent and significant size in absolute terms, the sustainable bond market is still very much in its early growth stage, representing only about 1.26 per cent of the total global bond market of approximately \$119 trillion.⁵ This suggests enormous growth potential for this segment going forward.

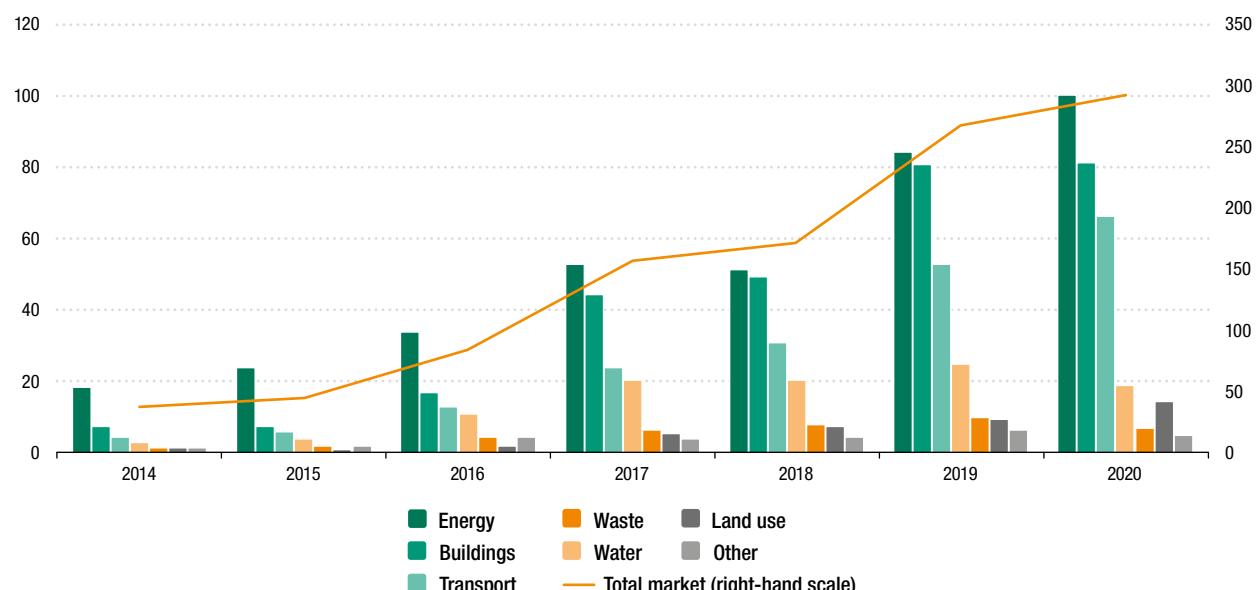
In the next five years, the sustainable bond market can expect to see further acceleration of growth as investors and issuers become more confident with this proven investment vehicle and the sense of urgency around financing the SDGs, including climate action, continues to create a conducive policy environment for these types of investments. By 2025, the sustainable bond market could reach 5 per cent of the total global market, which would bring over \$6 trillion of new investments in SDG sectors.

In part, this development has been facilitated by stock exchanges: 37 stock exchanges now have specialized market segments to increase the visibility of these products, up from zero exchanges 10 years ago. The Luxembourg Stock Exchange, with the creation of the Luxembourg Green Exchange market segment, was one of the first exchanges to list green bonds. By Q1 2021, the new exchange had listed over 500 green bonds, 350 mixed-sustainability bonds and 70 social bonds. Stock exchanges also work with issuers to develop sustainable bonds: for example, the Johannesburg Stock Exchange worked with the city of Cape Town in 2020 to develop a municipal green bond. More details about different types of sustainable bonds are provided in the following subsections.

a. Green bonds

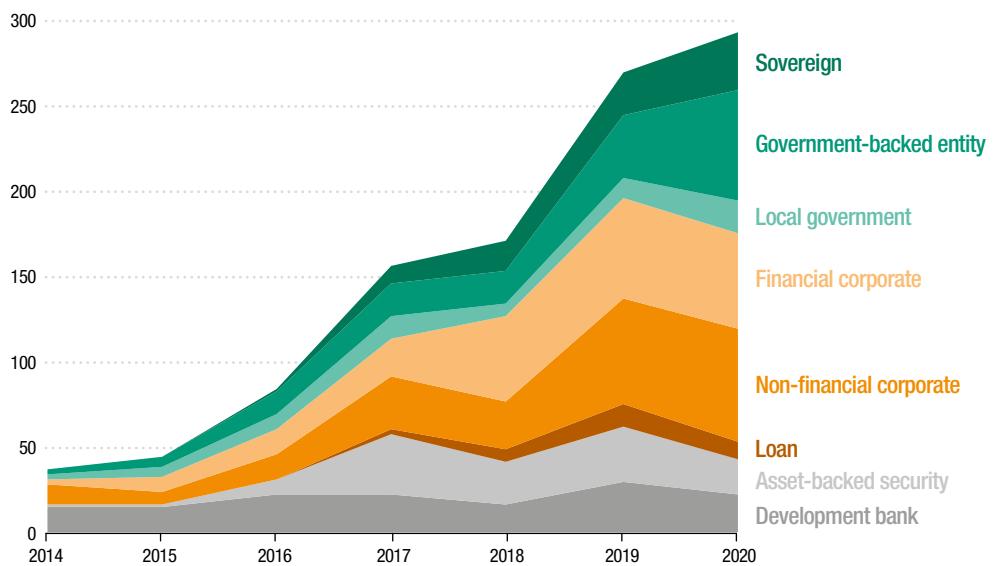
Green bonds facilitate investment in environmental infrastructure projects, including projects related to climate action (SDG 13), affordable and clean energy (SDG 7), and sustainable cities and communities (SDG 11). Green bond segments on stock exchanges first emerged in 2014, and the value of green bonds issued, both listed and unlisted, has since grown by 700 per cent into a \$300 billion market (figure V.4). The proceeds of green bonds are primarily used in three sectors: energy, buildings and transport. In 2020, the global green bond market continued its upward trend, though it grew slower in 2020 than in 2019. This may be due to the effects of the pandemic leading to deferred infrastructure projects; it may also be related to the dramatic growth of the sustainability bond market, which mixes elements of green bonds and social bonds.

Figure V.4. | **Green bond market size and industries financed, 2014–2020**
(Billions of dollars)



Source: Climate Bonds Initiative.

Figure V.5. | Green bond market size by type of issuer, 2014–2020 (Billions of dollars)



Source: Climate Bonds Initiative.

Although financial and non-financial corporations are the dominant issuers of green bonds, the value issued by government-backed entities increased in 2020 (figure V.5). Government-backed entities issued nearly \$65 billion in green bonds in 2020, compared with \$36 billion in 2019. Development banks issued nearly \$23 billion worth of green bonds in 2020, about \$6 billion less than in 2019, which accounted for only 7.8 per cent of all green bonds issued, compared with 40 per cent in 2014. This highlights how development banks kick-started this innovative area of finance, which is now dominated by government and private-sector issuers. For example, financial corporations, which issued 6.8 per cent of green bonds in 2014, accounted for 19 per cent of the market in 2020.

b. Social bonds

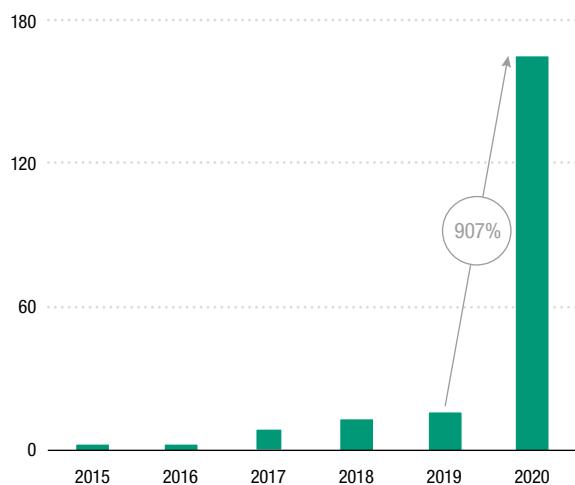
The pandemic has boosted the issuance of social bonds — a trend first observed in *WIR20*. The year 2020 saw a jump of over 900 per cent in the value of the social bond market (figure V.6). These sustainable debt products are based on a set of principles or guidelines issued by the International Capital Market Association (ICMA). According to the ICMA's *Social Bond Principles*, social bonds finance projects with positive social outcomes such as health or well-being improvement and poverty reduction. Similar to social bonds, impact bonds are outcomes-based contracts used to deliver services to the population (box V.3).

The huge surge in social bonds in 2020 was due mainly to the response to the COVID-19 pandemic. Supranational entities led the development of COVID-19 response bonds, primarily social bonds specifically developed to address the impacts of the pandemic. Multilateral development banks were able to react quickly as many already had frameworks in place to issue social and mixed-sustainability bonds. COVID-19 response bonds include the largest dollar-denominated social bond ever launched in international capital markets before Q1 2020: the issuance of the \$3 billion "Fight COVID-19" social bond of the African Development Bank (AfDB). Another big issuer of social bonds in 2020 was the European Union, which tapped the market multiple times to fund the EU SURE (Support to MITIGATE Unemployment Risks in an Emergency), a temporary job support program.

EU SURE is a programme developed by the EU to help member States cope with the economic disruption caused by the pandemic. The program provides financial assistance to address the sudden increase in public expenditure, as member States try to mitigate the consequences of the economic shocks of the pandemic. The EU SURE social bonds are aligned with the Social Bond Principles of the ICMA and aim at supporting employees and self-employed against the risk of unemployment and loss of income (SDG 8).

By the first quarter of 2021, the European Commission had issued €75.5 billion (\$91 billion) worth of social bonds in six rounds under the EU SURE instrument. These funds have already been disbursed to 17 member States (figure V.7), but others can still submit requests to receive financial support under SURE, which could raise up to €100 billion.

Figure V.6. Surge in social bonds in 2020
(Billions of dollars)



Source: UNCTAD.

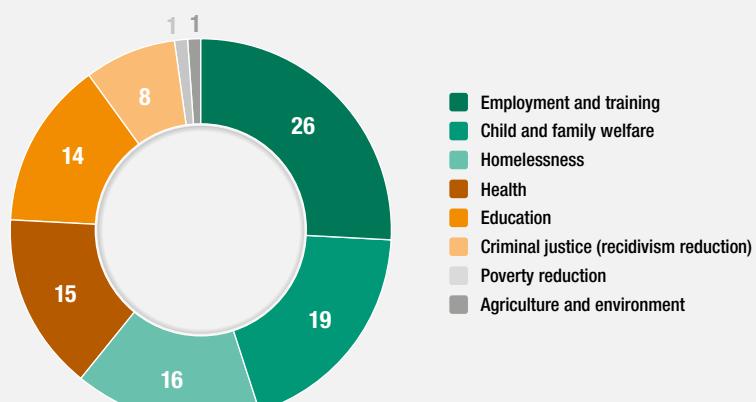
Box V.3. Impact bonds

Impact bonds are outcomes-based contracts that use private investor funding to cover the upfront capital required for providing a service. These contracts differ from traditional contracts by focusing on outcomes rather than on inputs and activities. The service is designed to achieve measurable outcomes, and the investor is repaid only if these outcomes are achieved.

There are two types of impact bonds: (i) social impact bonds, for which the outcome payer is the government representing the target group, and (ii) development impact bonds, in which the outcome payer is an external donor (e.g. aid agency of a government or multilateral agency).

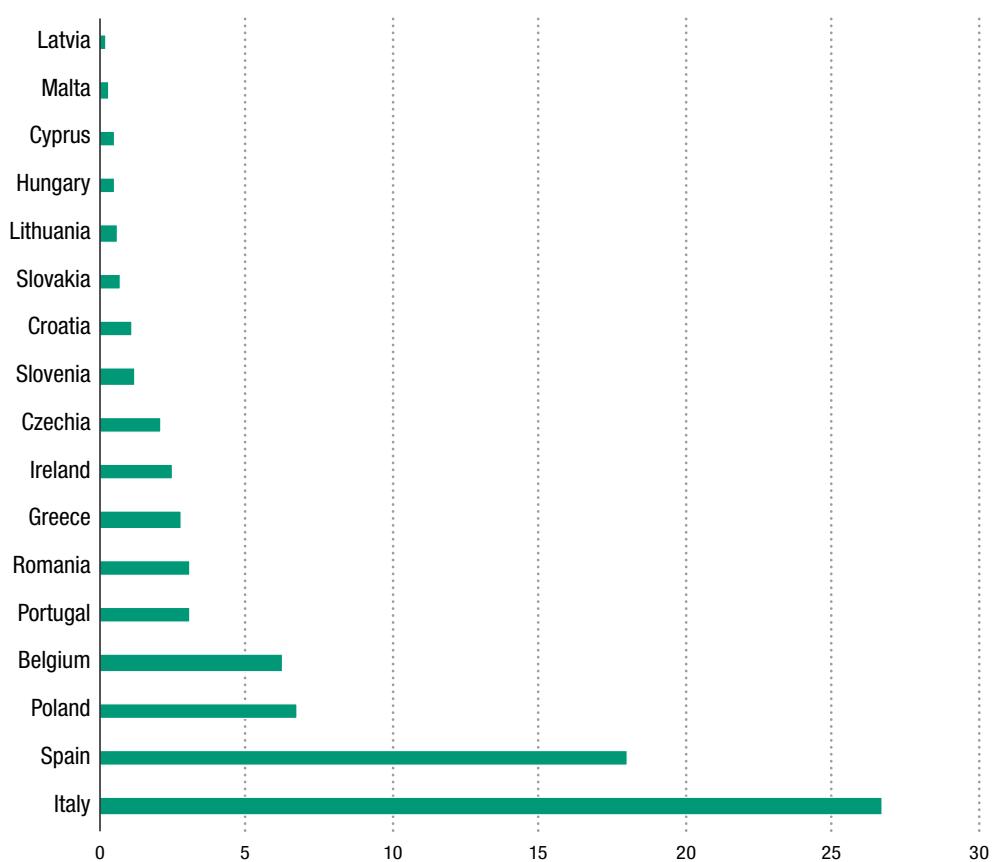
Currently, 206 projects are funded through impact bonds, which have raised over \$450 million all over the world for different policy sectors (box figure V.3.1).

Box figure V.3.1. Impact bonds by policy sector (Percentage by number of projects)



Source: Government Outcomes Lab, University of Oxford.

Figure V.7. | EU SURE Social Bond per country (Billions of euros)



Source: UNCTAD.

At the beginning of the pandemic, the AfDB raised \$3 billion in a three-year bond to help mitigate the economic and social impact of the pandemic on Africa's economies and livelihoods. The Fight COVID-19 bond was allocated to central banks and official institutions (53 per cent), bank treasuries (27 per cent) and asset managers (20 per cent). Final bond distribution statistics demonstrated a worldwide interest in COVID-19-related bonds: the bonds were funded from investors in Europe (37 per cent), the Americas (36 per cent), Asia (17 per cent), Africa (8 per cent) and the Middle East (1 per cent).

Currently, 12 African countries borrow funds from the AfDB that are financed by the Fight Covid-19 social bond. These countries' projects focus on different sectors and interventions, ranging from supporting the transition of production lines to health-care materials, to providing bridge-finance for SMEs struggling with the effects of national lockdowns, to providing social support for vulnerable people. For example, the Tunisian PARISE project received a \$217 million loan from the AfDB in April 2020 to mitigate the impact of the COVID-19 crisis through job protection and the social inclusion of vulnerable groups (the youth and the poor) over the short term, and through economic recovery in the medium term. In Cameroon, a \$106 million loan is funding the country's Crisis Response Budget Support Programme, which is to build capacity for COVID-19 testing, management and response by providing planning and strategic tools, as well as financial resources, to the health sector. It also aims to stabilize household income and livelihoods to safeguard food security.

c. Mixed-sustainability bonds

Mixed-sustainability bonds are instruments that mix social and environmental objectives and are defined by the ICMA Sustainability Bond Guidelines. Thus, they are aligned with the components of both ICMA's Green Bond Principles and Social Bond Principles. Similar to social bonds, the mixed-sustainability bond market saw a significant leap in volume in 2020, growing 226 per cent (figure V.8).

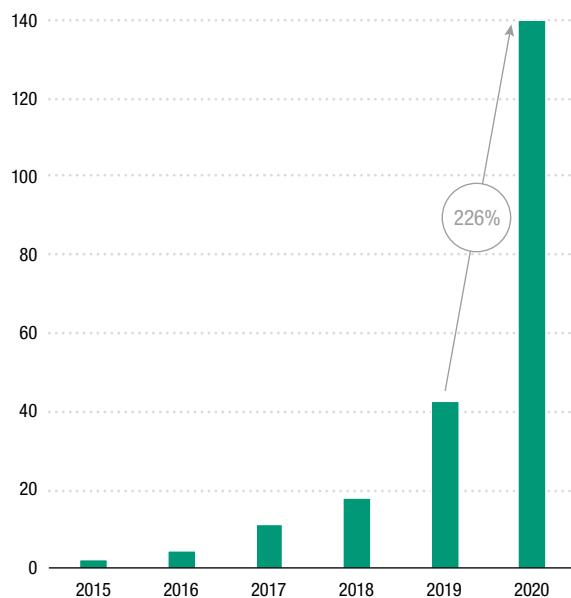
Given the cross-cutting and interrelated nature of social and environmental issues, these mixed-sustainability bonds are especially useful for raising funds for sustainable development projects. Supranational organizations, such as development banks, have taken the Sustainability Bond Guidelines as a guide for their sustainable development bonds frameworks. The World Bank Group has such a framework, and the proceeds of its bonds go to projects designed to achieve both positive social and environmental impacts and outcomes in line with the World Bank Group's twin goals of eliminating extreme poverty and promoting shared prosperity.

In 2020, the World Bank Group reported that it has committed \$23.2 billion of proceeds from mixed-sustainability bonds to fund 100 new projects, of which 54 per cent were from lower-middle-income countries, 57 per cent had a gender focus and 31 per cent had climate co-benefits. When analysed by sector, the majority of proceeds went to projects that involved some infrastructure aspect, such as transportation, water and sanitation, and energy. The region most benefited was Latin America and the Caribbean, followed by East Asia and the Pacific and then Europe and Central Asia.

As an example of how sustainable bonds can incorporate social and environmental goals, the World Bank project Support to Bogota's Metro Line 1 Project aims at improving public transportation in Colombia's capital (to reduce transportation emissions) but also embeds mechanisms to hire more women, with a target of at least 20 per cent of Metro employees. The project also incorporates a reporting mechanism for victims of sexual harassment and an action protocol for Metro police and staff to intervene.

Figure V.8.

Surge in mixed-sustainability bonds in 2020 (Billions of dollars)



Source: UNCTAD.

B. INSTITUTIONAL INVESTORS AND FINANCIAL SERVICE PROVIDERS

At the far upstream end of the investment chain are asset owners and asset managers, the vast majority of which are institutional investors. The size of the assets managed by institutional investors puts them in a strong position with regard to effecting change on sustainability issues. They can do this primarily through two routes: (i) asset allocation – how they choose to allocate the large amounts of capital at their disposal, which can have a determinative impact on companies and markets; and (ii) active ownership – how they engage with their investments through corporate governance mechanisms to influence the policies of the companies in which they invest.

1. Sustainability-influenced asset allocation

This section examines four groups of upstream institutional investors that have an important role to play in driving sustainable investment and who have a strong institutional interest in doing so: the first two, pension funds and sovereign wealth funds (SWFs), managed reported global assets of \$52 trillion and \$9.2 trillion, in 2021, respectively (Thinking Ahead Institute, 2021 and Global SWF, April 2021).⁶ The second two, insurance companies and banks, manage assets but primarily provide financial services for their clients in the form of risk liability and other risk management products, and loans. The investable assets of insurance companies and banks reached \$32 trillion (2018) and \$155 trillion (2019) respectively.⁷

a. Pension funds

Given their long-term obligations, pension funds (as well as SWFs, discussed in the next subsection) are in a better position to assess long-term risks to their portfolios, and the intergenerational nature of their business model tends to make them more responsive to ESG- and SDG-related issues. Consequently, there has been a realization on the part of these large institutional investors that ESG factors constitute material risks for the sustainability of their investments. UNCTAD has focused much of its analysis on public pension funds, which often have a clearly defined link with local communities and ESG priorities. In terms of their AUM, they accounted for almost \$20 trillion in 2021, or 40 per cent of total global pension assets.⁸

Public pension funds could be an important financing source for sustainable development. For example, infrastructure investments are well suited to their needs – their investment horizon aligns with long-term infrastructure projects and their investment capacity can address the size of such projects (PwC, 2016). Despite the impact of the pandemic, the investment of pension funds in infrastructure continued growing in 2020, with increasing investments committed by the funds to sectors critical for sustainable development, such as renewable energy, agriculture and industrial properties (including warehouses, industrial premises and logistics centres) (IE University, 2020).

In recent years sustainability-dedicated investment has started to gain increased traction among the funds, and their strategies have evolved from relatively simple approaches (such as exclusion or negative screening) to more sophisticated ones. Impact investment (including SDG-themed investment) has become an important investment strategy, showing an ongoing transition from responsible investment to sustainability-dedicated investment (UNCTAD, 2020d). The most popular investment areas are related to climate change mitigation, in particular in carbon-efficient assets, renewables, green real estate and infrastructure, and green, social or mixed-sustainability bonds. In 2018, Canada Pension Plan (CPP) became the first pension fund to issue green bonds, raising \$1.5 billion in total, a record at the time for a single green bond transaction in Canada.⁹

An increasing number of funds have also started to integrate the SDGs into their asset allocation. APG and PGGM (both the Netherlands) jointly developed a taxonomy for investment that contributes to the SDGs, called Sustainable Development Investment. By the end of 2017, PGGM had dedicated 15 per cent of its total assets to SDG-related sectors or projects. Other funds, such as ATP (Denmark), the Government Pension Investment Fund of Japan and the New Zealand Superannuation Fund, also use the SDGs as a reference to pursue positive investments that deliver clear social and environmental benefits alongside financial returns.

Nonetheless, public pension funds still have a long way to go in embracing sustainability in their investments. According to an UNCTAD report, among the world's 50 largest public pension funds and 30 largest SWFs, only 16 public pension funds and 4 SWFs published a sustainable or responsible investment report in 2019 (UNCTAD, 2020d). More fundamentally, public pension fund portfolios largely bypass developing-country markets, limiting their contribution to sustainable development.

b. Sovereign wealth funds

In response to the needs for additional resources to fight the pandemic and drive post-pandemic recovery, SWFs have acted as useful fiscal buffers for their governments. During the pandemic, many funds were called on to offset widening budget gaps to backstop the economic and financial impacts of the crisis. Reported drawdowns were widespread, ranging from large funds such as in Qatar, the Russian Federation, Singapore and Norway, where nearly 5 per cent of the Government Pension Fund Global's capital was earmarked for fiscal support, to small funds – as in Botswana, Ghana or Nigeria – that are far less well resourced. Meanwhile, the funds were also engaged in a variety of other measures designed to provide relief to distressed sectors of local economies. Mubadala Investment Company (United Arab Emirates), for example, rolled out a \$114 million rent relief plan targeting the retail and hospitality industries. In the Russian Federation, the Russian Direct Investment Fund provided capital for vaccine production. Funds from Malaysia, Singapore and Turkey have stepped in to fund or recapitalize local firms operating in key sectors (IE University, 2020). In view of their role in fighting the pandemic, SWFs – especially those in developing countries – may see their function as an economic stabilization vehicle further strengthened as a useful tool to insulate their economies from internal and external shocks and to promote sustainable development in their countries.

As SWFs become more active in direct investments in infrastructure, energy, emerging technologies and other assets that are vital to the strategic interests of host countries, it is worth questioning whether controlling stakes in investment projects are desirable. Where such significant stakes are warranted, there may be options for SWFs and public pension funds to work in partnership, either with host-country governments, with development finance institutions or with other private-sector investors that can bring technical and managerial competencies to the project.

Meanwhile, the funds should uphold responsible investment principles and standards, such as the Principles for Responsible Investment in Agriculture, which protect the rights of minority shareholders and local stakeholders. Home-country governments, as the final owners of the funds, need to review the mandate of these funds to allow them necessary space for investment abroad in productive assets and activities. In contrast, developing host countries need to reduce entry barriers for institutional investors while safeguarding public interests. In addition, they can use risk-sharing tools, such as public-private partnership, investment insurance and blended financing, to help improve the risk-return profile of SDG investment projects, and make bankable projects readily available for institutional investors, while taking measures to maximize their development benefits (*WIR14*).

The Santiago Principles,¹⁰ the industry-agreed framework on SWF governance and operations, have helped mitigate concerns related to governance, transparency and accountability issues to a certain extent. Yet, questions remain about whether SWFs are governed according to international standards and about their strategic purpose with regard to foreign investment (Marie et al., 2021). Meanwhile, sustainability integration, or how to make SWFs work better for sustainable development, is largely absent in the Santiago Principles. Therefore, the Principles need to be updated to ensure that ESG integration becomes an inherent part of SWF investment decision-making, and that the Principles are aligned with member State commitment to the SDGs and the Paris Agreement on Climate Change.

c. Insurance companies

In its role as risk manager, risk carrier and investor, insurance is a key component of a sustainable financial system. At its core, the insurance business model is built on the principle of mutualization of risk — making it a particularly effective tool for the management of collective problems posed by sustainable development challenges. Beyond providing financial resilience, insurance acts as an enabler of solutions that can drive social and environmental sustainability. Through investment, insurers can support sustainable development as asset owners, using capital-allocation and active-ownership strategies that complement their underwriting business.

Climate change is a systemic risk for the whole world. Total economic losses from disasters globally were an estimated \$202 billion in 2020, up from \$150 billion in 2019, with about \$190 billion resulting from natural catastrophes and the remainder from human-generated events. The *insurance protection gap* is the difference between economic losses and *insured* economic losses over time: the bigger the gap, the greater the uninsured losses. This gap is bigger in developing countries than in developed countries, further exacerbating the negative economic impacts of climate change on developing countries. In North America 66 per cent of the economic losses in 2020 were insured while in Oceania/Australia the share was 73 per cent and in Europe 33 per cent. In Latin America and the Caribbean it was 18 per cent, in Asia 12 per cent and in Africa 0 per cent. Worldwide, the insurance protection gap increased to \$113 billion in 2020, up from \$87 billion in 2019. Although insured (\$69.8 billion) and economic (\$104.6 billion) losses occurred primarily in North America in 2020, none of the \$1.4 billion in economic losses suffered in Africa were insured (Swiss Re Institute, 2021).

With economic losses from catastrophes growing faster than insured losses, adapting economies to climate-related impacts has become a major priority. New insurance products designed to create disaster-risk-financing systems, where no other risk-transfer tool is available, are increasingly being seen as part of the solution in closing this protection gap and fostering sustainable development.

Initiatives to harness insurance for sustainable development have been picking up momentum since 2012 when the UN Environment Programme Financial Initiative (UNEP FI) launched the Principles for Sustainable Insurance. The Principles serve as a global framework for the insurance industry to address ESG risks and opportunities and a global initiative to strengthen the insurance industry's contribution – as risk managers, insurers and investors – to building resilient, inclusive and sustainable communities and economies on a healthy planet. In 2016, UNEP-FI further created the Sustainable Insurance Forum whose core members are insurance regulators and supervisors. While the Principles are focused on the private companies in the insurance industry, the Forum is focused on strengthening insurance regulators' understanding of sustainability challenges and the systemic risks and opportunities sustainability presents for the insurance industry.

Climate change presents an enormous challenge for the industry, but it is also an issue in which the industry and its regulators can play an important role in promoting the transition to a net-zero economy. Among the key priorities, the insurance industry needs to

- assess climate change risks in an integrated manner, including climate-related physical, transition and litigation risks.
- recognize that climate change presents not only downside risks, but also upside opportunities to develop insurance products or expand existing ones within a changing risk landscape that can assist with climate adaptation.

An important step in the insurance industry was taken in April 2021 by seven of the world's leading insurers and reinsurers, working together with UNEP, in the process of establishing a pioneering Net-Zero Insurance Alliance. The seven companies – Allianz, Aviva, AXA, Munich Re, SCOR, Swiss Re and Zurich Insurance Group – recognize that the global insurance and reinsurance industry can play a key role in accelerating the transition to a resilient, net-zero emissions economy, in line with the 1.5°C target of the Paris Agreement on Climate Change.

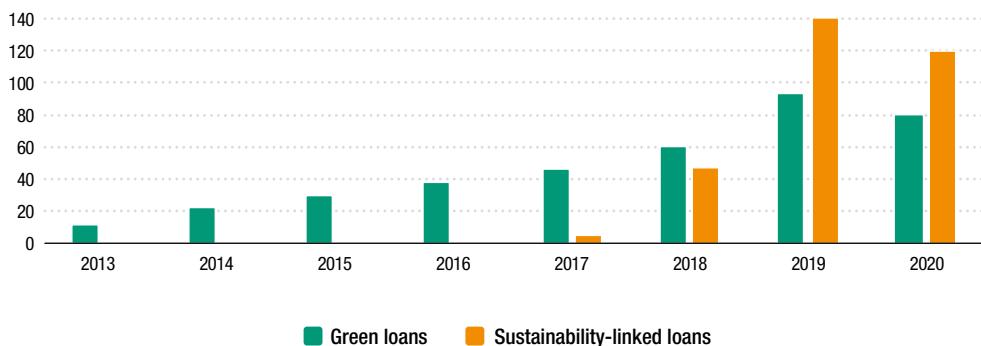
d. Banks

The volume of sustainable financial products and strategies has grown in the past years, driven by increased demand and campaigns to incentivize financial sector efforts in achieving global sustainability agendas. The focus of these initiatives has been mostly investors and asset owners, while the banking sector has received less attention. The banking sector can play a critical role in fostering sustainable development through enhanced corporate lending, which represents a significant source of global capital.

The sustainable loan market, valued at approximately \$200 billion in 2020, is less than a decade old and consists mainly of green loans (which have been used to finance green assets and projects) and sustainability-linked loans (which are tied to the borrower's ESG rating and not the use of proceeds) (figure V.9). The frameworks underpinning these instruments are the Green Loan Principles established in 2018 and the Sustainability Linked Loan Principles established in 2019 by the Loan Market Association, a banking industry group.

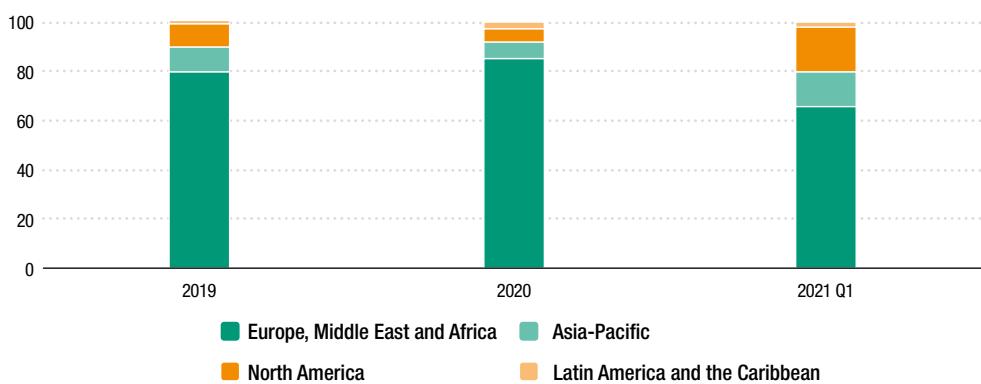
European markets played a leading role in the upward trend of the sustainable loan market, consistently representing about half or more of the market over the past five years (figure V.10). Most loans raised under the Green Loan Principles are for investment in renewable energy, while the sustainability-linked loans go to a more diversified set of industries.

Figure V.9. | Green and sustainability-linked loans (Billions of dollars)



Source: UNCTAD, based on Bloomberg data.

Figure V.10. | Sustainability-linked loan issuance by region (Per cent)



Source: UNCTAD, based on Bloomberg data .

The recent economic decline triggered by the pandemic poses a risk for debt markets. In this context, the consideration of ESG factors by banks and their inclusion into long-term strategies, risk management processes and product design is critical to have a more resilient system able to withstand shocks. For instance, in the COVID-19 crisis, evidence suggests that companies with strong ESG performance have been more resilient, and the same for sustainable debt and green bonds compared with mainstream corporate debt. Banks can lead the way to a more sustainable economy by lending to economic activities that contribute to sustainable development and by incentivizing clients to better address social and environmental opportunities and challenges.

In 2012, the International Finance Corporation launched a pioneering initiative, the Sustainable Banking Network. The Network is a unique, voluntary community of financial sector regulatory agencies and banking associations from emerging markets that are committed to advancing sustainable finance in line with international good practice. The current 43 member countries represent \$43 trillion or about 86 per cent of the total banking assets in emerging markets.

The UNEP FI Principles for Responsible Banking (box V.4), published in 2019, reinforced the case for the environmental and social aspect of corporate lending and banks.

Currently, they have 227 signatories, from 69 countries, totaling \$57 trillion in assets. This demonstrates growing interest from the banking community in joining the efforts of other financial sectors to promote sustainable development.

Another banking sector initiative is the Collective Commitment to Climate Action, the most ambitious global banking sector initiative supporting the transition to a net zero economy by 2050. It brings together a leadership group of 38 banks from across all six continents that have committed to align their portfolios with the global climate goal to limit warming to well below 2 degrees. The initiative's banks, representing more than \$15 trillion in assets, are fast-tracking the commitment made by all Principles for Responsible Banking signatories to align their business strategy with the temperature goals of the Paris Agreement on Climate Change. At the end of 2020, one year since the launch of the commitment, banks have taken steps to develop the know-how and underlying data to align their portfolios with the Paris Agreement on Climate Change. To deliver on their commitment, banks have been developing new financial products, implementing exclusion policies, assessing and managing risks, conducting portfolio alignment assessments and engaging with their clients.

2. The sustainability dimension of active ownership

With 43 per cent of public pension and SWF assets invested in publicly listed equities (Megginson et al., 2021), they are “universal owners” with large shareholdings in companies across a wide range of sectors and markets. The top 100 SWFs and public pension funds alone are estimated to own about 5 per cent of all listed equities globally (IE University, 2020). This puts them in a uniquely powerful position to drive sustainability inclusion along their investment chains through active and responsible ownership. This influence can be exercised through dialogue and engagement with their investees, voting rights at shareholder meetings, instructions to asset managers or, ultimately, divestment.

Box V.4.

The Principles for Responsible Banking

In September 2019, the United Nations Environment Programme Finance Initiative (UNEP FI) launched the Principles for Responsible Banking to provide a framework for a sustainable banking system and help the industry to demonstrate how it makes a positive contribution to society. They embed sustainability at the strategic, portfolio and transactional levels, and across all business areas. The Principles for Responsible Banking entail that signatory banks' strategy and practice align with the vision society set out for its future in the SDGs and the Paris Climate Agreement on Climate Change by following this six-point framework:

1. Alignment: Align business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the SDGs, the Paris Climate Agreement and relevant national and regional frameworks.
2. Impact and Target Setting: Continuously increase positive impacts while reducing the negative impacts on, and managing the risks to, people and environment resulting from banks' activities, products and services.
3. Clients and Customers: Work responsibly with clients and customers to encourage sustainable practices and enable economic activities that create shared prosperity for current and future generations.
4. Stakeholders: Proactively and responsibly consult, engage and partner with relevant stakeholders to achieve society's goals.
5. Governance and Culture: Implement these Principles through effective governance and a culture of responsible banking.
6. Transparency and Accountability: Periodically review individual and collective implementation of these Principles and be transparent about and accountable for positive and negative impacts.

The principles represent a multi-stakeholder partnership between UNEP FI and the banking industry to help banks implement these principles through guidance and reporting frameworks. They are open for banks to sign on. Signatory banks are required to report on their self-assessment within 18 months of becoming a signatory. Within a maximum of four years, banks are expected to have implemented their targets.

Source: UNEP FI Principles for Responsible Banking, <https://www.unepfi.org/banking/bankingprinciples>

a. Engagement

Active engagement can take many forms, including consultations and dialogue with all stakeholders in the investment value chain. Generally, funds favour engagement with asset managers and investees as a first resort to improve ESG performance, for example, by reducing carbon intensity or acting on gender parity. If engagement fails, the next resort can be to exclude firms from a fund's portfolio. Given the large portfolios of many funds, engagement can be an onerous task. For this reason, engagement is often undertaken by asset managers on behalf of the fund or outsourced to professional service providers.

In response to the large number of companies in fund portfolios, some funds take a thematic approach, engaging companies on specific issues, such as child labour, the preservation of marine life, management diversity or the circular economy, or developing engagement programmes that focus on specific components, such as climate change and emissions. Engagement can also be focused on corporate governance practices within companies.

Collective engagement through international initiatives and collaboration with other investors are gaining popularity. For example, many frontrunner pension funds have participated in the Climate 100+, an investor initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change. Group lobbying such as this tends to be more effective and time-saving for investors.

b. Voting

The most common way in which funds practise active ownership is through voting, either directly or, more likely, through a proxy. Most institutional investors regard voting in shareholder meetings as one of the most important tools for exercising ownership rights and a natural feature of ownership. They are increasingly supporting ESG and sustainability-related resolutions. Norway's Government Pension Fund, for example, voted in favour of over 43 per cent of sustainability-related resolutions in 2018, up from over 25 per cent in 2017. Washington State Investment Board voted in favour of over 90 per cent of climate change-related shareholder proposals for United States companies in 2019.

Many investors have voting policies, which can serve as custom voting instructions for proxy voting providers and enable the fund to actively vote in many company meetings across different markets and sectors. Most funds use specialist proxy voting services to both advise and vote on behalf of the fund. And some funds have a "voting focus" list, which allows them to focus on a selection of the largest or most strategically important companies in their portfolio.

In terms of corporate governance, funds have been active in promoting gender balance on company boards. For example, CPP (Canada) systematically votes against nominating committee chairs at companies that have no female directors and follows this up by voting against the entire nominating committee if there has been no progress a year later (box V.5). ABP (Netherlands) underlined its support for the principle of one share, one vote to align capital stakes and controlling rights. If companies adopt controlling structures, the fund asks the board to critically assess these structures and to phase them out over time. In these ways and more, the voting power of large share owners, such as pension funds, is plainly visible and their influence on company policy and action is potentially decisive and immediate.

Box V.5.

Gender equality in boardrooms

Gender equality is one of the 17 UN SDGs. Stock exchanges and other capital market stakeholders can play an important role in promoting gender equality in financial markets. Indeed, supporting actions in the private sector have soared in recent years, and awareness raising for gender parity in business positions has risen significantly. For example, seven years ago, seven exchanges started to raise awareness about the Women's Empowerment Principles and the importance of gender equality to businesses, by jointly holding special "Ring the Bell for Gender Equality" events. Organized by the UN Sustainable Stock Exchange (SSE), UN Women, UN Global Compact, the World Federation of Exchanges (WFE), and Women in ETFs, the event developed into an annual initiative which by 2021 included more than 100 exchanges around the world.

Although a growing number of exchanges promote gender equality among their listed companies, the number of women in high-level positions within companies remains low in many markets (box table V.5.1). For example, on average, only 20 per cent of corporate board seats in the G20 are held by women; and only 5.5 per cent of boards are chaired by a woman. The number of female CEOs is even lower; on average only 3.5 per cent of all CEO positions among large listed G20 companies are held by women.

Box table V.5.1. Ranking of G20 stock exchanges by gender balance of issuers' boards

Stock exchange (top 100 issuers by market capitalization)	Share of women on board (%)	Mandatory minimum rule for women on boards			Share of women chairs (%)	Share of women CEOs (%)
		Rule exists	Share of women (%)	Number of women		
1 Euronext Paris	44.3	Yes	40 ^a		2	5
2 Borsa Italiana	37.5	Yes	33 ^b		13	5
3 London Stock Exchange (LSE)	36.2	No			5	5
4 Deutsche Börse (DB)	32.5	Yes	30 ^c		4	2
5 Australian Securities Exchange (ASX)	32.3	No			14	8
6 New York Stock Exchange (NYSE)	30.4	No			9	8
7 Toronto Stock Exchange (TSX)	30.2	No	— ^d		9	4
8 Johannesburg Stock Exchange (JSE)	28.5	No			11	2
9 NASDAQ	27.8	Yes		1 ^e	3	5
10 Shenzhen Stock Exchange (SZSE)	17.3	No			5	11
11 National Stock Exchange of India (NSE)/ Bombay Stock Exchange (BSE) ^f	16.8	Yes		1 ^g	7	4
12 Borsa Istanbul	14.9	No	— ^h		6	3
13 Hong Kong Exchange (HKEX)	13.6	No			7	5
14 A Bolsa do Brazil (B3)	12.1	No			5	1
15 Japan Exchange Group (JPX)	11.9	No			1	0
16 Bolsas y Mercados Argentinos (BYMA)	10.8	No			2	1
17 Moscow Exchange (MICEX)	10.6	No			3	0
18 Shanghai Stock Exchange (SSE)	10.3	No			3	2
19 Indonesia Stock Exchange (IDX)	10.3	No			9	3
20 Bolsa Mexicana de Valores (BMV)	7.8	No			2	1
21 South Korea Stock Exchange (KRX)	7.4	Yes		1 ⁱ	1	2
22 The Saudi Stock Exchange Tadawul	1.2	No			1	1

Source: UN SSE (2021), Policy Brief: Gender Equality on Corporate Boards.

Note: Some markets have come close to achieving gender equality on boards. On the average board for Euronext Paris issuers, nearly half (44 per cent) of the seats are held by women. While the numbers for chair and CEO positions remain low everywhere, the Australian Stock Exchange is notable for having the most female chairpersons and the Shenzhen Stock Exchange is notable for having the highest number of female CEOs. In some cases, regulations may have helped increase the number of women in high-level positions. In 6 of the 22 markets in the G20, rules set a mandatory minimum for women's participation on boards, including in three of the top four exchanges.

^a Assemblée Nationale (2011), Dossiers. Société: représentation des femmes dans les conseils d'administration et de surveillance. Details of the rule: In case the total board members are fewer than nine, there should not be more than a two-seat difference between genders.

^b Borsa Italiana (2021). The Italian law, launched in 2011, is scheduled to expire at the end of 2021.

^c Deloitte (2019), Data driven change: Women in the boardroom, a global perspective. Detail of the rule: the quota applies to non-executive board seats.

^d Ontario Securities Commission (2014). Amendment Instrument for NI 58-101 Disclosure of Corporate Governance Practices. Details of the rule: Several provinces have a "comply or explain" rule regarding consideration of women for top management positions in listed companies with self-determined quotas. See also: Deloitte (2019), Data driven change: Women in the boardroom, a global perspective. In 2017 the province of Ontario set a goal of 30 per cent women on boards, to be reached within three or five years by listed companies.

^e NASDAQ (2020), Nasdaq to Advance Diversity through New Proposed Listing Requirements. Details of the rule: NASDAQ's proposal rules are pending approval by the U.S. Securities and Exchange Commission. If approved, they would require listed companies to have at least one director who self-identifies as female. In case of non-compliance, companies would have to explain the reasons.

^f Because of cross-listings, these two exchanges are grouped together in this ranking.

^g Indian Parliament (2013), Section 149(1)(b) of Companies Act 2013.

^h MSCI (2020), Women on Boards: 2020 Progress Report. Details of the rule: Non-binding goal of no less than 25 per cent female directors.

ⁱ MSCI (2020), Women on Boards: 2020 Progress Report. Details of the rule: As of July 2020, a large listed company should not have a board comprising only one gender.

Source: UNCTAD.

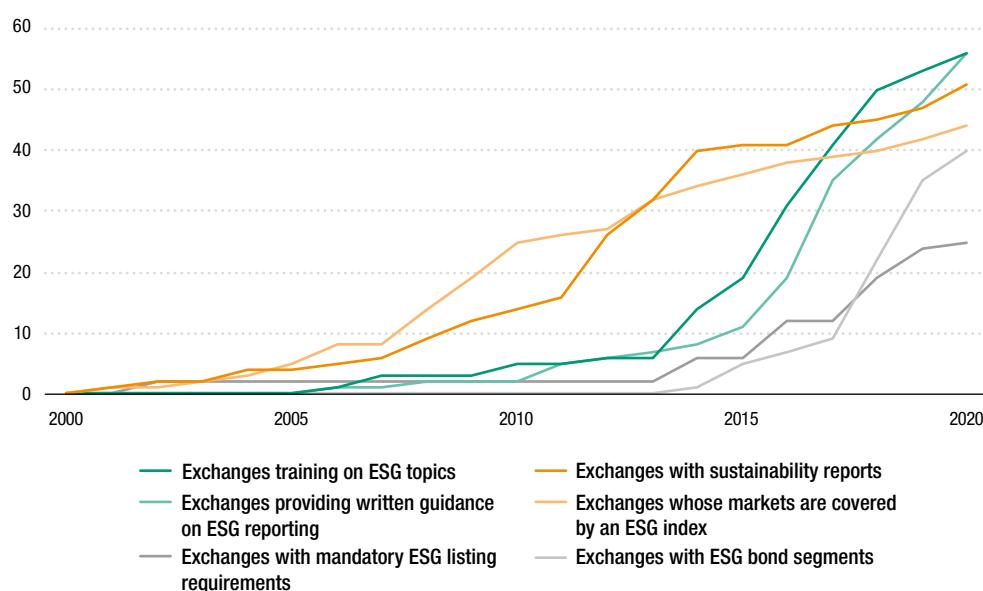
C. STOCK EXCHANGES AND DERIVATIVES EXCHANGES

The number of exchanges with written guidance on ESG disclosure (SDG 12.6) for issuers has grown rapidly, from 13 exchanges in 2015 to 56 at the end of 2020. Likewise, the number of stock exchanges providing training on ESG topics to issuers and investors continues to rise rapidly, with over half of the stock exchanges offering at least one training course or workshop. Mandatory ESG reporting is also on the rise in recent years, supported by both exchanges and security market regulators. The number of exchanges covered by mandatory rules on ESG disclosure more than doubled in the past five years, currently at 25. One of the highest increases is in the number of stock exchanges that have dedicated sustainability bond segments, which includes green bond segments (SDG 13); 14 exchanges opened such segments between 2019 and 2020, taking the total to 38.

1. Stock exchanges

The sustainability activities of stock exchanges – those related to ESG factors – have all grown rapidly in scale and scope over the past decade. The SSE database contains data on 106 stock exchanges worldwide, listing over 53,000 companies and representing a market capitalization of more than \$88 trillion. The database specifically tracks various activities related to ESG factors, all of which have seen rapid growth over the last decade (figure V.11).

Figure V.11. | Stock exchange trends, 2000–2021 (Number of exchanges)



Source: UNCTAD, SSE database.

This overall upward trend is expected to persist, as investor interest in ESG-themed products is strong and growing, public policies to promote sustainable development continue to strengthen in several jurisdictions and more stock exchanges recognize the important role that they can play in promoting investment in sustainable development. Key instruments and developments supporting these trends are discussed in more detail below.

a. Sustainable Stock Exchanges initiative

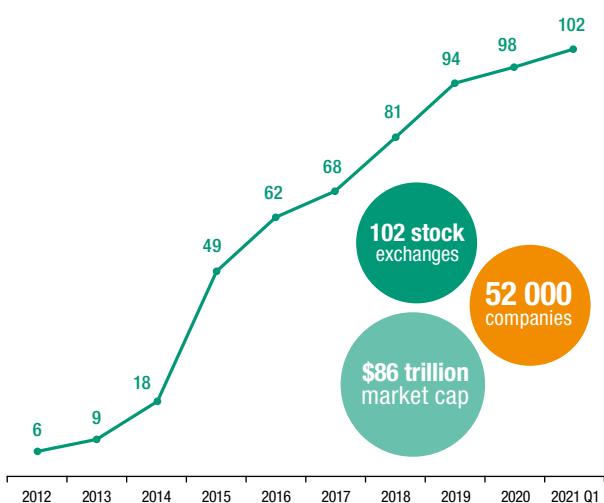
The SSE initiative, which has grown to include most of the stock exchanges in the world (figure V.12), provides an indicator of the growing attention that exchanges are giving to sustainability in their markets. Launched in 2009, the SSE is a UN Partnership Programme administered by UNCTAD, UN Global Compact, UN Environment and Principles for Responsible Investment. The SSE brings together exchanges, portfolio investors, listed companies, capital market regulators and policymakers to build consensus and capacity on SDG issues.

As of Q1 2021, 102 partner exchanges from five continents have publicly committed to advance sustainability in their markets. The SSE focuses on gender equality (SDG 5.5), SME financing (SDG 8.3), securities market regulation (SDG 10.5), sustainability reporting (SDG 12.6), green finance (SDG 13.3) and partnerships for sustainable capital markets (SDG 17).

b. ESG disclosure: stock exchange guidance, listing requirements and standards

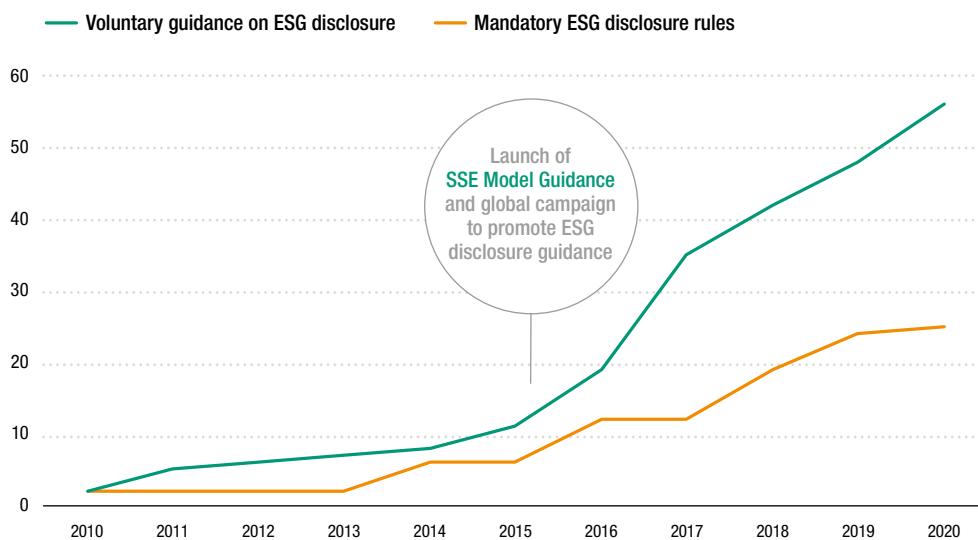
Over the past decade, the number of markets with ESG disclosure guidance and mandatory ESG disclosure rules has expanded rapidly (figure V.13). The number of stock exchanges providing formal guidance to issuers on reporting ESG information has gone from 2 to 56 exchanges, collectively listing over 40,000 companies with a market capitalization of more than \$50 trillion. During the same period, the number of markets with mandatory ESG disclosure rules has gone from 2 to 25, listing over 16,000 companies valued at over \$18 trillion. This trend suggests that SDG 12.6 on sustainability reporting should be achieved by 2030.

Figure V.12. SSE initiative members, 2012–2021 Q1 (Number of exchanges)



Source: UNCTAD, SSE database.

Figure V.13. | Global trend in ESG disclosure rules and guidance (Number of exchanges)



Source: UNCTAD, SSE database.

The ESG disclosure guidance produced by stock exchanges helps companies navigate, comply with or stay ahead of regulations that require disclosure of ESG information and assists companies in addressing growing investor demand for ESG information. The spectrum of approaches to reporting ESG data is rapidly consolidating on a few key reporting instruments (figure V.14). An overwhelming majority of guidance documents reference the instruments of the Global Reporting Initiative (GRI), followed by those of the Sustainability

Accounting Standards Board (SASB) and the International Integrated Reporting Council (IIRC), which are each referenced in about three quarters of guidance documents. Climate-specific reporting instruments such as the recommendations of the Financial Stability Board's Taskforce on Climate-related Financial Disclosures (TCFD) and the Carbon Disclosure Standards Board (CDSB) are referenced by just under half of the guidance documents.¹¹

Figure V.14.

ESG reporting instruments referenced in stock exchange guidance

(Per cent of guidance documents, as of Q1 2021)



Source: UNCTAD, SSE database.

c. Securities regulators and sustainability

In some markets, mandatory ESG disclosure rules originate from stock exchanges with devolved regulatory authority, but in most instances, they emanate from securities market regulators. At both the national and international levels, securities regulators are sharpening their focus on sustainability reporting through reporting rules, market education programmes and the development of disclosure and reporting standards.

At the national level, examples of regulators' initiatives include the announcement by Egypt's Financial Regulatory Authority of the launching of a new think tank and training centre, the Regional Center for Sustainable Finance. The Center has been established to help bridge the finance gap to fulfil the Paris Agreement on Climate Change and the SDGs. In Brazil, the Securities and Exchange Commission (CVM) launched the Sustainable CVM Series, consisting of guidance documents on sustainable finance. In the first volume, the CVM presents a guide focused on the inclusion of ESG issues with respect to investment decision making. In the United States, the Securities and Exchange Commission created a Climate and ESG Task Force to identify any material gaps or misstatements in issuers' disclosure of climate risks. The task force will also analyse disclosure and compliance issues relating to investment advisers' and funds' ESG strategies.

At the regional level, on 21 April 2021 the European Commission launched a package of measures designed to better channel investment towards sustainable activities across the *European Union*. This package includes the EU Taxonomy Climate Delegated Act (also known as the EU taxonomy), which seeks to minimize "greenwashing" by producing standardized language to be used by companies and investors when communicating about investments in sustainability-themed products and projects. Another important feature of this package is the new Corporate Sustainability Reporting Directive, which revises and strengthens the rules introduced by the Non-Financial Reporting Directive of 2014. It is designed to improve sustainability information by making it more consistent, comparable and reliable through the financial system. All these measures are elements of the European Green Deal that aims to make Europe climate-neutral by 2050.

At the international level, the International Organization of Securities Commissions (IOSCO)'s Sustainable Finance Network (created in 2018) published a report in 2020 (IOSCO, 2020) that highlights three priorities to address:

- Multiple and diverse sustainability frameworks and standards
- Lack of common definitions of sustainable activities
- "Greenwashing" and other challenges to investor protection

The report emphasized the need to improve the comparability of sustainability-related disclosures, noting that the lack of consistency and comparability across third-party frameworks could create an obstacle to cross-border financial activities and raise investor protection concerns. The report reflects expectations from regulators and market participants that IOSCO should take an active role in facilitating global coordination and addressing transparency. IOSCO has set up a Board-level Sustainable Finance Task Force (STF) to address these findings. The work of the STF has focused on three main areas: (i) improving sustainability-related disclosures by issuers; (ii) sustainability-related practices, policies, procedures and disclosures for asset managers; and (iii) ESG ratings and ESG data providers.

With regard to *sustainability-related disclosures for issuers*, following extensive industry engagement and detailed fact-finding work – focusing on investors' needs and the status of corporate disclosures on sustainability – IOSCO has identified significant gaps and shortcomings in corporations' sustainability-related disclosures and revealed that investor demand for sustainability-related information is not being properly met. The shortcomings include

- that companies' sustainability-related disclosures are not complete, consistent and comparable
- that companies report selectively against multiple different standards and frameworks

- that companies' sustainability disclosures typically aim to meet multiple stakeholder needs
- that companies do provide a mix of qualitative and quantitative information, but quantitative information is limited and not consistent
- that generally, companies do not provide detailed disclosures on the impact of sustainability practices on their financial performance and there is inconsistency in location (e.g. annual reports, stand-alone reports, corporate websites) and timing of reports, as well as the application of audit and assurance

Companies also face significant challenges, as they need more clarity on exactly what to disclose, where and how, in light of multiple requests for sustainability information from different asset managers and data service providers, which can be costly and inefficient. Common standards would potentially reduce the burden on corporate issuers caused by having to comply with diverging frameworks and help to clarify for issuers what they should disclose, where and when to make their disclosures and what structure/methodology to use. Having greater clarity on reporting expectations (including content, location and timing) will help issuers build relevant governance, systems and controls to meet reporting requirements.

IOSCO has publicly conveyed the urgent need to improve the completeness, consistency, comparability, reliability and auditability of sustainability reporting – including greater emphasis on industry-specific quantitative metrics and the standardization of narrative information. It has outlined three potential mechanisms to do so:

- Establish an International Sustainability Standards Board (ISSB) under the IFRS Foundation's structure, with a strong governance foundation¹²
- Build on existing efforts: IOSCO has strongly encouraged the ISSB to leverage on the alliance¹³ of leading sustainability reporting organizations' prototype for climate-related financial disclosures (the 'Prototype') that builds on existing content in their collective frameworks and the TCFD's recommendations. Given the urgency of the climate challenge, IOSCO supports a "climate first" approach in the near term, signalling that the new ISSB should also move forward quickly to develop standards covering other sustainability topics, including ESG issues.
- Encourage a "building block" approach to establishing a comprehensive global sustainability reporting system that provides a consistent and comparable baseline of sustainability-related information material to enterprise value creation, while also providing flexibility for coordination on reporting requirements that capture wider sustainability impacts. IOSCO has proposed that a multi-stakeholder expert consultative committee, within the IFRS Foundation structure, could be a promising mechanism to support the practical delivery of the building blocks approach, in a way that complements and does not replace existing advisory groups and outreach arrangements within the IFRS Foundation's architecture.

IOSCO considers that the IFRS Foundation could potentially deliver a global baseline for investor-oriented sustainability-related disclosure standards focused on enterprise value creation, which jurisdictions could consider incorporating or building upon as part of their mandatory reporting requirements, as appropriate and consistent with their domestic legal frameworks. This could promote international consistency and comparability in sustainability-related information, and also form the basis for the development of an audit and assurance framework.

IOSCO continues to work closely with the IFRS Foundation to assess refinements to the prototype and its content and to consider whether it could be a sound basis for the development of an international reporting standard under the ISSB. IOSCO plans to consider potential endorsement of future standards issued by the ISSB to use for cross-

border – and possibly also domestic – purposes to guide issuers' sustainability-related reporting requirements across member jurisdictions. IOSCO continues to coordinate with IFRS Foundation on the establishment of a multi-stakeholder expert consultative committee.

With regard to asset managers, after a comprehensive fact-finding exercise, IOSCO is planning to publish a draft Consultation Report at the end of June 2021. The Consultation Report will set out proposed recommendations for securities regulators and/or policymakers, as applicable, in order to improve sustainability-related practices, policies, procedures and related disclosures in the asset management industry.

The report is an important milestone as asset managers are at the heart of the investment chain. Notably, sustainability-related practices, policies and procedures help ensure that asset managers take sustainability-related risks and opportunities into consideration and integrate them into their decision-making process.

Further, the disclosure of such practices, policies and procedures is intended to promote consistency, comparability and reliability in disclosure, which will help prevent greenwashing at the asset manager level. Similarly, regulatory requirements or guidance relating to product-level disclosure for sustainability-related products are intended to prevent greenwashing at the product level. The report also addresses the risk of greenwashing through other recommendations that aim at both supporting sustainability-related financial and investor education initiatives and ensuring that there are adequate supervisory and enforcement tools to ensure compliance with requirements in this area and address breaches of such requirements.

With regard to *ESG ratings and data providers*, IOSCO is seeking to assist its members in understanding the implications of the increasingly important role of ESG ratings and other data products developed by private providers and, in doing so, develop guidance that securities markets regulators can impress upon these providers. IOSCO, through the fact-finding exercise, has come to the following initial conclusions:

- Higher-quality and more consistent ESG data are needed across the investment universe, and users need both breadth and depth of coverage for ESG data.
- There is sometimes little clarity and alignment on definitions and on what the ratings or data points intend to measure.
- There is currently little transparency about the methodologies and metrics that underpin the ESG ratings or data sets. Some commonalities have been observed, such as the prevalence of sector-specific methodologies, and the lack of benchmarking versus rival product offerings. However, there is still a wide degree of divergence in the industry.
- Interactions between data and rating providers and issuers appears insufficient, suggesting that ratings and data that investors rely on for investment decisions may contain errors. This is further exacerbated by the fact there is no standard market practice through which providers of ESG rating and data gather information from rated entities.
- Conflicts of interest may exist at the level of the ESG rating or data providers. This can be the case where they offer paid consulting services to corporate issuers, for example.

As a result of these findings, IOSCO will publish a set of recommendations for ESG rating and data providers, users of ESG ratings and data products, and entities covered by their ratings and data products. The Consultation Report is expected to be published by mid-July 2021 with a final report expected in the final quarter of 2021.

2. Derivatives exchanges

While the role of stock exchanges in sustainable development has been well explored over the past decade, the potential role of derivatives exchanges — where nearly 35 billion futures and options contracts were traded globally in 2019 — is less understood. Stock exchanges are seen as important enablers of change in as much as they are key market institutions sitting between listed companies and investors, and actively engaged with securities market regulators. Likewise, derivatives exchanges sit in the centre of a market ecosystem (figure V.15) where the exchange holds the potential to convene and influence market participants.

Until 2019, however, little work had been done to understand the role of derivatives exchanges in supporting the sustainability transition. In 2019 the WFE drafted a white paper on sustainability and commodity derivatives. Then in 2020, both the United States Commodity Futures Trading Commission – an industry regulatory body – and the Futures Industry Association (FIA) – an international industry association – acknowledged the role of derivatives markets in addressing climate change and associated risks (FIA, 2020). In 2021, the UN SSE and the WFE further explored how derivatives exchanges could contribute to sustainable development in a joint report (UNSSE, WFE, 2021). Collectively these efforts have marked a new interest in the role of these exchanges both by external stakeholders and by the exchanges themselves. While many challenges remain, new efforts in this area point to opportunities for a positive contribution from derivatives exchanges.

One key challenge for exchanges where fossil-fuel energy contracts account for a large proportion of traded activity is that fossil fuels are expected to be significantly phased out over the coming decades. Another challenge is that derivatives are often perceived as mathematically complex products overly focused on short-term trading, as not especially accessible to smaller investors and as a source of systemic risks. The latter challenge is one that policymakers need to continually address through regulation, much like in debt or equity markets, to ensure that these markets do not pose systemic risks to the wider economy.

At the same time, the transition to more sustainable investments also offers opportunities for all derivatives exchanges, particularly in offering sustainability-themed products and services. A number of exchanges are already doing this and, as the United States Commodity Futures Trading Commission notes in its report on climate risk, the need for new products likely will grow. The development of such products responds to growing market demand, as well as regulatory or policy developments.

Three general categories of products currently traded on derivatives exchanges can be adapted to facilitate investment in sustainable development: equity derivatives, commodity derivatives and special-purpose derivatives (e.g. weather futures contracts). Integrating sustainable development within these risk management products and engaging more closely with the derivatives ecosystem can assist the global effort to finance the SDGs. As derivatives exchanges look forward, they can support the sustainability agenda through actions in several areas, as presented in the following menu (UNSSE, WFE 2021):

Figure V.15. Participants in the derivatives exchange ecosystem



Source: UNCTAD.

- **Engage in partnerships** to build consensus on sustainable finance: exchanges should ensure they are participants in the evolving field of sustainable finance, to ensure agreed solutions are suitable for market deployment.
- Use the exchange's convening power to help **drive market standardization** where this is necessary to develop the market for sustainability-themed products – exchanges can use their position within the market ecosystem to reach market agreement on reference standards.
- Provide mechanisms to **enhance transparency** about the sustainability attributes of products traded on markets and market participants: transparency is a core attribute of market functioning. As an intermediate step, exchanges may consider providing a platform that enables market users to report on their sustainability practices and initiatives.
- **Link market participation to sustainable market practices** (particularly relevant in the case of commodities markets): exchanges may stipulate that participation in certain markets is predicated on meeting additional sustainability-aligned requirements. This could range from requiring the publication of a sustainability report to requiring demonstrated alignment (through reporting) with agreed sustainability practices.
- **Introduce sustainability-aligned data products** that support the development of the underlying markets: data products and services support the functioning of the traded market and can also be the basis for the development of new tradeable products.
- **List new tradeable sustainability-aligned products** to meet emergent demand, whether driven by regulatory changes or customer requirements (e.g. products that support a low-carbon transition). This also includes introducing or amending commodities contracts to specifically incorporate sustainability considerations (process and production methods): exchanges can support the development of the underlying market by listing products that enable price discovery of more sustainably produced versions of commodities or support the shift of the market towards more sustainably produced commodities.

Going forward, derivatives exchanges and policymakers can build on lessons learned from the experience of stock exchanges to further explore opportunities for derivatives exchanges to contribute to sustainable development. These efforts cover the full spectrum from product innovation (including modification of existing products) to working with stakeholders to further expand the sustainable finance market.

Between 2019 and 2020, the topic of sustainability has gone from virtually unconsidered in derivatives markets to the subject of multiple papers by the exchange industry, relevant regulators and international organisations. Exchanges, market participants and regulators looked at sustainability topics from various angles, from the potential impact on markets to the role derivatives markets can play in contributing to the SDGs. The sustainability challenges of the modern world are such that addressing them requires concerted effort from *all* actors, including *all* elements of the finance sector. Derivatives exchanges can be an important part of the overall solution, whether as providers of relevant products and services, contributors to greater data availability and transparency or conveners of the market to address barriers to change.

D. THE FUTURE OF SUSTAINABLE FINANCE

Capital markets can have a decisive impact on the level and direction of sustainable investment and can contribute towards filling the financing gap for the SDGs. Increasingly, financial institutions, such as stock exchanges and derivatives exchanges, have been integrating sustainability values and performance criteria in their activities. There has been a proliferation of sustainability-themed financial products in recent years, including sustainability-themed funds, bonds, and derivative products. Institutional asset owners, such as pension and sovereign wealth funds, are having an impact on companies and markets through asset allocation decisions and active ownership practices. Global efforts to fight the pandemic have also helped accelerate a transition towards sustainable investment.

1. “The triple challenge” and the market in transition

To continue growing and ensure concrete impacts over the long term, the sustainable investment market needs to address “a triple challenge”, in order to fully unleash its potential to finance sustainable development:

- i. *The niche market risk.* Despite a surge in recent years, sustainable investments remain a small share of the global market and there is a risk that it remains in this situation: as a small segment of the overall market. To realize the full potential of the capital markets, sustainability integration should not be limited to sustainability-themed products. Instead, all market players, should strive to make all financial products meet minimum ESG standards, and take actions to channel more investments into SDG-related sectors and areas with the aim of generating positive development impact on the ground.
- ii. *The geographical imbalance.* While there is clearly an increasing demand for sustainability-themed investment products, much of the recent momentum has bypassed developing countries. Most of the AUM linked to sustainability-themed products are tied to investments in developed markets, whereas the greatest sustainable development challenges and need for investment in SDG sectors is in developing countries. There need to be greater efforts to channel sustainable finance to developing countries. This may include innovation in project development, investment guarantees and other product innovation and de-risking strategies to encourage more private investment in developing countries. Investing in sustainable development must include investing in developing countries. Before developing countries are engaged in and benefit from the development of the sustainable investment market, the development impact of sustainable products remains limited.
- iii. *ESG/SDG-washing concerns.* Because of the lack of widely agreed international standards, sustainable investment products are so far mainly based on self-declaration. The wide differences in their sustainability ratings suggest that many of them may not meet their self-declared “sustainable” credentials. This leads to legitimate concerns about ESG/SDG-washing. The credibility of sustainable funds needs to be enhanced to attract investment flows to support the continued growth of the market.

Addressing these challenges requires three fundamental transitions in the sustainable investment market which would take it from where it is today to where it needs to be in the future:

- i. Growing sustainable investment from “market niche” to “market norm”, by making sustainability integration universal rather than a strategy of a subset of the larger market.
- ii. Transforming the sustainable investment market from a developed-country phenomenon to a global market, which benefits all countries, in particular developing economies.
- iii. Strengthening the credibility of sustainability ratings and reporting with more robust and regulated standards and taxonomies.

This transformation, from the market of today to the market of the future, entails concerted efforts by all stakeholders, including fund and index providers, institutional investors, stock exchanges and regulators. More work can be done to encourage the integration of ESG factors into mainstream products and indexes. Meanwhile, regulations need to keep pace with market trends to bring transparency, predictability and credibility to the market. Rules and guidelines to establish industry standards and governance requirements with an aim to bring transparency, predictability and credibility to the market are moving beyond voluntary measures. Slowly, regulation is helping to shape the future contours of the sustainable investment market.

The new EU taxonomy and regulations on sustainability-related disclosures in the financial services, as well as other sustainable investment-related regulations, could serve as examples for other countries. The increased role of IOSCO in sustainable finance and the proposed new Sustainability Standards Board from the IFRS Foundation also point towards the further development of globally harmonized approaches to sustainability reporting standards and the regulation of sustainability-themed financial products.

Much work has been done over the past decade to integrate sustainability into different parts of the financial system, including asset owners, banks, insurance companies and stock exchanges. Better coordinating these activities and effectively monitoring their impact can help accelerate the trend towards the future of finance.

2. The UN Global Sustainable Finance Observatory

To help address these challenges, UNCTAD will launch a new initiative, the UN Global Sustainable Finance Observatory. This initiative is built on the vision of a future global financial ecosystem in which sustainable development (as defined by the SDGs) is fully embedded into the business model and investment culture.

The Observatory will promote and facilitate the transition of sustainable investment from market niche to market norm, leading up to 2030 and beyond. It will address the challenges of fragmentation in standards, proliferation in benchmarking, complexity in disclosure and self-declaration of sustainability. It will integrate the relevant instruments and outputs on its virtual platform to facilitate the assessment, transparency and integrity of sustainable finance products and services. The Observatory will work in tandem with the standards-setting processes of the financial industry and regulatory bodies to promote the full and effective integration of sustainable development into all aspects of the global financial ecosystem.

Specifically, the UN Global Sustainable Finance Observatory will

- i. *Promote the integration of SDGs into the sustainability assessment ecosystem* in a coherent and synergistic manner, including through the established UN Core Indicators for SDGs reporting by enterprises (UN International Standards of Accounting and Reporting).
- ii. *Build a global database of sustainable investment funds and other products* to improve the open-source availability of sustainability data for key stakeholders and the public.
- iii. *Conduct sustainability assessments and ranking* of “self-claimed” sustainable products on the global capital market, and award best performers while disclosing ESG/SDG-washing cases.
- iv. *Establish a pool of various sustainability ratings* on the capital market for transparency and public scrutiny for better reporting methodology in different industries.
- v. *Compile a global inventory of good regulatory and policy practices* for sustainability integration into capital markets and facilitate peer learning.
- vi. *Provide a capacity-building platform* for assisting developing countries on policies, regulatory measures, product development, industry standards, reporting and other related issues to ensure their maximum benefit from sustainable finance.

The Observatory is envisioned as a multi-agency partnership coordinated by UNCTAD. It seeks to leverage the expertise and networks of initiatives working on different aspects of sustainable finance, such as the UN SSE initiative, UNCTAD Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting, the UN Global Compact, the Principles for Responsible Investment, UNEP FI, the UN Capital Development Fund, the International Finance Corporation, IOSCO, the International Standards Organization and the WFE, among other stakeholders.

The UN Global Sustainable Finance Observatory will be launched at UNCTAD's World Investment Forum in October 2021, which brings together the global investment-for-development community, including all capital market stakeholders along the global investment chain.

As a follow-up on UNCTAD's monitoring and analysis of capital markets and their contribution to the SDGs, which was requested and commended by the United Nations General Assembly in its resolution on “Promoting investments for sustainable development” (A/RES/74.199) and (A/RES/75/207), UNCTAD will seek the endorsement of the Global Sustainable Finance Observatory by the UN General Assembly as part of its efforts to accelerate the achievement of the SDGs, and to meet commitments on climate change and financing for development.

NOTES

- ¹ According to the quarterly statistics of the European Fund and Asset Management Association, the assets of regulated, open-ended funds worldwide (excluding funds of funds) were about \$54 trillion at the end of the second quarter of 2020 (<http://efama.org>).
- ² As an example, MSCI ACWI ESG Leaders Index (USD), an index designed to represent a broad spectrum of the global equity opportunity set with more than 1,200 high ESG rating stocks in its portfolio, recorded a return of over 40 per cent in the last two years.
- ³ “World’s biggest fund manager vows to divest from thermal coal”, *The Guardian*, 14 January 2020; “World’s biggest sovereign wealth fund to ditch fossil fuels”, *The Guardian*, 12 June 2019
- ⁴ Estimates for the average maturity of green bonds vary but include 8.75 years (Kapraun and Scheins, 2019) between 7 and 8 years (Ehlers and Packer, 2017) and 5 to 10 years (CBI, 2021).
- ⁵ Q1 2021 estimate by the Securities Industry and Financial Markets Association (SIFMA).
- ⁶ According to data from the Global SWF Data Platform, as of April 2021. See <https://globalswf.com/>.
- ⁷ <https://www.statista.com>.
- ⁸ According to data from the Global SWF Data Platform, as of April 2021. See <https://globalswf.com/>.
- ⁹ “Canada Pension sells \$1.2 billion green bond in global first”, Bloomberg, 13 June 2018.
- ¹⁰ <https://ifswf.org/>.
- ¹¹ The SSE’s ESG Guidance Database contains a comprehensive list of all stock exchange ESG guidance documents and an analysis of the reporting instruments they reference. With 57 guides from markets worldwide (as of Q1 2021), the database is designed to supplement the original SSE model guidance by facilitating peer-to-peer learning and benchmarking among exchanges. For more information, visit www.SSEinitiative.org/data.
- ¹² The IFRS Foundation, whose financial reporting standards have been adopted for use in more than 140 countries, launched consultations on the formation of the ISSB in Q4 2020 and is expected to formally launch the ISSB during the November 2021 UN COP26 climate summit. The new SSB would prioritize climate related reporting in a “climate first” strategy, building on the well-established work of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures, as well as work by the alliance of leading standard-setters in sustainability reporting (CDP, CDSB, GRI, IIRC and SASB).
- ¹³ “The alliance” comprises the CDP, the Climate Disclosure Standards Board (CDSB), the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), and the Sustainability Accounting Standards Board (SASB).

REFERENCES

- Aguiar, M., and G. Gopinath (2005). "Fire-sale foreign direct investment and liquidity crises". *Review of Economics and Statistics*, 87 (3): 439–452.
- Alfaro, L., and M. Chen (2012). "Surviving the global financial crisis: foreign ownership and establishment performance". *American Economic Journal: Economic Policy*, 4 (3): 30–55.
- Andreoni, A., and H. Chang (2021). "Bringing production back into development: An introduction". *The European Journal of Development Research*, 33: 165–178.
- Antràs, P. (2020). "De-Globalisation? Global value chains in the post-COVID-19 age". *Working Paper No. 28115*. Cambridge, MA: National Bureau of Economic Research.
- Athukorala, P. (2003). "Foreign direct investment in crisis and recovery: Lessons from the 1997–1998 Asian crisis". *Australian Economic History Review*, 43 (2): 197–213.
- Baldwin, R., and B. Weder Di Mauro (2020). *Economics in the Time of COVID-19*. VoxEU CEPR Policy Portal, <https://voxeu.org/>.
- Balistreri, E.J., C. Böhringer and T. Rutherford (2018). "Quantifying disruptive trade policies". *CESifo Working Paper No. 7382*, Munich: CESifo.
- Banaszak, J., R. Charron, J. Guevara and K. Stokvis (2020). "Preserving project continuity in the face of COVID-19". McKinsey & Company. <https://www.mckinsey.com/business-functions/operations/our-insights/preserving-project-continuity-in-the-face-of-covid-19>.
- Banaszak, J., C. Hopper and G. Hovnanian (2021). "Infrastructure tendering in the midst of COVID-19". McKinsey & Company. <https://www.mckinsey.com/business-functions/operations/our-insights/infrastructure-tendering-in-the-midst-of-covid-19>.
- Barbier, E.B., and J.C. Burgess (2020). "Sustainability and development after COVID-19". *World Development*, 135: 105082.
- Biadgeng, E., and J.-C. Maru (2011). "The influence of preferential trade agreements on the implementation of intellectual property rights in developing countries: A first look". *IPRs and Sustainable Development Paper No. 33*. New York and Geneva: United Nations and Geneva: International Centre for Trade and Sustainable Development (ICTSD).
- Bolwijn, R., B. Casella and D. Rigo (2018). "An FDI-driven approach to measuring the scale and economic impact of BEPS". *Transnational Corporations*, 25 (2): 107–143.
- Brakman, S., H. Garreltsen and A. van Witteloostuijn (2020). "The turn from just-in-time to just-in-case globalization in and after times of COVID-19: An essay on the risk re-appraisal of borders and buffers". *Social Sciences & Humanities Open*, 2 (1): 100034.
- Brambila-Macias, J., and I. Massa (2010). "The global financial crisis and Sub-Saharan Africa: the effects of slowing private capital inflows on growth". *African Development Review*, 22 (3): 366–377.
- Broccolini, C., G. Lotti, A. Maffioli, A. Presbitero and R. Stucchi (2019). "Mobilization effects of multilateral development banks", *IMF Working Paper*, No. 19/28. Washington D.C.: International Monetary Fund.
- Capgemini Research Institute (2020). *Fast Forward: Rethinking Supply Chain Resilience for a Post COVID-19 World*. Paris: Capgemini Research Institute.
- Casella, B. (2019). "Looking through conduit FDI in search of ultimate investors – a probabilistic approach". *Transnational Corporations*, 26 (1): 109–146.
- Casella, B., M. Borga and K. Wacker (2021). "Foreign direct investment as a measure of international production: challenges and recent progress". Unpublished.
- Castignino, S., S. Subudhi, J. Sogorb and P. Colomar (2020). "The role of infrastructure stimulus in the COVID-19 recovery and beyond". Boston Consulting Group. <https://www.bcg.com/publications/2020/infrastructure-stimulus-in-covid-pandemic-recovery-and-beyond>.

- Climate Bonds Initiative (2021). *Sustainable Debt: Global State of the Market 2020*. April 2021, https://www.climatebonds.net/files/reports/cbi_sd_sotm_2020_04d.pdf.
- Correa, C. (2013). "Is Section 3(d) consistent with TRIPS?" *Economic and Political Weekly*, 48 (32): 49–52.
- Cushman & Wakefield (2019). "Data centres in Southeast Asia poised for rapid growth". August 2019, <https://www.cushmanwakefield.com/-/media/cw/apac/singapore/insights/research/data-centres-in-southeast-asia-2019.pdf>.
- Dafermos, Y., D. Gabor and J. Michell (2021). "The Wall Street Consensus in pandemic times: what does it mean for climate-aligned development?" *Canadian Journal of Development Studies / Revue canadienne d'études du développement*, 42 (1-2): 238–251.
- Damgaard, J., T. Elkjaer and N. Johannessen (2019). "What is real and what is not real in the global FDI network", *IMF Working Paper WP/19/274*. Washington: International Monetary Fund.
- Dencik, J., K. Gijpers, R. Spee, P. Van Hove and D. Zaharchuk (2020). *Global Location Trends. 2020 Special Edition: Location Strategy in a Post-Covid-19 World*. New York: IBM Institute for Business Value.
- Doraisami, A. (2007). "Financial crisis in Malaysia: Did FDI flows contribute to vulnerability?" *Journal of International Development: The Journal of the Development Studies Association*, 19 (7): 949–962.
- Dornean, A., V. Isan and D. Oanea (2012). "The impact of the recent global crisis on foreign direct investment. evidence from Central and Eastern European countries". *Procedia Economics and Finance*, 3: 1012–1017.
- Dorobantu, S., and J. Müllner (2019). "Debt-side governance and the geography of project finance syndicates". *Journal of Corporate Finance*, 57 (issue C): 161–179.
- EDF (2020). Résultats semestriels 2020, Annexes. 30 juin 2020. Électricité de France S.A. <https://www.edf.fr/edf/resultats-financier-semestriel>.
- Edgington, D., and R. Hayter (2001). "Japanese direct foreign investment and the Asian financial crisis". *Geoforum*, 32 (1): 103–120.
- Ehlers, T., and F. Packer (2017). "Green bond finance and certification". *BIS Quarterly Review*, 17 September 2017, pp. 89–104. Basel: Bank of International Settlements, <https://ssrn.com/abstract=3042378>.
- Enderwick, P., and P. Buckley (2020). "Rising regionalization: Will the post-COVID-19 world see a retreat from globalization?" *Transnational Corporations*, 27 (2): 99–112.
- Equator Principles Association (2020). "Guidance on the implementation of the Equator Principles during the Covid-19 pandemic". https://equator-principles.com/wp-content/uploads/2020/06/Guidance_on_the_implementation_of_the_EP_during_the_covid19_pandemic.pdf.
- Esty, B. (2002). "Returns on project-financed investments: Evolution and managerial implications". *Journal of Applied Corporate Finance*, 15 (1): 71–86.
- Euler Hermes Allianz (2020). "Global supply chain survey: in search of post Covid-19 resilience". December 2020, https://www.eulerhermes.com/en_global/news-insights/economic-insights/Global-Supply-Chain-Survey-In-search-of-post-Covid-19-resilience.html.
- Fay, M., D. Martimort and S. Straub (2021). "Funding and financing infrastructure: The joint-use of public and private finance". *Journal of Development Economics*, 150: 102629.
- FIA (2020). *How Derivatives Markets are Helping the World Fight Climate Change*. Washington D.C.: Futures Industry Association, https://www.fia.org/sites/default/files/2020-08/FIA%20Climate%20Change%20Policy%20Paper_0.pdf.
- Financing for Sustainable Development Office (2021). *Financing for Sustainable Development Report 2021*. Report of the Inter-agency Task Force on Financing for Development. New York: United Nations.
- Flyvbjerg, B. (2011). "Over budget, over time, over and over again: Managing major projects". In Morris, P. W. G. , J. K. Pinto and J. Söderlund (eds.). *The Oxford handbook of project management*. UK: Oxford University Press, pp. 321–344.
- Flyvbjerg, B., M. Garbuio and D. Lovallo (2009). "Delusion and deception in large infrastructure projects: Two models for explaining and preventing executive disaster". *California Management Review*, 51: 170–193.
- Fu, X. (2020). "Digital transformation of global value chains and sustainable post-pandemic recovery". *Transnational Corporations*, 27 (2): 157–166.

- Gabor, E., and K.P. Sauvant (2019). "Incentivizing sustainable FDI: The Authorized Sustainable Investor". *Columbia FDI Perspectives, Perspectives on topical foreign direct investment issues*, 256.
- Gallagher, K.P., H. Gao, W.N. Kring, J.A. Ocampo and U. Volz (2021). "Safety first: Expanding the global financial safety net in response to COVID-19". *Global Policy*, 12 (1): 140–148.
- Gartner (2021). *Weathering the Storm: Supply Chain Resilience in an Age of Disruption*. Stamford: Gartner.
- G&A (2020). *2020 S&P 500 Flash Report*. New York: Governance and Accountability Institute, Inc, <https://www.ga-institute.com/research-reports/flash-reports/2020-sp-500-flash-report.html>.
- Gereffi, G. (2020). "What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies". *Journal of International Business Policy*, 3 (3): 287–301.
- Giannetti, M., and L. Laeven (2012). "Flight home, flight abroad, and international credit cycles". *American Economic Review*, 102 (3): 219–224.
- GIIN (2020). *Annual Impact Investor Survey 2020*. June 2020. Global Impact Investing Network, <https://thegiin.org/assets/GIIN%20Annual%20Impact%20Investor%20Survey%202020%20Executive%20Summary.pdf>.
- Haraguchi, M., and U. Lall (2015). "Flood risks and impacts: A case study of Thailand's floods in 2011 and research questions for supply chain decision making". *International Journal of Disaster Risk Reduction*, 14: 256–272.
- He, J. (2019). "Indian patent law and its impact on the pharmaceutical industry: What can China learn from India?" In Liu, K.C., and U. Racherla (eds.). *Innovation, Economic Development, and Intellectual Property in India and China*, ARCLALA Series on Intellectual Assets and Law in Asia, Cham: Springer: 251–269.
- IADB (2019). *2019 Latin American and Caribbean Macroeconomic Report: Building Opportunities for Growth in a Challenging World*. Washington D.C.: Inter-American Development Bank.
- Ibeh, K.I.H. (2020). "Promoting African digital multinationals for a more inclusive post-pandemic future". *Transnational Corporations*, 27 (2): 167–181.
- IE University (2020). *Sovereign Wealth Funds 2020*. Madrid: IE University, <https://static-frm.ie.edu/cgc/wp-content/uploads/sites/33/2019/01/IE-CGC-ICEX-SWF-REPORT-2020.pdf>.
- IMF (2020a). *A Long and Difficult Ascent, October 2020*. Washington, D.C.: International Monetary Fund.
- IMF (2020b). *Special Series on COVID-19: Temporary Investment Incentives*. Washington, D.C.: International Monetary Fund.
- IMF (2020c). *World Economic Outlook Update, June 2020: A Crisis Like No Other, An Uncertain Recovery*. Washington, D.C.: International Monetary Fund.
- IMF (2020d). *World Economic Outlook, April 2020: The Great Lockdown*. Washington, D.C.: International Monetary Fund.
- IMF (2020e). *World Economic Outlook Update, January 2020: Tentative Stabilization, Sluggish Recovery?* Washington, D.C.: International Monetary Fund.
- IMF (2021a). *World Economic Outlook, April 2021: Managing Divergent Recoveries*. Washington, D.C.: International Monetary Fund.
- IMF (2021b). "COVID-19 Policy Tracker" (various countries), Washington, D.C.: International Monetary Fund, <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>.
- IMF (2021c). "Tracker of COVID-19 Responses to Facilitate Financial Access". Washington, D.C.: International Monetary Fund, <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19>.
- IMF (2021d). *Fiscal Monitor, April 2021: A Fair Shot*. Washington, D.C.: International Monetary Fund.
- IOSCO (2020). "Sustainable Finance and the Role of Securities Regulators and IOSCO". FR04/2020. <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD652.pdf>.
- James, B.E., and Vaaler, P.M. (2018). "Minority Rules: Credible State Ownership and Investment Risk Around the World". *Organization Science*, 29 (4): 653–677.
- James, B.E., and Vaaler, P.M. (forthcoming). "State ownership and project financing". In Wright, M., G. Wood, A. Cuervo-Cazurra, P. Sun, I. Okhmatovskiy and A. Grosman (eds.), *Oxford Handbook on State Capitalism and the Firm*. Oxford, UK: Oxford University Press.

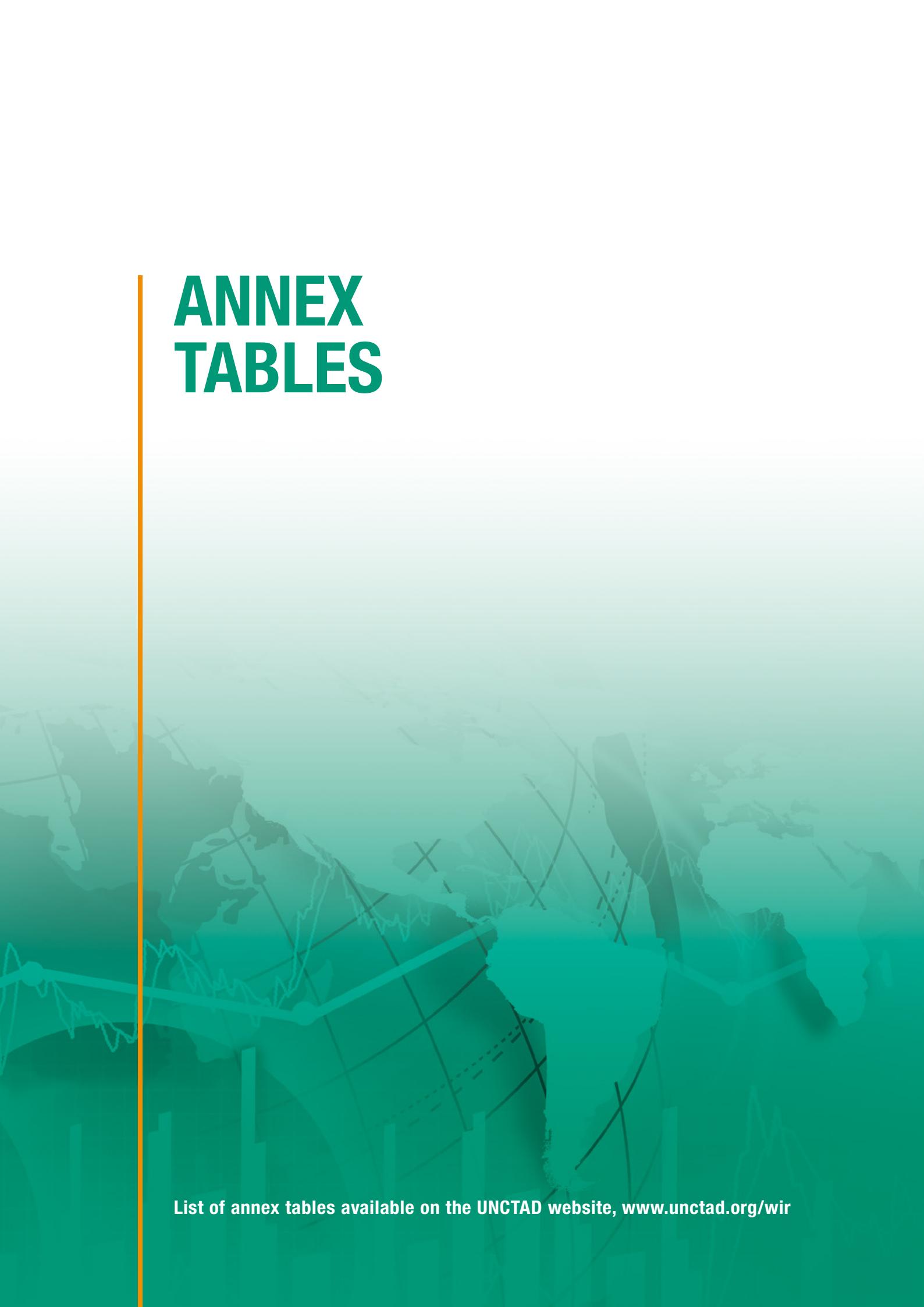
- Javorcik, B. (2020). "Global supply chains will not be the same in the post-COVID-19 world". In Baldwin, R., and S. Evenett (eds.), *COVID-19 and Trade Policy: Why Turning Inward Won't Work*. VoxEU CEPR Policy Portal, <https://voxeu.org/>.
- JETRO (2020). "Programme for strengthening overseas supply chains", https://www.jetro.go.jp/ext_images/services/supplychain/kekka1_en.pdf.
- Kapraun, J., C. Latino, C. Scheins and C. Schlag (2019). "(In)-credibly green: Which bonds trade at a green bond premium?" 29 April 2021. Proceedings of Paris December 2019 Finance Meeting EUROFIDAI – ESSEC, SSRN: <http://dx.doi.org/10.2139/ssrn.3347337>.
- Khutko, A. (2020). "Despite the Covid-19 pandemic, 99% of foreign direct investment projects in Russia will be implemented". Ernst & Young, https://www.ey.com/en_ru/news/2020/07/ey-european-attractiveness-survey-2019.
- Kowalski, P. (2020). "Will the post-Covid world be less open to foreign direct investment?" In Baldwin, R., and S. Evenett, (eds.), *COVID-19 and Trade Policy: Why Turning Inward Won't Work*. London: CEPR Press, pp. 131–149.
- Krugman, P. (2000). "Fire-sale FDI". In Edwards, S. (ed), *Capital Flows and Emerging Economies: Theory, Evidence and Controversies*. Chicago: University of Chicago Press.
- Kuznetsov, A. (2021). "Direct Investment from Russia Abroad: Changes since 2018". *Obshchestvennye nauki i sovremennost*, 1 (2021): 5–15.
- Laplume, A.O., B. Petersen and J. M. Pearce (2016). "Global value chains from a 3D printing perspective". *Journal of International Business Studies*, 47 (5): 595–609.
- Lund, S., J. Manyika, A. Mehta and D. Goldstein (2018). "A decade after the global financial crisis: What has (and hasn't) changed". *McKinsey & Company Briefing Note*, September.
- McKinsey & Company (2021). "Infrastructure tendering in the midst of COVID-19". January, <https://www.mckinsey.com>.
- Maire, J., A. Mazarei and E. M. Truman (2021). *Sovereign Wealth Funds Are Growing More Slowly, and Governance Issues Remain*. Washington D.C.: Peterson Institute for International Economics.
- Megginson, W., D. Lopez and A. Malik (2021). "The rise of state-owned investors: sovereign wealth funds". 26 January. *Annual Review of Financial Economics*, <http://dx.doi.org/10.2139/ssrn.3712690>.
- Moody's (2021). "Coronavirus – Global: COVID-19 one year on: Opportunities and hazards will drive differences in recoveries across sectors". Moody's Investors Service, Report No. 1266499, 10 March.
- Moon, H., J. Cheng, M. Kim and J. Kim (2011). "FDI, economic decline and recovery: Lessons from the Asian financial crisis". *Multinational Business Review*, 19 (2): 120–132.
- Morgan Stanley (2019). *Sustainability Reality: Analyzing Risks and Returns of Sustainable Funds*. New York: Morgan Stanley.
- Moschouli, E., R. Murwantara and T. Vanelslander (2019). "Cost performance of transport infrastructure projects before and after the global financial crisis (GFC): Are differences observed in the conditions of project performance?" *Research in Transportation Economics*, 75: 21–35.
- Müllner, J., and J. Puck (2018). "Towards a holistic framework of MNE-state bargaining: A formal model and case-based analysis". *Journal of World Business*, 53 (1): 15–26.
- Nocke, V., and S. Yeaple (2008). "An assignment theory of foreign direct investment". *The Review of Economic Studies*, 75 (2): 529–557.
- OECD (2020a). *Global Outlook on Financing for Sustainable Development 2021*. Paris: OECD.
- OECD (2020b). *Investment Screening in Times of COVID-19 and Beyond*. Paris: OECD.
- OECD (2021). "COVID-19 and a new resilient infrastructure landscape". *Tackling Coronavirus (COVID-19): Contributing to a Global Effort*. Paris : OECD, <https://www.oecd.org/coronavirus/policy-responses/covid-19-and-a-new-resilient-infrastructure-landscape-d40a19e3/>.
- Owens, J. ,and J. Zhan (2018). "Trade, investment and taxation: policy linkages". *Transnational Corporations Special Issue on Investment and International Taxation, Part 1*, 25 (2): 1–8.
- PIC/S (2021). "Pharmaceutical Inspection Co-operation Scheme". Geneva, <https://picscheme.org/en/picscheme>.

- Poulsen, L., and G. Hufbauer (2011). "Foreign direct investment in times of crisis". *Transnational Corporations*, 20 (1): 19–38.
- Plummer, M., and D. Cheong (2009). "FDI effects of ASEAN Integration". *Région et Développement*, LEAD, Université du Sud - Toulon Var, 29: 49–67.
- PwC (2016). *Sovereign Investors 2020: A Growing Force*. <https://www.pwc.com/gx/en/sovereign-wealth-investment-funds/publications/assets/sovereign-investors-2020.pdf>.
- PwC (2021). "Global crisis survey 2021: Building resilience for the future". <https://www.pwc.com/gx/en/issues/crisis-solutions/global-crisis-survey.html>.
- Rasul, G. (2020). "A framework for improving policy priorities in managing COVID-19 challenges in developing countries". *Frontiers in Public Health*, 8: 1–9.
- Refinitiv (2020). "Fighting Covid-19 with Infrastructure". *BRI Connect: An Initiative in Numbers*. 5th ed. London: Refinitiv.
- Refinitiv (2021). "Global project finance review. First quarter 2021". London: Refinitiv, https://thesource.refinitiv.com/thesource/getfile/index/c5da678a-ec2b-44c8-a730-f04a5f2af82b?utm_source=Eloqua&utm_medium=email&utm_campaign=146708_NewsletterDQRProjectFinanceReviewNew&utm_content=Global%20Project%20Finance%20Review.
- Rugman, A.M. (2013). "The international financial crisis and transnational corporation strategy". *Transnational Corporations*, 20 (1): 103–116.
- Sneader, K., and S. Singhal (2021). "The next normal arrives: Trends that will define 2021 – and beyond". McKinsey & Company, <https://www.mckinsey.com/featured-insights/leadership/the-next-normal-arrives-trends-that-will-define-2021-and-beyond>.
- Srai, J.S. ,and C. Ané (2016). "Institutional and strategic operations perspectives on manufacturing reshoring". *International Journal of Production Research*, 54 (23): 7193–7211.
- Srai, J.S., G. Graham, P. Hennelly, W. Phillips, D. Kapletia and H. Lorentz (2020). "Distributed Manufacturing a new form of localised production model?" *International Journal of Operations and Production Management*, 40 (6): 697–727.
- Stubbs, T., W. Kring, C. Laskaridis, A. Kentikelenis and K. Gallagher (2020). "Whatever it takes? The global financial safety net, Covid-19, and developing countries". *World Development*, 137: 105171.
- Swiss Re Institute (2021). "Natural catastrophes in 2020: secondary perils in the spotlight, but don't forget primary-peril risks". *Sigma* No. 1/2021, <https://www.swissre.com/dam/jcr:16271084-77b5-478f-b6ce-8948f94cba4e/sigma-1-2021-secondary-perils-en.pdf>.
- Szeles, M.R., and C. Saman (2020). "Globalisation, economic growth and COVID-19. Insights from international finance". *Romanian Journal of Economic Forecasting*, 23 (3): 78–92.
- Szent-Iványi, B. (2016). *Foreign Direct Investment in Central and Eastern Europe: Postcrisis Perspectives*. Cham: Palgrave Macmillan.
- Teigland, J., M. Lhermitte and H. Bax (2020). "How can Europe reset the investment agenda now to rebuild its future?" EY Attractiveness Survey, Ernst & Young, https://www.ey.com/en_ch/attractiveness/20/how-can-europe-reset-the-investment-agenda-now-to-rebuild-its-future.
- Terrill, M., O. Emslie and G. Moran (2020). "The rise of megaprojects: counting the costs". *Grattan Institute Report* No. 2020-15. <https://grattan.edu.au/wp-content/uploads/2020/11/The-Rise-of-Megaprojects-Grattan-Report.pdf>.
- Thaler, R.H. (1988). "Anomalies: The winner's curse". *Journal of Economic Perspectives*, 2: 191– 202.
- Thangavelu, S., Y. Wei Yong and A. Chongvilaivan (2009). "FDI, growth and the Asian financial crisis: the experience of selected Asian countries". *World Economy*, 32 (10): 1461–1477.
- Thinking Ahead Institute (2021). *Global Pension Assets Study 2021*. <https://www.thinkingaheadinstitute.org/research-papers/global-pension-assets-study-2021/>.
- Thompson, E., and J. Poon (2000). "ASEAN after the financial crisis: links between foreign direct investment and regulatory change". *ASEAN Economic Bulletin*, 17 (1): 1–14.

- Turban, S., S. Sorbe, V. Millot and A. Johansson (2020). "A set of matrices to map the location of profit and economic activity of multinational enterprises", *Documents de travail de l'OCDE sur la fiscalité*, No. 52, Paris: OECD Publishing, <https://doi.org/10.1787/4ec98acc-en>.
- UN DESA (2021a). *World Economic Situation and Prospects 2021*. New York: United Nations, <https://www.un.org/development/desa/dpad/publication/world-economic-situation-and-prospects-2021/>.
- UN DESA (2021b). *World Economic Situation and Prospects as of mid-2021*. New York: United Nations, <https://www.un.org/development/desa/dpad/publication/world-economic-situation-and-prospects-as-of-mid-2021/>.
- UN ECLAC (2021). *Financing for Development in the Era of COVID-19 and Beyond*. New York and Santiago de Chile: United Nations.
- UNCTAD (2011a). *Using Intellectual Property Rights to Stimulate Pharmaceutical Production in Developing Countries. A Reference Guide*. New York and Geneva: United Nations.
- UNCTAD (2011b). *Local Production of Pharmaceuticals and Related Technology Transfer in Developing Countries: A Series of Case Studies by the UNCTAD Secretariat*. New York and Geneva: United Nations.
- UNCTAD (2014). *Investment by TNCs and Gender: Preliminary Assessment and Way Forward*. New York and Geneva: United Nations.
- UNCTAD (2015). *Investment Policy Framework for Sustainable Development*. New York and Geneva: United Nations.
- UNCTAD (2017). *Tool Box for Policy Coherence in Access to Medicines and Local Pharmaceutical Production*. New York and Geneva: United Nations, https://unctad.org/system/files/official-document/diaepcb2017d2_en.pdf.
- UNCTAD (2018). *UNCTAD's Reform Package for the International Investment Regime*. New York and Geneva: United Nations.
- UNCTAD (2019). *Guidance on Core Indicators for Entity Reporting on Contribution Towards Implementation of the Sustainable Development Goals*. New York and Geneva: United Nations.
- UNCTAD (2020a). "Investment policies for SDG Sectors: Recent developments". *Investment Policy Monitor*, Special Issue 5. New York and Geneva: United Nations.
- UNCTAD (2020b). *Productive Capacities Index: Methodological Approaches and Results*. New York and Geneva: United Nations.
- UNCTAD (2020c). Case Law Database: Intellectual Property and Public Health. New York and Geneva: United Nations, <https://unctad.org/ippcaselaw>.
- UNCTAD (2020d). *How Public Pension and Sovereign Wealth Funds Mainstream Sustainability: Practices of the Frontrunners and a Proposed Integration Framework*. New York and Geneva: United Nations.
- UNCTAD (2020e). *International Investment Agreements Reform Accelerator*. New York and Geneva: United Nations.
- UNCTAD (2020f). *Leveraging the Potential of ESG ETFs for Sustainable Development*. New York and Geneva: United Nations.
- UNCTAD (2020g). "Post-COVID-19: Investment Promotion Agencies and the 'New Normal'". *IPA Observer*, Special Issue 9, July. New York and Geneva: United Nations.
- UNCTAD (2021a). *Multinational Enterprises and the International Transmission of Gender Policies and Practices*. New York and Geneva: United Nations.
- UNCTAD (2021b). *Investment Policy Monitor*. No. 24, February. New York and Geneva: United Nations.
- UNCTAD (2021c). *Global Investment Trends Monitor*. No. 38, January. New York and Geneva: United Nations.
- UNCTAD (2021d). "Progress since 2015 in promoting SDG investment in developing economies now at risk due to COVID-19". *SDG Investment Trends Monitor*, Issue 3. New York and Geneva: United Nations.
- UNCTAD (forthcoming a). *ESG ETFs 2021 – State of the Market and the Potential for Sustainable Development*. New York and Geneva: United Nations.
- UNCTAD (forthcoming b). *Financing Sustainable Development – the Role of the Global Sustainable Fund Market*. New York and Geneva: United Nations.
- UNCTAD (forthcoming c). *IPA Observer* No.11. New York and Geneva: United Nations.

- UNCTAD and WFE (2017). *The Role of Stock Exchanges in Fostering Economic Growth and Sustainable Development*. New York and Geneva: United Nations, and London: World Federation of Exchanges.
- United Nations (2021). *Financing for Sustainable Development Report 2021*. Inter-agency Task Force on Financing for Development. New York: United Nations, <https://development.un.org/fsdr2021>.
- UN SSE Initiative (2019). *United Nations Sustainable Stock Exchanges Initiative: 10 Years of Impact and Progress*. New York and Geneva: United Nations.
- UN SSE Initiative and WFE (2021). *How Derivatives Exchanges Can Promote Sustainable Development – An Action Menu*. New York and Geneva: United Nations, and London: World Federation of Exchanges.
- Vaaler, P.M., B.E. James and R. Aguilera (2008). "Risk and capital structure in Asian project finance". *Asia Pacific Journal of Management*, 25 (1): 25–50.
- Vinokurov, E., and A. Levenkov (2021). "The enlarged global financial safety net". *Global Policy*, 12 (1): 15–23.
- Vintila, M. (2011). "Foreign direct investments during financial crises". *Annals of Faculty of Economics*, 1: 41–45.
- Vujanovic, N., B. Casella and R. Bolwijn (2021). "Forecasting global FDI: a panel data approach". *Transnational Corporations*, 28 (1): 97–125.
- WIR98. UNCTAD (1998). *World Investment Report 1998: Trends and Determinants*. New York and Geneva: United Nations.
- WIR14. UNCTAD (2014). *World Investment Report 2014: Investing in the SDGs: An Action Plan*. New York and Geneva: United Nations.
- WIR15. UNCTAD (2015). *World Investment Report 2015: Reforming International Investment Governance*. New York and Geneva: United Nations.
- WIR16. UNCTAD (2016). *World Investment Report 2016. Investor Nationality: Policy Challenges*. New York and Geneva: United Nations.
- WIR17. UNCTAD (2017). *World Investment Report 2017. Investment and the Digital Economy*. New York and Geneva: United Nations.
- WIR18. UNCTAD (2018). *World Investment Report 2018: Investment and New Industrial Policies*. New York and Geneva: United Nations.
- WIR19. UNCTAD (2019). *World Investment Report 2019: Special Economic Zones*. New York and Geneva: United Nations.
- WIR20. UNCTAD (2020). *World Investment Report 2020: International Production Beyond the Pandemic*. New York and Geneva: United Nations.
- World Bank (2021). "Cameroon Nachtigal Hydropower Project". <https://projects.worldbank.org/en/projects-operations/project-detail/P157734>.
- WTO (2015). *Extension of the Transition Period under Article 66.1 of the TRIPS Agreement for Least-Developed Country Members for Certain Obligations with Respect to Pharmaceutical Products*. Geneva: World Trade Organization.
- Zhan, J., and T. Ozawa (2001). *Business Restructuring in Asia: Cross-Border M&As in the Crisis Period*. Copenhagen: Copenhagen Business School Press.
- Zhan, J., and C. Spennemann (2020). "Ten actions to boost low and middle-income countries' productive capacity for medicines". New York and Geneva: United Nations, <https://unctad.org/news/ten-actions-boost-low-and-middle-income-countries-productive-capacity-medicines>.

ANNEX TABLES



List of annex tables available on the UNCTAD website, www.unctad.org/wir

Annex table 1. FDI flows, by region and economy, 2015–2020 (Millions of dollars)

Region/economy	FDI inflows						FDI outflows					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
World^a	2 032 298	2 065 238	1 647 312	1 436 732	1 530 228	998 891	1 698 209	1 616 138	1 604 697	870 715	1 220 432	739 872
Developed economies	1 267 808	1 344 533	894 321	707 649	748 999	312 170	1 262 783	1 173 389	1 087 409	430 584	780 489	347 162
Europe	712 907	766 384	502 644	344 267	362 644	72 537	793 247	646 326	504 686	410 207	363 738	73 741
European Union	591 208	361 545	301 457	347 437	380 281	103 190	737 609	515 135	345 219	313 807	407 516	91 722
Austria	1 488	- 8 508	14 953	5 287	968	- 17 340	7 029	- 2 033	10 251	5 612	10 894	- 3 213
Belgium	28 331	59 243	- 708	30 821	2 886	8 437	55 199	36 374	29 698	39 498	1 581	10 227
Bulgaria	2 217	1 040	1 814	1 143	1 717	2 426	138	405	331	249	420	204
Croatia	84	273	540	1 171	1 336	1 304	- 140	- 1 938	- 725	201	167	235
Cyprus	23 946	10 928	9 423	- 1 735	26 183	- 3 647	39 280	8 690	8 678	- 7 326	20 237	- 5 954
Czechia	465	9 815	9 522	11 010	10 108	6 293	2 487	2 182	7 560	8 663	4 128	3 142
Denmark	3 616	235	3 749	1 198	3 587	1 151	9 420	10 110	9 518	- 369	11 404	4 395
Estonia	36	1 059	1 942	1 498	3 091	3 156	182	487	881	58	1 987	218
Finland	2 109	8 582	2 864	- 2 171	13 612	2 575	- 16 084	24 277	- 574	11 455	4 865	6 604
France	45 365	23 077	24 833	38 185	33 965	17 932	53 218	64 848	35 985	105 635	38 663	44 203
Germany	30 541	15 633	48 641	62 073	54 063	35 651	99 025	63 661	86 518	86 244	139 278	34 950
Greece	1 268	2 765	3 485	3 973	5 019	3 572	1 578	- 1 667	168	477	642	703
Hungary	- 14 537	- 5 439	3 515	6 410	3 884	4 169	- 16 110	- 8 272	1 220	3 022	2 848	4 282
Ireland	217 869	39 414	52 835	- 16 096	81 104	33 424	168 480	30 086	- 2 048	9 620	- 16 633	- 49 474
Italy	19 635	28 469	24 047	37 682	18 146	- 388	21 644	16 181	24 531	32 818	19 787	10 357
Latvia	739	255	708	967	874	873	71	159	133	205	- 105	268
Lithuania	1 055	303	1 021	977	1 169	479	377	43	80	704	143	- 285
Luxembourg	12 500	31 900	- 6 815	- 16 757	14 792	62 145	17 314	30 171	34 765	11 623	34 472	127 087
Malta	5 069	4 248	3 407	4 024	3 784	3 917	- 5 163	- 5 298	- 7 237	- 7 442	7 109	7 288
Netherlands	163 888	59 734	16 558	87 671	48 963	- 115 300	233 643	185 164	19 092	- 45 379	84 867	- 161 051
Poland	15 271	15 690	9 172	15 996	10 853	10 080	4 996	11 600	2 169	891	1 290	1 821
Portugal	7 630	5 066	7 752	7 115	12 084	6 324	5 226	872	- 749	799	3 344	2 288
Romania	3 840	5 000	5 419	6 219	5 791	2 322	562	5	- 97	379	363	202
Slovakia	106	806	4 017	1 675	2 449	- 1 930	6	96	1 325	322	153	233
Slovenia	1 675	1 246	898	1 384	1 227	529	267	290	338	281	389	555
Spain	8 558	31 569	41 966	53 495	8 515	8 928	41 926	43 946	56 045	37 734	19 671	21 422
Sweden	8 444	19 141	15 900	4 221	10 112	26 109	13 037	4 699	27 362	17 835	15 549	31 014
Other developed Europe	121 699	404 839	201 186	- 3 170	- 17 637	- 30 653	55 638	131 191	159 467	96 400	- 43 778	- 17 981
Iceland	709	- 427	- 41	- 381	- 302	- 811	- 31	- 1 147	- 208	76	465	- 276
Norway	- 2 515	- 3 900	- 5 849	226	16 287	- 2 394	30 948	3 092	- 2 220	11 408	5 560	- 1 063
Switzerland	84 320	150 467	110 723	- 68 313	- 79 077	- 47 172	91 543	166 852	19 522	43 491	- 43 723	16 768
United Kingdom	39 186	258 699	96 354	65 299	45 454	19 724	- 66 821	- 37 606	142 373	41 425	- 6 081	- 33 409
North America	511 461	495 475	318 063	261 641	309 249	180 144	331 799	353 976	403 969	- 136 995	172 450	141 466
Canada	43 836	36 056	22 767	38 240	47 837	23 823	67 440	69 507	76 188	57 417	78 898	48 655
United States	467 625	459 419	295 296	223 401	261 412	156 321	264 359	284 469	327 781	- 194 412	93 552	92 811
Other developed economies	43 440	82 675	73 614	101 741	77 106	59 489	137 737	173 087	178 754	157 372	244 302	131 955
Australia	29 580	48 401	45 225	68 477	39 224	20 146	- 9 337	2 304	6 356	7 800	9 266	9 172
Bermuda	- 143	82	- 288	95	4	114	- 84	72	- 42	- 35	- 38	341
Israel	11 337	11 988	16 893	21 515	19 047	24 758	10 969	14 579	7 624	6 087	8 598	5 860
Japan	2 976	19 359	9 356	9 256	14 552	10 254	136 249	155 937	164 588	143 094	226 648	115 703
New Zealand	- 309	2 844	2 429	2 397	4 278	4 216	- 59	196	227	426	- 172	880
Developing economies^a	730 434	653 885	702 495	692 480	723 385	662 562	403 323	417 562	478 816	402 530	416 620	387 069
Africa	57 902	46 249	40 176	45 374	47 143	39 785	9 157	8 083	11 779	8 013	4 930	1 592
North Africa	12 327	13 841	13 275	15 398	13 550	10 127	1 364	1 514	1 359	2 260	1 696	1 082
Algeria	- 585	1 636	1 232	1 466	1 382	1 125	103	46	- 29	845	31	16
Egypt	6 925	8 107	7 409	8 141	9 010	5 852	182	207	199	324	405	327
Libya	395	440	110	276	345	205 ^d
Morocco	3 255	2 157	2 686	3 559	1 720	1 763	653	580	1 021	782	893	492
South Sudan	0.2 ^d	- 8 ^d	1 ^d	60 ^d	- 232 ^d	18 ^d
Sudan	1 728	1 064	1 065	1 136	825	717
Tunisia	1 003	885	881	1 036	845	652	31	242	57	34	22	43
Other Africa	45 576	32 407	26 901	29 976	33 593	29 658	7 793	6 569	10 420	5 752	3 234	510
West Africa	10 191	11 725	10 112	8 100	11 958	9 768	2 220	1 243	1 197	1 107	1 265	1 607
Benin	150	132	201	194	218	176	33	17	32	10	27	24
Burkina Faso	232	391	3	268	163	149	14	51	10	68	16	22
Cabo Verde	120	125	111	110	107	73	- 10	- 10	- 9	- 11	- 27	- 45
Côte d'Ivoire	494	578	975	620	936	509	14	29	676	145	120	158
Gambia	13	- 28	18	52	44	46 ^d	- 23	- 1	2	0.5 ^d	0.5 ^d	1 ^d
Ghana	3 192	3 485	3 255	2 989	3 879	1 877	221	15	16	81	588	542
Guinea	53	1 618	578	353	44	325	5	21	1	- 0.3	1	1

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Annex table 1. FDI flows, by region and economy, 2015–2020 (Continued)

Region/economy	FDI inflows						FDI outflows					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Guinea-Bissau	19	24	16	21	72	20	2	0.5	0.3	- 0.4	0.4	0.4
Liberia	627	453	248	129	87	87	30 ^d	168 ^d	54 ^d	84 ^d	102 ^d	80 ^d
Mali	276	356	563	467	721	308	82	97	15	0.3	1	26
Mauritania	502	271	587	773	887	978 ^d	0.2 ^d	1 ^d	10 ^d	4 ^d	5 ^d	6 ^d
Niger	529	301	339	466	717	367	34	40	29	39	32	27
Nigeria	3 064	3 453	2 413	775	2 305	2 385	1 435	335	311	566	285	- 338
Senegal	409	472	588	848	1 065	1 481	31	224	82	53	71	171
Sierra Leone	252	138	129	218	368 ^d	349 ^d
Togo	258	- 46	89	- 183	346	639	349	257	- 33	70	43	931
Central Africa	8 294	5 403	8 946	9 354	8 858	9 177	337	338	291	290	257	263
Burundi	7	0.1	0.3	1	1	6	0.2	-	-	-	1	2
Cameroon	627	664	814	762	1 027	488 ^d	- 11	- 39	22	110	127	85 ^d
Central African Republic	3	7	7	18 ^d	26 ^d	35 ^d
Chad	560 ^d	245 ^d	363 ^d	461 ^d	567 ^d	558 ^d
Congo	3 803	1 612	4 417	4 315	3 366 ^d	4 016 ^d	- 16	10	45	14	23 ^d	27 ^d
Congo, Democratic Republic of the	1 674	1 205	1 340	1 617	1 488	1 647	508	272	292	209	134	149
Equatorial Guinea	233 ^d	54 ^d	305 ^d	396 ^d	452 ^d	530 ^d
Gabon	991 ^d	1 244 ^d	1 314 ^d	1 379 ^d	1 553 ^d	1 717 ^d	- 150 ^d	45 ^d	- 84 ^d	- 63 ^d	- 34 ^d	..
Rwanda	380	342	356	382	354	135	3	48	16	18	5	-
Sao Tome and Principe	15	31	29	23	24	47	3	1	0.3	2	1	1
East Africa	7 717	8 302	8 784	8 054	7 726	6 461	207	140	215	233	168	131
Comoros	5	4	4	6	4	9 ^d
Djibouti	124 ^c	160 ^c	165 ^c	170 ^c	222 ^d	240 ^d
Eritrea	49 ^d	52 ^d	55 ^d	61 ^d	67 ^d	74 ^d
Ethiopia	2 627	4 143	4 017	3 310	2 549	2 395
Kenya	1 464	1 139 ^d	1 404	1 139	1 098	717	15	11	14	11	11	- 7
Madagascar	436	451	358	353	474	359	82	90	106	118	102	102
Mauritius	216	379	480	461	471	246	100	28	89	98	57	26
Seychelles	195	155	192	120	144	122	10	10	6	5	- 2	10
Somalia	303 ^d	330 ^d	369 ^d	408 ^d	447 ^d	464 ^d
Uganda	738	626	803	1 055	1 259	823	0.3	0.2	0.3	0.3	0.3	0.3
United Republic of Tanzania	1 561	864	938	972	991	1 013 ^d
Southern Africa	19 374	6 978	- 941	4 469	5 051	4 252	5 029	4 848	8 717	4 122	1 544	- 1 492
Angola	10 028	- 180	- 7 397	- 6 456	- 4 098	- 1 866	- 785	273	1 352	6	- 2 349	91
Botswana	379	143	261	286	94	80	- 183	- 170	1	- 82	20	17
Eswatini	41	21	- 56	36	130	41	- 1	- 7	65	- 11	22	- 14
Lesotho	207	159	123	129	118	102 ^d
Malawi	510	116	90	959	822	98	4	42	- 3	1	- 0.2	7
Mozambique	3 867	3 093	2 293	2 703	2 212	2 337	2	35	26	- 25	- 31	153
Namibia	888	356	280	209	- 179	- 75	102	- 5	- 66	98	9	50
South Africa	1 729 ^c	2 235 ^c	2 008 ^c	5 450 ^c	5 125 ^c	3 106 ^c	5 744 ^c	4 474 ^c	7 371 ^c	4 076 ^c	3 147 ^c	- 1 973 ^c
Zambia	1 305	663	1 108	408	548	234	125	177	- 72	32	696	133
Zimbabwe	421	372	349	745	280	194	22	29	42	27	31	44
Asia	514 307	470 818	505 154	496 473	515 548	535 324	372 364	397 577	430 469	392 197	364 290	388 797
East and South-East Asia	483 091	438 808	477 299	464 691	482 138	498 777	331 816	356 712	391 732	345 349	323 566	355 295
East Asia	317 635	270 786	271 049	266 520	241 976	291 836	255 020	302 701	291 478	281 697	237 822	282 448
China	135 577	133 711	136 315	138 305	141 225	149 342	145 667	196 149	158 290	143 037	136 905	132 940
Hong Kong, China	174 353	117 387	110 685	104 246	73 714	119 229 ^b	71 821	59 703	86 704	82 201	53 202	102 224 ^b
Korea, Democratic People's Republic of	78 ^d	89 ^d	- 13 ^d	2 ^d	30 ^d	6 ^d
Korea, Republic of	4 104 ^c	12 104 ^c	17 913 ^c	12 183 ^c	9 634 ^c	9 224 ^c	23 687 ^c	29 890 ^c	34 069 ^c	38 220 ^c	35 239 ^c	32 480 ^c
Macao, China	1 037	1 959	1 254	2 497	6 690	3 514 ^d	- 876	- 1 002	814	143	561	510 ^d
Mongolia	94	- 4 156	1 494	2 174	2 443	1 719	11	14	49	37	127	26
Taiwan Province of China	2 391 ^c	9 692 ^c	3 401 ^c	7 114 ^c	8 240 ^c	8 802 ^c	14 709 ^c	17 946 ^c	11 552 ^c	18 058 ^c	11 787 ^c	14 268 ^c
South-East Asia	114 235	113 741	154 607	145 909	181 047	135 945	68 980	48 491	88 762	52 020	72 469	61 111
Brunei Darussalam	173	- 150	460	382	275	577
Cambodia	1 823	2 476	2 786	3 208	3 662	3 625	88	79	115	124	102	127
Indonesia	16 641	3 921	20 579	20 563	23 883	18 581	5 937	- 12 215	2 077	8 053	3 352	4 467
Lao People's Democratic Republic	1 078 ^c	935 ^c	1 686 ^c	1 320 ^c	557 ^c	968 ^c	40 ^c	15 ^c	10 ^c	.. ^c	.. ^c	.. ^c
Malaysia	10 082	11 336	9 399	7 618	7 813	3 483	10 546	8 011	5 638	5 114	6 231	2 827
Myanmar	2 824	2 989	4 341	3 554	2 766	1 834
Philippines	4 447	6 915	8 704	6 602 ^b	8 671 ^c	6 542 ^c	4 347	1 032	1 752	770 ^b	3 351 ^c	3 525 ^c

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Annex table 1. FDI flows, by region and economy, 2015–2020 (Continued)

Region/economy	FDI inflows						FDI outflows					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Singapore	59 700	70 221	84 671	75 969	114 162	90 562	45 223 ^c	38 157 ^c	64 883 ^c	22 035 ^c	50 578 ^c	32 375 ^c
Thailand	5 624	2 491	7 875	11 144	3 063	- 6 100	1 687	12 398	13 807	15 326	8 391	16 716
Timor-Leste	43	5	7	48	75	72	13	13	694
Viet Nam	11 800	12 600	14 100	15 500	16 120 ^c	15 800 ^c	1 100	1 000	480	598	465 ^c	380 ^c
South Asia	51 221	54 281	51 643	52 262	59 115	70 997	7 816	5 521	11 493	11 632	13 275	11 736
Afghanistan	163	94 ^c	53 ^c	119 ^c	39 ^c	13 ^c	1	15 ^c	11 ^c	41 ^c	26 ^c	37 ^c
Bangladesh	2 235	2 333	2 152	3 613	2 874	2 564	46	41	142	23	28	12
Bhutan	6	- 34	- 9	7	3	3
India	44 064	44 481	39 904	42 156	50 558	64 062	7 572	5 072	11 141	11 447	13 144	11 560
Iran, Islamic Republic of	2 050	3 372	5 019	2 373	1 508	1 342	120	104	76	75	85	78 ^d
Maldives	298 ^c	457 ^c	458 ^c	576 ^c	956 ^c	348 ^c
Nepal	52	106	198	67	185	126
Pakistan	1 673	2 576	2 496	1 737	2 234	2 105	25	52	52	- 21	- 85	34
Sri Lanka	680 ^c	897 ^c	1 373 ^c	1 614 ^c	758 ^c	434 ^c	53 ^c	237 ^c	72 ^c	68 ^c	77 ^c	15 ^c
West Asia	31 215	32 011	27 855	31 782	33 410	36 547	40 548	40 865	38 737	46 847	40 725	33 503
Bahrain	65	243	1 426	1 654	1 501	1 007	3 191	- 880	229	111	- 197	- 205
Iraq	- 7 574	- 6 256	- 5 032	- 4 885	- 3 076	- 2 896	148	304	78	188	194	149
Jordan	1 600	1 553	2 030	955	730	726 ^c	1	3	7	- 8	43	26
Kuwait	311	419	348	204	104	- 319 ^d	5 367	4 528	9 013	3 715	- 2 495	2 427 ^d
Lebanon	2 159	2 568	2 522	2 658	2 055	3 067 ^d	660	1 005	1 317	631	303 ^d	28 ^d
Oman	- 2 172 ^c	2 265 ^c	2 918 ^c	5 940 ^c	3 420 ^c	4 093 ^d	336 ^c	356 ^c	2 424 ^c	715 ^c	627 ^c	1 255 ^d
Qatar	1 071	774	986	- 2 186	- 2 813	- 2 434	4 023	7 902	1 695	3 523	4 450	2 730
Saudi Arabia	8 141	7 453	1 419	4 247	4 563	5 486	5 390	8 936	7 280	19 252	13 547	4 854
State of Palestine	103	297	188	252	132	52	- 73	45	3	31	56	61
Syrian Arab Republic
Turkey	18 976	13 651	10 965	12 840	9 290	7 880	4 809	2 954	2 626	3 605	2 967	3 240
United Arab Emirates	8 551	9 605	10 354	10 385	17 875	19 884	16 692	15 711	14 060	15 079	21 226	18 937
Yemen	- 15	- 561	- 270 ^d	- 282 ^d	- 371 ^d	..	4 ^d	1 ^d	6 ^d	4 ^d	3 ^d	..
Latin America and the Caribbean ^a	156 619	135 853	156 330	150 053	160 474	87 574	21 913	11 795	36 465	1 939	47 004	- 3 542
South America	106 599	90 737	106 557	102 468	112 657	51 891	9 804	10 953	31 776	- 6 739	35 740	- 10 672
Argentina	11 759	3 260	11 517	11 873	6 663	4 123	875	1 787	1 156	1 802	1 539	1 234
Bolivia, Plurinational State of	555	335	712	302	- 217	- 1 048	- 2	89	80	- 84	48	- 102
Brazil	49 961	53 700	66 585	59 802	65 386	24 778	- 11 643	- 5 901	19 040	- 16 336	19 031	- 25 808
Chile	20 404	12 072	6 203	7 742	12 525	8 386	15 456	8 236	3 599	1 292	9 278	11 583
Colombia	11 724	13 848	13 837	11 535	14 314	7 690	4 218	4 517	3 690	5 126	3 219	1 966
Ecuador	1 331	756	624	1 388	962	1 017
Guyana	122	58	212	1 231	1 695	1 834	..	26	-	-	17	14
Paraguay	308	425	576	458	522	568
Peru	8 314	6 739	6 860	6 967	8 055	982	189	1 156	500	136	941	503
Suriname	267	300	98	119	- 20	- 27
Uruguay	1 085	- 1 825	- 601	163	1 837	2 630	311	2	1 478	664	590	17
Venezuela, Bolivarian Republic of	769	1 068	- 68	886	934	959 ^d	399	1 041	2 234	661	1 076	- 79 ^d
Central America	46 607	41 712	45 410	44 870	43 872	33 172	11 947	597	4 654	8 600	10 704	6 954
Belize	65 ^c	44 ^c	24 ^c	118 ^c	94 ^c	76 ^c	0.5 ^c	2 ^c	0.3 ^c	1 ^c	2 ^c	4 ^c
Costa Rica	2 752	2 204	2 778	2 337	2 748	1 711	211	77	126	53	117	87
El Salvador	397	347	889	826	636	200	0.3	- 0.4	0.2	-	0.4	- 1
Guatemala	1 231	1 174	1 130	981	975	915	183	209	196	203	175	211
Honduras	1 204	1 139	1 176	961	498	419	252	239	141	66	- 1	47
Mexico	35 437	31 069	34 200	33 730	34 097	29 079	10 672	193	3 988	8 365	10 985	6 528
Nicaragua	967	989	1 035	838	503	182	45	65	65	75	59	40
Panama	4 556	4 745	4 177	5 080	4 320	589	584	- 188	138	- 163	- 634	39
Caribbean ^a	3 412	3 404	4 363	2 715	3 945	2 512	163	245	35	78	560	176
Anguilla	79 ^b	60 ^b	54 ^b	56 ^b	125 ^b	26 ^c	11 ^b	- 2 ^b	- 1 ^b	- 1 ^b	- 1 ^b	- 1 ^c
Antigua and Barbuda	107 ^b	81 ^b	113 ^b	116 ^b	139 ^b	22 ^c	10 ^b	12 ^b	13 ^b	9 ^b	11 ^b	10 ^c
Aruba	- 27	28	88	110	- 133	114	10	- 0.4	9	5	2	- 10
Bahamas	713	1 260	901	947	611	897	170	359	151	117	148	157
Barbados	418	269	206	242	215	262	52	- 194	- 28	9	28	8
British Virgin Islands	66 713 ^d	49 023 ^d	39 610 ^d	34 390 ^d	39 103 ^d	39 620 ^d	60 908 ^d	30 168 ^d	50 904 ^d	41 587 ^d	44 154 ^d	42 280 ^d
Cayman Islands	80 502 ^d	58 816 ^d	15 173 ^d	20 681 ^d	28 165 ^d	23 621 ^d	71 046 ^d	16 604 ^d	4 079 ^d	8 261 ^d	31 630 ^d	10 835 ^d
Curaçao	146	133	173	127	56	164 ^d	19	39	- 145	30	11	4 ^d
Dominica	13 ^b	41 ^b	- 2 ^b	- 37 ^b	33 ^b	25 ^c	- 12 ^b	- ^b	- ^b	- ^b	- ^b	0.1 ^c
Dominican Republic	2 205	2 407	3 571	2 535	3 021	2 554

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Annex table 1. FDI flows, by region and economy, 2015–2020 (Concluded)

Region/economy	FDI inflows						FDI outflows					
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020
Grenada	151 ^b	95 ^b	112 ^b	127 ^b	131 ^b	146 ^c	9 ^b	5 ^b	9 ^b	15 ^b	10 ^b	0.2 ^c
Haiti	106 ^c	105 ^c	375 ^c	105 ^c	75 ^c	30 ^d
Jamaica	925 ^c	916 ^c	888 ^c	775 ^c	665 ^c	366 ^c	34 ^c	270 ^c	47 ^c	13 ^c	446 ^c	4 ^c
Montserrat	5 ^b	2 ^b	2 ^b	2 ^b	6 ^b	0.3 ^c
Saint Kitts and Nevis	120 ^b	94 ^b	51 ^b	85 ^b	92 ^b	47 ^c	- 6 ^b	- 1 ^b	- 0.4 ^b	- 0.5 ^b	- b	- 6 ^c
Saint Lucia	114 ^b	129 ^b	131 ^b	135 ^b	31 ^b	15 ^c	21 ^b	5 ^b	6 ^b	13 ^b	8 ^b	- 39 ^c
Saint Vincent and the Grenadines	58 ^b	153 ^b	98 ^b	100 ^b	113 ^b	73 ^c	5 ^b	- 9 ^b	- 5 ^b	- 5 ^b	- 6 ^b	- 3 ^c
Sint Maarten	36	55	64	- 197	59	25 ^d	1	3	2	4	1	4 ^d
Trinidad and Tobago	177 ^c	- 24 ^c	- 471 ^c	- 700 ^c	184 ^c	- 439 ^d	128 ^c	- 25 ^c	- 12 ^c	65 ^c	114 ^c	172 ^d
Oceania	1 606	965	836	579	220	- 121	- 110	107	102	382	397	222
Cook Islands	5 ^c	10 ^c	2 ^c	12 ^c	8 ^d	7 ^d	0.2 ^c	0.3 ^c	0.3 ^c	0.3 ^c	0.3 ^d	0.3 ^d
Fiji	205	390	386	471	321	241	- 33	- 16	- 2	- 4	- 36	14
French Polynesia	26	62	79	63	25	56 ^d	23	24	15	- 28	4	- 2 ^d
Kiribati	- 1 ^c	2 ^c	1 ^c	- 1 ^c	- 1 ^c	- 0.3 ^d	0.1 ^c	0.1 ^c	0.1 ^c	0.1 ^c	0.1 ^c	0.1 ^d
Marshall Islands	- 5	- 3	6	10	4	7 ^d
New Caledonia	1 210	414	410	250	662	443 ^d	58	80	79	96	83	86 ^d
Palau	36	36	27	22 ^d	22 ^d	24 ^d	1 ^d
Papua New Guinea	28	- 40 ^c	- 180 ^c	- 341 ^c	- 901 ^c	- 935 ^c	- 174	- c	- c	306 ^c	335 ^c	114 ^c
Samoa	27	3	9	17	- 2	- 1	4	15	0.1	-	4	5
Solomon Islands	32	39	43	25	33	9	5	1	7	9	4	3
Tonga	12	9	14	15	13 ^d	- 0.5 ^d	5	1	1	1	1 ^d	0.4 ^d
Tuvalu	0.3 ^d	0.1 ^d				
Vanuatu	31	44	38	37	35	30 ^d	2	1	1	1	0.2	2 ^d
Transition economies	34 056	66 819	50 496	36 604	57 844	24 160	32 103	25 187	38 472	37 601	23 322	5 641
South-East Europe	4 937	4 647	5 571	7 491	7 106	6 110	525	239	314	597	615	310
Albania	946	1 101	1 149	1 290	1 288	1 107	38	64	26	83	128	89
Bosnia and Herzegovina	361	350	492	574	400	371	73	39	79	- 24	3	- 5
Montenegro	699	226	559	490	417	529	12	- 185	11	109	75	- 5
North Macedonia	240	375	205	725	446	274	15	24	2	12	40	39
Serbia	2 348	2 352	2 878	4 091	4 270	3 440	346	250	147	363	294	125
CIS	27 390	60 520	42 946	27 806	49 427	17 433	31 268	24 541	37 889	36 664	22 426	5 308
Armenia	184	334	251	254	254	117	29	71	29	7	- 143	- 27
Azerbaijan	4 048	4 500	2 867	1 403	1 504	507	3 260	2 574	2 564	1 761	2 432	825
Belarus	1 668	1 238	1 279	1 421	1 293	1 397	122	114	70	50	16	82
Kazakhstan	4 057	8 511	4 669	3 628	2 874	3 877	795	- 5 235	913	- 1 095	- 2 624	- 2 028
Kyrgyzstan	1 142	616	- 107	144	404	- 331	- 0.2	-	- 29	5	5	2
Moldova, Republic of	237	84	152	292	503	55	19	9	13	38	42	- 12
Russian Federation	11 858	37 176	25 954	13 228	32 076	9 676	27 090	26 951	34 153	35 820	22 024	6 311
Tajikistan	572	345	307	360	213 ^c	107 ^c	..	35	159	82	23 ^c	70 ^c
Turkmenistan	3 043 ^d	2 243 ^d	2 086 ^d	1 997 ^d	2 129 ^d	1 169 ^d
Ukraine	- 458	3 810	3 692	4 455	5 860	- 868	- 51	16	8	- 5	648	82
Uzbekistan	1 041 ^c	1 663 ^c	1 797 ^c	625 ^c	2 316 ^c	1 726 ^c	5 ^c	6 ^c	9 ^c	2 ^c	3 ^c	2 ^c
Georgia	1 729	1 653	1 978	1 306	1 311	617	309	407	269	340	282	23
Memorandum												
Least developed countries (LDCs) ^e	37 790	25 939	20 808	23 163	23 294	23 610	696	1 977	2 211	888	- 979	2 801
Landlocked developing countries (LLDCs) ^f	25 033	24 254	25 266	22 927	22 292	15 392	4 274	- 2 077	3 912	897	803	- 903
Small island developing states (SIDS) ^g	4 026	4 688	3 832	3 728	4 420	2 641	508	467	275	340	762	1 012

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, 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, North Macedonia, Malawi, Mali, the Republic of Moldova, Mongolia, Nepal, 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, São 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 2020 (Millions of dollars)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2020	2000	2010	2020
World^a	7 377 352	19 898 878	41 354 249	7 408 902	20 468 141	39 247 013
Developed economies	5 779 695	13 137 228	28 680 229	6 699 480	17 078 534	30 135 440
Europe	2 454 640	7 865 776	15 461 119	3 174 200	9 918 706	17 295 338
European Union	1 882 785	5 960 396	11 563 397	1 967 112	6 988 784	13 407 714
Austria	31 165	160 615	194 058	24 821	181 638	234 076
Belgium	..	473 358	635 929	..	431 613	677 661
Belgium and Luxembourg	195 219	179 773
Bulgaria	2 704	44 970	59 724	67	2 583	3 431
Croatia	2 785	32 215	32 066	952	4 914	1 247
Cyprus	2 846	260 132	480 867	557	242 556	492 264
Czechia	21 644	128 504	188 772	738	14 923	56 213
Denmark	73 574	96 136	135 125 ^c	73 100	163 133	244 651 ^c
Estonia	2 645	15 551	34 450	259	5 545	11 124
Finland	24 273	86 698	96 903	52 109	137 663	166 014
France	184 215	630 710	968 138	365 871	1 172 994	1 721 798
Germany	470 938	955 881	1 059 326 ^b	483 946	1 364 565	1 977 236 ^b
Greece	14 113	35 026	51 801	6 094	42 623	21 861
Hungary	22 870	91 015	100 993	1 280	23 612	36 870
Ireland	127 089	285 575	1 350 055	27 925	340 114	1 206 729
Italy	122 533	328 058	485 842	169 957	491 208	596 158
Latvia	1 691	10 869	20 457	19	931	2 519
Lithuania	2 334	15 455	23 709	29	2 647	5 101
Luxembourg	..	172 257	627 358	..	187 027	887 036
Malta	2 263	129 770	240 905	193	60 596	72 030
Netherlands	243 733	588 077	2 890 579	305 461	968 105	3 797 598
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	107 526	136	2 327	2 724
Slovakia	6 970	50 328	63 992	555	3 457	5 343
Slovenia	2 389	10 667	20 420	772	8 147	8 670
Spain	156 348	628 341	853 291	129 194	653 236	624 839
Sweden	93 791	352 646	408 824	123 618	394 547	464 542
Other developed Europe	571 855	1 905 380	3 897 722	1 207 088	2 929 921	3 887 623
Iceland	497	11 784	7 501	663	11 466	5 489
Norway	30 265	177 318	147 764	34 026	188 996	197 867
Switzerland	101 635	648 092	1 536 254	232 202	1 043 199	1 628 856
United Kingdom	439 458	1 068 187	2 206 202	940 197	1 686 260	2 055 412
North America	3 108 255	4 406 182	11 902 541	3 136 637	5 793 476	10 092 922
Canada	325 020	983 889	1 099 894	442 623	983 889	1 964 428
United States	2 783 235	3 422 293	10 802 647	2 694 014	4 809 587	8 128 494
Other developed economies	216 801	865 270	1 316 569	388 643	1 366 352	2 747 180
Australia	121 686	527 728	790 655	92 508	449 740	627 280
Bermuda	265 ^b	2 837	2 452	108 ^b	925	506
Israel	20 426	60 086	188 952	9 091	67 893	117 095
Japan	50 323	214 880	243 046	278 445	831 076	1 982 134
New Zealand	24 101	59 738	91 463	8 491	16 717	20 165
Developing economies^a	1 545 693	6 066 143	11 803 928	689 810	3 020 726	8 674 871
Africa	153 062	619 119	978 858	39 815	137 318	325 909
North Africa	45 590	201 109	320 514	3 199	25 770	40 585
Algeria	3 379 ^b	19 545	33 086	205 ^b	1 505	2 723
Egypt	19 955	73 095	132 477	655	5 448	8 481
Libya	471 ^b	16 334	18 462 ^b	1 903 ^b	16 615	21 147 ^b
Morocco	8 842 ^b	45 082	72 273	402 ^b	1 914	7 630
Sudan	1 398	15 690	29 211
Tunisia	11 545	31 364	35 006	33	287	603
Other Africa	107 472	418 009	658 343	36 616	111 549	285 324
West Africa	33 010	106 590	217 280	6 381	18 088	20 803
Benin	213	604	2 833	11	21	337
Burkina Faso	28	354	3 020	0.4	8	483
Cabo Verde	192 ^b	1 367	2 463	..	-	- 108
Côte d'Ivoire	2 483	6 978	12 237	9	94	1 292
Gambia	216	323	519 ^b

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Annex table 2. FDI stock, by region and economy, 2000, 2010 and 2020 (continued)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2020	2000	2010	2020
Ghana	1 554 ^b	10 080	41 882	..	83	1 593
Guinea	263	486 ^c	5 063 ^b	12	144 ^c	98 ^b
Guinea-Bissau	38	63	317	-	5	11
Liberia	3 247	10 206 ^c	8 883 ^b	2 188	4 714	4 828 ^b
Mali	132	1 964	6 011	1	18	282
Mauritania	146 ^b	2 372 ^b	9 973 ^b	4 ^b	28 ^b	99 ^b
Niger	45	2 251	8 189	1	9	412
Nigeria	23 786	66 797	102 094	4 144	12 576	6 871
Senegal	295	1 699	8 673	22	263	1 082
Sierra Leone	284 ^b	482 ^c	2 433 ^b
Togo	87	565	2 690	- 10	126	3 523
Central Africa	5 053	39 227	109 273	1 651	2 217	4 382
Burundi	47 ^b	13 ^c	234 ^b	2 ^b	2 ^c	5 ^b
Cameroon	917 ^b	3 099 ^b	9 026 ^b	1 252 ^b	971 ^b	1 065 ^b
Central African Republic	104	511	718 ^b	43
Chad	576 ^b	3 594 ^b	7 053 ^b
Congo	1 893 ^b	9 261 ^b	32 962 ^b	40 ^b	34 ^b	107 ^b
Congo, Democratic Republic of the	617	9 368	27 279	34	229	3 049
Equatorial Guinea	1 060 ^b	9 413 ^b	15 094 ^b
Gabon	- 227 ^b	3 287 ^b	13 957 ^b	280 ^b	946 ^b	79 ^b
Rwanda	55	422	2 636	..	13	74
Sao Tome and Principe	11 ^b	260 ^b	314 ^b	..	21 ^b	5 ^b
East Africa	7 202	36 826	92 730	387	1 431	2 023
Comoros	21 ^b	60 ^b	138 ^b
Djibouti	40 ^c	332 ^c	1 988 ^b
Eritrea	337 ^b	666 ^b	1 196 ^b
Ethiopia	941 ^b	4 206	27 351
Kenya	932 ^b	4 967	10 010	115 ^b	62	85
Madagascar	141	4 383 ^c	8 339 ^b	9 ^b	193 ^c	887 ^b
Mauritius	683	4 658	5 720 ^b	132	864	669 ^b
Seychelles	515	1 701	3 285	130	247	301
Somalia	4 ^b	566 ^b	3 616 ^b
Uganda	807	5 575	14 528	..	66	82
United Republic of Tanzania	2 781	9 712	16 559 ^b
Southern Africa	62 208	235 365	239 061	28 198	89 813	258 116
Angola	7 977	32 458	16 752	- 8	1 870	3 239
Botswana	1 827	3 351	5 454	517	1 007	954
Eswatini	536	927	877	87	91	103
Lesotho	330	929	923 ^b
Malawi	358	963	1 590 ^b	- 5	45	13 ^b
Mozambique	1 249	4 331 ^c	45 384 ^c	1	3 ^c	7 ^c
Namibia	1 276 ^c	3 595 ^c	6 071 ^c	45 ^c	722 ^c	995 ^c
South Africa	43 451 ^c	179 565 ^c	136 735 ^c	27 328 ^c	83 249 ^c	249 820 ^c
Zambia	3 966 ^b	7 433	19 368 ^b	..	2 531	2 303 ^b
Zimbabwe	1 238	1 814	5 907	234	297	682
Asia	1 052 003	3 882 356	8 562 879	596 576	2 465 982	7 575 350
East and South-East Asia	982 718	3 290 058	7 778 958	582 023	2 300 769	7 067 767
East Asia	694 372	1 873 452	4 249 364	495 206	1 599 149	5 197 113
China	193 348	586 882 ^b	1 918 828 ^b	27 768	317 211	2 351 800
Hong Kong, China	435 417	1 067 520	1 884 881 ^d	379 285	943 938	1 953 924 ^d
Korea, Democratic People's Republic of	11 ^b	- 5 ^b	2 ^b
Korea, Republic of	43 738 ^c	135 500 ^c	264 920 ^c	21 497 ^c	144 032 ^c	500 901 ^c
Macao, China	2 801 ^b	13 603	46 924 ^b	..	550	7 459 ^b
Mongolia	182	8 445	24 207	..	2 616	697
Taiwan Province of China	18 875	61 508 ^c	109 602 ^b	66 655	190 803 ^c	382 333 ^b
South-East Asia	257 603	1 147 611	2 913 722	84 056	601 179	1 671 334
Brunei Darussalam	3 868 ^b	4 140	7 589
Cambodia	1 580	9 026	36 903	193	345	1 187
Indonesia	25 060	160 735	240 477	6 940	6 672	88 207
Lao People's Democratic Republic	588 ^b	1 888 ^b	10 899 ^b	26 ^b	68 ^b	95 ^b
Malaysia	52 747	101 620	174 123	15 878	96 964	129 291
Myanmar	3 752 ^b	14 507 ^b	35 960
Philippines	13 762 ^b	25 896	103 193 ^c	1 032 ^b	6 710	63 966 ^c

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Annex table 2. FDI stock, by region and economy, 2000, 2010 and 2020 (continued)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2020	2000	2010	2020
Singapore	110 570	633 354 ^c	1 855 370 ^c	56 755	466 723 ^c	1 220 671 ^c
Thailand	30 944	139 286	271 827	3 232	21 369	155 602
Timor-Leste	..	155	468 ^b	..	94	802 ^b
Viet Nam	14 730 ^b	57 004 ^b	176 911 ^b	..	2 234 ^b	11 513 ^b
South Asia	30 743	268 995	615 871	2 761	100 441	199 320
Afghanistan	17 ^b	963 ^c	1 592 ^c	..	16 ^c	134 ^c
Bangladesh	2 162	6 072	19 395	68	98 ^c	327
Bhutan	4 ^b	56	139
India	16 339	205 580	480 298	1 733	96 901	191 304
Iran, Islamic Republic of	2 597 ^b	28 953	58 711 ^b	411 ^b	1 713 ^b	4 057 ^b
Maldives	128 ^b	1 114 ^b	5 552 ^b
Nepal	72 ^b	239	1 740
Pakistan	6 919	19 828	35 666	489	1 362	1 988
Sri Lanka	2 505	6 190	12 778 ^b	60	351	1 511 ^b
West Asia	69 286	592 299	783 921	14 553	165 213	507 583
Bahrain	5 906	15 154	31 690	1 752	7 883	18 942
Iraq	- 48	7 965	632	3 017
Jordan	3 135	21 899	36 556	44	473	681
Kuwait	608	11 884 ^c	14 138 ^b	1 428	28 189 ^c	34 328 ^b
Lebanon	14 233	44 285	17 752 ^b	352	6 831	3 952 ^b
Oman	2 577 ^b	14 987 ^b	35 425 ^b	..	2 796 ^b	13 247 ^b
Qatar	1 912	30 549	28 627 ^b	74	12 995	47 510 ^b
Saudi Arabia	17 577	176 378	241 862 ^c	5 285	26 528	128 759 ^c
State of Palestine	1 418 ^b	2 176	2 717	..	241	254
Syrian Arab Republic	1 244	9 939 ^b	10 743 ^b	..	5	5 ^b
Turkey	18 812	188 357	211 573	3 668	22 509	52 487
United Arab Emirates	1 069 ^b	63 869	150 896 ^b	1 938 ^b	55 560	203 728 ^b
Yemen	843	4 858	1 942 ^b	13 ^b	571 ^b	672 ^b
Latin America and the Caribbean ^a	338 774	1 549 973	2 231 736	53 170	416 598	771 732
South America	186 641	1 085 163	1 402 127	43 634	288 295	575 247
Argentina	67 601	85 591	85 451	21 141	30 328	40 709
Bolivia, Plurinational State of	5 188	6 890	10 483	29	8	791
Brazil	..	640 330	608 086	..	149 333	277 454
Chile	45 753	160 904	272 336	11 154	61 126	145 333
Colombia	11 157	82 991	213 323	2 989	23 717	65 818
Ecuador	6 337	11 858	20 649
Guyana	756	1 784	7 945	1	2	56
Paraguay	1 219	3 254	6 881
Peru	11 062	42 976	115 955	505	4 265	9 625
Suriname	2 012	224
Uruguay	2 088	12 479	33 537	138	345	8 455
Venezuela, Bolivarian Republic of	35 480	36 107	25 468 ^b	7 676	19 171	26 782 ^b
Central America	139 768	417 113	757 371	8 534	126 008	193 517
Belize	294 ^c	1 454 ^c	2 408 ^c	42 ^c	49 ^c	73 ^c
Costa Rica	2 809	15 936	45 846	22	1 135	3 538
El Salvador	1 973	7 284	10 075	104	1	3
Guatemala	3 420	4 554	17 294	93	452	1 839
Honduras	1 392	6 951	16 898	..	850	2 466
Mexico	121 691	355 512	596 826 ^c	8 273	119 967	178 947 ^c
Nicaragua	1 414	4 681	9 422	..	181	800
Panama	6 775	20 742	58 603	..	3 374	5 850
Caribbean ^a	12 365	47 697	72 238	1 002	2 295	2 968
Anguilla	-	-	812 ^b	-	-	64 ^b
Antigua and Barbuda	-	-	1 131 ^b	-	-	102 ^b
Aruba	1 161 ^b	4 567	4 261	675	682	654
Bahamas	3 865	13 160	26 073	547	2 538	7 278
Barbados	308	4 970	8 105	41	4 058	3 825
British Virgin Islands	30 289 ^b	265 783 ^b	950 876 ^b	69 041 ^b	376 866 ^b	42 280 ^b
Cayman Islands	27 316 ^b	151 519 ^b	23 621 ^b	21 643 ^b	75 212 ^b	10 835 ^b
Curaçao	-	527	1 891 ^b	-	32	715 ^b
Dominica	-	-	345 ^b	-	-	2 ^b
Dominican Republic	1 673	18 793	44 681	813 ^c

/...

Annex table 2. FDI stock, by region and economy, 2000, 2010 and 2020 (concluded)

Region/economy	FDI inward stock			FDI outward stock		
	2000	2010	2020	2000	2010	2020
Grenada	-	-	1 402 ^b	-	-	82 ^b
Haiti	95	625 ^c	1 955 ^b
Jamaica	3 317 ^c	10 855 ^c	17 538 ^c	709 ^c	176 ^c	576 ^c
Montserrat	-	-	34 ^b
Netherlands Antilles	277	6
Saint Kitts and Nevis	-	-	1 822 ^b	-	-	14 ^b
Saint Lucia	-	-	1 112 ^b	-	-	190 ^b
Saint Vincent and the Grenadines	-	-	1 570 ^b	-	-	56 ^b
Sint Maarten	-	256	299 ^b	-	10	180 ^b
Trinidad and Tobago	7 280 ^b	17 424 ^b	8 064 ^b	293 ^b	2 119 ^b	1 580 ^b
Oceania	1 854	14 694	30 456	249	827	1 880
Cook Islands	123 ^b	13 ^b
Fiji	356	2 963	5 730	39	47	71
French Polynesia	146 ^b	442 ^b	1 098 ^b	..	144 ^b	347 ^b
Kiribati	..	5 ^c	10 ^b	..	2 ^c	1 ^b
Marshall Islands	20 ^c	120 ^c	212 ^b
Micronesia, Federated States of	..	7 ^c	235 ^b	5 ^b
New Caledonia	- 41 ^b	5 726 ^b	16 705 ^b	2 ^b	304 ^b	1 045 ^b
Palau	173	232	488 ^b
Papua New Guinea	935	3 748	3 913 ^b	194 ^b	209 ^b	139 ^b
Samoa	77	220	142	..	13	47 ^b
Solomon Islands	106 ^b	552	601	..	27	71
Tonga	19 ^b	220 ^b	465 ^b	14 ^b	58 ^b	110 ^b
Tuvalu	..	5 ^c	8 ^b
Vanuatu	61 ^b	454	724 ^b	..	23	30 ^b
Transition economies	51 964	695 507	870 091	19 611	368 881	436 702
South-East Europe	1 237	43 479	90 242	16	2 553	6 700
Albania	247	3 255	10 024	..	154	779
Bosnia and Herzegovina	450	6 709	9 428	..	211	570
Montenegro	..	4 231	6 513 ^b	109 ^b
North Macedonia	540	4 351	7 306	16	100	114
Serbia	..	22 299	51 763	..	1 960	4 546
CIS	49 965	643 510	761 249	19 477	365 480	427 028
Armenia	513	4 405	5 246	-	150	492
Azerbaijan	1 791	7 648	32 787	1	5 790	26 825
Belarus	1 306	9 904	14 519	24	205	1 491
Kazakhstan	10 078	82 648	151 396	16	16 212	14 152
Kyrgyzstan	432	1 698	4 205	33	2	897
Moldova, Republic of	449	2 876	4 792	23	68	269
Russian Federation	29 738	464 228	446 656	19 211	336 355	379 637
Tajikistan	136	1 226	3 129 ^b	186 ^b
Turkmenistan	949 ^b	13 442 ^b	39 323 ^b
Ukraine	3 875	52 872	48 933	170	6 548	2 882
Uzbekistan	698 ^b	2 564 ^c	10 264 ^c	..	152 ^c	196 ^c
Georgia	762	8 518	18 600	118	848	2 974
Memorandum						
Least developed countries (LDCs) ^a	35 974	161 790	395 392	2 604	11 528	24 108
Landlocked developing countries (LLDCs) ^f	33 846	176 897	418 248	1 025	29 266	50 241
Small island developing States (SIDS) ^g	17 133	60 503	93 718	1 906	10 286	15 710

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 Príncipe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, the Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, 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, the former Yugoslav Republic of Macedonia, Malawi, Mali, the Republic of Moldova, Mongolia, Nepal, 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, São Tomé and Príncipe, Seychelles, Solomon Islands, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu.

EXPLANATORY NOTES

The terms country and economy as used in this Report also refer, as appropriate, to territories or areas; the designations employed and the presentation of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. In addition, the designations of country groups are intended solely for statistical or analytical convenience and do not necessarily express a judgment about the stage of development reached by a particular country or area in the development process. The major country groupings used in this Report follow the classification of the United Nations Statistical Office:

- Developed economies: the member countries of the OECD (other than Chile, Colombia, Costa Rica, 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](#)).

Reference to companies and their activities should not be construed as an endorsement by UNCTAD of those companies or their activities.

The boundaries and names shown and designations used on the maps presented in this publication do not imply official endorsement or acceptance by the United Nations.

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.
- Reference to “dollars” (\$) means United States dollars, unless otherwise indicated.

Annual rates of growth or change, unless otherwise stated, refer to annual compound rates.

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

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TRANSNATIONAL CORPORATIONS

**Financing investment in sustainable post-pandemic recovery –
Actors, Strategies, Institutions, and Impacts**

Guest Editors: Jakob Müllner (WU-Vienna) & Riccardo Crescenzi (LSE)

UNCTAD's *2020 World Investment Report* concluded that, over the coming years, the attention of global investment and development policymakers is likely to shift from investment in productive capacity in global supply chains towards investment in infrastructure and domestic services. This shift implies a focus on a wider range of actors (e.g. not only traditional TNCs but also financial institutions, institutional investors and funds).

In this special issue, we invite academic research on actors, strategies, institutions, and effects of sustainable development finance and investment in the context of the post-pandemic recovery. Research should combine finance and development aspects and, ideally, point towards policy and practice implications. Of special interest is research that looks at implications for policies targeting green, digital and inclusive recovery in advanced and emerging economies and their sub-national regions.

The special issue will be open to research covering the full 'investment chain' from the mobilization of funds in financial markets to the impact of investment projects on the ground. Because COVID-19 has significantly affected the market for development finance, priority will be given to recent empirical research that considers the repercussions of COVID-19 for sustainable finance. We invite qualitative, quantitative and conceptual contributions and offer an **accelerated submission process**. Possible topics include, but are not limited to:

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 - Traditional sponsors, creditors & guarantee agencies
 - New players: ESG & impact funds, Sovereign Wealth Funds, Infrastructure & Hedge Funds
- Development finance strategies & instruments
 - Project finance
 - Private public partnerships (PPP)
 - Blended finance
 - Micro-finance
 - Soft & concessionary loans
 - Green bonds
 - Development assistance
- The global institutional development finance environment
 - Voluntary international standards (e.g. Equator Principles, OECD Guidelines for Multinational Enterprises)
 - Multinational development institutions in project finance investment (UN, WTO, OECD, IMF, MIGA)
 - International investment regime and international arbitration
- Economic, social and environmental impacts of development finance
 - Sectoral or sub-national regional impacts and their global geography
 - Interactions between recovery plans (supra-national, national and sub-national) and development finance
 - Impact evaluation of specific projects of general interest for digital, green and inclusive recovery
 - Development finance and EU Cohesion Policy

- Role and impacts of public policies (e.g. Investment Promotion Agencies)
- COVID-19 implications for development finance and its impacts

Accelerated submission process

1. **Optional preliminary submission July 15th:** Authors may submit either
 - 1.1. Full papers
 - 1.2. Paper abstracts for upfront feedback
2. **Preliminary response August 1st:** Those accepted for further development will receive a detailed review. A positive preliminary feedback does not guarantee publication but it allows authors to get early feedback on suitability of the proposed paper, chances and detailed feedback from editors & reviewers
3. **Mandatory main submission September 1st:** Authors submit full papers
4. **Decision announcement September 29th:** Authors receive conditional acceptance or rejection decision within 30 days
5. **Final submission November 14th**
6. **Publication of the special issue: December 2021**

Guest Editors

Riccardo Crescenzi is Professor of Economic Geography at the London School of Economics and is the current holder of a European Research Council (ERC) Grant. He is also an Associate at the Centre for International Development, Harvard Kennedy School of Government. Riccardo is the Editor-in-Chief of the LSE Blog Global Investment and Local Development (GILD) and is currently part of the National Infrastructure Commission of Italy. He has been a Jean Monnet Fellow at the European University Institute (EUI) and a Visiting Scholar at the Harvard Kennedy School of Government, Taubman Centre and at the University of California Los Angeles (UCLA). His research is focused on regional economic development, innovation, Foreign Direct Investment (FDI) and multinationals and the analysis and evaluation of European Union policies. His ERC project looks at the location strategies of FDI, at their impacts on the host economies and at the evaluation of policies for FDI attraction and retention.

Jakob Müllner is Associate Professor at the Institute of International Business at WU-Vienna. His research seeks to integrate finance and international business perspectives. It focuses on financing international business and financial risk management strategies in internationalization. He published in ABS 4 ranked journals in the disciplines International Finance, International Business and Management (e.g. Academy of Management Journal, Journal of Corporate Finance, Journal of World Business). He was nominated for Haynes Prize for most promising scholar (AIB), the Carolyn B. Dexter Award (AOM), the Alan Rugman Young Scholar Award (AIB) and received the Distinguished Paper Award from the Academy of Management Strategy Division in 2019. Jakob Müllner serves as track chair for International Finance, Accounting and Corporate Governance in the European International Business Association (EIBA) and co-founded the annual WU-Vienna IB & Finance Paper Development Workshop.



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