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2025 World Investment Report

International investment in the digital economy

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Preface

At a time when the world should be deepening cooperation and expanding opportunity, we are seeing the opposite. Barriers are rising. Globalization is retreating. And the consequences for sustainable development are profound.

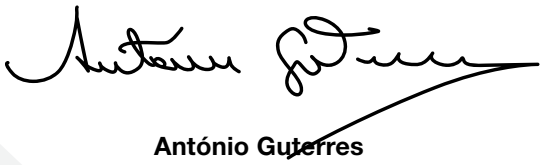
The *World Investment Report 2025* delivers a sobering message: global foreign direct investment fell by 11 per cent in 2024, to $1.5 trillion. Infrastructure investment is slowing. Industrial investment is under strain. And developing countries – those most in need – are being left behind.

Rising trade tensions, policy uncertainty and geopolitical divisions risk making the investment environment even worse.

One bright spot is the digital economy, but the growth in this sector remains highly uneven. Investment in digital infrastructure is essential to closing the digital divide. Digital connectivity is a powerful driver of progress – if we ensure it reaches everyone.

This year's report explores how international investment can help bridge that divide. It offers practical guidance to help governments attract and direct capital toward inclusive growth – advancing the Global Digital Compact and the Sustainable Development Goals.

Now more than ever, we need to work together to chart a course towards a more resilient and sustainable world. The *World Investment Report 2025* offers ideas and insights to help do just that.



António Guterres
Secretary-General of the United Nations

Foreword

Investment is more than just capital flows and project pipelines. It is a signal of where we are placing our bets as a society: on what we value, where we see potential and who we believe should be part of the future. As such, investment trends do more than track economic performance – they offer a mirror to our priorities, our systems and the choices we make collectively.

The World Investment Report 2025 arrives at a moment when that mirror reflects both strain and opportunity. The global economy continues to grapple with a complex set of challenges: mounting debt, persistent underperformance in GDP growth, geopolitical tensions, and structural shifts in trade and investment flows.

As our report shows, global foreign direct investment contracted for the second consecutive year. International project finance, critical for large-scale infrastructure and development, registered the steepest decline, falling by 26 per cent. Meanwhile, cross-border mergers and acquisitions remained below the long-term average, signalling a structural shift toward domestic and near-shore investment strategies amid rising policy risks, regulatory scrutiny and global uncertainty.

What is most alarming, however, is the continued deterioration of investment flows into key sectors aligned with the Sustainable Development Goals. In 2024, investment in energy and gas supply fell by 28 per cent, while project finance in renewable energy declined by 16 per cent. This trend comes at a time when the world can least afford to fall short. Reversing this negative trend in Goals investment will demand not only more capital – both public and private – but also deeper alignment of investment flows with long-term sustainability goals.

Amid these challenges, the report identifies investment in the digital economy as an engine of growth and transformation. The digital economy is expanding at an annual rate of 10 to 12 per cent, outpacing global GDP growth and accounting for a rising share of value creation worldwide.

Yet this growth is not equally distributed. Despite more than $500 billion in greenfield investment in the digital economy into developing countries over the past five years, this investment is heavily concentrated in a few countries. Many structurally weak and vulnerable economies remain marginalized, constrained by inadequate digital infrastructure, limited digital skills and policy and regulatory uncertainty.

This inequality underscores one of the defining development questions of our time, one we tackle in the report: will digital transformation deepen divides, or can it become a pathway to more inclusive, sustainable growth?

To translate digital opportunities into inclusive progress, it is essential to create an enabling environment for sustainable investment in the digital economy. While many developing countries have adopted digital strategies, these often exist in silos – disconnected from broader industrial, sustainability and investment agendas. Gaps in data governance, poorly calibrated intellectual property frameworks that neither encourage innovation nor facilitate knowledge sharing, and fragmented regulatory regimes continue to hold back progress.

The *World Investment Report 2025* sets out a road map for bridging this gap. It highlights the catalytic role of development finance institutions, multilateral development banks, sovereign wealth funds and blended finance mechanisms in scaling up investment in the digital economy. These priorities align with the growing reform momentum ahead of the Fourth International Conference on Financing for Development, including calls to triple multilateral lending capacity and de-risk private investment to close infrastructure gaps.

This year's report also reflects the global commitments made under the Global Digital Compact and the Pact for the Future, adopted in 2024. To accelerate implementation, it proposes practical tools, including a Policy Toolkit for Investment in the Digital Economy, designed to equip governments, investors and development partners with the knowledge, data and guidance needed to navigate an evolving investment landscape.

UNCTAD remains fully committed to supporting all Member States in building a smart, inclusive and sustainable future. The stakes are clear. The digital transformation is not an inevitability – it is a choice. We must choose to make it inclusive. We must choose to make it sustainable. We must choose to ensure that the next chapter of investment does not simply digitize inequality but evens the playing field of our digital world.

Rebeca Grynspan
Secretary-General of UNCTAD

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Explanatory notes

The terms country and economy as used in this report also refer, as appropriate, to territories or areas. In addition, the designations of country and economy groupings are intended solely for statistical or analytical convenience and do not necessarily express a judgement about the stage of development reached by a particular country or area in the development process. The major country and economic 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 and Türkiye), European Union member countries that are not OECD members (Bulgaria, Croatia, Cyprus, Malta and Romania) plus Albania, Andorra, Belarus, Bosnia and Herzegovina, Liechtenstein, Monaco, Montenegro, North Macedonia, the Republic of Moldova, the Russian Federation, San Marino, Serbia and Ukraine, plus the territories of of Bermuda, Faroe Islands, Gibraltar, Greenland, Guernsey and Jersey.
- 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) or Taiwan Province of China.

Throughout the report, data provided on investment trends for the Netherlands refer only to the Netherlands; information for Aruba, Curaçao and Sint Maarten is reported separately.

Methodological details on FDI and MNE statistics can be found on the report website (https://unctad.org/topic/investment/world-investment-report).

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 indicates that the item is not applicable, unless otherwise indicated.
- A slash (/) between dates representing years, e.g., 2020/21, indicates a financial year.
- Use of a dash (–) between dates representing years, e.g. 2020–2021, signifies the full period involved, including the beginning and end years.

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.

Abbreviations

AEC	ASEAN Economic Community
AFA	Advanced Framework Agreement
AfCFTA	African Continental Free Trade Area
AI	artificial intelligence
ASEAN	Association of Southeast Asian Nations
BCI	British Columbia Investment Management
BEES	biodiversity, ecosystem and ecosystem services
BIT	bilateral investment treaty
CCM	carbon credit market
CBI	Climate Bonds Initiative
CDP	Carbon Disclosure Project
CEPA	Comprehensive Economic Partnership Agreement
CHIPS	Creating Helpful Incentives to Produce Semiconductors (Act)
COP	Conference of the Parties of the United Nations Framework Convention on Climate Change
COVID-19	coronavirus disease 2019
CSRD	Corporate Sustainability Reporting Directive
ECT	Energy Charter Treaty
EFRAG	European Financial Reporting Advisory Group
EFTA	European Free Trade Association
EPA	Economic Partnership Agreement
ESG	environmental, social and governance
ESRS	European Sustainability Reporting Standards
ETS	emissions trading system
EV	electric vehicle
FDI	foreign direct investment
FET	fair and equitable treatment
FfD4	Fourth Financing for Development Conference
FTA	free trade agreement
GATS	General Agreement on Trade in Services
GDP	gross domestic product
GFIEF	Global Forum on Islamic Economics and Finance
GHG	greenhouse gas
GIA	Global Innovation Alliance
GRI	Global Reporting Initiative
GSFO	Global Sustainable Finance Observatory
GVC	global value chain
IAASB	International Auditing and Assurance Standards Board
ICSID	International Centre for Settlement of Investment Disputes
ICT	information and communications technology
ICVCM	Integrity Council for the Voluntary Carbon Market
IESBA	International Ethics Standards Board for Accountants
IFRS	International Financial Reporting Standards
IFSB	Islamic Financial Services Board
IIA	international investment agreement
IMF	International Monetary Fund
IP	Intellectual property
IPA	investment promotion agency
IPF	international project finance
IPFSD	Investment Policy Framework for Sustainable Development
IPSASB	International Public Sector Accounting Standards Board
ISAR	International Standards of Accounting and Reporting
ISDS	investor–State dispute settlement
ISSB	International Sustainability Standards Board
ITU	International Telecommunication Union
LDC	least developed country
LLDC	landlocked developing country
M&As	mergers and acquisitions
MERCO-SUR	Southern Common Market
MNE	multinational enterprise
NDC	nationally determined contribution
OECD	Organisation for Economic Co-operation and Development

OFDI	Outward FDI
OIC	Organisation of Islamic Cooperation
PPF	public pension fund
PPP	public–private partnership
PRI	political risk insurance
R&D	research and development
RCEP	Regional Comprehensive Economic Partnership
SASB	Sustainability Accounting Standards Board
SEZ	special economic zone
SIDS	small island developing States
SIFA	Sustainable Investment Facilitation Agreement
SMEs	small and medium-sized enterprises
SWF	sovereign wealth fund
tCO2e	tons of carbon dioxide equivalent
TAPED	Trade Agreements Provisions on Electronic-commerce and Data
TCFD	Task Force on Climate-related Financial Disclosures
TIP	treaty with investment provision
TNFD	Taskforce on Nature-related Financial Disclosures
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNIDROIT	International Institute for the Unification of Private Law
VCM	voluntary carbon market
WIPO	World Intellectual Property Organization
WMO	World Meteorological Organization
WTO	World Trade Organization

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World Investment Report 2025

Chapter I

International investment trends

United Nations

Key findings

Global FDI fell by 11 per cent in 2024

FDI flows were reported 4 per cent higher, at $1.5 trillion. However, this figure was inflated by volatile flows through conduit economies. Excluding those, global flows fell by 11 per cent, a second year of decline. The outlook for 2025 is negative, owing to high investor uncertainty.

FDI in developing countries remains highly concentrated

Among developed countries, a sharp fall in inflows in Europe contrasted sharply with rising investment in North America. FDI flows to developing countries were flat, despite sizeable increases in Africa and in South-East Asia. Flows fell in East Asia and in South America. Ten recipients account for three quarters of developing-country inflows.

Digital economy investment is the only growth sector

Sectoral trends showed lower investment in most infrastructure sectors. Project announcements in supply chain–intensive industries held steady. Digital sectors, in contrast, saw a doubling of project values. The growing weight of FDI in digital economy sectors is reflected in the composition of the top 100 MNEs; technology firms now account for more than 20 percent of their revenues.

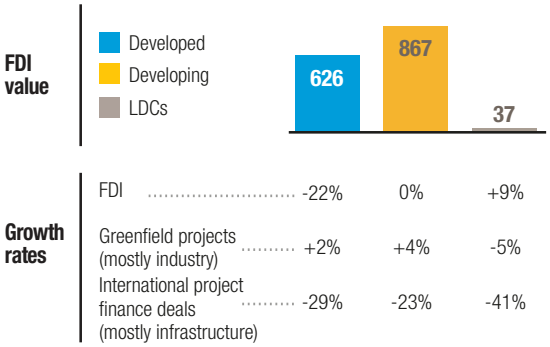
Investment in the Sustainable Development Goals is in crisis

Goals investment in developing countries dropped by a quarter to a third across infrastructure, renewable energy, water and sanitation, and agrifood systems. Only the health sector saw positive growth in 2024, albeit from a small base.

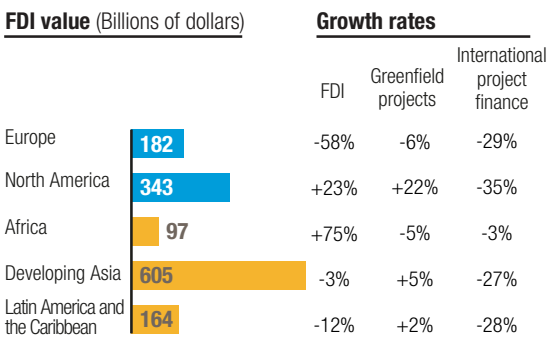
The international project finance slump is hurting financing for development efforts

The prolonged contraction in IPF has significant implications for the Fourth International Conference on Financing for Development. Between 2021 and 2024, the value of IPF fell by more than 40 per cent. The downturn disproportionally affects LDCs, which rely more on international sources of finance.

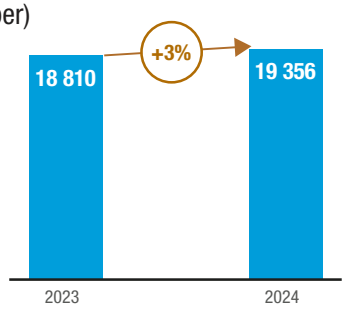
Income groups



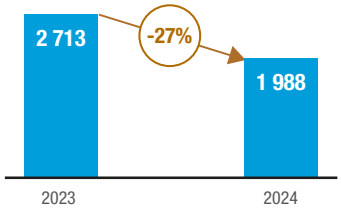
Regions



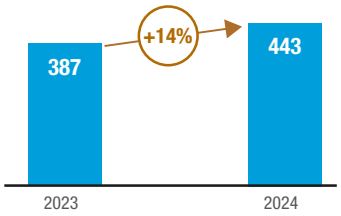
Greenfield projects
(Number)



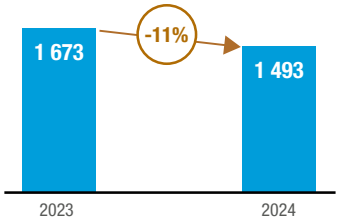
International project finance deals
(Number)



Cross-border M&As
(Value)



FDI
(Value)



Industries
(Project values)

Infrastructure	-14%
GVC-intensive industries	+1%
Semiconductors	+140%
Digital economy	+107%
Extractives	-51%

SDG sectors
(Developing economies, project values)

Infrastructure	-35%
Renewable energy	-31%
Water, sanitation and hygiene	-30%
Agrifood systems	-19%
Health and education	+25%

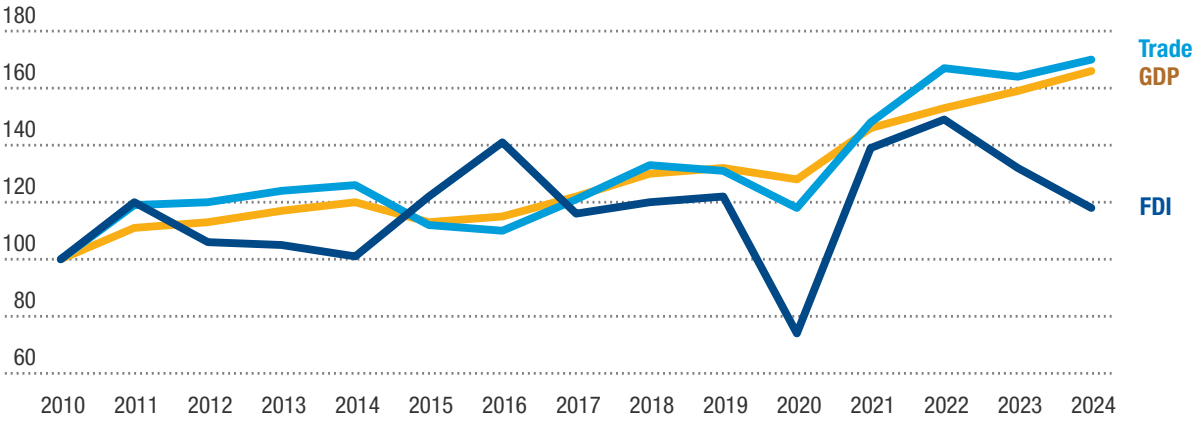
A. Foreign direct investment

Global foreign direct investment (FDI) flows, absent the financial flows to a handful of European conduit economies, continued to decline in 2024. The outlook for 2025 is increasingly pessimistic as early first-quarter data point to record lows in deals and announced projects, underscoring the fragility of global investment dynamics.

1. Global trends and prospects

Global FDI in 2024 increased marginally, by 4 per cent, from $1.45 trillion to $1.51 trillion. However, this headline figure masks significant underlying weaknesses. It was inflated by volatile financial flows through several European economies with high levels of conduit flows.[1] When these are excluded, global FDI flows in fact declined by 11 per cent on a like-for-like basis, from $1.67 trillion to $1.49 trillion – marking the second consecutive year of double-digit contraction and confirming persistent fragility in international investment flows. The decline in FDI flows is in stark contrast to other macroeconomic variables, including gross domestic product (GDP) and trade (figure I.1).

Figure I.1
FDI is losing pace with GDP and trade
FDI, GDP and trade indexed, 2010 = 100



Source: UNCTAD, based on IMF for GDP and trade.

Note: GDP at current prices, trade is value of goods and services exports.

Abbreviations: FDI, foreign direct investment; GDP, gross domestic product; IMF, International Monetary Fund.

[1] Several European economies, including Ireland, Luxembourg, the Netherlands and Switzerland, where FDI statistics are significantly affected by conduit financial flows, reported large fluctuations and negative numbers in 2023 and 2024. Fewer negative numbers in 2024 exerted a net positive effect on global flows of about $230 billion.

One of the sharpest declines in components of FDI (box I.1) was seen in international project finance (IPF) deals. This form of investment, which is critical for large-scale infrastructure projects – particularly in developing countries – fell by 26 per cent in value in 2024, following the steep drop in 2023. The downturn was driven largely by financing constraints, including uncertainty about exchange rates and interest rate levels. The impact has been especially severe in the least developed countries (LDCs), where IPF represents a relatively larger share of FDI.

Box I.1
Investment data used in this report

UNCTAD reports international investment trends based on foreign direct investment (FDI) statistics – stocks and flows, inward and outward – provided by Member States, as well as data on three types of investment projects:

- Cross-border mergers and acquisitions (M&As): Transactions that directly affect FDI flows.
- Greenfield projects: Announcement-based data that reflect investment intentions in the reporting year and signal directional FDI trends ahead. Greenfield projects mostly occur industrial sectors.
- International project finance (IPF) deals: Announcements of large-scale projects involving multiple investors and containing a significant debt component. These projects mostly occur in infrastructure sectors and are therefore especially relevant for investment in the Sustainable Development Goals.

The data on the three types of projects are treated separately and are used as complementary information to explain productive FDI trends. They are statistically distinct from FDI data based on the balance of payments. For example, greenfield project announcements include estimates for projected capital expenditures in the future, not actual financial flows in the reporting year. Likewise, only a part of IPF values translates into FDI (see also section I.D).

Project data are sourced from The Financial Times Ltd, fDi Markets (www.fDimarkets.com) for greenfield projects and from LSEG Data & Analytics for M&As and IPF. Full details on statistical methods and sources of data for each country can be found in the online-only methodological notes published with each *World Investment Report*.

Source: UNCTAD.

Greenfield project announcements showed mixed signals. The number of projects announced in industrial sectors increased slightly (by 3 per cent), but their value fell by 5 per cent. Nonetheless, at $1.3 trillion, the value of greenfield announcements remained at historically high levels – the second highest on record. Activity was strongest in supply chain–intensive manufacturing industries, with regions such as South-East Asia, Eastern Europe and Central America benefiting most. These trends reflect the continued effort by multinational enterprises (MNEs) to rebalance production locations amid a shifting global trade environment. Cross-border mergers and acquisitions (M&As), which predominantly affect FDI flows in developed countries, increased by 14 per cent in 2024 to reach $443 billion. Yet this recovery built on a low base and still leaves M&A activity well below the average of the past decade. In addition, there is a longer-term trend of declining shares of cross-border deals relative to total M&A activity, as firms increasingly opt for domestic and near-market acquisitions. This trend reflects growing sensitivity to geopolitical risks, regulatory hurdles and shifting industrial policies.

a. FDI inflows

Global FDI flows fell by 11 per cent in 2024, to $1.5 trillion; however, this figure conceals wide differences in performance across economies (figure I.2). Developed countries experienced a 22 per cent contraction, while flows to developing economies were stable. Much of the global decline was due to a 58 per cent fall in FDI to Europe. Other contributors were the decline of FDI to China, where inflows dropped by 29 per cent, and South America, where inflows declined by 18 per cent.

By contrast, several regions recorded growth. North America saw a 23 per cent increase in FDI, with inflows in the United States of America up 20 per cent, mostly driven by a doubling of M&A sales values and by large-scale investment in high-tech and clean energy sectors.

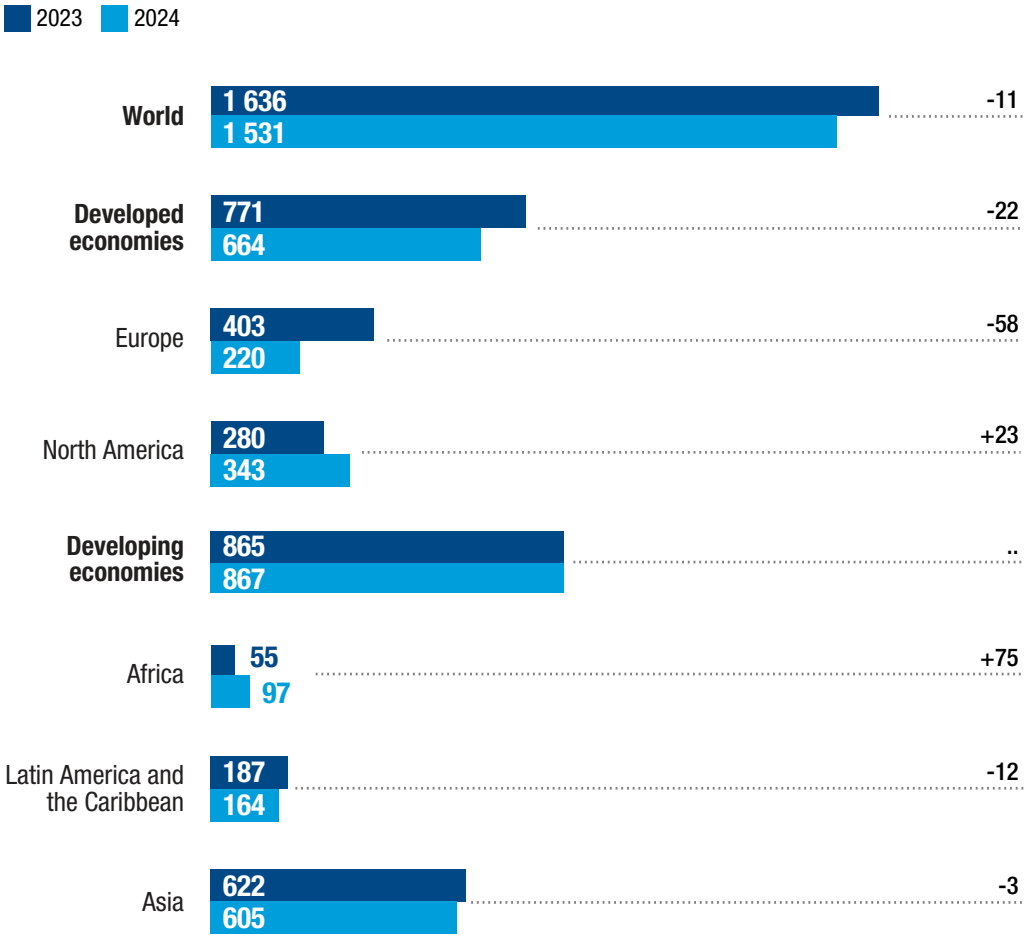
Among developing regions, ASEAN recorded a 10 per cent growth in inflows, Central America a 4 per cent growth and Africa 75 per cent. The increase in Africa led to a new record for FDI inflows to the region. The sharp rise was driven primarily by a single development megaproject in Egypt – valued at $35 billion; yet even excluding this project, the region still recorded a 12 per cent increase.

FDI to developing countries as a group remained stable at $867 billion, or 57 per cent of global FDI, despite tight financing conditions and growing geopolitical uncertainty. Developing Asia, the largest recipient region, saw only a slight decline of 3 per cent, with several major economies maintaining strong inflows, compensating the decline in China. Latin America and the Caribbean experienced a 12 per cent decline. The relative resilience of developing regions reflects ongoing investor interest in market-seeking and resource-based investment, and the growing role of South–South capital flows.

In terms of announced greenfield projects – a forward-looking indicator of investor sentiment – the global number of projects rose by 3 per cent in 2024, reaching more than 19,000. This was the third-highest level ever recorded. The value of these projects, however, declined by 5 per cent, suggesting a shift towards smaller projects or more cautious capital commitments. The increase in project numbers was driven by investment in manufacturing industries, especially in strategic sectors such as semiconductors and electric vehicle (EV) components, often supported by industrial policies. Digital economy sectors, including platforms and services (chapter IV), also saw strong growth.

Developed economies saw a 2 per cent increase in greenfield project numbers, led by investment in the United States and Canada, in that order. In developing regions, trends were more mixed.

Figure I.2
Foreign direct investment declined in several regions
Inflows by economic grouping and region
(Billions of dollars and percentage change)

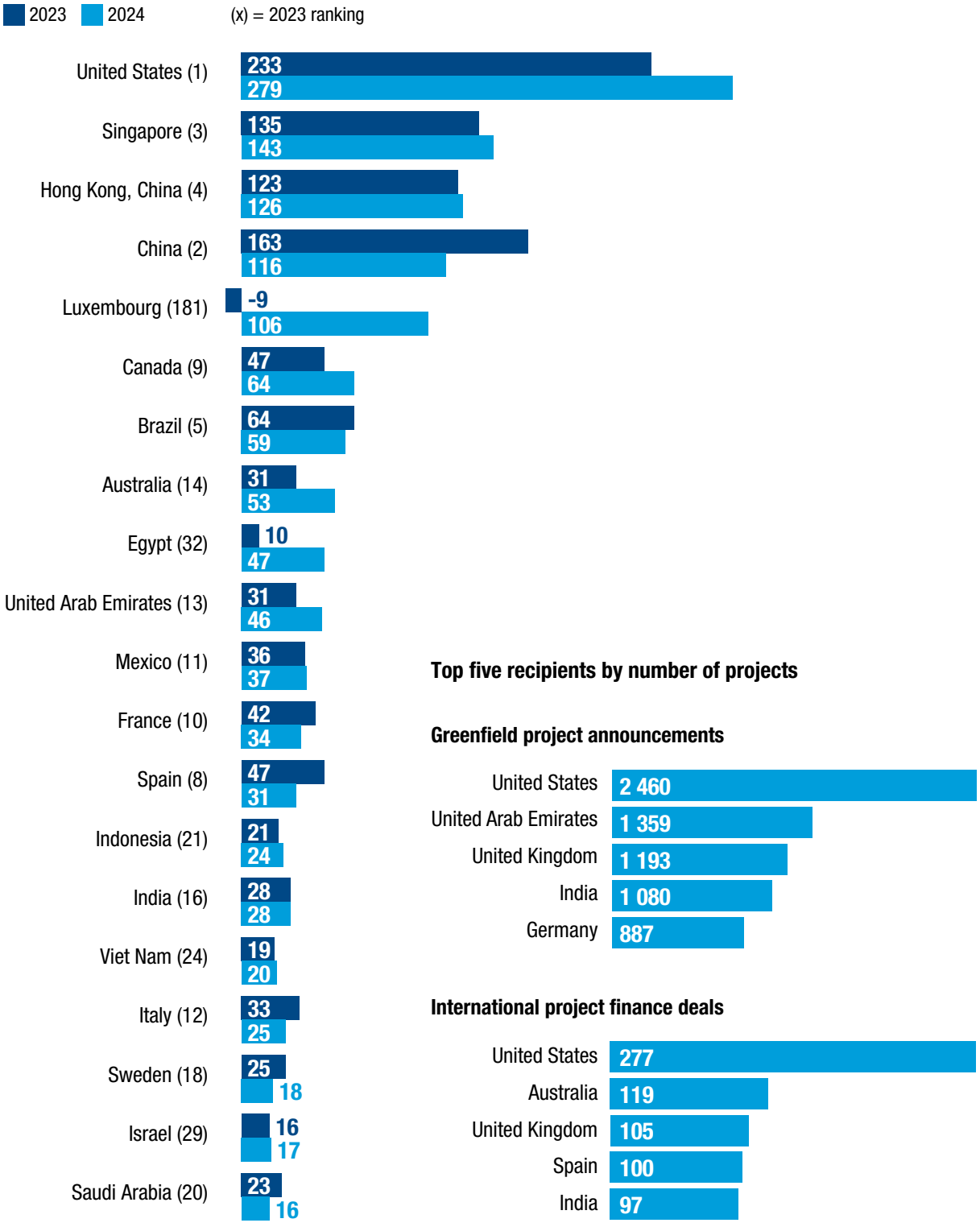


Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

In Asia, particularly East and South-East Asia, as well as India in South Asia, investors maintained strong project activity, as they did in Latin America and the Caribbean, while investment in Africa experienced a decline of 5 per cent.

Looking at the top investment destinations, the United States remained the recipient of the largest amount of FDI and led in both greenfield projects and IPF deals (figure I.3). Brazil, Egypt, the United Arab Emirates, Mexico, India, Indonesia and Viet Nam, in that order, also featured among the top FDI recipients. Greenfield project activity was particularly strong in India and the United Arab Emirates, while IPF remained more concentrated in a few mature markets and large emerging economies. The disparity between trends in greenfield projects and IPF deals underlines the divergence between industrial investment and infrastructure development dynamics in the current global environment.

Figure I.3
Inflows declined in most developing economies in the top 20 recipients
Foreign direct investment inflows, top 20 host economies
(Billions of dollars)



Source: UNCTAD and based on information from The Financial Times, fDi Markets (www.fDimarkets.com) and LSEG Data & Analytics.

Among structurally weak and vulnerable economies, trends were similarly mixed. FDI inflows to the LDCs increased by 9 per cent, reflecting a modest recovery from previous years. Small island developing States (SIDS) saw a stronger rise of 11 per cent, while landlocked developing countries (LLDCs) experienced a decline of 10 per cent. Despite these headline increases, in all three groups significant declines were recorded in the value of announced greenfield projects and in IPF activity. This suggests that although some capital is returning to these economies, largely in the form of reinvested earnings or smaller-scale investment, the outlook for large-scale and future-oriented projects remains weak.

These regional patterns reflect a growing fragmentation in global investment flows. Investment is increasingly shaped by geopolitical considerations, industrial policies and supply chain realignment. While some regions and sectors continue to attract significant capital, others face tightening constraints.

b. FDI outflows

In 2024, FDI outflows from developed countries increased by 8 per cent, reaching $1.1 trillion. As with inflows, outflows were significantly influenced by corporate restructuring activities and intrafirm financial flows in Europe. Several major conduit economies recorded substantial increases in outflows.[2] However, when these countries are excluded, FDI outflows from developed countries declined by 24 per cent.

The decline occurred despite an increase in the value of cross-border M&As, normally a key driver of FDI outflows from developed economies. The value of transactions rose by 26 per cent, largely due to major deals involving MNEs from the United Kingdom of Great Britain and Northern Ireland.

Announced greenfield projects by investors from developed countries remained stable across both Europe and North America.

The United States remained the largest home country of FDI outflows despite a 26 per cent decline. Cross-border M&As by United States–based investors held steady at $118 billion, still about 30 per cent below the five-year average. Their overseas asset purchases were heavily concentrated in the information and communication sector, which accounted for half of all cross-border M&A deals and announced greenfield projects in 2024. Companies from the United States allocated more than 60 per cent of the total value of their greenfield projects to domestic (interstate) investment – the highest share ever recorded. This increased domestic focus reflected a relatively strong economy, policy measures aimed at encouraging investment at home and stricter controls on outbound investment (chapter II).

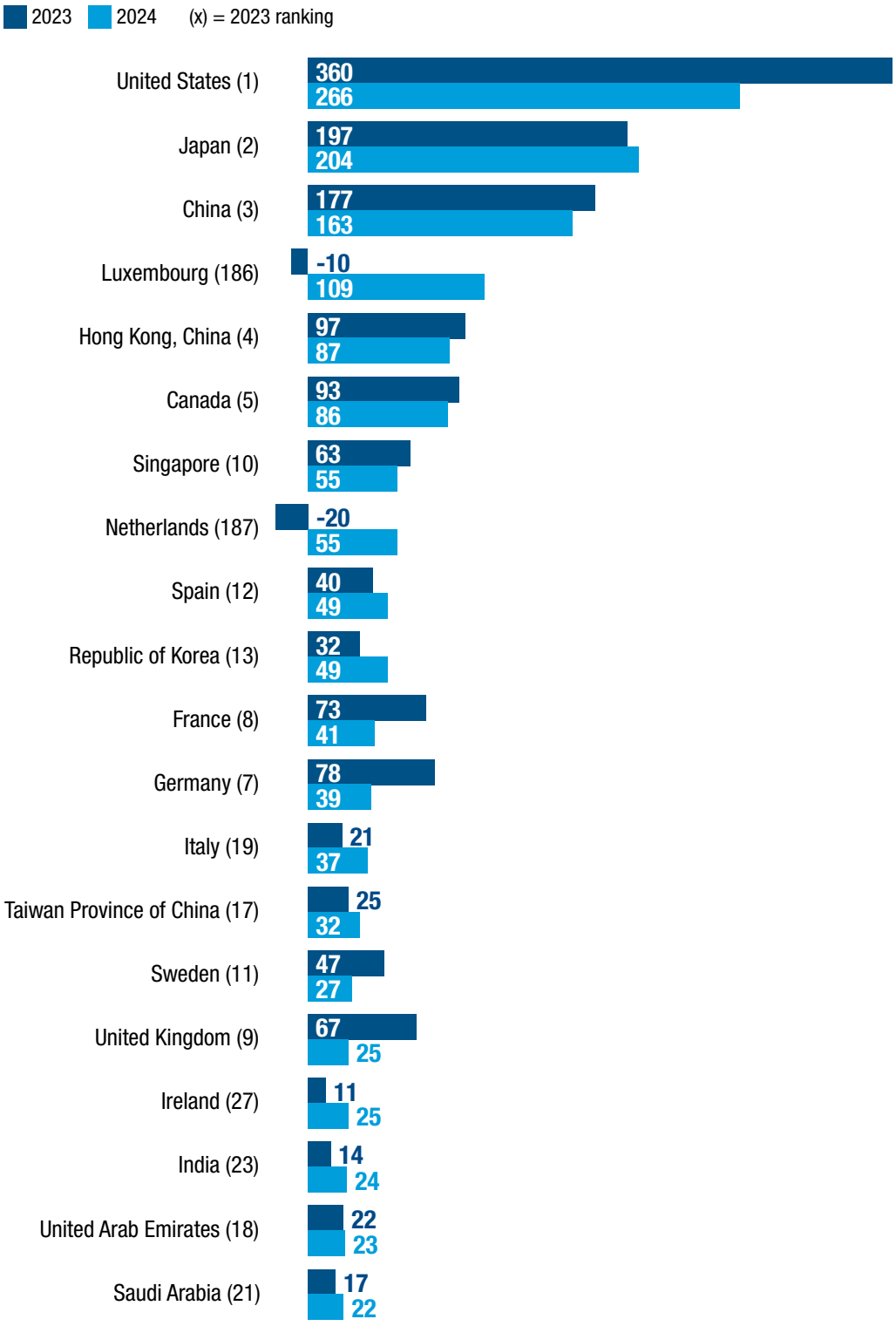
FDI outflows from companies in Japan rose by 4 per cent, driven primarily by a 27 per cent increase in investment in the United States. Outward FDI from investors in Europe (excluding conduit jurisdictions) declined by nearly 30 per cent, with sharp decreases from major investor home countries such as France and Germany (figure I.4), where cross-border M&A activity dropped significantly.

Among other home countries of major investors, seven were in developing Asia. Notably, India and Saudi Arabia rose in the rankings compared with the previous year. The number of greenfield projects announced by Indian investors increased by 20 per cent, placing India among the world's top 10 investor countries. FDI outflows from investors in the United Arab Emirates also rose by 5 per cent, supported by a 46 per cent surge in the value of cross-border acquisitions.

[2] The Netherlands and Luxembourg alone reported a combined net increase in outward FDI flows of $380 billion (from -$217 billion to $163 billion), or almost a quarter of global FDI flows.

Figure I.4
Seven economies in Asia are among the top 20 home economies of outflows

Foreign direct investment outflows, top 20 home economies,
(Billions of dollars)



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

FDI outflows from MNEs in developing economies declined by 5 per cent, totaling $491 billion. The drop was particularly pronounced in Latin America and the Caribbean, where outflows fell by 33 per cent, largely due to a halving of investment by Brazilian investors. In Asia, FDI outflows decreased slightly, by 3 per cent, yet the region still accounted for 28 per cent of global FDI outflows.

FDI outflows from MNEs in China declined by 8 per cent in 2024, falling to $163 billion. The value of announced greenfield projects dropped sharply, to $86 billion – half the level recorded in 2023, which had seen a significant surge. However, the number of greenfield projects announced by Chinese MNEs increased by 6 per cent, ranking China sixth globally. Notably, 70 per cent of these projects were focused on the manufacturing sector, particularly in the European Union and South-East Asia.

In early 2025, the number of greenfield projects announced by Chinese firms was below the quarterly average of 2023 and 2024, as investors appeared to be waiting for greater clarity on tariff policies.

c. FDI prospects

The outlook for global FDI in 2025 is negative. Although at the start of the year expectations were for modest growth, these have been overtaken by rising economic and policy uncertainty. The escalation of a new tariff war, along with deteriorating investor sentiment, has led to downward revisions in key FDI determinants: global GDP growth, capital formation, trade and exchange rate stability (table I.1). Financial market volatility has also increased. These trends contributed to a sharp drop in investment activity in early 2025, with first-quarter data showing record lows in both deal volumes and project announcements.

Table I.1
Key indicators for foreign direct investment prospects

Indicator	2024	2025 (January)	2025 (April)	Implications for FDI prospects in 2025
Gross domestic product growth (%)	3.3	3.2	2.8	Negative
Gross fixed capital formation (%)	3.7	3.7	3.1	Negative
Trade volume (%)	3.8	3.4	1.7	Negative
Inflation outlook (%)	5.8	4.2	4.3	Neutral
Foreign exchange volatility	7.5	8.7	9.4	Negative
Stock market volatility index	13.8	18.7	25.0	Negative
Commodity/energy price index	105.1	99.0	92.1	Negative
Purchasing managers' index	48.8	48.3	49.4	Neutral
Global economic policy uncertainty index	229.7	339.4	549.0	Negative

Sources: UNCTAD, based on International Monetary Fund for gross domestic product growth, gross fixed capital formation, trade and inflation outlook; World Bank for commodity/energy price index; and policyuncertanty.com for global economic policy uncertainty index.

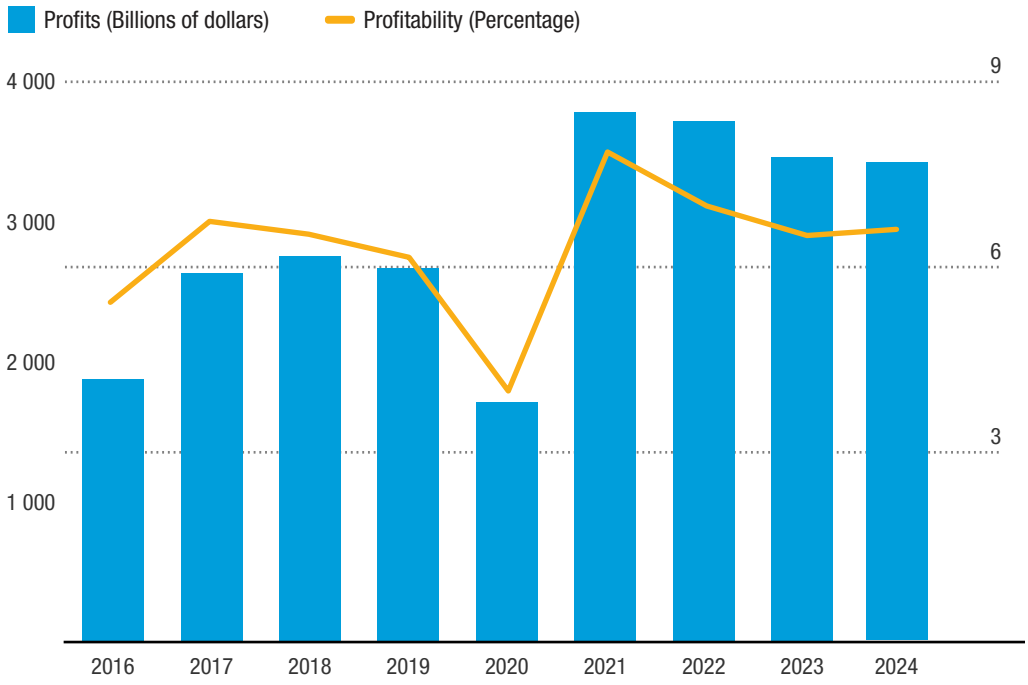
Notes: Purchasing managers' index is the average for China, the United States and the European Union. Trade is exports of goods and services. Foreign exchange rate volatility is the Deutsche Bank FX Volatility Index. The stock market volatility index is the Chicago Board Options Exchange Volatility Index.

Macroeconomic indicators are pointing to slower momentum. Forecasts for global GDP growth have been revised downward since the beginning of the year. Projections for capital formation and trade – critical to value chain–driven investment – have also weakened. Persistent high debt levels in several countries, coupled with political instability and fluctuating exchange rates, are reducing the attractiveness of FDI across many regions. Investor confidence indicators such as the Purchasing Managers' Index have softened in key capital-exporting countries.

The M&A market has been particularly affected. Despite optimism in January for a continued recovery in dealmaking, activity dropped sharply in the first quarter of 2025, reaching the lowest levels since the global financial crisis. Importantly, even if global M&A rebounds later in 2025, this may not translate into an equivalent rise in cross-border transactions. Policy-driven fragmentation, growing regulatory scrutiny of foreign acquisitions and geopolitical factors are reshaping corporate acquisition strategies.

Nevertheless, there are some mitigating factors. The anticipated start of an interest rate–cutting cycle in major economies may ease borrowing conditions, which could help stabilize IPF and capital-intensive FDI. In addition, the profit levels of large multinational corporations remain strong (figure I.5), suggesting continued capacity for reinvestment. Reinvested earnings are an important and stable component of FDI flows, especially in times of uncertainty.

Figure I.5
The profits of the largest multinational enterprises remained high
Profitability and profit levels of MNEs



Source: UNCTAD, based on data from LSEG Data & Analytics.

Note: Covers 4,309 MNEs for which data were available for every year in the range. Profitability is calculated as the ratio of net income to total sales.

Abbreviation: MNE, multinational enterprise.

At the sectoral level, investment in the digital economy and technology continues to act as a growth engine. Sectors such as artificial intelligence (AI), cloud computing and cybersecurity have attracted substantial investment. Among the top 10 highest-value greenfield projects announced in 2024, 4 were in semiconductor manufacturing – 3 of them located in the United States. Data centre development is also expanding rapidly, driven by growing digital demand and strategic industrial policies.

Meanwhile, trade and investment policy developments are reshaping global FDI patterns (box I.2). The current tariff escalation is best understood not as a new phenomenon, but as an acceleration of an existing trend (UNCTAD, 2024a).

Over the past two years, global supply chain–intensive manufacturing FDI has already begun to shift in response to a series of overlapping disruptions. Last year's *World Investment Report* documented a 22 per cent increase in greenfield project announcements in manufacturing in 2023 – marking a break with over a decade of negative growth in the sector. This uptick was driven by MNE efforts to restructure supply chains following pandemic-induced disruptions, the temporary blockage of the Suez Canal, other global shipping bottlenecks and the growing political push to localize production in strategic sectors. In 2024, the number of greenfield announcements in manufacturing increased further by 5 per cent.

Box I.2
Global trade tensions and implications for FDI prospects

The escalation of global trade tensions over the past year — driven by reciprocal tariff measures, evolving trade negotiations and heightened economic policy uncertainty — has significantly reshaped the landscape for international investment. As of May 2025, the United States had implemented baseline reciprocal tariffs of 10 per cent on imports from 59 countries, effective from 9 April, with additional measures applied to China from 14 May. These actions are part of broader negotiations between the United States and its major trading partners, generating ripple effects across global economic and trade dynamics.

Recent analyses by international organizations, including the International Monetary Fund, UNCTAD and the World Trade Organization, emphasize that heightened trade tensions and the associated surge in policy uncertainty are likely to dampen global economic and trade growth, with substantial spillovers to global FDI flows. Firms are recalibrating cross-border investment strategies, seeking to navigate a more complex and uncertain operating environment.

At the firm level, the combination of economic and trade policy uncertainty has strong implications for the international investment decisions of multinational enterprises (MNEs). Uncertainty tends to depress firms' appetite for new cross-border projects, delay greenfield projects, and increase caution about M&As. In response, many firms are reconfiguring production systems to strengthen resilience, diversify geographic exposure, relocate manufacturing bases or increase localization — trends that are already reshaping global patterns of foreign direct investment (FDI).

The emerging tariff landscape, shaped by ongoing negotiations and evolving policy frameworks, is expected to drive further sectoral and geographic reallocation of FDI, particularly in manufacturing. Industries such as automotive, electronics, chemicals and renewable energy are undergoing intensified supply chain restructuring, as companies seek to balance market access, production costs and regulatory risks.

In addition, other United States policy initiatives – notably the America First Investment Policy, the Inflation Reduction Act and the CHIPS and Science Act – are amplifying the effects of global trade tensions on FDI. These initiatives – with elements echoed in the industrial policies adopted by the European Union and in other countries and regions – aim to stimulate domestic manufacturing, advanced technology production and critical supply chain reshoring, with far-reaching effects on global investment decisions.

Overall, the interplay between global trade tensions, national industrial policies and evolving supply chain strategies presents both risks and opportunities for FDI flows. While some developing and emerging economies may benefit from the diversification of production networks, the aggregate impact on global FDI is projected to remain negative in the near term, with risks of longer-term fragmentation of international investment patterns if tensions persist.

Source: UNCTAD.

The underlying drivers of a further wave of supply chain restructuring investment that may materialize in 2025 – risk diversification, security of supply and geopolitical alignment – are therefore largely the same as those that emerged earlier. What is new is the amplification of these drivers through an escalation in tariff measures. The result may be a more urgent reconfiguration of production networks, particularly in sectors vulnerable to trade policy shifts and reliant on just-in-time logistics. Industrial strategies aimed at building domestic production capacity in strategic sectors – such as critical minerals, advanced manufacturing and digital infrastructure – are influencing the destination and structure of new investment. Trade fragmentation is encouraging firms to invest in geopolitically aligned countries, accelerating regionalization trends and reducing cross-border exposure.

Regulatory developments will continue to affect investment flows. While the United States administration is advancing regulatory simplification and investor incentives, it is also intensifying foreign investment screening, particularly in defence- and technology-related sectors. The European Union and other advanced economies are following suit, contributing to a more complex FDI landscape for foreign investors (see chapter II).

Finally, new sources of private capital are playing an increasingly prominent role in shaping international investment. Private equity firms, with substantial reserves of undeployed capital, are particularly active in technology-related sectors and in emerging markets. Institutional investors – including sovereign wealth funds and public pension funds – are seeking stable, inflation-resilient assets such as infrastructure and digital connectivity (see chapter III). These actors are expected to have a growing influence on FDI flows, particularly in the context of global sustainability and resilience agendas.

2. Trends by project type and sector

a. Project types

FDI flows are typically associated with two main types of investment projects: greenfield projects and cross-border M&As. Each is driven by distinct factors and has different implications for development.

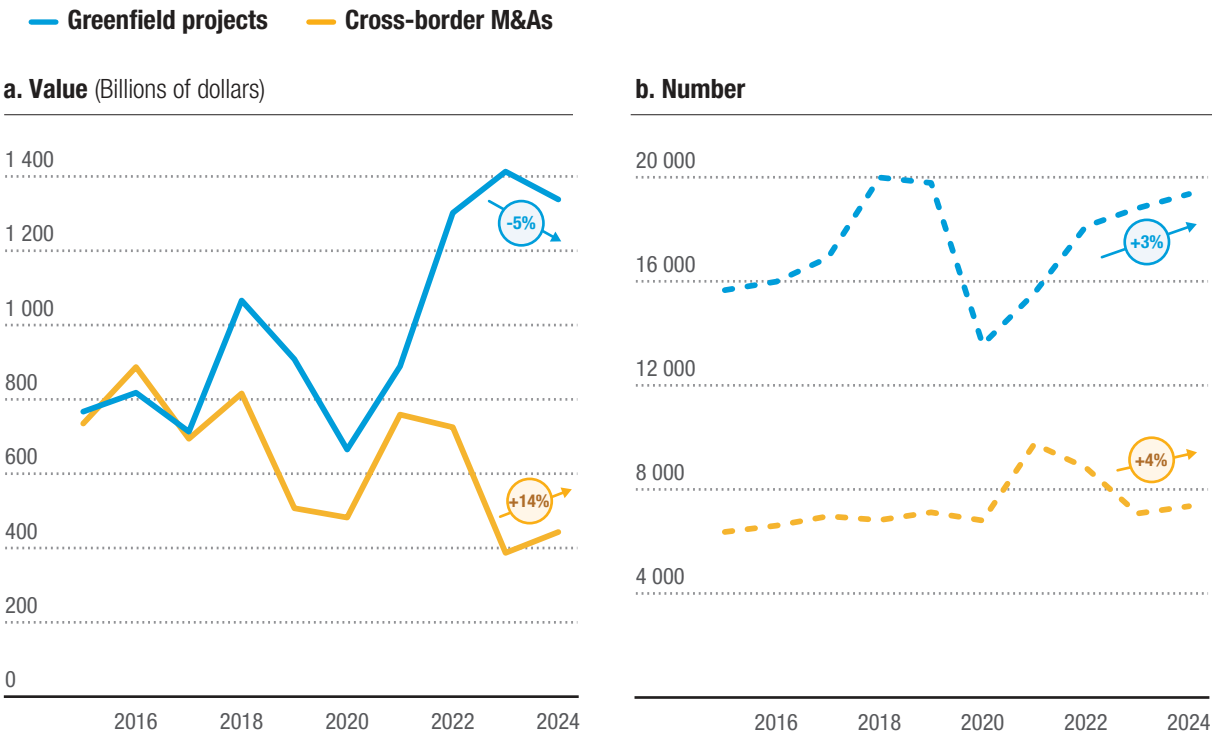
Greenfield projects involve the creation of new facilities and are most common in the industry and services sectors. These projects can have a significant development impact through productive capacity build-up, job creation, and technology and know-how dissemination.

Cross-border M&As involve ownership changes, such as acquisitions, divestitures and corporate restructurings. These projects typically have less direct development impact, as they do not immediately result in new capacity or infrastructure.

In recent years, trends in both project numbers and investment values have diverged sharply across these categories, reflecting their differing drivers (figure I.6).

Greenfield project announcements, which had been stagnant for over a decade – particularly in manufacturing – began to recover after the sharp decline in 2020. Following three years of consecutive growth, the value of announced greenfield projects remained elevated, despite a slight decline in 2024.

Figure I.6
Greenfield investment announcements remained high
Value and number of investment projects by type



Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fDimarkets.com) and LSEG Data & Analytics.

Abbreviation: M&As, mergers and acquisitions.

This stability, although it is a departure from the long-term downward trend, masks important shifts in the sectoral and geographical patterns of investment, driven by trade and investment policy factors, supply chain restructuring needs and digitalization trends.

Cross-border M&As, often regarded as a bellwether of investor sentiment, have seen a gradual global decline in recent years. While they still represent a large share of FDI inflows in developed economies – particularly in the United States – their value remains subdued. Despite a modest uptick in 2024, overall M&A markets continue to be weak in 2025. Any near-term recovery is expected to be led by domestic transactions, with limited spillover into cross-border activity or FDI inflows.

It is important to note that M&As account for only a small proportion of FDI in developing countries, where greenfield projects and IPF are more dominant.

i. Greenfield projects

In 2024, the number of greenfield projects announced in industrial sectors increased by 3 per cent, although their value fell by 5 per cent. The total value remained high, at $1.3 trillion, the second-highest level on record (table I.2). The high aggregate value was mainly supported by an increase in announcements in the information and communication technology (ICT) sector – primarily driven by investment in data centres and data processing. Most other sectors recorded lower values. Announcements in manufacturing held steady after the increase in 2023, with supply chain–intensive industries remaining active. Over the past two years, MNEs in manufacturing have been anticipating the need for strategic rebalancing of production locations, with South-East Asia, Eastern Europe and Central America emerging as key beneficiaries.

Table I.2
Announced greenfield projects by sector and top industries

	Value (Billions of dollars)			Number		
Sector/industry	2023	2024	**Growth** (%)	2023	2024	**Growth** (%)
Total	**1 413**	**1 338**	**-5**	**18 810**	**19 356**	**3**
Primary	77	41	-48	155	158	2
Manufacturing	605	590	-3	7 670	8 028	5
Services	730	708	-3	10 985	11 170	2
Top 10 industries in value terms						
Energy and gas supply	381	273	-28	896	894	0
Information and communication	122	211	73	3 414	3 406	0
Electronics and electrical equipment	178	182	2	1 450	1 445	0
Construction	71	89	25	358	366	2
Automotive	91	85	-7	989	942	-5
Coke and refined petroleum	56	65	16	78	61	-22
Basic metal and metal products	70	59	-15	343	296	-14
Transportation and storage	66	55	-17	1 325	1 094	-17
Extractive industries	76	39	-48	122	122	0
Chemicals	56	38	-32	595	708	19

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

After a significant rise in greenfield projects in extractive industries in 2022 and 2023, projected capital expenditures in this sector almost halved in 2024 to $41 billion, returning to the average level of the past decade. This decline was partly driven by lower energy prices. Investments in energy and gas supply also fell by 28 per cent in value, largely due to significant decreases in renewables investment in the European Union, Asia and Africa. Fossil fuel processing and refining, by contrast, saw a 16 per cent increase, buoyed by the largest greenfield project announced in 2024 – a $30 billion liquefied natural gas plant in Argentina, jointly developed by Shell (United Kingdom) and YPF (Argentina).

The value and number of greenfield projects rose in developed economies but fell in developing countries, reversing the trend observed in 2023. The United States and India experienced significant growth in manufacturing projects, reaching record levels. In the United States, the increase in value was driven by major semiconductor and automotive projects. In India, semiconductor and basic metals projects contributed to the rise in manufacturing activity. Semiconductor projects were also announced in other countries, including Italy and Singapore.

Greenfield projects in the services sector declined by 3 per cent in value and rose by 2 per cent in number. As in energy and gas supply, project values also dropped in transport and storage (down 17 per cent) and basic metal and metal products (down 15 per cent). In contrast, project values in ICT nearly doubled, to more than $200 billion. The growth of the digital economy and the development of AI applications have accelerated investment in data infrastructure and semiconductor manufacturing, both of which were significantly represented among the largest greenfield projects announced. The latter has also benefited from industrial policies aimed at securing chip supply and expanding domestic production capacity.

ii. Cross-border mergers and acquisitions

In 2024, global M&A activity experienced a modest recovery, with total deal value (including domestic transactions) increasing by approximately 10 per cent year-on-year, reaching about $3 trillion. This growth was driven by several large-scale transactions, particularly in the technology, energy and financial sectors.

Despite the increase in deal value, the overall number of transactions remained below historical averages, reflecting a cautious approach among dealmakers amid persistent economic uncertainty and regulatory scrutiny. Elevated interest rates and inflation continued to influence financing conditions, leading to a preference for strategic, high-value deals over a larger volume of smaller transactions.

Private equity activity also rebounded, with deal value rising by one third in 2024. This increase was largely concentrated in the technology sector, where private equity accounted for nearly one third of global buyout value.

The growth in deal activity picked up in the latter half of 2024, with analysts anticipating continued recovery in 2025, driven by easing monetary policies, technological advancements and the strategic need for companies to adapt to shifting market dynamics. Instead, deal activity in the first quarter of 2025 slowed to levels not seen since the global financial crisis, with companies holding off in the face of trade and investment policy uncertainty and geopolitical and economic headwinds.

Cross-border M&A activity followed a similar pattern in 2024, with a 4 per cent increase in deal count and a 14 per cent rise in value (table I.3). Cross-border deals tend to be larger than domestic ones, which helped drive the increase in value. The growth was primarily fueled by deals in the ICT industry – traditionally the most active M&A segment, accounting for roughly three times more deals than any other – as well as in finance and insurance. Activity in supply chain–intensive industries such as electronics, machinery and basic metals also saw significant increases (albeit from a lower base), reflecting ongoing strategic efforts to reconfigure global supply chains.

Table I.3
Net cross-border M&A sales by sector and top industries

Sector/industry	Value (Billions of dollars) 2023	2024	Growth (%)	Number 2023	2024	Growth (%)
Total	**387**	**443**	**14**	**7 074**	**7 352**	**4**
Primary	37	20.0	-46	533	616	16
Manufacturing	141	140	-1	1 485	1 467	-1
Services	210	283	35	5 056	5 269	4
Top 10 industries in value terms						
Information and communication	69	114	65	1 499	1 517	1
Finance and insurance	14	41	181	585	633	8
Professional services	28	36	30	631	673	7
Pharmaceuticals	32	26	-17	136	116	-15
Utilities	17	25	50	244	225	-8
Electronics and electrical equipment	6	23	296	267	264	-1
Machinery and equipment	6	20	218	219	263	20
Extractive industries	34	18	-47	416	488	17
Basic metal and metal products	3	16	394	142	128	-10
Trade	18	15	-15	554	596	8

Source: UNCTAD, based on information from LSEG Data & Analytics.

b. Selected industries

Sectoral trends showed declining investment in infrastructure, renewable energy and critical minerals. Digital infrastructure was the exception, with an increase in project numbers. Overall, the digital sector – including platforms and services – experienced a doubling in project values. Greenfield project announcements in supply chain–intensive industries, including electronics, automotive, machinery and textiles, held steady, with several megaprojects announced again in the semiconductor industry.

iii. Infrastructure

In 2024, global FDI in infrastructure sectors – including utilities, transport and communications – remained weak, owing to its reliance on IPF, which saw a marked decline. IPF deal numbers and aggregate values dropped by one fifth, reflecting tight financing conditions, especially in developing economies. Investor risk aversion and rising borrowing costs significantly affected capital-intensive infrastructure projects.

Greenfield project activity held up better, with the number of announcements up 5 per cent, although projected capital expenditures decreased by the same percentage (table I.4). The number was propped up by strong growth in the telecommunications industry. Telecommunications infrastructure performed comparatively well, with notable rises in the value of both greenfield announcements and IPF deals. Greenfield project numbers rose more slowly and the number of IPF deals declined. This pattern reflects a concentration of capital in fewer, larger projects, particularly data centres and broadband networks, driven by the rapid digitalization of economies.

Table I.4
Investment projects in infrastructure
(Billions of dollars, number and percentage)

	Announced greenfield projects				International project finance deals			
	2022	2023	2024	Growth rate, 2023–2024	2022	2023	2024	Growth rate, 2023–2024
Infrastructure industries								
Value	**458**	**465**	**440**	**-5**	**797**	**768**	**622**	**-19**
Number of projects	**1 390**	**1 502**	**1 576**	**5**	**2 193**	**1 961**	**1 569**	**-20**
Power[a]								
Value	9	14	6	-54	145	93	86	-8
Number of projects	53	72	95	32	198	162	103	-36
Renewable energy								
Value	373	369	270	-27	439	452	348	-23
Number of projects	560	875	883	1	1 717	1 565	1 266	-19
Transport infrastructure								
Value					55	113	37	-67
Number of projects					120	99	82	-17
Telecommunication[b]								
Value	75	82	164	99	158	110	150	37
Number of projects	777	555	598	8	158	135	118	-13

Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fDimarkets.com) and LSEG Data & Analytics.

Note: Transport services in greenfield projects are not classified as infrastructure industries.

[a] Excluding renewable energy.

[b] Including information services activities.

Renewable energy remained the largest recipient of investment in infrastructure, despite declines of about one quarter in both number and value. The industry saw substantial project announcements, with solar and wind energy continuing to dominate. In addition, investment in green hydrogen and related clean technologies gained momentum, accounting for an increasing share of renewable energy pledges. These trends underscore the role of energy transition imperatives in shaping infrastructure FDI.

Transport infrastructure investment, by contrast, slowed further, reflecting subdued trade growth and fiscal constraints in key investment destinations. Although public-private partnerships (PPPs) continued to support some large-scale logistics projects, the overall trend in transport infrastructure remains weak.

iv. Global value chain–intensive industries

FDI in global value chain (GVC)–intensive manufacturing industries held steady in 2024, after a significant increase in the previous year (table I.5). The number and aggregate value of greenfield project announcements in sectors such as electronics, automotive, machinery and textiles increased marginally, with shifts in geographical patterns reflecting a strategic realignment of global production networks. MNEs are continuing to diversify supply chains, with growing investment in South-East Asia, Eastern Europe and Central America.

Table I.5
Announced greenfield projects in global value chain–intensive industries
(Billions of dollars, number and percentage)

	2022	2023	2024	Growth rate, 2023–2024
Global value chain-intensive industries				
Value	**279**	**309**	**311**	**1**
Number of projects	**3 520**	**4 530**	**4 731**	**4**
Electronics and electrical equipment				
Value	192	178	182	2
Number of projects	1 201	1 450	1 445	0
Semiconductors				
Value	90	50	120	140
Number of projects	142	145	149	3
Automotive				
Value	60	91	85	-7
Number of projects	732	989	942	-5
Machinery and equipment				
Value	15	24	23	-3
Number of projects	759	1 014	1 121	11
Textile, clothing and leather				
Value	12	16	21	29
Number of projects	828	1 077	1 223	14

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

Semiconductor-related projects – already a significant part of global investment in the electronics industry in 2022 and 2023 in response to chip shortages – grew further in 2024. The number of announcements remained stable, but with 4 of the top 10 greenfield projects in 2024 occurring in the chips industry (of which 3 in the United States), aggregate values increased by 140 per cent to $120 billion, pushed up by policy-driven supply chain restructuring and booming demand for high-end chips as a result of AI innovations.

The automotive industry continued to attract large-scale greenfield projects, primarily driven by the transition to EVs, although overall project numbers and values declined slightly. New battery and EV assembly facilities were announced in the United States, India and several European countries, in that order. Government incentives linked to industrial policy have played a key role in supporting these trends.

The machinery and textile industries saw modest gains in investment. Both sectors are benefiting from demand linked to reindustrialization efforts and from regional production integration initiatives, although rising costs and trade tensions are shaping cautious investor sentiment.

v. Digital industries

Digital economy sectors remained among the most dynamic FDI segments in 2024 (table I.6). Project numbers in digital services, platforms and e-commerce rose by 17 per cent and aggregate values doubled. While many projects concern services or other less tangible activities, higher average values were driven by capital-intensive investment in digital infrastructure and data centres, paralleling

Table I.6
Announced greenfield projects in digital industries
(Billions of dollars, number and percentage)

	2022	2023	2024	Growth rate, 2023–2024
Digital industries				
Value	**44**	**37**	**77**	**107**
Number of projects	**469**	**286**	**334**	**17**
Digital content				
Value	1	0.07	3	4 128
Number of projects	33	8	22	175
Digital solutions				
Value	9	15	31	106
Number of projects	146	117	122	4
E-commerce				
Value	27	19	30	62
Number of projects	198	122	113	-7
Internet platforms				
Value	7	3	12	281
Number of projects	92	39	77	97

Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fDimarkets.com).
Note: For the classification of digital industries, see the *World Investment Report 2017* (UNCTAD, 2017).

the trend in the telecommunications industry, where greenfield announcements nearly doubled, driven by continued demand for data processing, cloud computing and AI infrastructure.

Investment was concentrated in data centres, fintech platforms, e-commerce logistics and specialized software services. Major technology firms expanded operations in both developed and emerging markets, targeting growing digital consumption and enterprise demand for automation. For example, in the digital solutions segment, Oracle (United States) announced plans to invest more than $6.5 billion to build multiple data centres in Malaysia in order to meet the growing demand for AI and cloud services in the country. Similarly, Microsoft (United States) revealed a $3 billion investment to enhance its cloud and AI infrastructure in India.

However, digital economy investment also encountered regulatory and operational headwinds. Data governance issues, digital taxation regimes and content restrictions in some jurisdictions prompted more cautious entry strategies. Despite this, the outlook remains positive, with digital infrastructure forming a cornerstone of national development and industrial strategies. In early 2025, for example, ByteDance (China) announced plans to invest $8.8 billion to develop data centres in Thailand over the next five years.

vi. Extractive sectors and critical minerals

After two strong years, in 2024 greenfield project activity in extractive industries slowed. The total value of new projects announced fell by nearly half, to about $40 billion, returning to its long-term average (table I.7). Lower energy prices and increased price volatility for critical minerals contributed to investor caution. However, demand for transition-related minerals such as lithium, cobalt and rare earth elements continued to support baseline levels of investment.

Several countries in Africa and in Latin America – such as the Democratic Republic of the Congo, Namibia and Zambia in Africa and Argentina, Chile and Peru in Latin America – remained key destinations for new exploration and mining projects.

Governments in both regions are also taking steps to increase local value addition and secure greater development benefits from mineral wealth, although investment risks remain elevated.

MNEs from China have been major investors in LDCs in mining and critical minerals for many years, building an important strategic advantage, yet investors from other major capital-exporting economies are also gaining ground, often with explicit support from their governments. For example, the United States is negotiating an agreement with the Democratic Republic of the Congo regarding access to its deposits of critical minerals in exchange for infrastructure investment and other support. Similarly, India has been securing access to copper deposits in Zambia.[3]

Table I.7
Investment projects in extractive industries and critical minerals by finance type
(Billions of dollars, number and percentage)

	Announced greenfield projects				International project finance deals			
	2022	2023	2024	Growth rate, 2023–2024	2022	2023	2024	Growth rate, 2023–2024
Extractive industries								
Value	**108**	**76**	**39**	**-48**	**185**	**145**	**69**	**-52**
Number of projects	**99**	**122**	**122**	**0**	**231**	**180**	**124**	**-31**
Oil and gas								
Value	91	37	21	-43	137	75	46	-39
Number of projects	60	50	63	26	133	111	81	-27
Mining								
Value	18	39	19	-52	47	70	23	-67
Number of projects	39	72	59	-18	98	69	43	-38
Critical minerals (including processing)								
Value	**31**	**57**	**21**	**-63**	**27**	**27**	**5**	**-81**
Number of projects	**61**	**117**	**67**	**-43**	**30**	**33**	**13**	**-61**

Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fDimarkets.com) and LSEG Data & Analytics.

[3] Both initiatives are recent. See Mills A (2025), Exclusive: US pushes Congo, Rwanda for peace accord and billion-dollar mineral deals, Reuters, May 1, https://www.reuters.com/world/africa/us-pushing-congo-rwanda-peace-accord-accompanied-by-bilateral-minerals-deals-2025-05-01, and Zadeh J (2025), India's strategic investment in Zambian copper mining, Discovery Alert, April 5, https://discoveryalert.com.au/news/indias-strategic-copper-investment-zambia-2025/.

Trends in IPF for extractive industries mirrored greenfield trends in 2024, with a notable reduction in new large-scale initiatives. Financing constraints and environmental scrutiny have led to a more selective approach by sponsors and lenders. Several large mining and energy infrastructure projects in Africa and in Latin America have faced delays caused by environmental permitting issues and investor risk reassessments.

While investor appetite has moderated, long-term demand for critical minerals – linked to global decarbonization pathways – continues to underpin strategic interest in this sector. Public policy support and evolving trade frameworks may play a growing role in shaping future FDI flows in extractives.

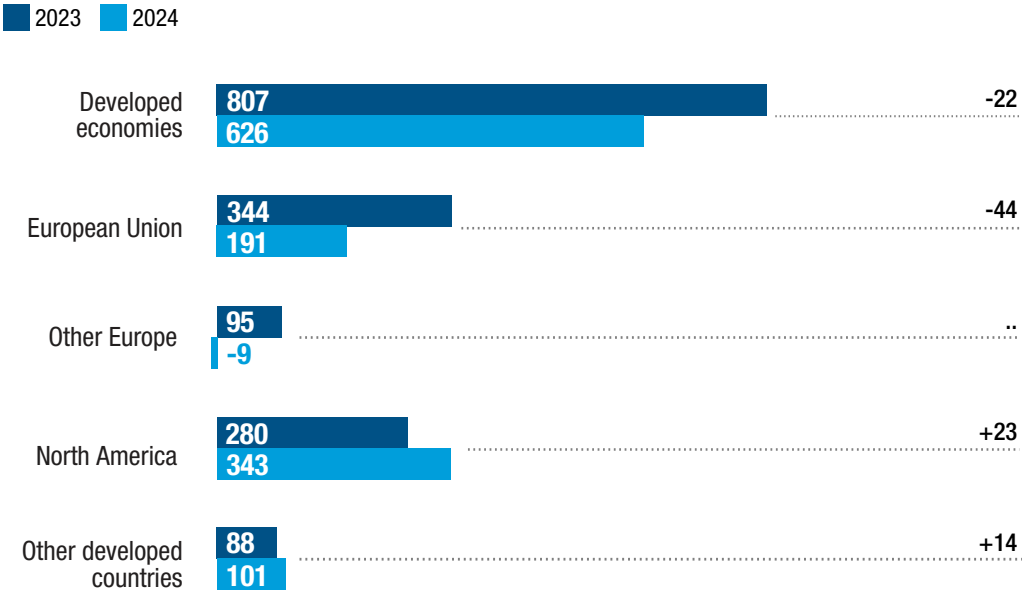
3. Trends by geography

a. Developed economies

In developed countries, the 2024 trend was again strongly affected by financial transactions and corporate reconfigurations driven by both supply chain restructuring and international tax reforms. FDI inflows to developed economies declined by 22 per cent in 2024, reflecting broader investor caution amid heightened economic uncertainty (figure I.7).

The fall was driven primarily by a 44 per cent drop in FDI to the European Union, where geopolitical tensions and financial market instability weighed on investor sentiment. Fifteen of the 27 member states recorded declining inflows, with significant contractions in the largest economies, with Germany 89 per cent lower, Spain 35 per cent, Italy 24 per cent and France 20 per cent.

Figure I.7
Developed economies: Sharply contrasting trends
Inflows by economic grouping
(Billions of dollars and percentage change)



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

In contrast, North America recorded a 23 per cent increase in FDI, with a 38 per cent jump in Canada and a 20 per cent rise in the United States. The number of large cross-border M&A deals (valued at more than $1 billion) in the United States rose from 38 in 2023 to 46 in 2024. Major transactions included Aon (Ireland) acquiring NFP (United States) for $14 billion and Novo Nordisk (Denmark) purchasing Catalent (United States) for $12 billion. These deals were complemented by strong greenfield activity, with a record number of projects announced. Investment was buoyed by robust consumer demand, government incentives and greater investor interest in strategic sectors such as semiconductors (supported by the CHIPS Act), renewable energy, aerospace and industrial equipment. However, IPF activity declined in line with the global slump, with the number and value of deals falling by 35 per cent and 4 per cent, respectively.

FDI flows to Canada reached $64 billion, driven by M&A activity and strong performance in the manufacturing and extractive sectors. United States investors accounted for nearly 60 per cent of total inflows. Notable deals included the $9 billion acquisition of Elk Valley Resources and a $5 billion investment in Nuvei. Divestments also occurred, such as the $10 billion acquisition of HSBC Canada by the Royal Bank of Canada. The number of announced greenfield projects rose by two thirds to a record 602, placing Canada seventh among global investment destinations. The strongest growth was recorded in machinery and equipment manufacturing, followed by ICT.

Beyond North America, FDI flows to several other developed economies also increased. Australia saw inflows reach $53 billion, a 75 per cent increase, supported by stronger M&A and greenfield activity. The largest M&A deal occurred in data centres, where two institutional investors, Blackstone (United States) and the Canada Pension Plan Investment Board, acquired Airtrunk (Australia), a provider of data processing and hosting services, for $16 billion. This was the second-largest global deal in 2024.

Overall, cross-border M&A activity in developed economies rose by 36 per cent, to $418 billion, led by a doubling of M&A sales in the United States. Major deals outside the United States included the $24 billion acquisition of Telecom Italia's fixed network, the $13 billion purchase of Viessmann Climate Solutions (Germany) and the $12 billion purchase of Adevinta (Norway).

The number of greenfield projects announced in developed economies increased by 2 per cent, with sharply contrasting trends between Europe and North America. Europe saw a decline of 6 per cent, including a 7 per cent drop within the European Union. North America recorded a 22 per cent increase. Greenfield projects in technology sectors are growing in importance, with a significant role for start-up companies, which are active in international investment projects from an early age (box I.2).

The overall value of announced greenfield projects in developed countries increased by 11 per cent due to higher average project values, which were driven by large-scale investment in semiconductors and other strategic sectors. The United States, the targe of three of the four largest semiconductor projects announced, recorded a 77 per cent increase in greenfield project value, to $245 billion. The United Kingdom also saw an increase in value terms by more than one third, despite a decline in project numbers.

IPF in developed economies continued to decline, by 29 per cent. North America experienced a 35 per cent drop. The downturn was widespread and affected most infrastructure sectors (apart from digital infrastructure), reflecting broader investor caution and tighter financial conditions.

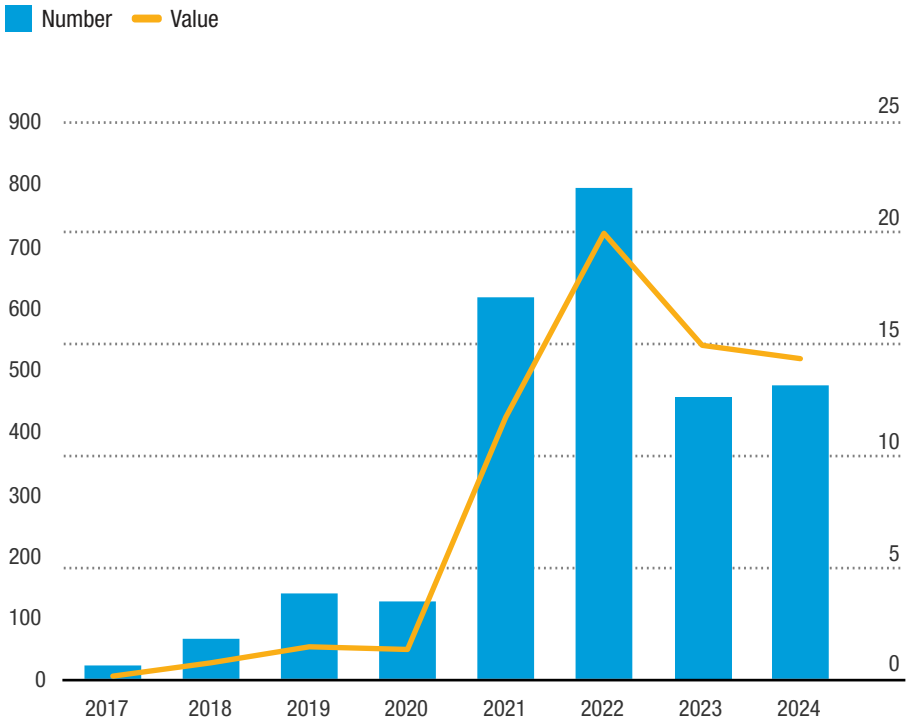
Box I.2
Investment projects by start-ups

Since 2020, increased funding for early-stage companies and start-ups has enabled a growing number of such firms to expand internationally. Between 2017 and 2024, start-ups announced an estimated 2,650 greenfield projects, with a combined value of $65 billion. These projects were highly concentrated in a few sectors: nearly 60 per cent were in software and IT services, followed at a distance by financial services (7 per cent), industrial equipment (5 per cent), and food and beverages (4 per cent). The technology sector as a whole accounted for more than 70 per cent of all projects.

The United States emerged as the leading destination for start-up-driven greenfield projects, attracting nearly one fifth of all such projects. It was followed by the United Kingdom, Germany, the United Arab Emirates and Spain. The international expansion strategies of tech start-ups typically focus on building out global sales and support operations to access foreign markets, while keeping core functions such as research and development and engineering in centralized locations, often in their home countries. This pattern reflects the digital nature of their business models and the concentration of technical talent in established innovation hubs.

Source: UNCTAD.

Box figure I.2.1
Announced greenfield projects by start-up companies
(Billions of dollars and number of projects)



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

b. Developing economies

In 2024, developing economies accounted for 57 per cent of global FDI inflows. Total FDI to developing countries remained stable at $867 billion, virtually unchanged from the previous year, reflecting a degree of resilience in the face of global uncertainty, tight financial conditions and weakening global trade. The flat growth in flows contrasts with the 22 per cent contraction in developed economies and underscores the continued importance of developing regions in the global investment landscape.

However, FDI inflows to developing countries remain highly concentrated. Ten major emerging markets accounted for approximately 75 per cent of total FDI received by the group. These include large economies such as China, Brazil, Mexico, Indonesia and India, in that order. This concentration underscores the challenges faced by smaller and more vulnerable developing economies in attracting significant international investment.

Greenfield project announcements in developing countries increased by 4 per cent in number but declined by 19 per cent in value in 2024. Despite relatively strong performance in some regions, such as ASEAN, and in individual economies in the rest of Asia and parts of Africa, the overall picture was subdued. IPF deals – critical for investment related to infrastructure and energy – fell even more sharply, by 23 per cent. This decline was driven by high debt levels, tighter financing conditions and growing investor caution, particularly in frontier and low-income markets.

Several factors shaped investment dynamics in developing countries in 2024. Global economic uncertainty and exchange rate volatility weighed on investor confidence. The growing complexity of industrial and trade policy in developed economies influenced investment patterns, especially in sectors sensitive to reshoring and near-shoring trends.

Meanwhile, the increasing role of South–South investment, the emergence of sovereign wealth funds from the Global South and selective industrial policy initiatives in larger emerging markets helped sustain capital inflows in certain economies. These dynamics contributed to divergent regional and national performance trends.

The trend analyses for developing regions and groups – Africa, developing Asia, Latin America and the Caribbean – presented in the following sections offer a longer-term perspective on sectoral greenfield activity patterns over the past decade. For each region, sectoral investment patterns during the past five years (2020–2024) are compared with those of the preceding five-year period (2015–2019). Across developing regions, the data reveal distinct sectoral dynamics shaped by persistent structural challenges and emerging opportunities for transformation.

Energy and gas supply consistently emerges as the leading sector across all developing regions, attracting the largest share of announced greenfield projects and showing robust growth. This reflects global momentum related to the energy transition, infrastructure modernization and rising demand – especially in underserved and rapidly urbanizing economies.

Extractive industries remain a key sector across all regions, although their relative importance varies. Africa and LDCs continue to rely heavily on extractives, while investment in the sector has contracted in Asia over the past decade. Despite these divergent trends, extractives persist as a long-term anchor, particularly in resource-rich countries. In many of these countries, continued dependence on primary extraction, with limited local value addition, raises concerns about overreliance and vulnerability to commodity cycles.

Several regions have made progress in industrial upgrading. Latin America stands out with rising investment in processing industries, as well as chemicals, machinery and electronics.

Developing Asia has also registered growth in high value added manufacturing, particularly in the electronics and automotive industries. In contrast, Africa and LDCs continue to experience stagnation in most manufacturing sectors, highlighting barriers to structural transformation.

The digital economy is the fastest-growing sector, particularly in developing Asia and in Latin America, where both numbers and value of investment projects have expanded sharply. Africa and LDCs are also seeing rising investment in digital economy sectors, albeit from a low base and often limited in scale as a result of persistent structural and regulatory barriers. Bridging the digital divide remains critical to inclusive development and achievement of the Sustainable Development Goals in education, innovation and economic inclusion.

Construction remains significant in absolute terms in Africa, reflecting large infrastructure gaps and urban development needs. Countries such as Egypt, South Africa and Angola, in that order, have attracted large capital-intensive projects, while Ghana, Kenya and Morocco have drawn mid-sized, high-impact developments. Elsewhere, including in Latin America, Asia and LLDCs, international investment in construction has declined.

Hospitality, traditionally central to SIDS and tourism-driven economies, has experienced sharp declines since 2020 because of the coronavirus 19 (COVID-19) pandemic. Investment in tourism infrastructure has contracted across all regions. The slow recovery highlights the vulnerability of the sector and the need for greater economic diversification.

Investment in transportation and storage shows mixed results, but LLDCs have recorded strong gains. This sector is critical for landlocked and geographically disadvantaged economies working to reduce trade costs and improve connectivity. In other regions, selective upticks were seen in this sector, connected to the boom in e-commerce logistics investment over the past five years.

Greenfield project activity in sectors related to the Sustainable Development Goals, such as education and health, remains low across all developing regions. Education attracts minimal FDI in developing countries, with negligible volumes in SIDS, LLDCs and LDCs. Health services also show weak performance, with notable declines, particularly in LDCs and SIDS. These patterns underscore the persistent gap between development needs and private sector engagement, reinforcing the urgency of stronger policy incentives, blended finance and investment facilitation to better align FDI flows with the Goals.

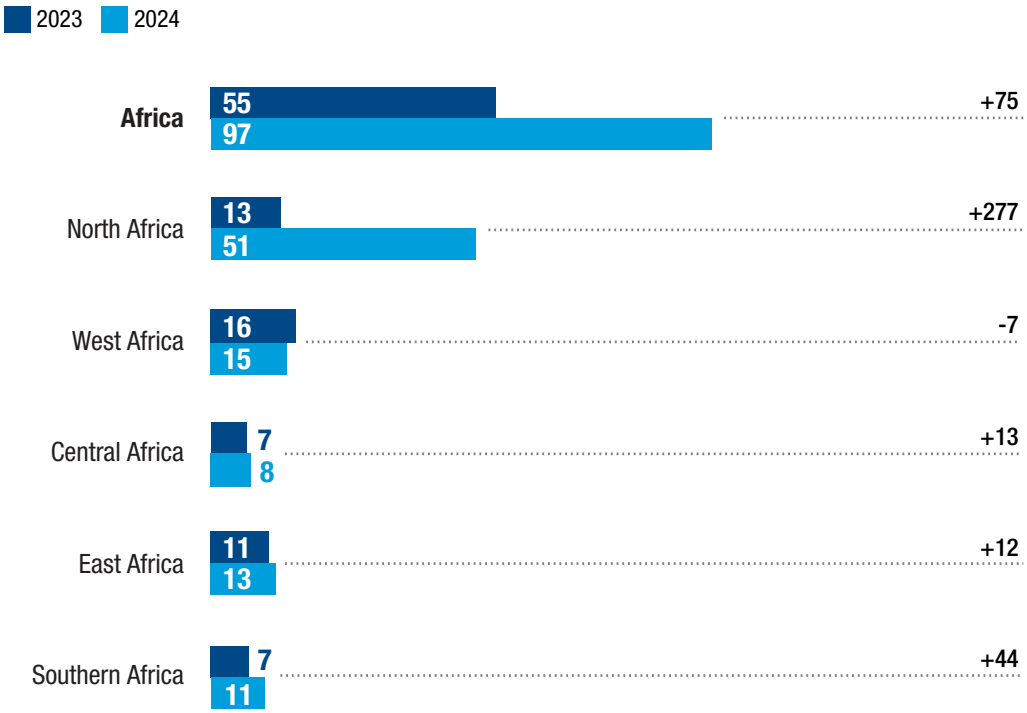
i. Africa

In 2024, Africa registered a remarkable rebound in FDI inflows, which increased by 75 per cent to reach $97 billion (figure I.8). This figure accounted for 6 per cent of global FDI inflows, up from 4 per cent the previous year, and 11 per cent of total FDI to developing economies, compared with just 6 per cent in 2023.

This exceptional growth was largely attributable to a single megaproject: the Ras El-Hekma urban development deal in Egypt.[4] Net of the increase in Egypt, FDI flows to Africa were still up 12 per cent, but they remained modest at about $62 billion, or 4 per cent of global FDI.

[4] The Ras El-Hekma Development Project in Egypt involves the construction of a hospital, hotel, school buildings, universities, residential districts, tourist resorts, public service facilities, and other leisure and entertainment venues in Ras El-Hekma City. The project is sponsored by Abu Dhabi Developmental Holding and the Government of Egypt. It is estimated to cost $35 billion. The Government will retain a 35 per cent stake.

Figure I.8
Foreign direct investment increased in most of Africa
Inflows by region and subregion
(Billions of dollars and percentage change)



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

The value of IPF deals increased by 15 per cent, driven by several large energy and transport infrastructure projects, particularly in Egypt, where IPF commitments more than doubled. Greenfield project activity declined. The number of announcements fell by 5 per cent, and the total value dropped by 37 per cent. Cross-border M&As, which in recent years have accounted for about 15 per cent of FDI inflows to Africa, turned negative in 2024. The region recorded net divestments of $1.5 billion, compared with $9.5 billion in net investment in 2023. This was mainly due to the $1.1 billion sale by Exxon Mobil (United States) of its onshore oil and gas assets to Seplat Energy (Nigeria).

FDI flows increased across most of Africa. North Africa emerged as the main growth engine. In addition to the strong growth in Egypt, FDI in Tunisia rose by 21 per cent to $936 million and FDI in Morocco increased by 55 per cent to $1.6 billion.

The value of greenfield projects announced in Africa fell to $113 billion, from $178 billion in 2023. Most countries registered a decrease in project numbers. Within the region, only North Africa registered growth, with greenfield project values increasing by 12 per cent to $76 billion, accounting for two thirds of total project capital expenditures on the continent. Egypt was the principal driver of this growth, recording a 30 per cent increase in greenfield project value, along with a 4 per cent rise in number. Tunisia also contributed significantly, with investment announcements worth $13 billion (from close to zero in 2023) and a significant rise in project numbers.

The largest year-on-year increases in greenfield project value by industry were recorded in construction (rising to $19 billion) and metal products (to $1.5 billion),

while the value of electricity and gas supply projects dropped by $51 billion compared with 2023. This decline alone accounts for most of the overall $66 billion decrease in greenfield project value.

Africa is attracting a growing share of global megaprojects, with seven valued at more than $4 billion. The largest greenfield announcement for any country in 2024 was the Ras El Hekma construction megaproject in Egypt. Total Energies (France) announced a $6 billion project in the extractive sector in Angola and another megaproject in renewable energy in Tunisia, also totaling $6 billion. Among the largest deals, three renewable energy projects – each valued at approximately $4 billion – were announced in Egypt, developed by Amm Power (Canada), Meridiam (France), SK Holdings (Republic of Korea) and Pash Global (United Kingdom).

Although the value of IPF deals in Africa increased as a result of the construction megaproject in Egypt, the number of projects was 3 per cent lower. Only the renewable energy industry recorded substantial growth in both the number and the value of projects. Africa registered seven major deals linked to the energy transition, with a combined estimated value of approximately $17 billion. Egypt emerged as the primary destination, hosting four of these projects, including a $3.8 billion undersea power transmission cable project, a $2.5 billion hybrid wind and solar power plant project, and a $2.2 billion onshore wind project. Other notable deals included green hydrogen projects in Egypt and Tunisia and two large wind and solar projects in Namibia. Morocco also attracted a green ammonia and synthetic fuel production project. Key investors originated from China, France, the United Arab Emirates and the United Kingdom.

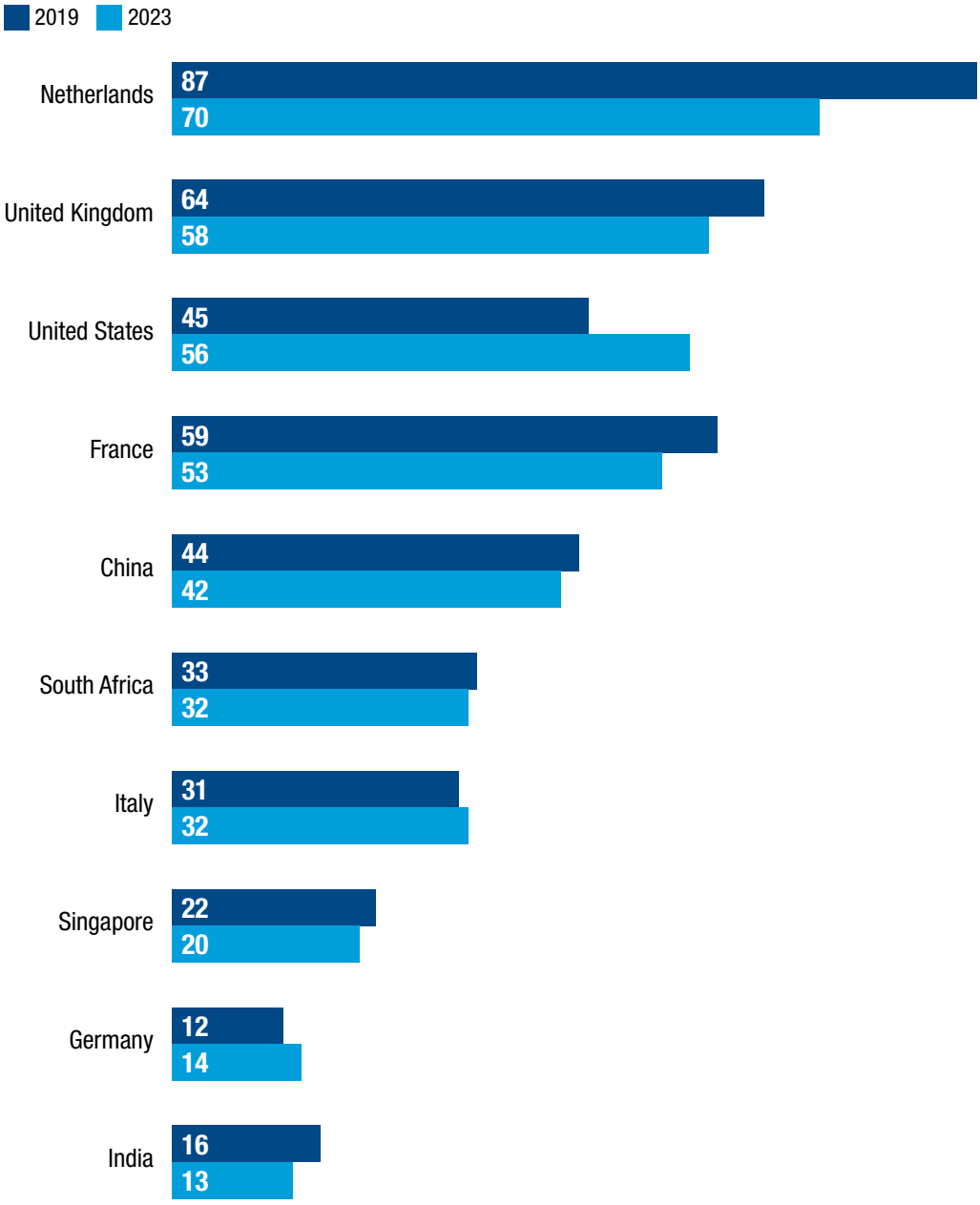
European investors remain the largest holders of FDI stock in Africa (figure I.9), occupying three of the top four spots. The large stock holdings registered to the Netherlands is in part due to indirect investment by ultimate owners elsewhere, especially in the United States. MNEs based in the United Kingdom concentrate in South Africa, Egypt, Nigeria and Ghana, in that order; nearly half of their FDI stock is in financial services. The stock of United States firms in Africa increased significantly as a result of new investment in various industries (including digital infrastructure), consolidation and expansion of operations (e.g. in energy industries) and revaluation of existing assets. FDI from firms in China, estimated at $42 billion, showed greater diversification beyond extractives, with rising investment in building materials, food processing, pharmaceuticals and motorcycle manufacturing. One third of all Belt and Road Initiative projects in Africa are now in social infrastructure sectors such as health, education, and water and sanitation, with a growing focus on renewable energy (UNCTAD, 2024b).

Looking at longer-term sectoral investment trends in Africa – comparing the most recent five-year period and the preceding one – shows that energy, construction and extractives continue to dominate greenfield project activity in the continent (figure I.10). These sectors not only maintained their lead in terms of share but also posted strong growth.

In 2024, the energy sector stood out as the top destination for greenfield activity. Projects more than tripled in value and saw a moderate increase in number, accounting for more than 20 per cent of total greenfield value and nearly 6 per cent of all projects, with an average size exceeding $1 billion. Although investment needs in energy security remain vast, the growth trend underscores the important role of FDI in improving energy supply across Africa and in supporting the gradual shift in Africa towards a more sustainable energy future.

In the construction sector, although the number of projects declined significantly, the total investment value increased by almost half. This points to a clear shift towards fewer but larger capital-intensive infrastructure projects.

Figure I.9
European enterprises remained the largest investors in Africa
Africa: Top 10 investor economies by FDI stock
(Billions of dollars)

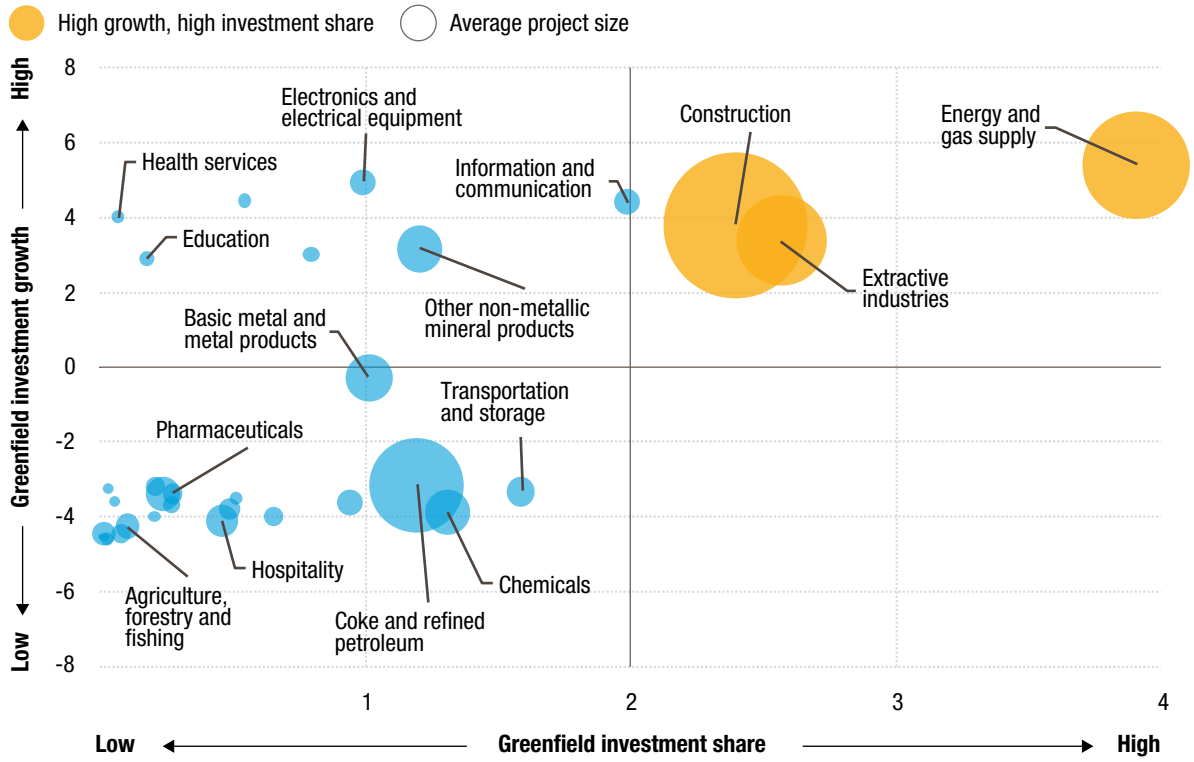


Source: UNCTAD, FDI/MNE database (https://unctad.org/fdistatistics).

Notes: Data represent direct bilateral investment relationships. Ultimate owners of investment holdings can be based in other home economies.

Abbreviation: FDI, foreign direct investment.

Figure I.10
Energy, construction and extractive industries were the leading sectors for greenfield investment in Africa
Industry share in greenfield projects, growth rate and average project size, 2020–2024



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

Notes: The x-axis represents each industry's share in total greenfield values. The y-axis shows the growth rate, calculated by comparing greenfield investment values in the periods 2020–2024 and 2015–2019, thus reflecting five-year growth performance. Bubble sizes denote the average project size during 2020–2024.

Construction represented nearly 10 per cent of total greenfield project value, with the highest average project size across all sectors at $1.8 billion. The United Arab Emirates led in capital inflows to this sector, with $49 billion in announced deals.

Extractive industries also recorded strong growth, with project numbers and total investment value rising by about one third. Although accounting for less than 2 per cent of all projects, extractives contributed about 13 per cent of total greenfield project value, with an average size of more than $700 million. These developments reflect, among other factors, the surging global demand for critical minerals found in Africa – including lithium, cobalt, and rare earth elements – that are key to the energy transition.

Investment in extractives was concentrated, coming from a handful of investor home countries. Investors from Singapore, France, Canada, the United Kingdom, and Italy, in that order, accounted for about 80 per cent of capital flows into the sector. On the recipient side, Guinea topped the list, securing $19 billion, primarily from two iron ore projects. The Democratic Republic of the Congo attracted $9 billion in copper and battery minerals projects, followed by Uganda (with $6.6 billion in projects), Angola ($6.1 billion) and Libya ($6 billion). These figures underline the importance of a few large-scale projects in shaping sectoral investment flows.

At the same time, the data reveal a structural shift within the energy and resources sectors in Africa. While investment in extractive industries for critical minerals and in renewable energy projects is growing, FDI in fossil fuel processing is in decline.

Although still modest in overall share (about 6 per cent), the digital economy has emerged as one of the fastest-growing sectors – expanding by more than three quarters in project value and by nearly one third in project numbers over the last five years.

Several GVC-intensive industries, such as electronics and electrical equipment, have seen growth in greenfield project activity, albeit from a small base. This suggests that global supply chain restructuring is opening new opportunities for some African economies to attract investment in manufacturing segments that traditionally have been less represented in the region.

In contrast, pharmaceutical FDI in Africa remains limited. Despite policy efforts in several countries to promote local production of medicines, the number and value of greenfield projects in this industry have not shown significant growth over the past five years. This underscores the continuing challenges of scaling up investment in health-related manufacturing on the continent.

The agriculture, forestry and fishing sector also saw a decline. Over the past five years, project numbers dropped by nearly half and their value fell by more than two thirds, to just 0.5 per cent of total greenfield activity. This sharp contraction stands in stark contrast to the sector's vital importance for food security and rural development, highlighting the need to better align investment flows with development priorities.

c. Developing Asia

FDI flows to developing Asia declined by 3 per cent in 2024, to $605 billion (figure I.11). Despite this modest drop, the region remained the recipient of the largest amount of FDI globally, attracting 70 per cent of total FDI to developing economies and 40 per cent of global inflows.

The overall decline was driven primarily by a fall in flows to East Asia, particularly China, where FDI flows dropped 29 per cent. Taiwan Province of China saw a substantial increase in inflows, largely from strategic investment shifts in advanced manufacturing and semiconductors.

South-East Asia continued to serve as an engine of FDI growth, with inflows up 10 per cent. Significant increases in flows to Indonesia, Malaysia, Singapore, Thailand and Viet Nam brought overall FDI flows in ASEAN to a new record of $225 billion.

FDI to South Asia was broadly stable. While flows to India experienced a small decline, it remained the dominant recipient in the subregion, accounting for the vast majority of inflows. Investment flows to Pakistan and Sri Lanka increased.

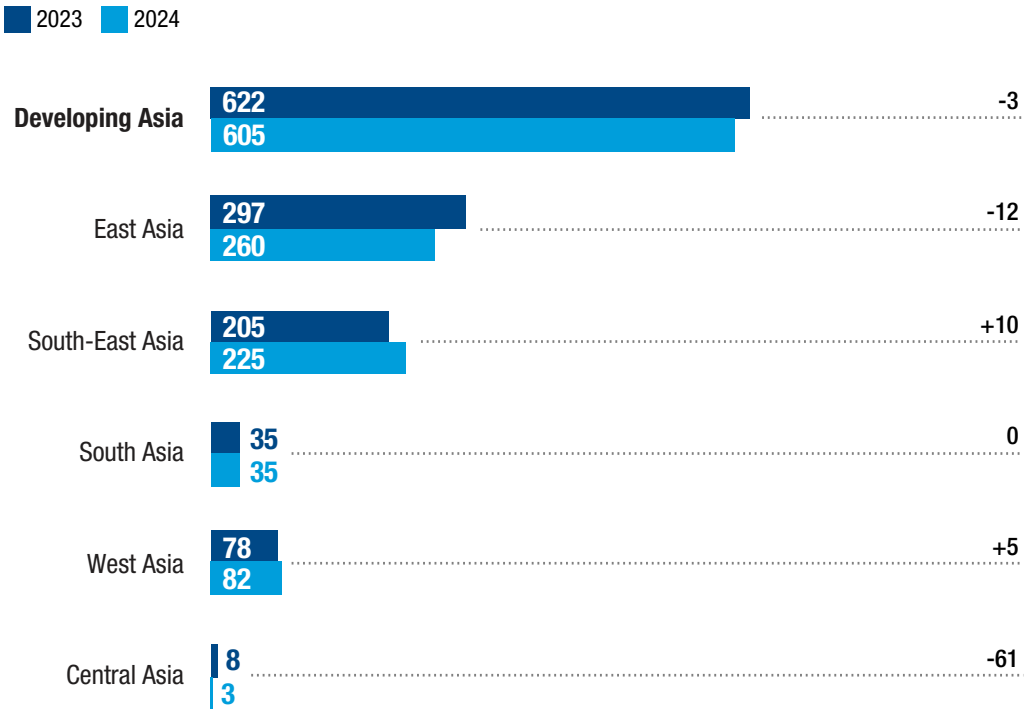
West Asia experienced a mixed performance. A strong rebound of flows in the United Arab Emirates helped lift subregional figures, even as flows to Saudi Arabia and other Gulf Cooperation Council countries declined.

Central Asia recorded the steepest relative decline. Kazakhstan, which typically receives the highest FDI inflows in the area, experienced a sharp reversal, contributing significantly to the regional downturn.

These contrasting trends underscore the diversity of FDI dynamics across Asia, shaped by shifts in GVCs, national investment climates and evolving geopolitical considerations.

Greenfield project announcements in developing Asia presented a mixed picture in 2024. While the number of projects increased by 5 per cent, the total value of announcements declined by 23 per cent, to $363 billion. The region continued to attract substantial investor interest, accounting for nearly a third of the global number of announced greenfield projects and over a quarter of their total value.

Figure I.11
South-East Asia showed significant growth in foreign direct investment
Inflows by region and subregion
(Billions of dollars and percentage change)



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

Sectoral shifts were notable. Announced values in the digital economy and metal production rose, reflecting growing interest in high-tech and advanced manufacturing. However, these gains were offset by sharp declines in electricity and gas supply and in petroleum processing projects, which together fell by more than $70 billion. These sectors accounted for most of the overall decline in greenfield values.

While project numbers increased in most regions, only a few countries saw a significant rise in the value of new project announcements. India stood out with projected capital expenditures up by more than a quarter to $110 billion, almost a third of the total in Asia. Several other economies showed positive momentum. Qatar saw a sixfold increase in project value and nearly doubled its project count. Azerbaijan, Bahrain and Türkiye also recorded higher levels of announced project activity, highlighting selective growth in the otherwise subdued regional picture for new project announcements.

IPF activity in developing Asia declined sharply in 2024. The number of deals fell by 27 per cent – broadly in line with the global average – but the total value dropped by a steeper 43 per cent. This disproportionate decline suggests that the global downturn in IPF deals is affecting emerging markets more severely, due to higher risk perceptions and elevated capital costs, with negative implications for investment in infrastructure and the energy transition.

The contraction was most pronounced in South-East Asia, where the value of IPF deals fell by more than 60 per cent. Major pullbacks occurred in Malaysia (87 per cent), Indonesia (66 per cent) and the Philippines (-61 per cent). Investment in South Asia also experienced a substantial decline, led by a sharp drop in India (-37 per cent).

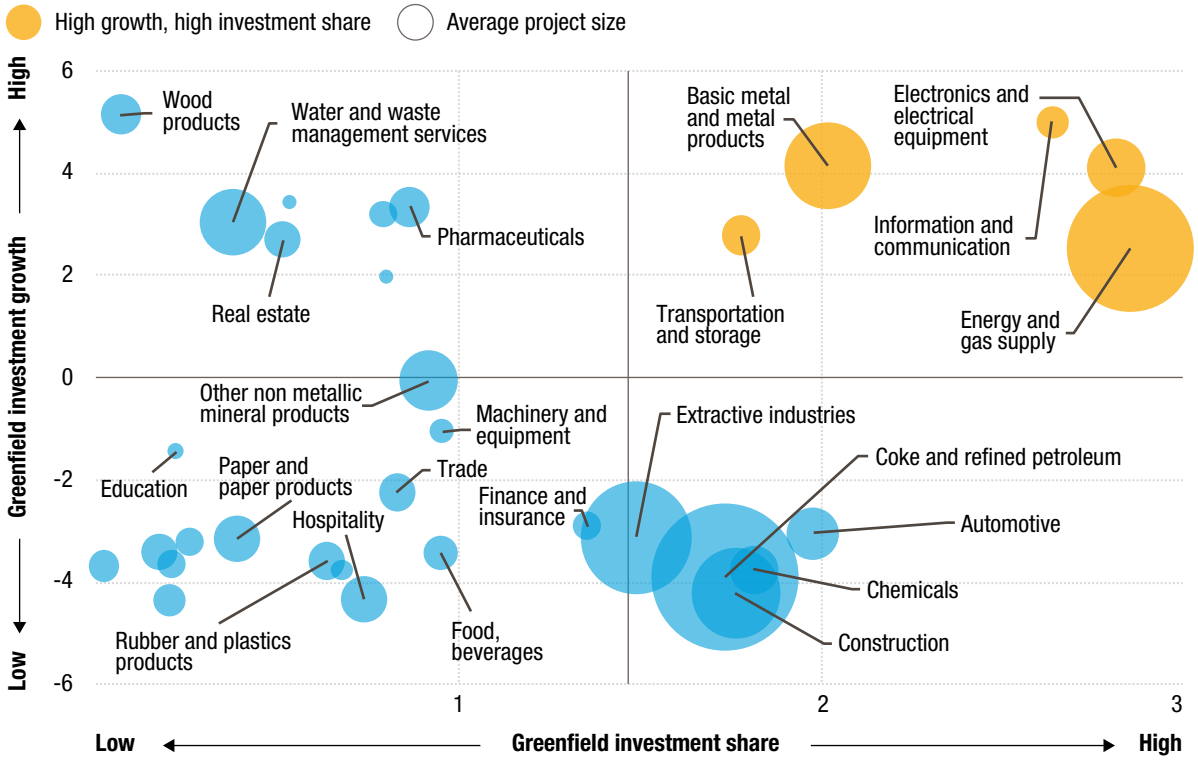
West Asia was the only subregion to show resilience, with IPF value increasing by 5 per cent to $78 billion. This was supported by sustained activity in infrastructure and energy projects, particularly in the United Arab Emirates, Saudi Arabia and Iraq, in that order.

Cross-border M&A activity in developing Asia declined sharply in 2024, with total net sales falling by 57 per cent – from $58 billion in 2023 to $25 billion. Despite occasional large transactions, cross-border M&A normally represents only a small fraction of both global deal volume and total FDI in the region.

The downturn was led by investors from China, where M&A sales dropped by 49 per cent. The United Arab Emirates and India, in that order, also contributed to the decline, primarily through divestments or sales of assets to local partners. For example, Walt Disney (United States) partially exited its operations in India through a $3 billion merger of Star India with Viacom 18 Media, creating a joint venture majority owned by Indian firms. Several pharmaceutical operations in India owned by international investors were also sold to local firms.

Looking at longer-term sectoral investment trends in developing Asia – comparing the most recent five-year period with the preceding one – reveals that manufacturing supply chains, renewable energy and the digital economy are the primary drivers of greenfield activity in the region (figure 1.12).

Figure I.12
Manufacturing supply chains, renewable energy, and the digital economy drove greenfield investment in developing Asia
Industry share in greenfield projects, growth rate and average project size, 2020–2024



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

Notes: The x-axis represents each industry's share in total greenfield values. The y-axis shows the growth rate, calculated by comparing greenfield investment values in the periods 2020–2024 and 2015–2019, thus reflecting five-year growth performance. Bubble sizes denote the average project size during 2020–2024.

Among these, the digital economy recorded the most substantial growth over the last decade, with a 146 per cent increase in project value and a 48 per cent rise in project numbers. This was propelled by strong inflows from the United States, followed by Singapore and China. United States MNEs alone invested almost $100 billion in digital economy activities in developing Asia during the last five years.

The digital economy now represents about 5 per cent of total greenfield project value and 16 per cent of project numbers – the highest by volume. Relatively small average project sizes indicate a vibrant ecosystem fuelled by start-ups, regional small and medium-sized enterprises, and multinational expansions. Key investment areas include data centres, telecommunications infrastructure, cloud computing and financial technology platforms. This growth is driven by rapid urbanization, high mobile Internet penetration and national digital economy strategies, positioning the region as a global hub for digital infrastructure and services.

Greenfield project activity in electronics and electrical equipment remained a cornerstone of capital inflows, increasing by 59 per cent in value and accounting for almost 10 per cent of all greenfield projects, underscoring its strategic role in regional supply chain diversification. This trend reflects rising global demand for semiconductors, EV components and automation technologies. Countries such as India, Malaysia and Viet Nam have enhanced their appeal as manufacturing hubs, bolstered by trade shifts and industrial policies. Increasing average project sizes implies larger, more integrated operations, signaling long-term confidence in the industry's productivity and export potential.

In the metal products industry, greenfield project value rose by more than 60 per cent, despite a 20 per cent decline in project numbers. With an average project size of $272 million, it remains one of the region's most capital-intensive sectors. Growth is driven by rising demand for steel and industrial metals, linked to renewable energy infrastructure, EV production and large-scale construction. India and Indonesia continue to attract major smelting, rolling and processing facilities. The data indicate a move towards fewer, but significantly larger and vertically integrated projects, aligning with global trends in resource security and supply chain localization.

Energy and gas supply retained its position as the top sector by project value, accounting for 14 per cent of the total. The sector shows the highest average project size at $584 million, with a prevalence of utility-scale developments, including solar farms, wind parks, liquefied natural gas terminals and power transmission infrastructure. The sector saw moderate growth in value (+12 per cent), driven by national energy transition plans in India, Indonesia and Viet Nam, supported by blended finance models and enabling policy frameworks. The trend towards fewer but larger projects highlights a maturing investment environment for renewable energy, where de-risking mechanisms and long-term power purchase agreements increasingly influence investor decisions.

The transportation and storage industry exhibited steady growth, with green investment value up by 15 per cent and project numbers increasing by 28 per cent. It accounted for 4 per cent of total investment value and almost 5 per cent of project numbers. This performance reflects ongoing efforts to modernize ports, expand warehousing and develop integrated logistics corridors. Investment momentum is fuelled by growing e-commerce, regional trade flows and PPPs. Initiatives such as the ASEAN connectivity programmes, Belt and Road Initiative–linked projects and the digitalization of freight and logistics have further spurred investor interest. The industry's expansion highlights its vital role in supporting efficient and resilient intraregional trade.

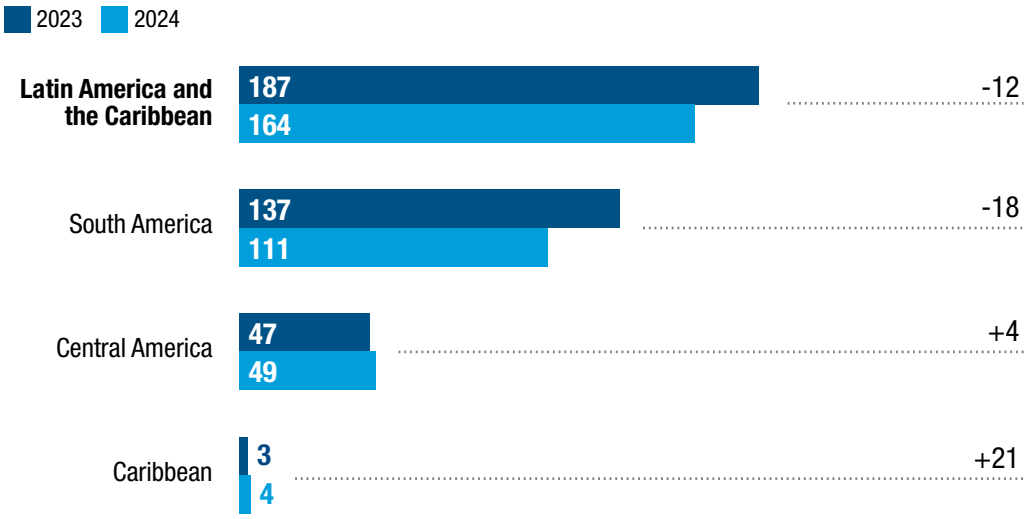
d. Latin America and the Caribbean

FDI flows to Latin America and the Caribbean declined by 12 per cent in 2024, to $164 billion (figure I.13). The region accounted for 19 per cent of total FDI to developing economies and 11 per cent of global inflows. The decline was most pronounced in South America, where FDI dropped by 18 per cent to $111 billion. The downturn was driven primarily by falls in flows to Argentina, Chile, Colombia and Brazil, in that order. Although inflows in Brazil were 8 per cent lower, the country remained the top recipient in the region by value at $59 billion, supported by continued investment in renewable energy. Guyana and Peru posted gains, with FDI inflows rising almost 20 per cent in Guyana (to $8.6 billion) and almost doubling in Peru (to $5.9 billion), largely reflecting interest in offshore oil development and mining, respectively. In Central America, FDI rose by 4 per cent to $49 billion, led by modest gains in Mexico, where inflows reached $37 billion (+1 per cent), driven by manufacturing and logistics. Panama and Nicaragua also recorded substantial growth. The Caribbean saw a 21 per cent increase in FDI, reaching $3.9 billion, supported by stable inflows into the Dominican Republic.

FDI associated with cross-border M&A activity in the region declined sharply in 2024, as net sales plummeted by 85 per cent, from $11.1 billion in 2023 to just $1.6 billion. This was mainly due to Iberdrola (Spain) selling a 55 per cent stake in its fossil fuel power generation subsidiaries in Mexico to Infrastructure Partners (Mexico) for $6.2 billion. In addition, Brazil – the only sizeable M&A market in the region – recorded a 37 per cent drop, with sales falling to $5.4 billion from $8.5 billion.

Greenfield project announcements in Latin America and the Caribbean increased in both value and volume, with project numbers up 2 per cent and projected capital expenditures rising 19 per cent.

Figure I.13
Foreign direct investment in Central America and the Caribbean held steady
Inflows by region and subregion
(Billions of dollars and percentage change)



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

The largest year-to-year increases in project value were in coke and refined petroleum projects (to $47 billion) and digital economy (to $18 billion), while project values for extractive industries and metal products dropped by $20 billion and $8 billion, respectively, compared with 2023. In South America, investment value grew by 17 per cent to $113 billion, driven largely by Brazil, which recorded a 33 per cent increase to $50 billion. This was supported by the announcement of a $5 billion packaging project by CMPC (Chile) and a major renewable energy investment by Fotowatio Renewable Ventures (Saudi Arabia). Argentina saw the highest increase in announcements, which tripled to $37 billion, largely due to a $30 billion energy investment by Shell (United Kingdom). Overall, greenfield projects in the region are expected to generate more than 300,000 jobs. Only about 10 per cent of these jobs are associated with megaprojects valued at more than $1 billion. In total, the region attracted 19 such megaprojects.

IPF deals in Latin America and the Caribbean declined in both number and value, by 28 per cent and 22 per cent, respectively, driven by decreases in the power, mining and industry sectors. South America experienced the largest decline, with IPF value falling to $80 billion (-22 per cent) and the deal count shrinking by 29 per cent – still, in line with global averages and less than in other developing regions. In Brazil, Peru and Argentina, in that order, deal flows were maintained but at lower values, while project announcements in Chile and Colombia deals contracted significantly. In Central America, the value of IPF deals dropped by 52 per cent to $7.4 billion. In contrast, the Caribbean stood out for its resilience, with the value of deals more than doubling, to $6 billion.

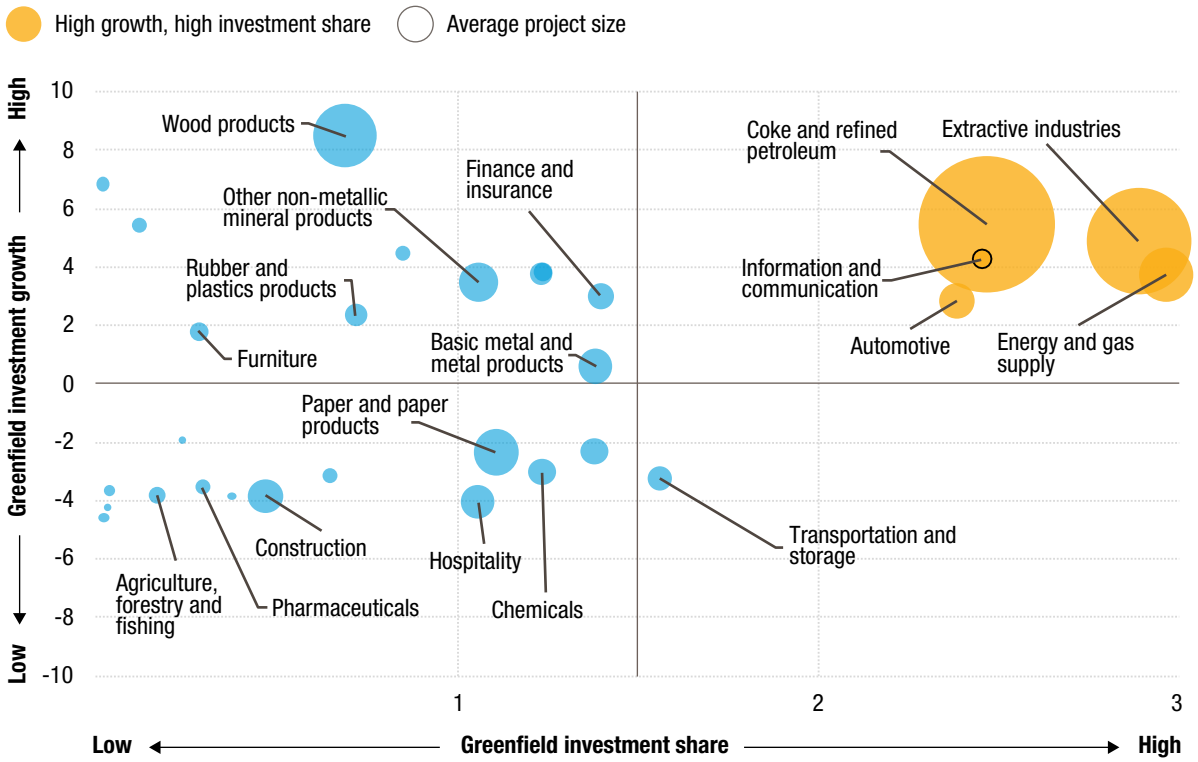
IPF was highly concentrated in a few key destination countries. Brazil attracted $26 billion in total investment across sectors such as hydrogen, biomass and solar energy.

Chile ranked second, receiving approximately $20 billion, with notable projects in offshore wind and water infrastructure. Peru followed with $18 billion, mostly in hydrogen-related investment. Uruguay secured $7 billion, primarily driven by large-scale green hydrogen and synthetic fuels projects, while Jamaica attracted $2 billion for infrastructure and renewable energy under a PPP.

International companies driving these projects included Verano Energy (Chile) for a green fuel plant in Peru, Al Khaleej Sugar (United Arab Emirates) for a biomethanol refinery in Brazil, Voltalia (France) and Phelan Green Energy (South Africa) for hydrogen projects in Brazil and Peru, respectively, and Rio Tinto (United Kingdom) for a lithium mining expansion in Argentina. Infrastructure investment was spearheaded by Yildirim Holding (Türkiye) at Acajutla Port in El Salvador and by the World Bank in a PPP infrastructure portfolio in Jamaica. Meanwhile, Tamarack Valley Energy (Canada) invested in a large solar-hydrogen complex in Mexico, and Abdul Latif Jameel (Saudi Arabia) and ETC Transmission Holding(Spain) undertook both water system expansion projects and battery storage in Chile. Across these projects, the dominant implementation model was build-own-operate.

Looking at longer-term sectoral trends in Latin America and the Caribbean – comparing the most recent five-year period of greenfield project activity with the previous one – reveals that clean energy, critical minerals, digital technology and automotive innovation have emerged as the principal drivers of investment in the region (figure I.14).

Figure I.14
Foreign direct investment in fossil fuel industries continued in parallel with that in clean energy and critical minerals
Industry share in greenfield projects, growth rate and average project size, 2020–2024



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

Notes: The x-axis represents each industry's share in total greenfield values. The y-axis shows the growth rate, calculated by comparing greenfield investment values in the periods 2020–2024 and 2015–2019, thus reflecting five-year growth performance. Bubble sizes denote the average project size during 2020–2024.

Over the past five years, clean energy established itself as the leading sector, growing by 41 per cent and accounting for 18 per cent of total greenfield activity, fueled by national renewable energy targets, feed-in tariffs and long-term power purchase agreements in countries such as Brazil, Chile and Colombia.

Investment in raw materials processing industries grew significantly, with the value of greenfield announcements in coke and refined petroleum products up by 235 per cent to almost $60 billion – more than triple its level in the previous period. It now represents more than 10 per cent of the region's total greenfield activity, making it one of the top four sectors.

The automotive industry continues to serve as a foundational component of the region's industrial economy, expanding by 16 per cent and capturing an 11 per cent share of total greenfield activity. This performance was supported by deeper integration into North American and European value chains, along with targeted policy incentives for EV production. Meanwhile, investment in the digital economy rose by 70 per cent, reaching $59 billion, spurred by growing demand for digital infrastructure, data centres and connectivity solutions.

Together, these four sectors – clean energy, coke and refined petroleum, automotive and digital technology – accounted for the majority of capital inflows into the region during the period under review.

Other sectors, such as finance and insurance, basic metals, and food and beverages, maintained stable investment levels, albeit with limited or negative growth. Finance and insurance grew by 19 per cent, reaching $16.8 billion. Investment in basic metals remained flat (up just 1 per cent, at $17 billion), while food and beverages contracted slightly (–9 per cent, to $17 billion as well). Despite these modest dynamics, the sectors continued to represent significant shares of total greenfield activity, underscoring enduring investor interest in financial services, core industrial inputs and food processing.

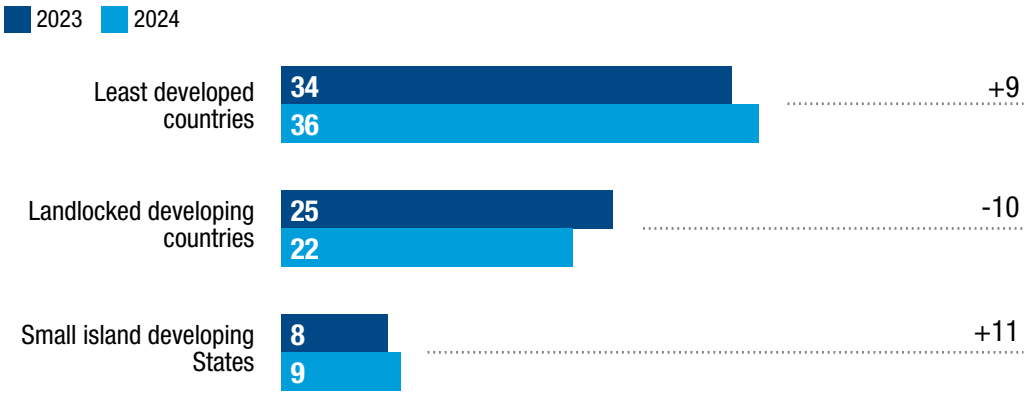
e. Structurally weak, vulnerable and small economies

The concentration of FDI flows in relatively few, mostly large emerging economies means that LDCs, non-resource-rich LLDCs and SIDS continue to attract only limited international investment. In 2024, FDI flows to LDCs and SIDS increased marginally, while those to LLDCs declined (figure I.15).

i. Least developed countries

In 2024, FDI flows to LDCs reached $37 billion. LDCs continued to attract only a small share of global FDI, approximately 2 per cent. The marginal increase was primarily concentrated in a few economies that benefited from large-scale energy, infrastructure or extractive projects. Among LDCs, the most notable gains were seen in Zambia, Mozambique, and Ethiopia, in that order. Zambia saw a significant increase from $0.1 billion to $1.2 billion, driven by renewed investor interest in copper mining and green industrial value chains. In Mozambique, FDI inflows rose from $2.5 billion to $3.6 billion, reflecting progress in energy-sector megaprojects. Inflows to Ethiopia rose by more than a fifth to $4 billion. Rwanda and Tanzania experienced respective increases of 14 per cent and 28 per cent, reflecting targeted investment facilitation and PPPs in infrastructure and services.

Figure I.15
Inflows increased in structurally weak, vulnerable and small economies
Inflows to least developed countries, landlocked developing countries and small island developing States
(Billions of dollars and percentage change)



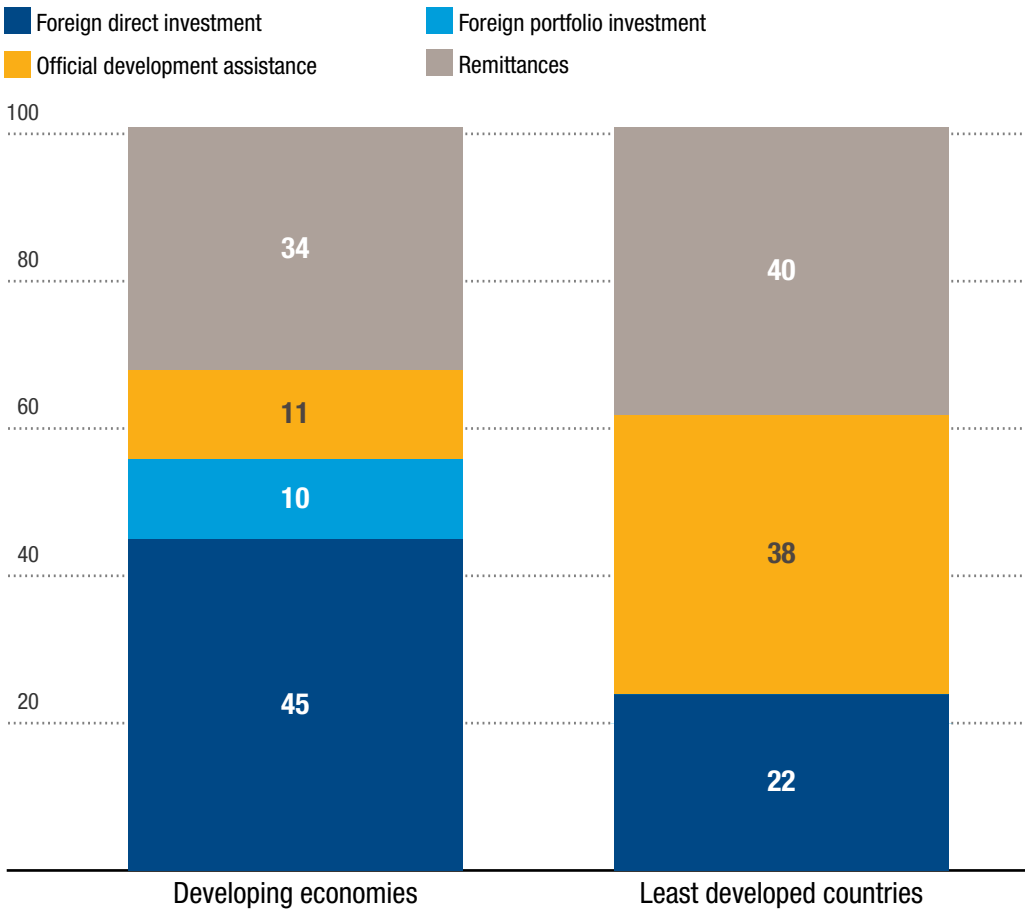
Source: UNCTAD, FDI/MNE database (www.unctad.org/fdistatistics).

FDI in Uganda rose by 10 per cent to $3.3 billion, supported by continued interest in oil development and transport corridors. Bangladesh saw a slight decline of 13 per cent to $1.3 billion, but this followed a strong performance in 2023 and maintained the country's position as a top LDC recipient.

While FDI remains the largest source of external financial flows for developing economies as a group, at 45 per cent of the total, in LDCs FDI accounts for a much smaller share of 24 per cent. Remittances and official development assistance together constitute 77 per cent of external financial flows to LDCs (figure I.16), highlighting their continued reliance on concessional finance and personal transfers. Although these sources are generally stable, they are less effective in fostering productive capacity or facilitating technology transfer.

Fewer greenfield projects were announced in LDCs in 2024, reversing the gains made in the previous year. Although the number of projects declined by only 5 per cent, their announced value fell sharply to $21 billion, down from $76 billion in 2023. This downturn was driven primarily by a steep decline in Africa, where investment fell by 76 per cent to $16 billion.

Figure I.16
Foreign direct investment remains a critical part of external financial resources for developing countries
Share of external financial flows by category, 2024
(Percentage)



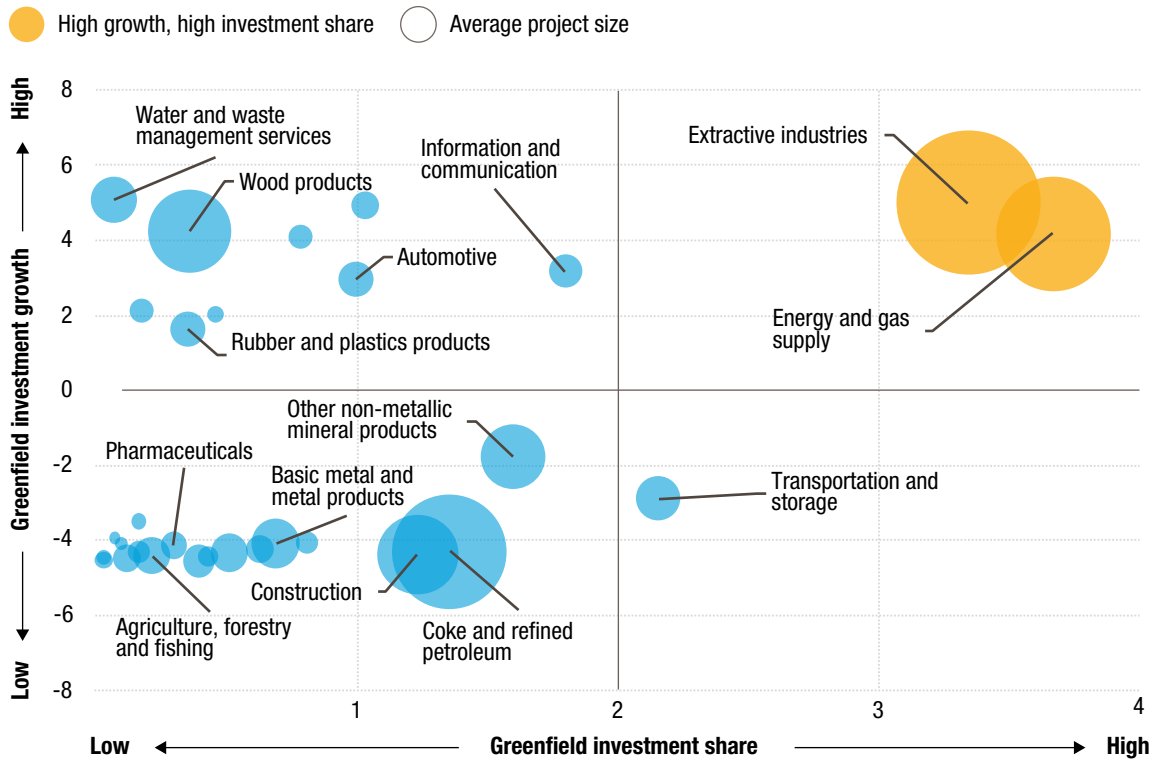
Source: UNCTAD FDI/MNE database (www.unctad.org/fdistatistics), IMF balance-of-payments statistics, World Bank KNOMAD (Global Knowledge Partnership on Migration and Development) database and OECD.

Angola emerged as an outlier, registering $8 billion in announced greenfield projects. This was driven mostly by a single project in the energy sector, valued at $6 billion, led by Total Energies (France). Togo and Senegal also recorded growth in announced project value. In Senegal projected greenfield capital expenditures rose to $1.5 billion, driven by a major port and logistics infrastructure project led by Dubai World (United Arab Emirates), valued at $1.2 billion – one of the most significant transportation investments in West Africa. In Togo project announcements grew to $316 million, driven by a digital economy project led by ST Digital (Cameroon), valued at $246 million.

Several traditionally strong LDC recipients saw steep declines in investment, including the Democratic Republic of the Congo, Uganda, Ethiopia and Zambia, in that order. These reversals reflected a broader investor retreat from higher-risk markets amid rising global financing costs and geopolitical uncertainty.

IPF flows to LDCs contracted sharply in 2024 in both value and number, declining by 74 and 41 per cent, respectively. This retrenchment reflects broader global trends, but the contraction in LDCs was significantly more pronounced than the global average. Despite the overall downturn, a few countries emerged as outliers, including Malawi, Rwanda and Zambia.

Figure I.17
Extractive industries and utilities remain the most important investment sectors in least developed countries
Industry share in greenfield projects, growth rate and average project size, 2020–2024



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

Note: The x-axis represents each industry's share in total greenfield values. The y-axis shows the growth rate, calculated by comparing greenfield investment values in the periods 2020–2024 and 2015–2019, thus reflecting five-year growth performance. Bubble sizes denote the average project size during 2020–2024.

FDI associated with cross-border M&A activity in the region, normally very low in value, rose sharply in 2024, with net sales increasing from $83 million in 2023 to $416 million. This was primarily driven by a single large transaction in which Delta Mining, a subsidiary of International Resources Holding (United Arab Emirates), acquired a 51 per cent stake in Mopani Copper Mines (Zambia) for $1.1 billion. The overall increase in M&A activity was partially offset by a major divestment – namely, an $830 million asset sale in Angola, where a unit of ETU Energias (Angola) acquired local assets owned by Galp Energia (Portugal).

An analysis of longer-term sectoral investment trends in LDCs – comparing greenfield activity during the past five years (2020–2024) with the previous five-year period – reveals a further concentration of capital allocation towards the energy and extractive industries (figure I.17). While the growth in extractive industries continues the long-standing dominance of FDI in natural resources – often criticized for limited linkages to inclusive development – it also increasingly reflects global demand for transition-critical minerals such as lithium, cobalt and rare earth elements. In this way, the extractives sector is becoming more closely tied to the global clean energy transition.

At the same time, the expansion of investment in the energy and gas supply sector represents a trend distinctly aligned with the Sustainable Development Goals. This growth is primarily driven by utility-scale projects in renewable energy generation, including solar, wind and hydropower, contributing directly to Goals related to energy access and sustainability. Together, these developments indicate that the energy transition is reshaping the FDI landscape in LDCs – albeit with varied implications for long-term development outcomes. Meanwhile, sectors that made up a larger share of FDI in LDCs before, such as construction and transport, have seen a significant decline in both value and numbers of projects, suggesting a reorientation of investor priorities in LDCs.

During 2020–2024, the energy and gas supply sector emerged as the leading destination for greenfield projects in LDCs, accounting for 22 per cent of total project value – a two-thirds increase over the preceding period. Although the number of projects grew only modestly (by 5 per cent), the substantial average size of more than $700 million underscores the sector's capital-intensive nature. This growth was largely fueled by continued interest in utility-scale solar, wind, hydropower and natural gas infrastructure, driven by both rising energy demand and the international push for clean energy access in underserved regions.

The extractive industries registered the fastest growth among all major sectors. Investment value increased by almost 150 per cent, raising the sector's share to 11 per cent of total greenfield activity in LDCs. Although the number of projects remained relatively low (42), this was offset by the highest average project size across all sectors – $1.1 billion per project. Growth was largely propelled by surging global demand for transition-critical minerals, including cobalt, lithium and rare earth elements, as well as traditional commodities such as gold, copper and oil. Countries such as Guinea, the Democratic Republic of Congo, Uganda and Angola, in that order, have become focal points for international investors because of their substantial geological reserves and strategic importance in the global clean energy supply chain.

The digital economy, while smaller in terms of project value, has emerged as a strategic sector in the LDC development landscape. Greenfield activity in the sector grew by 23 per cent in the recent period, reaching 4 per cent of total greenfield project activity. Notably, it attracted the highest number of projects – 152 in total – reflecting rising interest in connectivity infrastructure, cloud services, fintech platforms and digital inclusion initiatives. This trend is in line with broader efforts to bridge the digital divide and enhance productivity across sectors.

The construction sector, important for infrastructure development, housing and industrial real estate, retained a relatively large share of investment value (11 per cent) but experienced a dramatic downturn. Both the number of projects and total project values fell by 80 per cent compared with the prior five-year period. This contraction reflects tighter financial conditions, delayed public infrastructure programmes and shifting investor focus towards more scalable or higher-return sectors.

The logistics sector (transportation and storage) also recorded declines of close to 20 per cent. Despite this, it maintained a 9 per cent share of total greenfield activity, both by value and volume. While still significant in absolute terms, the contraction suggests a deceleration in investment momentum in both infrastructure and logistics services.

ii. Landlocked developing countries

FDI flows to LLDCs declined by 10 per cent in 2024, to $23 billion. This marked a reversal of the modest recovery recorded in the previous year. The decline was largely driven by sharp contractions in several of the larger LLDCs. In Kazakhstan, for instance, flows saw a significant reversal – from $3.7 billion to a net outflow of -$2.6 billion. The LLDCs' share of global FDI decreased from 1.7 per cent to 1.5 per cent.

Greenfield project announcements in LLDCs presented a mixed picture. While the number of projects increased by 5 per cent, their total value declined by 21 per cent to $42 billion. LLDCs accounted for just 7 per cent of the total greenfield project value in developing economies.

In 2024, despite the overall decline in value, five greenfield projects exceeding $1 billion were announced in LLDCs, with Kazakhstan attracting four of them, in sharp contrast with the reported negative FDI inflows. Among these was a $5.5 billion natural gas facility announced by UCC (Qatar). In addition, Fujian Hengwang (China) announced a $1.8 billion steel manufacturing project in the country.

IPF deals in LLDCs declined in both number (25 per cent) and value (40 per cent). The downturn was particularly severe in African LLDCs, where the value of total financing plummeted by 57 per cent to $3.8 billion.

An analysis of longer-term sectoral investment trends in LLDCs – comparing greenfield project activity during the past five years (2020–2024) with the previous five-year period – shows an increasing concentration of investment in the energy, transport and extractive sectors. Investors from China, through its Belt and Road Initiative, led energy and gas supply investment with more than $8 billion across 25 projects, followed by investors from the United Arab Emirates (nearly $8 billion, in 27 projects) and Saudi Arabia (more than $7 billion, in 15 projects). In the transport sector, investors from Qatar and France were the top contributors, with about $6 billion and nearly $4 billion, respectively.

The energy and gas supply sector remained the dominant destination for greenfield projects in LLDCs during 2020–2024, attracting almost $50 billion. This represented more than a doubling of investment in the previous period and accounted for nearly 30 per cent of total greenfield activity in LLDCs. Investment flows were heavily concentrated in a few key countries. Uzbekistan emerged as the top host, securing about $18 billion across more than 40 projects. Kazakhstan followed with about $5 billion, while Zimbabwe and Bhutan, in that order, also recorded strong inflows, each exceeding $3 billion. Other notable destinations included Azerbaijan, Nepal and North Macedonia, in that order, each receiving more than $1.5 billion in greenfield project value.

Greenfield activity in the digital economy sector also rose significantly, with a handful of LLDCs accounting for the bulk of activity. The leading recipients were Tajikistan, Paraguay, Uzbekistan, Ethiopia and Zambia. Tajikistan attracted more than $1.1 billion, followed by Paraguay with a

similar amount and Uzbekistan with nearly $900 million. This concentration reflects a combination of government-led digitalization strategies, regulatory reforms and growing domestic demand for digital services. In particular Uzbekistan and Ethiopia, in that order, have seen substantial interest from investors following reforms in their telecommunications sectors. Investors from the Russian Federation and the United States, in that order, were the top contributors to the LLDC digital economy, each investing about $2 billion. Other notable investors included those from the Netherlands, Mauritius, the United Kingdom, France, and Switzerland, in that order.

In the transport sector, greenfield projects were also concentrated in a few LLDCs. Kazakhstan attracted the largest share, with nearly $8 billion across 19 projects. Uganda followed with close to $4 billion in nine projects. Other recipients included Uzbekistan (more than $1 billion), as well as Azerbaijan, the Republic of Moldova and Rwanda, in that order. Most other LLDCs recorded minimal activity in this sector. Investors from Qatar and France were the top contributors, investing about $6 billion and $4 billion, respectively.

iii. Small island developing States

FDI flows to SIDS increased by 11 per cent in 2024, reaching $9 billion.[5] Yet, FDI distribution across SIDS remained uneven, with the Dominican Republic receiving nearly half of all inflows.

The number of announced greenfield projects in SIDS declined. Mauritius recorded a two-thirds decrease in both value and project count. The Caribbean region – despite a modest 6 per cent decline in total investment value – remained the largest recipient among SIDS, accounting for nearly two thirds of the group's total inflows. The Dominican Republic experienced a 37 per cent drop in projected greenfield capital expenditures to $1.2 billion. Jamaica, in contrast, saw the value of announced greenfield projects rise from $10 million to $325 million. In Oceanian SIDS, overall investment rose by 5 per cent, with Fiji attracting $472 million – up 45 per cent. Sectorally, manufacturing and the digital economy were the only ones to register growth in both project number and value, while energy and gas supply experienced a marked decline across both dimensions.

IPF values in SIDS increased by 14 per cent to $5.3 billion in 2024 in only a small number of deals. Driving the increase in value was a $2 billion project supported by the International Finance Corporation in Jamaica, which will cover several PPPs across various infrastructure sectors.

An analysis of longer-term sectoral investment trends in SIDS – comparing greenfield activity during the past five years (2020–2024) with the previous five-year period – shows that, as in other vulnerable economies, the energy and gas supply sector was the most dynamic. Greenfield project value in the sector more than tripled to $5.4 billion, and the number of projects more than doubled. The sector accounted for more than 32 per cent of the total value and 12 per cent of the total number of projects announced.

Most investment was concentrated in solar and biomass power generation. Leading players included Masdar (United Arab Emirates), Lightsource BP (United Kingdom), ACCIONA Energía (Spain) and Inkia Energy (Singapore). More than 70 per cent of all energy projects were located in four SIDS: the Dominican Republic, Seychelles, Tonga and Mauritius.

The digital economy also maintained a strong position, representing 12 per cent of total greenfield project value and 16 per cent of the number of announced projects.

[5] SIDS as used in this report follows the list established by the United Nations Office of the High Representative for the Least Developed Countries, except for Belize, Cook Islands, Cuba, Guinea-Bissau, Guyana, Haiti, Niue, Papua New Guinea, Singapore and Suriname, which are excluded from SIDS here.

Although value declined slightly (by 8 per cent), the number of projects increased by 19 per cent, indicating growing investor interest in digital infrastructure and services. Despite this momentum, the absolute project value remained modest and the sector has yet to scale up significantly. Nevertheless, the upward trend in project numbers suggests that the digital economy could become increasingly attractive for future investment.

New investment opportunities have also been gradually emerging. The transportation and storage sector recorded a 45 per cent increase in capital expenditure and a 92 per cent rise in project numbers. This growth highlights the growing importance of logistics and connectivity in island economies and points to a potential shift in investor focus towards infrastructure enablers.

Hospitality, traditionally the cornerstone of investment in SIDS, continued to attract the largest share of greenfield projects by value (more than one third). Nevertheless, the sector experienced a 39 per cent decline in value and a 63 per cent drop in project numbers, underscoring the vulnerability of SIDS economies to the pandemic, which occurred during this period, and the slow recovery of global tourism.

Investors from the United Kingdom contributed the single largest share of capital, with $1.2 billion invested through two high-value projects. Investors from the United Arab Emirates accounted for more than $600 million, mainly through Masdar and Lootah Biofuels, with a strong focus on biomass and clean manufacturing. European investors collectively accounted for more than 55 per cent of total capital expenditure, with those from Spain leading, followed by those from France and Germany. These investors predominantly targeted solar energy projects, especially in the Dominican Republic and in African SIDS such as the Seychelles and Mauritius.

B. Investment in the Sustainable Development Goals

The global investment environment remains challenging for sectors crucial to achieving the Sustainable Development Goals. In 2024, the value of Goals-related investment in developing countries fell by more than a quarter. Both IPF and greenfield project announcements declined. Goals-related investment in the LDCs dropped dramatically, by almost 90 per cent, demonstrating the disproportional impact of the global downturn in IPF on the poorest countries.

This section examines international investment trends in key Goals-relevant sectors, including infrastructure, renewable energy, water and sanitation, agrifood systems, health and education, with a focus on developing countries and particularly LDCs. It analyses developments in both IPF and greenfield project activity, drawing attention to priority areas for policy support and international cooperation.

In 2024, the combined values of announced greenfield projects and IPF deals in sectors relevant to the Sustainable Development Goals in developing countries fell by 26 per cent. Because Goals-relevant sectors such as utilities, renewable energy generation and transport infrastructure are highly reliant on IPF, most of the decline was caused by the global downturn in IPF deals that resulted from tighter financing conditions. Risk averseness among long-term investors in large-scale, capital-intensive projects with long payback times disproportionally affects the poorest countries, where concerns about debt sustainability and swings in exchange rates tend to deter investors more than elsewhere. This explains the dramatic impact of the downturn on Goals-related investment in LDCs, where total projected investment values dropped by 86 per cent.

The number of projects and deals fell less dramatically, by 7 per cent for developing countries overall, and by 19 per cent in LDCs. This indicates that the downturn mostly affects larger projects. The largest absolute declines in values were in infrastructure industries (including transport infrastructure and utilities) and renewable energy generation, showing that mounting challenges in accessing international finance significantly hinder the energy transition in developing countries.

Exceptions to the negative trend in 2024 were in the health sector (table I.8), but investment values in that sector are too low to affect the overall trend of investment in the Sustainable Development Goals. Pockets of growth were also present in telecommunications, where digital infrastructure investment plays an important role; however, such investment is mostly concentrated in relatively higher-income and larger markets.

Looking at longer-term developments in Goals-related investment, comparing 2024 trends with trends in 2015, when the Goals were adopted, shows significant growth only in renewables and in health. Infrastructure investment in 2024 was lower than it was when the Goals were adopted.

Table I.8
Investment in developing countries in sectors relevant to the Sustainable Development Goals
(Billions of dollars and percentage)

	2015	2023	2024	Growth rate 2015–2024	Growth rate 2023–2024
Infrastructure[a]	150	219	142	-6	-35
Renewable energy	106	372	256	143	-31
Water, sanitation and hygiene	8	12	9	13	-30
Agrifood system[b]	19	24	19	5	-19
Health and education	11	12	15	38	25

Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fDimarkets.com) and LSEG Data & Analytics.

[a] Including transport infrastructure (only international project finance), power generation and distribution (except renewables) and telecommunications.

[b] Including agricultural production and processes; fertilizers, pesticides and other chemicals; research and development; and technology.

a. Infrastructure

International investment in infrastructure sectors, including transport and utilities, experienced a sharp decline in 2024. IPF in these sectors fell significantly as rising interest rates, inflationary pressures and tighter global financial conditions reduced the availability of long-term capital (table I.9). Greenfield project activity also slowed, particularly in LDCs, where investor perceptions of risk remained high (table I.10).

Transport infrastructure was especially affected, with fewer large-scale projects reaching financial close. Weak trade growth and high debt burdens in many developing countries have further constrained public investment capacity and reduced the viability of PPPs. Utility projects in water, electricity and waste management also suffered setbacks, particularly in countries with limited fiscal space and regulatory certainty.

b. Renewable energy

In developing countries, renewable energy remained the largest sector relevant to the Sustainable Development Goals, but investment declined by about one quarter across both IPF and greenfield activity. The fall reflects worsening financing difficulties for large-scale solar and wind installations, particularly in lower-income countries where investors perceive higher levels of financial risk. While investor interest in clean energy remains strong, deals are increasingly concentrated in relatively more advanced developing countries with more developed financial ecosystems.

In LDCs, investment in renewables was hit particularly hard. Several planned utility-scale solar and wind projects, such as the Scaling Solar initiatives in countries such as Madagascar and Zambia, experienced delays or downsizing in the face of rising capital costs and currency volatility. The GET FiT programme in Uganda also faced challenges in scaling further as a result of financing constraints. Nonetheless, some momentum continued in off-grid and distributed renewable energy solutions, often supported by concessional financing or blended finance instruments.

Table I.9
Sectors relevant to the Sustainable Development Goals: International project finance deals in developing economies
(Millions of dollars, number and percentage)

	Developing economies				Least developed countries			
	2022	2023	2024	Growth rate, 2023–2024	2022	2023	2024	Growth rate, 2023–2024
Total								
Value	**351 143**	**359 726**	**237 465**	**-34**	**26 895**	**22 228**	**6 375**	**-71**
Number of projects	**813**	**690**	**574**	**-17**	**59**	**51**	**34**	**-33**
Power[a]								
Value	66 914	63 218	34 437	-46	4 920	1 199	950	-21
Number of projects	70	59	38	-36	8	2	3	50
Renewable energy								
Value	185 612	171 216	146 897	-14	11 795	12 188	4 507	-63
Number of projects	566	508	428	-16	34	34	26	-24
Transport infrastructure								
Value	27 117	87 100	18 537	-79	5 228	3 853	728	-81
Number of projects	61	39	39	0	6	7	2	-71
Telecommunication[b]								
Value	34 525	18 158	23 807	31	298	2 312	40	-98
Number of projects	51	44	37	-16	2	4	1	-75
Water, sanitation and hygiene								
Value	16 829	11 062	7 197	-35	2 297	2 156	150	-93
Number of projects	26	21	15	-29	5	2	2	0
Food and agriculture								
Value	17 054	7 051	3 982	-44	2 341	522	-	..
Number of projects	26	14	12	-14	3	2	-	..
Health								
Value	1 512	1 919	2 608	36	16	-	-	..
Number of projects	5	5	5	0	1	-	-	..
Education								
Value	1 579	-	-	..	-	-	-	..
Number of projects	8	-	-	..	-	-	-	..

Source: UNCTAD, based on information from LSEG Data & Analytics.

[a] Excluding renewable energy.

[b] Including information services activities.

Table I.10
Sectors relevant to the Sustainable Development Goals: Announced greenfield projects in developing economies
(Millions of dollars, number and percentage)

	Developing economies				Least developed countries			
	2022	2023	2024	Growth rate, 2023–2024	2022	2023	2024	Growth rate, 2023–2024
Total								
Value	**249 505**	**279 537**	**203 441**	**-27**	**9 300**	**44 998**	**3 196**	**-93**
Number of projects	**1 131**	**1 273**	**1 261**	**-1**	**48**	**61**	**58**	**-5**
Power[a]								
Value	4 723	7 178	4 715	-34	1 869	679	37	-95
Number of projects	18	29	42	45	3	1	4	300
Renewable energy								
Value	185 896	200 704	109 324	-46	5 448	42 253	1 912	-95
Number of projects	187	279	214	-23	13	24	13	-46
Telecommunication[b]								
Value	27 264	43 367	60 315	39	937	1 400	641	-54
Number of projects	325	283	289	2	12	13	10	-23
Water, sanitation and hygiene								
Value	1 065	1 357	1 494	10	136	73	-	..
Number of projects	14	11	15	36	1	1	-	..
Food and agriculture								
Value	19 841	17 047	15 456	-9	726	436	326	-25
Number of projects	283	336	321	-4	14	14	9	-36
Health								
Value	9 729	8 932	10 922	22	177	113	191	70
Number of projects	207	230	272	18	4	4	16	300
Education								
Value	988	951	1 215	28	7	44	89	104
Number of projects	97	105	108	3	1	4	6	50

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

[a] Excluding renewable energy.

[b] Including information services activities.

c. Water and sanitation

Water and sanitation infrastructure saw an overall contraction in international investment in 2024. The number and value of IPF deals declined. They remain rare in LDCs, where affordability challenges and weak project preparation capacities remain significant bottlenecks. Investment in this sector continues to be highly dependent on public funding and development finance.

Greenfield project activity was minimal, with only a few announcements of small-scale wastewater treatment and potable water access projects. Despite being a foundational component of sustainable development, the sector continues to lag in attracting private investment because of its low commercial returns and high perceived risks.

d. Food and agriculture

International investment in agrifood systems declined in 2024, with both greenfield activity and IPF contracting. The downturn was driven by a combination of climate-related risks, supply chain disruptions and weaker commodity markets, which have dampened investor appetite. Investment remained focused on food processing and agribusiness supply chains, while primary agriculture received limited attention.

In LDCs, food and agriculture investment was particularly subdued. Many projects rely heavily on concessional finance or donor support, and high inflation and input costs further undermined profitability. Despite the clear link between investment in agrifood systems and food security, private capital flows into the sector remain insufficient to meet development needs.

e. Health

In 2024, the health sector in developing countries was one of the few Goals-relevant areas to see an increase in international investment, with growth in both project numbers and announced value. The number of greenfield projects rose by 18 per cent, and total announced investment value increased by 22 per cent (see table I.10).

IPF transactions remained limited in number but relatively large – and growing – in scale (see table I.9). Investment was largely concentrated in middle-income countries, with limited activity in LDCs, where it is most urgently needed because of weak health systems and a high incidence of preventable and infectious diseases.

Many of these LDCs are in Africa, where one of the most critical investment challenges is the development of local pharmaceutical manufacturing capacity. Despite growing demand, the continent still imports more than 70 per cent of its medicines, and FDI penetration remains very limited – accounting for less than 5 per cent of global greenfield projects in pharmaceutical manufacturing over the past two decades, or some 90 projects. Building local production capacity is vital to improve access to essential medicines, strengthen health security and foster industrial development. UNCTAD has long been engaged in this area, including through the launch of an Action Plan (UNCTAD, 2021) and a series of analytical and technical assistance activities aimed at supporting local pharmaceutical production in Africa, particularly in strategic segments such as antibiotics (UNCTAD, 2011a, 2011b, 2023a, 2023b, 2023c).

The business case for local pharmaceutical manufacturing remains challenging in many developing countries because of their small, fragmented markets, high input costs, infrastructure gaps and dependence on imported raw materials (UNCTAD, 2025a). To improve commercial viability, policy responses must combine investment incentives, public procurement frameworks and regional market integration. FDI can play a key role by bringing in capital, technology and expertise to support sustainable local production and integration into global and regional value chains. UNCTAD contributes to this effort through targeted advisory services, investment strategy development and engagement with authorities of special economic zones (SEZs), investment promotion agencies and regional platforms to help build a more conducive environment for FDI in the sector (UNCTAD, 2025b).

C. Internationalization trends of the largest MNEs

Despite subdued trends in FDI flows and slowing trade over the course of the last decade, international production continued to expand. Flows added to growing stocks of overseas assets, increasing sales and employment in foreign affiliates, and rising incomes from foreign investment, partially allaying – so far – fears of a reversal of globalization. In 2024, although FDI stocks continued to accumulate, investment returns sagged and project numbers dwindled. The top 100 MNEs saw significant shifts in composition over the past few years with the entry of more Asian firms. Their foreign sales continued to grow faster than their overseas assets and workforce, a result of the rising number of technology and digital MNEs in their midst.

International production refers to the cross-border activities of MNEs, encompassing FDI and the operations of foreign affiliates as well as the flows of capital, goods, services, technology and knowledge that sustain these networks. In the UNCTAD framework (table I.11), international production includes not only the equity-based investment recorded in FDI statistics but also the broader ecosystem of international production networks, including GVCs, intrafirm trade, and contractual and non-equity partnerships. Key indicators of international production, such as the sales, value added, assets, exports and employment of foreign affiliates, are used to capture the scale and scope of these cross-border operations, offering critical insights into the evolving patterns of global economic integration and the role of MNEs in development.

UNCTAD ranks the top 100 MNEs not on the basis of their overall size, but on the basis of their international footprint, i.e. their foreign assets, sales and employment (table I.12). The Transnationality Index – a composite index of the share of foreign over total assets, sales and employment – tracks trends in the development of international production networks.

In 2024, the international footprint of the top 100 remained unchanged, primarily sustained by the continued expansion of technology firms and the emergence on the list of new Asian players. However, this overall stability masks deeper shifts in corporate strategies, sectoral performance and regional representation across the global MNE landscape.

The 2024 ranking saw the exit of several long-term companies, including General Electric, IBM, Walmart and Comcast (all United States). GE, a leader in the ranking since the early 1990s, began scaling back and refocusing its operations in about 2010. It divested non-core businesses and major overseas assets, retaining three core segments: aerospace, healthcare and energy. In 2023, GE spun off GE HealthCare, followed by GE Vernova in 2024, transforming GE into an aviation-focused company with the balance of its operations in its home market.

Table I.11
Selected indicators of foreign direct investment and international production
(Billions of dollars at current prices, percentage and thousands of employees)

Item	1990	2005–2007 (pre-crisis average)	2021	2022	2023	2024
FDI inflows	205	1 425	1 677	1 390	1 455	1 509
FDI outflows	244	1 463	1 914	1 569	1 556	1 609
FDI inward stock	2 196	14 589	46 509	43 734	48 098	50 907
FDI outward stock	2 255	15 299	42 227	39 493	42 597	43 595
Income on inward FDI[a]	82	1 130	2 921	3 588	3 655	3 341
Rate of return on inward FDI[b]	5.2	9.3	7.6	9.2	9.3	7.4
Income on outward FDI[a]	128	1 244	2 827	3 512	3 528	3 199
Rate of return on outward FDI[b]	8.4	10.6	7.0	8.7	8.7	7.5
Announced greenfield projects	..	744	889	1 302	1 413	1 338
International project finance deals	..	768	1 533	1 487	1 231	909
Cross-border M&As	98	729	759	725	387	443
Sales of foreign affiliates	4 801	19 655	31 904	38 194	..	..
Value added (product) of foreign affiliates	1 074	4 640	6 884	8 296	..	..
Total assets of foreign affiliates	4 649	46 729	89 612	100 583	..	..
Employment by foreign affiliates	20 449	49 514	76 262	82 338	..	..
Gross domestic product	22 612	52 546	97 844	101 948	106 432	110 549
Gross fixed capital formation	5 838	12 540	25 398	26 414	27 306	28 273
Charges for the use of intellectual property, receipts	31	191	642	665	570	560

Source: UNCTAD, FDI/MNE database, IMF (2025b), information from The Financial Times Ltd, fDi Markets (www.fDimarkets.com) and LSEG Data & Analytics.

Note: Not included are the value of worldwide sales by foreign affiliates associated with their parent firms through non-equity relationships and the value 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 data of foreign affiliates of MNEs from countries for which the data are available, on the basis of three-year 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 2024, in both cases representing more than 90 per cent of global inward and outward stocks.

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

Abbreviations: FDI, foreign direct investment; M&As, mergers and acquisitions.

Table I.12
Internationalization statistics of the 100 largest non-financial multinational enterprises, worldwide and from developing economies
(Billions of dollars, thousands of employees and percentage)

	100 largest MNEs, global					100 largest MNEs, developing economies		
Variable	2022[a]	2023[a]	Change, 2022–2023	2024[b]	Change, 2023–2024	2022[a]	2023[b]	Change
Assets								
Foreign	10 118	10 283	1.6	10 237	-0.4	2 908	2 955	1.6
Domestic	10 575	9 322	-11.9	9 430	1.2	8 700	7 873	-9.5
Total	20 693	19 605	-5.3	19 667	0.3	11 608	10 828	-6.7
Foreign as share of total	49	52		52		25	27	
Sales								
Foreign	7 438	6 949	-6.6	6 972	0.3	2 504	2 489	-0.6
Domestic	6 744	5 579	-17.3	5 135	-8.0	5 526	4 395	-20.5
Total	14 182	12 528	-11.7	12 107	-3.4	8 030	6 885	-14.3
Foreign as share of total	52	55		58		31	36	
Employment								
Foreign	9 096	9 530	4.8	8 953	-6.1	4 112	4 142	0.7
Domestic	11 316	10 523	-7	9 543	-9.3	9 659	9 666	0.1
Total	20 413	20 053	-1.8	18 495	-7.8	13 771	13 807	0.3
Foreign as share of total	45	48		48		30	30	
Transnationality Index	49	52		53		29	31	
Unweighted average	61	63		63		46	46	
Median	63	66		66		49	43	

Source: UNCTAD, MNE database.

Note: Data refer to fiscal year results reported between 1 April of the base year and 31 March of the following year. Complete 2024 data for the 100 largest firms from developing economies are not yet available.

[a] Revised results.

[b] Preliminary results.

IBM, a technology pioneer in the ranking since 1990, has also undergone substantial transformation. The company has divested mature segments and invested in digital technologies. Following the 2021 spin-off of its IT infrastructure services unit Kyndryl, IBM has pursued acquisitions in AI and data services to enhance its hybrid cloud platform. This strategic pivot towards domestic markets has reduced its international footprint.

Walmart, similarly, divested its stakes in JD.com (China) and Seiyu (Japan) in 2024 and exited operations in several African markets.

These departures from the ranking were balanced by the entry of several Asian firms: China Communication Construction (China), Hyundai Motors (Republic of Korea), Hitachi (Japan) and semiconductor company Broadcom (United States).

Sectoral trends diverged significantly. Utilities MNEs experienced the sharpest retrenchment, with a nearly 10 per cent reduction in foreign assets, mainly due to restructuring of European energy providers. EDF (France), Enel (Italy) and RWE (Germany) led this decline. EDF, renationalized in 2023, reported a 40 per cent drop in foreign assets and a €14 billion impairment related to delays at the Hinkley Point nuclear project in the United Kingdom. In contrast, Canadian utility Enbridge expanded rapidly, acquiring United States gas distribution companies worth more than $14 billion.

Telecommunications and trade services MNEs also reduced their international exposure. Deutsche Telekom sold its United States tower business for more than $10 billion in late 2023. Telefónica (Spain) continued divesting Latin American assets to refocus on Spain, Brazil, Germany and the United Kingdom. Vodafone (United Kingdom) sold Vodafone Spain for $5.3 billion and an additional 10 per cent of Vantage Towers (Germany) for $1.4 billion.

Trading companies displayed mixed results in 2024. Trafigura (Singapore) divested some underperforming assets (including a stake in Indian refiner and retailer Nayara) and placed others – including their holdings in Porto Sudeste in Brazil and in Australian smelters – under review. Mitsubishi (Japan) sold Australian coal mines for $4.1 billion in 2024 as part of portfolio optimization. Despite setbacks, commodity traders reported strong profits and announced new acquisitions.

Technology MNEs expanded their foreign assets by 8 per cent, driven by new entries and growing investment in overseas data centres. Microsoft (United States), Tencent (China), Alphabet (United States) and Legend Holdings (China) led this growth. In 2024, Microsoft increased its foreign assets by more than 20 per cent, announcing 10 new data centres across Europe and in Brazil and Indonesia. It also committed to tens of billions of dollars in annual overseas investment to ensure data sovereignty and reliable capacity. Tencent boosted its foreign assets through acquisitions in overseas gaming markets, prompted in part by Chinese licensing constraints. Since 2020, Tencent has completed more than 30 international equity deals, most of undisclosed value.

MNEs in extractive industries increased their internationalization through sustained investment in developing alternatives to Russian gas supplies. In the aftermath of the energy crisis, European energy MNEs partly shifted away from renewables to focus more heavily on fossil fuels, particularly oil and liquefied natural gas. Shell (United Kingdom), for instance, invested heavily in the liquefied natural gas sector in Argentina, forming a $30 billion partnership with YPF. Shell now leads the top 100 ranking with estimated foreign assets of more than $450 billion. Meanwhile, United States extractive MNEs focused more on domestic markets.

Automotive MNEs maintained stable internationalization levels amid fierce competition from Chinese EV producers. Volkswagen (Germany) restructured in response to high EV transition costs and weak European sales, divesting Russian and Chinese operations. Nissan (Japan) announced a 20 per cent cut in global capacity. Renault (France) reduced operations while forming strategic partnerships with Volvo (Sweden), CMA CGM (France) and Geely (China). Conversely, Hyundai (Republic of Korea) entered the ranking with more than $20 billion in global investment.

Already facing a difficult market environment, global carmakers are now contending with newly announced tariffs in the United States. Automotive MNEs from Japan have all forecast profit declines for the coming year. Honda expects a 70 per cent drop and plans to relocate the production of its Civic hybrid model from Japan to the United States.

Similarly, Toyota announced new investment and is planning to shift production of its best-selling models to localize manufacturing and circumvent tariffs.[6]

Other sectors, including light and heavy industry and services, showed minimal net change, as restructuring in some MNEs was offset by expansion in others.

Over time, the geographical composition of the home countries of the global MNEs in the ranking has gradually shifted towards Asia. This trend is driven not only by the expanding presence of large Chinese conglomerates but also by the rising prominence of MNEs from other advanced Asian economies – particularly the Republic of Korea (table I.13).

Table I.13
Top 100 non-financial multinational enterprises by home economy
(Number)

Region/country	2010	2020	2024
Europe	**63**	**53**	**52**
France	14	13	13
Germany	10	11	10
Switzerland	6	5	5
United Kingdom	18	12	11
Others	15	12	13
North America	**20**	**22**	**20**
Canada	1	2	2
United States	19	20	18
Other developed countries	**8**	**11**	**13**
Australia	1	..	..
Japan	7	10	10
Republic of Korea[a]			3
Developing Asia	**7**	**14**	**15**
China	4	10	10
Hong Kong, China	1	1	1
Taiwan Province of China	..	1	1
Malaysia	1	..	1
Republic of Korea[a]	1	1	
Saudi Arabia	..	1	1
Singapore	..	..	1
Latin America and the Caribbean	**2**	**..**	**..**
Total	**100**	**100**	**100**

Source: UNCTAD, MNE database.

[a] The Republic of Korea graduated to a developed economy in 2021.

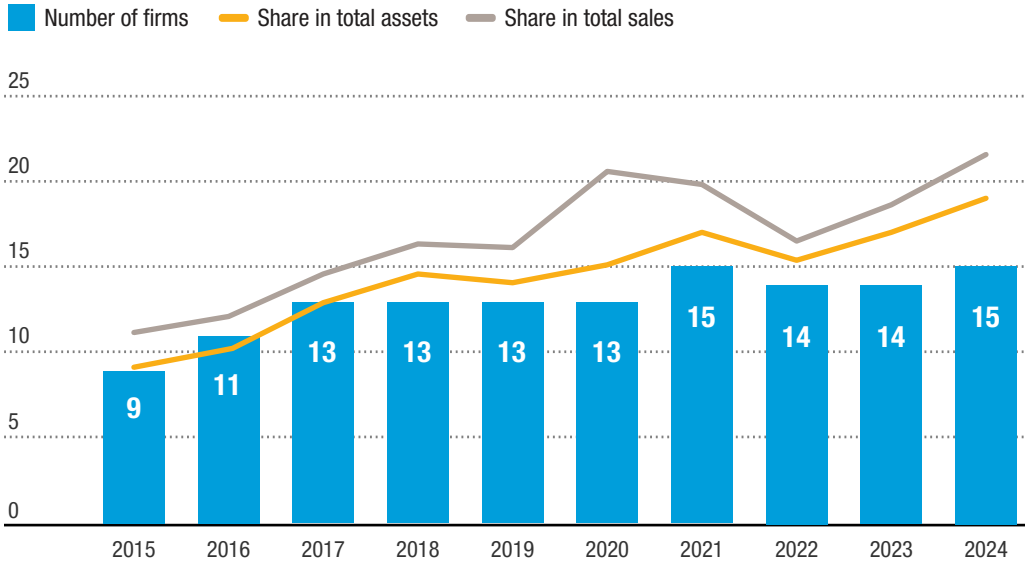
[6] See Takahashi N (2025), Honda signals profit drop and warns of $3 billion tariff hit, *The Japan Times*, May 13, https://www.japantimes.co.jp/business/2025/05/13/companies/honda-profit-drop/https://japannews.yomiuri.co.jp/business/companies/20250113-232779/.

In contrast, the number of European MNEs has declined by more than 10, primarily in the heavy industry, extractives and utilities sectors. This reduction reflects both consolidation within these industries and the relatively weak representation of European firms in technology-related sectors, with SAP (Germany) being the only major player. These shifts reflect broader global economic trends and are accompanied by sectoral concentration, with top MNEs increasingly clustered in a few key industries: extractives, pharmaceuticals, trade and services, and technology.

The number of technology MNEs in the top 100 global ranking has risen to 15 (figure I.18), with the return of Legend Holdings (China) and semiconductor company Broadcom (United States), following its $69 billion acquisition of software company VMware (United States) in late 2023.[7]

Technology MNEs together with companies in the extractive industries (oil, gas and mining) represent the largest sectors in the ranking, followed by automotives (13 companies), and pharmaceuticals, light industries and utilities (all at 10). However, technology could soon become the largest sector with three semiconductor multinationals – SK (Republic of Korea), the parent company of SK Hynix; Nvidia (United States); and TSMC (Taiwan Province of China) – along with the e-commerce firm Rakuten (Japan), poised to enter the ranking as early as next year, provided their current pace of international expansion continues. Their inclusion would raise the number of semiconductor MNEs in the rankings to seven, underscoring both the rising strategic importance of the semiconductor industry and the growing market concentration within the sector.

Figure I.18
Tech firms account for more than a fifth of the revenues of the top 100 multinational firms
Evolution of tech firms in the UNCTAD ranking of the top 100 multinational firms (Number and percentage)



Source: UNCTAD, MNE database.

[7] In previous editions of the *World Investment Report*, Hitachi (Japan) was counted as a technology MNE. However, in recent years the company has expanded its business in the energy, transport and mobility sectors. In fiscal year 2024 the digital and software division accounted for only a quarter of Hitachi's revenues.

Even without factoring in these potential additions, technology MNEs have maintained robust performance, with an average annual sales growth rate of approximately 13 per cent since 2015 – far outpacing the 3 per cent growth recorded by other MNEs in the rankings. In 2024, sales by technology MNEs represented 22 per cent of the total sales of ranked firms, surpassing the previous peak reached during the pandemic in 2020. Their assets now account for 19 per cent of the top 100 companies' total assets.

The internationalization patterns of the world's largest MNEs in 2024 reveal both resilience and transformation. While macroeconomic turbulence constrained global investment, technology and energy firms drove expansion, often reshaping their portfolios in response to emerging market opportunities or geopolitical constraints. The growing role of Asian firms – particularly in the technology and automotive sectors – signals a broader shift in global corporate influence. Meanwhile, European MNEs face structural challenges, especially in traditional sectors. Looking ahead, the sustained rise of semiconductor and AI-driven companies, combined with strategic realignments in response to geopolitical pressures, may further alter the global footprint of MNEs in the coming years.

D. International project finance: Implications for financing for development

The contraction in IPF has significant implications for global development financing efforts, particularly in the framework of the Fourth International Conference on Financing for Development. Between 2021 and 2024, the value of IPF deals fell by more than 40 per cent, with sharp reductions in both the number of transactions and the average deal size. This downturn was especially pronounced in Goals-aligned sectors such as renewable energy, sustainable transport and critical infrastructure, where IPF provides the majority of external financing. It disproportionally affected LDCs, which rely more on international sources of finance for infrastructure projects. Evidence on more than two decades of IPF shows that there is an important role to play for governments (through PPPs), multilateral development banks and risk insurance agencies, as well as new types of financial investors, in pushing capital to where it is needed most.

Achieving the Sustainable Development Goals in developing countries requires an estimated $4 trillion to $5 trillion annually, with 40 to 50 per cent expected to come from private capital and blended finance mechanisms, including IPF. The recent decline in IPF deals has directly contributed to the widening gap in Goals investment. The impact has been particularly severe in LDCs and SIDS, where IPF can account for more than 60 to 70 per cent of total infrastructure investment.

The agenda for the Fourth International Conference on Financing for Development emphasizes the urgent need to scale up the catalytic role of multilateral development banks, expanding the use of guarantees, hybrid capital and de-risking instruments to crowd in private investment and reinvigorate stalled project pipelines.

Without targeted interventions to reverse the decline in IPF deals, particularly in priority sectors for the achievement of the Goals, the international community risks leaving structural investment gaps unaddressed and jeopardizing progress towards critical global development commitments.

a. Evolution of international project finance

The use of IPF expanded steadily during the past decade, aided by historically low interest rates and policy-driven infrastructure initiatives. Following 2020, the sector experienced a surge, driven by pandemic recovery packages, industrial policy measures and the global push for clean energy and digital infrastructure.

At its peak in 2021, the cumulative value of IPF even surpassed that of greenfield project activity. However, rising financing costs, inflation and heightened risk aversion have since reversed the trend, and in 2024, IPF recorded a sharp contraction. The number of deals globally fell by 27 per cent, following an already steep decline in 2023. Adverse macro financial conditions have taken a toll on large-scale investment in infrastructure and energy. In value terms, the decline was particularly steep, with IPF values falling by 26 per cent (table I.14). Asia experienced some of the largest declines, with 43 per cent lower values.

IPF performed relatively better than domestic project finance, as the equity participation of international investors often enables access to more favourable financing conditions. Projects led by domestic sponsors saw a 56 per cent decrease in number and a 40 per cent decrease in value.

IPF deals in renewable energy – a key driver of growth in IPF in recent years – slowed further in 2024, with declines of 16 per cent in both project numbers and project value, following a similar drop in 2023.

The contraction was even more pronounced in domestic project finance for renewables, with a reduction of about 60 per cent in both metrics. Regionally, IPF deals in renewable energy declined by 22 per cent in North America, 18 per cent in developing Asia and 14 per cent in Latin America and the Caribbean. Africa was the only region to record an increase, with an 8 per cent gain.

The sharper declines in IPF deals in renewable energy in developed countries contrast with the broader pattern, where developing and structurally weak economies have been disproportionately affected by the global downturn. Higher interest rates and heightened investor sensitivity to risk – especially concerns about sovereign debt distress – are key constraints, given the debt-heavy structure of most IPF deals.

Table I.14
International project finance deals by top industries

Sector/industry	Value (Billions of dollars) 2023	2024	Growth (%)	Number 2023	2024	Growth (%)
Total	**1 231**	**909**	**-26**	**2 713**	**1 988**	**-27**
Top 10 industries by number						
Renewable energy	452	348	-23	1 565	1 266	-19
Industrial real estate	169	94	-44	252	125	-50
Telecommunication	110	150	37	135	118	-13
Power	93	86	-8	162	103	-36
Transport infrastructure	113	37	-67	99	82	-17
Oil and gas	75	46	-39	111	81	-27
Residential/commercial real estate	46	41	-10	131	66	-50
Mining	70	23	-67	69	43	-38
Petrochemicals	67	19	-72	85	39	-54
Water and sewerage	13	14	11	30	23	-23

Source: UNCTAD, based on information from LSEG Data & Analytics.

Telecommunications infrastructure was the only sector to see a significant increase in project value in 2024 – consistent with greenfield project trends, where the digital economy is a key driver of new capital commitments. However, the increase in value was largely attributable to a few high-value projects, while the number of deals declined.

Industrial real estate, including SEZs, which had been another driver of growth in IPF, experienced a sharp contraction in 2024. Both the number and the value of projects fell by nearly 50 per cent. As investors in supply chain–intensive sectors reassess strategic locations, developers and sponsors of industrial zones are adopting a more cautious stance.

b. Growth phases and factors

IPF has evolved significantly over the past decades, playing a crucial role in the development of large-scale infrastructure, energy and industrial projects worldwide. As a financing mechanism that pools resources from multiple investors – including governments, development banks, private sector institutions and multilateral agencies – IPF has been instrumental in addressing capital-intensive development needs while distributing financial risk among stakeholders. IPF shares a close relationship with FDI, as both serve as mechanisms for channeling cross-border capital into productive assets. Whereas international production FDI is primarily structured as equity investment in companies, infrastructure IPF is centred on specific projects and often involves a mix of debt financing, syndicated loans and complex contractual agreements. This distinct structure makes IPF particularly suitable for large-scale development initiatives that require long-term commitments and diversified risk-sharing models. The mixed financing arrangements in IPF deals mean that only a portion of international infrastructure investment translates directly into FDI in balance-of-payments statistics – about 17 per cent according to UNCTAD research (see UNCTAD, 2020; UNCTAD, 2021; Viné et al., 2022) – it plays a similar role to FDI due to its stability and long-term strategic management.

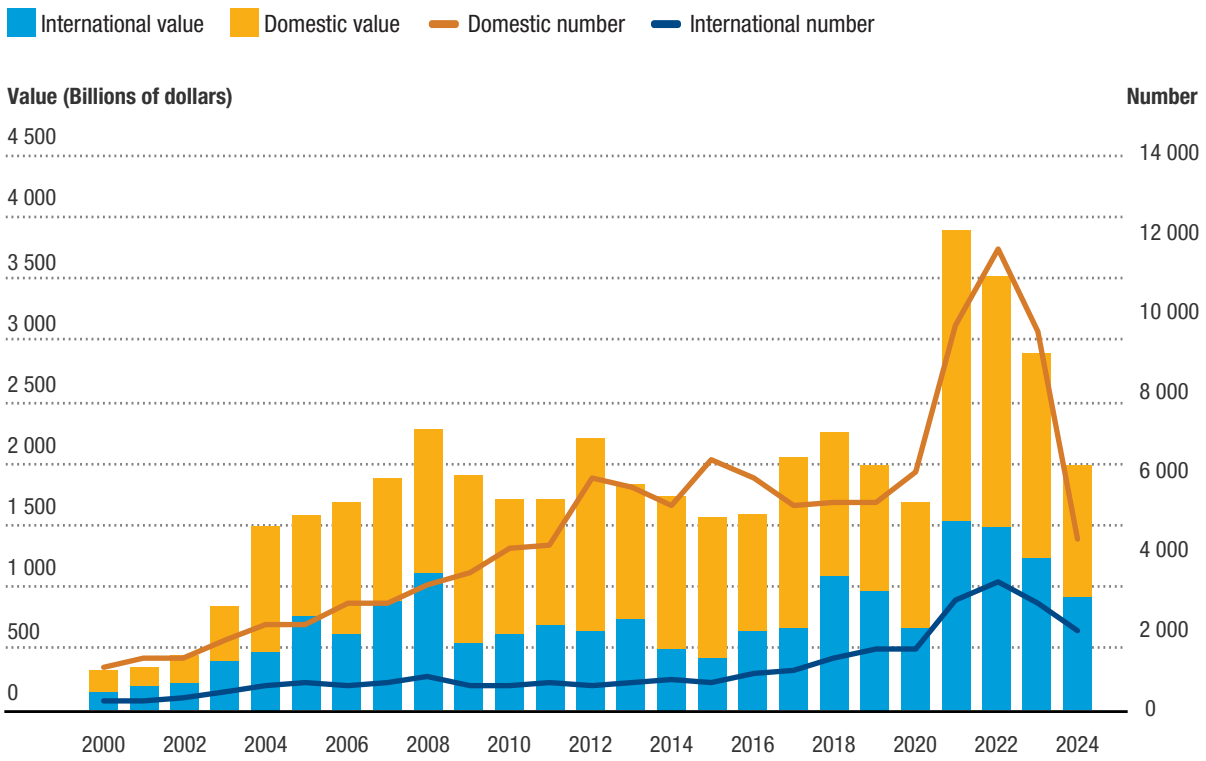
The global IPF market consists of domestically sponsored deals (where national governments, utilities, infrastructure companies and investment funds act as the project sponsors and equity owners) and internationally sponsored deals (where the equity owners include one or more foreign investors). Over the last two decades, internationally sponsored deals have accounted for about 20 per cent of project numbers but about 40 per cent of project values.

The growth of IPF can be traced to the mid-20th century, when large-scale infrastructure projects – particularly in the energy and transportation sectors – began attracting cross-border investment. Over time, especially during the 2000s, financial innovations, risk mitigation instruments and evolving regulatory frameworks contributed to the expansion of IPF (figure I.19).

Since 2000, IPF has gone through several major phases:

- Pre-2008 financial crisis: Characterized by rapid growth and large-scale projects, driven by favourable financial conditions and rapid globalization. Many developing countries, facing significant infrastructure financing gaps, turned to IPF for essential services such as energy, transportation and water supply.
- Post-2008 crisis: Marked by tighter credit conditions and greater investor caution. The private sector's appetite for large infrastructure projects diminished, prompting a shift towards smaller-scale ventures. PPPs evolved to encourage collaboration between governments and private investors.
- Post-2015 growth: A period of renewed growth driven by low interest rates and initiatives such as the Belt

Figure I.19
International project finance deals started growing after 2015
Value and number of deals by source of investment



Source: UNCTAD, based on information from LSEG Data & Analytics.

and Road Initiative of China,[8] the Sustainable Development Goals and the Paris Agreement. Development finance institutions and multilateral agencies played a pivotal role through guarantees, insurance and concessional finance. Renewable energy projects became the key growth driver. The period culminated in a surge driven by ultra-low interest rates, pandemic recovery funds and new industrial policies pushing infrastructure, digital and green investment projects, resulting in a peak in 2021.

- Recent decline: Following the post-pandemic surge, international project numbers declined. In developing countries – and especially in LDCs – the downturn began earlier, coinciding with the pandemic onset. Recovery packages in advanced economies diverted investment towards lower-risk markets. This trend was intensified in the last two years by rising interest rates, global policy uncertainty and growing investor concerns about debt distress in many lower-income countries.

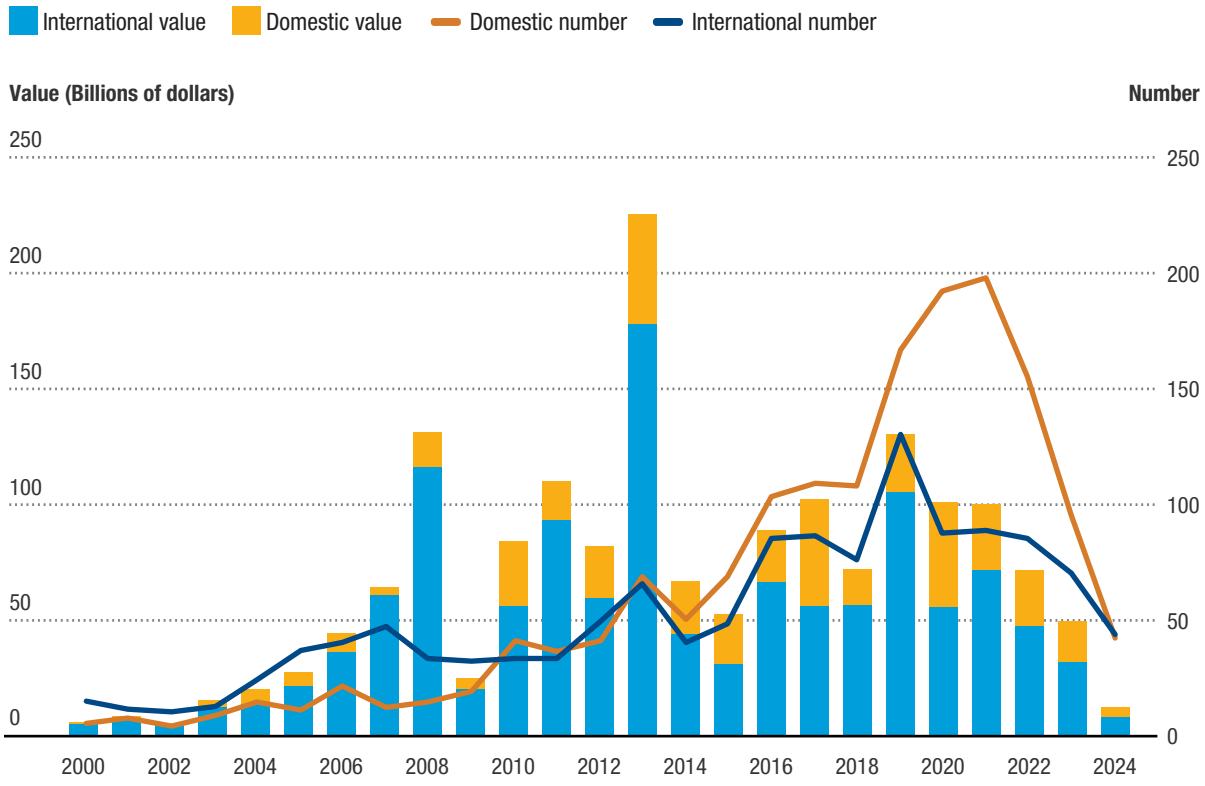
[8] Until recently, the majority of Belt and Road projects did not involve equity participation by Chinese MNEs. Instead, they were financed through loans subscribed by the host economies. In many cases, the only registered project owner was the host-country Ministry of Infrastructure, causing these projects to present as domestic in investment databases. As such, relatively few are included in the IPF data set used by UNCTAD. As part of the ongoing restructuring of the initiative, Chinese contractors are now more frequently required to take equity stakes in the projects they execute. This will lead to an increase in the share of Belt and Road projects in the IPF data set.

In developing countries, trends for domestic and international project finance followed broadly similar paths. However, trends diverged across regions and income groups. Importantly, LDCs experienced a sharper and more persistent decline in both domestic and international project finance after 2020, showing how tighter financing conditions and investor uncertainty affect countries with lower credit ratings disproportionally (figure I.20).

Over the past two decades, several factors have fueled the expansion of IPF:

- Infrastructure needs and development goals: Developing economies face significant infrastructure financing gaps, particularly in such sectors as energy, transport and water.
- Public investment and stimulus packages: Governments increasingly use infrastructure investment to stimulate economic recovery and competitiveness.
- PPPs: These structures blend public oversight with private sector expertise and funding, making large-scale projects more feasible.
- Financial innovations: Structured financing tools, blended finance and risk-sharing mechanisms have broadened the investor base. Prolonged low interest rates also lowered investment costs. The UNCTAD analysis suggests that a 1 percentage point rise in benchmark rates (e.g., LIBOR or SOFR) is linked to a 2 per cent drop in IPF deals and nearly a 9 per cent drop in domestic deals – an effect stronger in developing economies.

Figure I.20
Project finance deals in least developed countries are largely driven by international investment
Value and number of deals by source of investment



Source: UNCTAD, based on information from LSEG Data & Analytics.

- Sustainability and green finance: Climate and sustainability goals have increased investment in renewables and green infrastructure.
- Multilateral support: Institutions such as the World Bank and regional development banks play a catalytic role by providing risk mitigation and concessional finance.

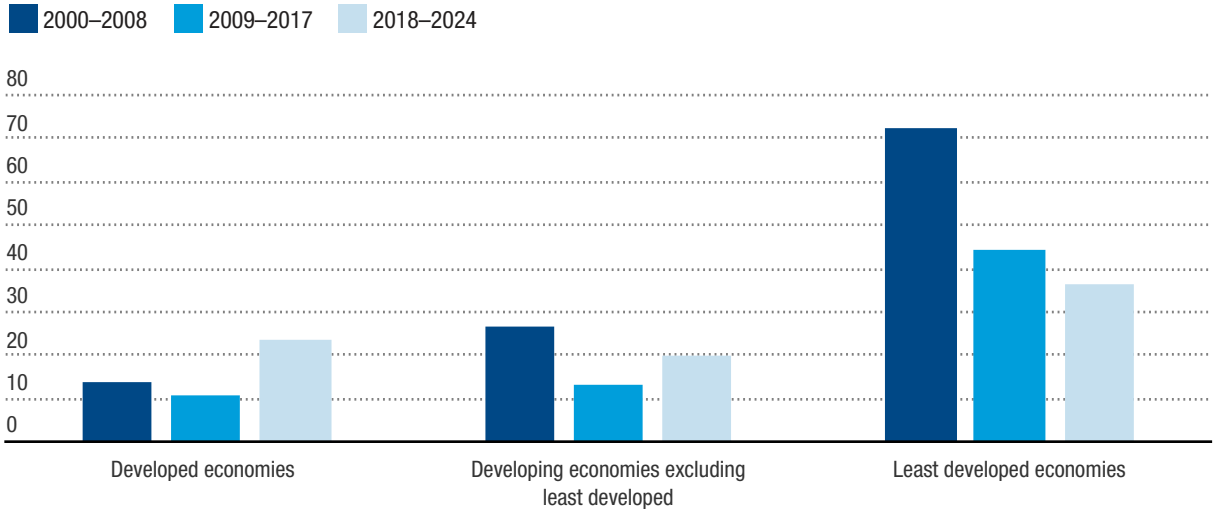
c. The role of international investors

The relative importance of international investors relative to domestic sponsors varies by project type, size and geography. Worldwide, IPF accounts for about 20 per cent of all deals but 40 per cent of total investment – indicating larger project sizes. This share has remained stable since the early 2000s, though sectoral and regional variation exists. In LDCs, international sponsorship exceeded 70 per cent early on but declined to about 35 per cent (figure I.21).

This is still above the global average, but the trend indicates that capacity is increasing among domestic sponsors.

Across sectors, the participation of foreign investors is influenced by the expected returns, risk profile and nature of the project. Mining and hydrocarbon projects are capital-intensive and generally undertaken by large MNEs. As a result, more than half of these projects involve international investors. In the hard infrastructure sector – such as power plants and transport networks – the presence of foreign sponsors is also significant, with their share exceeding 40 per cent in developing economies. By contrast, investment in social infrastructure, such as healthcare, is predominantly financed domestically. In developing economies, international involvement in social infrastructure remains limited: foreign-sponsored hospital and educational projects account for less than 10 per cent and 5 per cent, respectively, of the total numbers of projects.

Figure I.21
The share of internationally sponsored projects increased since 2018, except in least developed countries
Share of international project finance deals by economic groupings



Source: UNCTAD, based on information from LSEG Data & Analytics.

While participation by foreign sponsors has remained relatively stable across most sectors, foreign investment in renewable energy has grown. In developing countries, the international share of renewables projects rose from 12 per cent in the 2000s to 30 per cent during the last five years.

The diverging trends in the relative significance of IPF across income groups is partly explained by the evolving sectoral distribution of projects. During the 2000s, a substantial portion of projects – especially in LDCs – were concentrated in the extractives sector and sponsored by large international energy MNEs. For instance, in LDCs, extractives accounted for more than 40 per cent of all projects in the early 2000s. Following the financial crisis, IPF shifted increasingly towards essential infrastructure in sectors such as transport, power and telecommunications, as well as in education and healthcare, where public agencies and domestic investors tend to play a larger role. There was also greater use of IPF for domestic industrial and residential real estate, a sector that typically sees lower involvement of foreign investors. More recently, the rapid expansion of renewable energy projects has boosted the international share of project finance again.

d. The role of governments and development finance institutions

Financing public infrastructure often requires the involvement of multiple stakeholders. In LDCs, attracting foreign private investors can be particularly challenging. As a result, local authorities – either directly or through State-owned enterprises – are often required to participate in projects as sponsors or to provide equity at later stages of deployment to help mitigate perceived country risk.

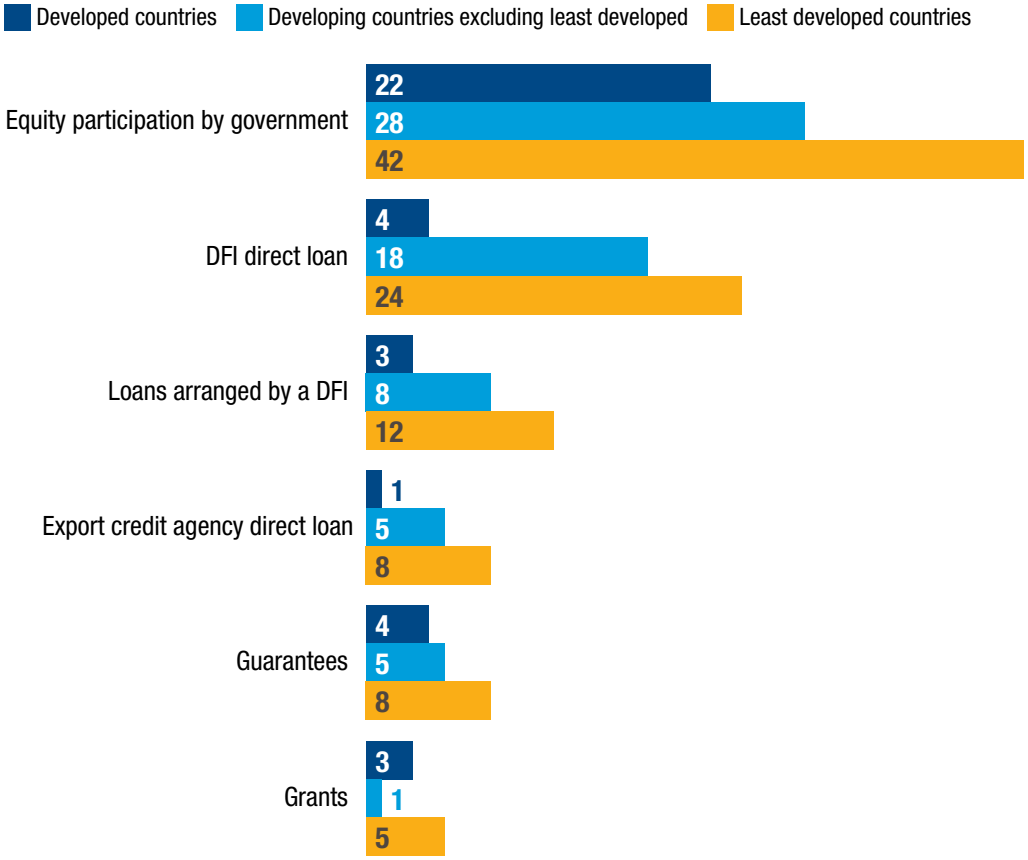
More than 40 per cent of international projects in LDCs involve public participation, compared with approximately 27 per cent in other developing countries (figure I.22). This share varies significantly by sector; for instance, nearly half of infrastructure projects that provide public services involve public sector participation (UNCTAD, forthcoming).

Development finance institutions including multilateral development banks and other bilateral development institutions play a vital role in mobilizing foreign private investment in infrastructure projects in developing economies. Their support may include concessional loans, grants, guarantees, technical assistance and help with organizing financing syndicates. These institutions directly finance nearly a quarter of infrastructure projects in LDCs and arrange about 12 per cent of the syndicated loans financing them. Through the organization of syndicated loans (referred to as the B tranche), they mobilize private investment by offering guarantees and, in some cases, extending their preferred creditor status to other syndicate participants. This risk mitigation and reduction in transaction costs can result in lower financing spreads.

Other actors also provide guarantees to cover commercial and political risks. Export credit agencies from the home countries of major sponsoring companies often step in to help attract other private investors. However, such guarantees are relatively limited in use, covering only about 8 per cent of projects in LDCs and less than 5 per cent in other developing countries.

These instruments – guarantees, concessional financing and syndication arrangements – should be deployed more frequently, particularly in LDCs, where the high perception of risk acts as a major deterrent to private investment. The scarcity of infrastructure projects that are fully privately owned and financed – less than a quarter of all international projects in these countries – highlights the urgent need for risk mitigation mechanisms. Political instability, weak regulatory frameworks, currency volatility and limited project preparation capacity contribute to investor hesitation (UNCTAD, 2025c; UNCTAD, 2025d).

Figure I.22
Partnership schemes and loans from development finance institutions are crucial for financing projects in least developed countries
Share of projects financed by selected institution types
(Percentage)



Source: UNCTAD, based on information from LSEG Data & Analytics.

Notes: Only projects financed by an international sponsor. DFIs include multilateral and bilateral development banks. Direct loans include parallel loans and A tranche loans. Loans arranged by a DFI include tranche B loans. Guarantees include commercial and policy risk guarantees. Grants include concessionary grants by DFIs or public institutions.

Abbreviation: DFI, development finance institution.

By expanding the use of risk-sharing instruments, development finance institutions and governments can enhance the bankability of projects, reduce financing costs and create more attractive conditions for private sector involvement.

e. Sectoral evolution

IPF used to focus largely on hard infrastructure and extractive industries. Since 2008, however, renewable energy has emerged as the dominant sector, accounting for more than half of all international projects over the past five years.

The number of extractive projects declined steadily during most of the 2010s but has rebounded recently, driven by increased demand for critical minerals (figure I.23).

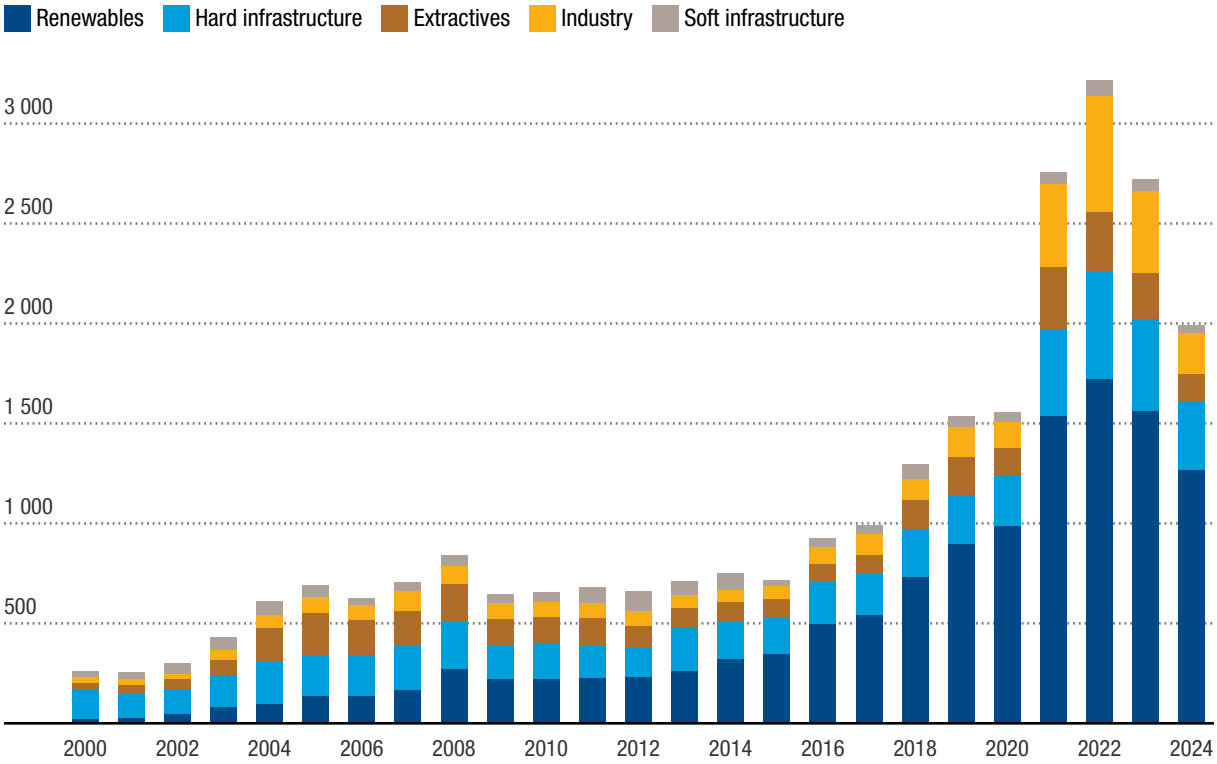
The growth in IPF observed after 2015 appears more closely connected to the Paris Agreement than to the adoption of the Sustainable Development Goals in the same year. Nearly all the growth has been driven by the renewables sector, which expanded at an average annual rate of 23 per cent. In contrast, investment in other Goals-related sectors grew more modestly: hard infrastructure

(e.g. transport and utilities) at 6 per cent and social infrastructure (e.g. health, education, water and sanitation) at just under 10 per cent. Within hard infrastructure sectors, telecommunications was the exception at 43 per cent; data centre projects have increased rapidly, especially in developed and advanced developing countries, positioning IPF as a key financing modality for digital infrastructure.

Sectoral patterns vary by income group. Developed economies leverage IPF for infrastructure modernization and for the energy transition. In Europe, in particular, renewable energy installations account for almost two thirds of projects, although project values are relatively low because of the relatively low average value of renewables projects. In developing economies, extractive industries and industrial and commercial real estate make up a larger share of IPF. In LDCs, where logistics, telecommunications and energy infrastructure are often underdeveloped, hard infrastructure projects account for a larger share – particularly since 2008.

Real estate projects in developing countries often support the mining, tourism and industrial sectors. Recently, there has been a marked increase in projects establishing large-scale manufacturing facilities in emerging sectors, including semiconductors, EVs, batteries and renewable energy components

Figure I.23
Since 2015 annual growth in renewables has surpassed that of all other sectors combined
Number of international project finance deals by sector



Source: UNCTAD, based on information from LSEG Data & Analytics.

Note: Hard infrastructure is that for power, telecommunications, transport, waste and recycling. Soft infrastructure is that for hospitals, schools, water and sanitation, and other social infrastructure (museums, stadiums, police and fire stations, defence, prisons). Industry refers to industrial and commercial real estate and agriculture. Extractives refers to oil and gas, mining and petrochemicals.

(e.g. manufacturing of solar panels and wind turbines), as well as the processing of critical minerals. This is an important development, indicating that project financing mechanisms are increasingly being used for industrial projects, in addition to traditional infrastructure and public services sectors. These projects have doubled in number over the past five years, with Chinese MNEs sponsoring about a quarter. SEZs also fall under this category. Their number has grown steadily across developing economies; there were about 50 SEZ-related projects in the last five years.

f. Geographical distribution

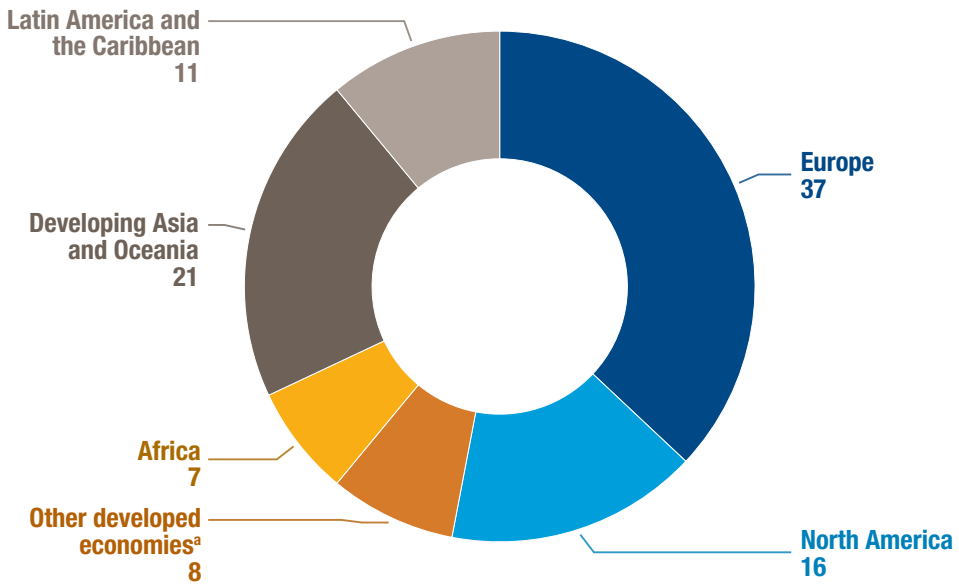
Since 2015, the number of IPF deals has increased across all regions, growing at an average annual rate of 18 per cent. However, growth has varied widely by region.

Developed economies experienced the fastest growth, averaging 24 per cent annually, largely driven by intra-European projects. Developing regions saw slower growth at 12 per cent, with developing Asia leading at 19 per cent. Growth in Africa and in Latin America and the Caribbean lagged, at 8 and 6 per cent, respectively.

Europe now accounts for more than one third of international projects (figure I.24), mainly due to intra-European initiatives led by large utilities and infrastructure multinationals such as Engie (France), Enel (Italy), Iberdrola (Spain) and ACS (Spain). Excluding intra-European deals, the share of Europe falls below 10 per cent.

Developing Asia has become a major hub for IPF deals, driven by significant infrastructure gaps, Goals-related investment needs – especially in renewables – and regional integration initiatives.

Figure I.24
Developing Asia and Europe are the main destinations for international project finance
Share of number of projects, 2022–2024
(Percentage)



Source: UNCTAD, based on information from LSEG Data & Analytics.

[a] Other developed economies are Australia, Israel, Japan, New Zealand and the Republic of Korea, as well as Bermuda.

It accounts for a fifth of international projects and about a third of global IPF values. Relatively high average values are a result of investment in large infrastructure projects and a continued high share of investment in extractives.

While IPF use in Africa has lagged that in other regions, greater participation by multilateral banks and private investors has begun to close the infrastructure financing gap, particularly in energy and transport. Africa now accounts for less than 10 per cent of IPF deals worldwide, but about 13 per cent of global IPF values. As in other developing regions, there is a relatively high share of projects in extractive industries.

Latin America and the Caribbean has traditionally attracted substantial IPF deals, particularly in energy and natural resources, but political and economic instability has constrained growth. The region accounts for 11 per cent of global IPF deals, but less than 10 per cent of deal values.

Since 2020, the share of total IPF flowing to developing countries has declined from more than 55 per cent before 2015 to about 40 per cent.

LDCs saw a peak in about 2015, sustained until 2019, but their share has since dropped to just 2 per cent of global projects.

IPF has also become more concentrated among developing countries. The top 10 host economies now attract more than half of international projects, up 10 percentage points since 2018 (figure I.25). Brazil, India and Chile now host more than 30 per cent of international projects in developing economies – double their pre-2018 share – driven by strong renewable energy programmes. In contrast, countries such as Mexico, Indonesia and China – in that order – have seen absolute growth in project numbers but a relative decline in share. The shift in China reflects its growing reliance on domestic capabilities in renewables.

Smaller and more vulnerable economies, particularly LDCs and SIDS, continue to be marginalized (table I.15). Since 2000, a total of 28 developing countries – mostly small island States and countries suffering political instability – have attracted three or fewer IPF projects. Factors such as small market size, high project costs, weak institutional capacity and poor credit ratings discourage investors and limit their participation in IPF.

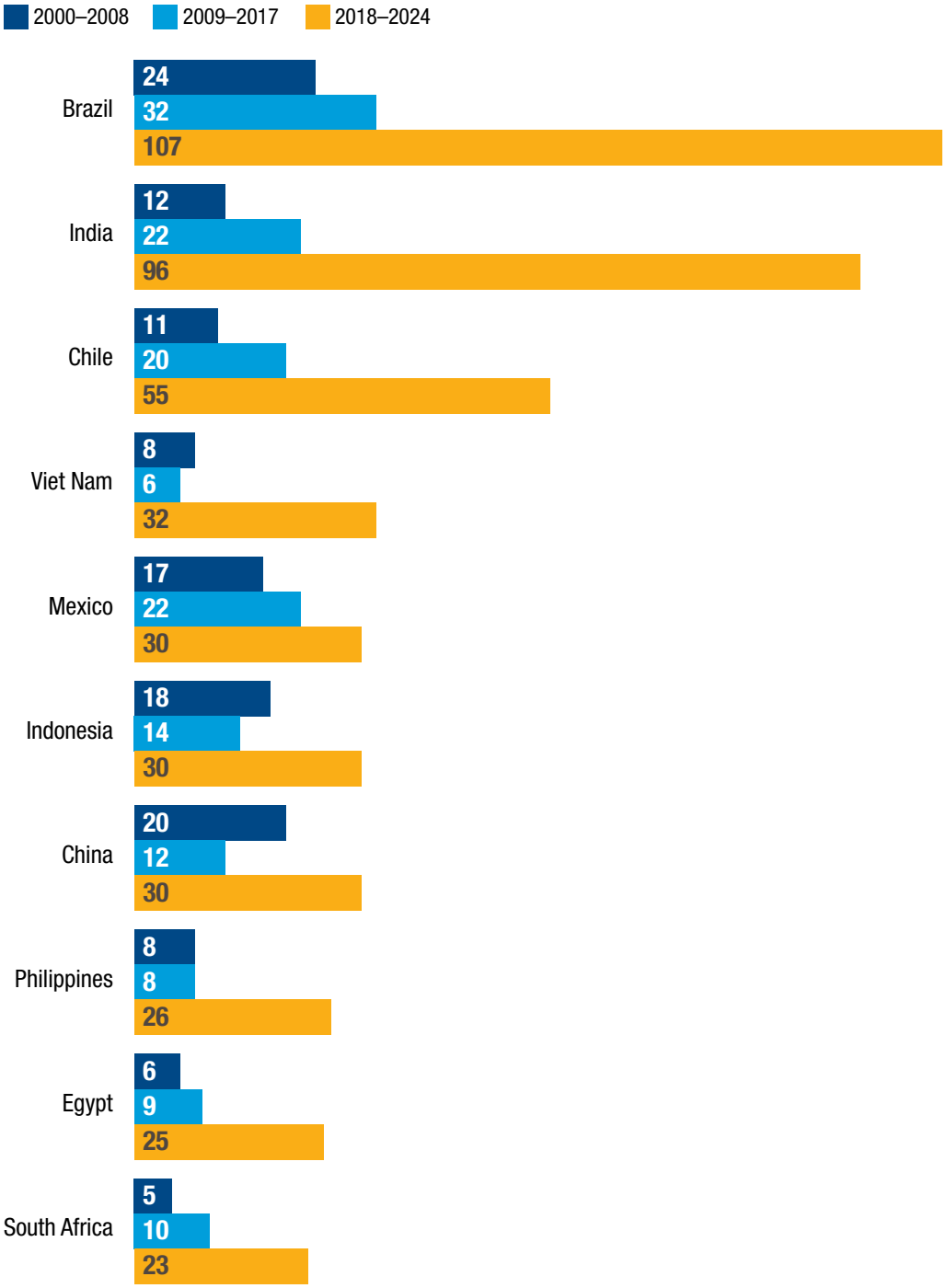
Table I.15
Developing economies with three or fewer international finance deals since 2000, by subgroup
(Number)

Grouping	Number of economies with three or fewer international projects since 2000	Total number of economies
Small island developing States	19	38
Least developed countries	11	44
Landlocked developing countries	4	32
Total	**28**[a]	

Source: UNCTAD, information from LSEG Data & Analytics.

[a] Total number of countries without double-counting. Some countries belong to more than one grouping.

Figure I.25
International project finance is increasingly concentrated in a few developing economies
Average yearly number of international project finance deals in developing economies in selected periods



Source: UNCTAD, based on information from LSEG Data & Analytics.

g. The top 100 international project finance investors

Historically, strategic sponsors – the companies that establish, own and lead project companies – have been non-financial firms in industries such as utilities, construction and extractives. These industries have traditionally dominated IPF because of their reliance on capital-intensive, long-term investment.

Major companies such as Engie and Total (both France), Shell (United Kingdom) and Enel (Italy) have ranked among the top sponsors since 2000. In recent years, utilities have become particularly prominent, driven by the surge in renewable energy projects. New players such as Masdar (United Arab Emirates) and ACWA Power (Saudi Arabia), in rank order, have gained traction, especially in emerging markets.

Over time, financial institutions – including investment funds, pension funds and private equity firms – have taken on more active roles. Beyond providing financing, many now hold equity stakes and contribute expertise in structuring, risk management and capital mobilization. Since 2018, nearly 40 of the top sponsors have been financial institutions, up from about 10 before the global financial crisis (figure I.26). In earlier years, the World Bank Group was among the top sponsors, often stepping in where private capital was scarce.

Today, the two most active international sponsors are the financial sector firms Macquarie Group (Australia) and Brookfield (Canada), which have been involved in 258 and 211 deals respectively since 2018. Their portfolios span energy, infrastructure and real estate, demonstrating both breadth and scale.

Pension funds have also expanded their sponsorship of infrastructure and renewable energy projects. The Ontario Teachers' Pension Plan, the Canada Pension Plan Investment Board and the Ontario Municipal Employees Retirement System are now among the top 50 international sponsors, drawn by the promise of stable returns and alignment with long-term sustainability goals.

The pursuit of stable and predictable returns has led financial sponsors to concentrate the majority of their investment in developed economies and a few of the most advanced developing countries. Of more than 150 projects backed by the three Canadian pension funds, only 22 were in middle-income developing economies and none in LDCs, with the majority concentrated in renewables in developed markets.

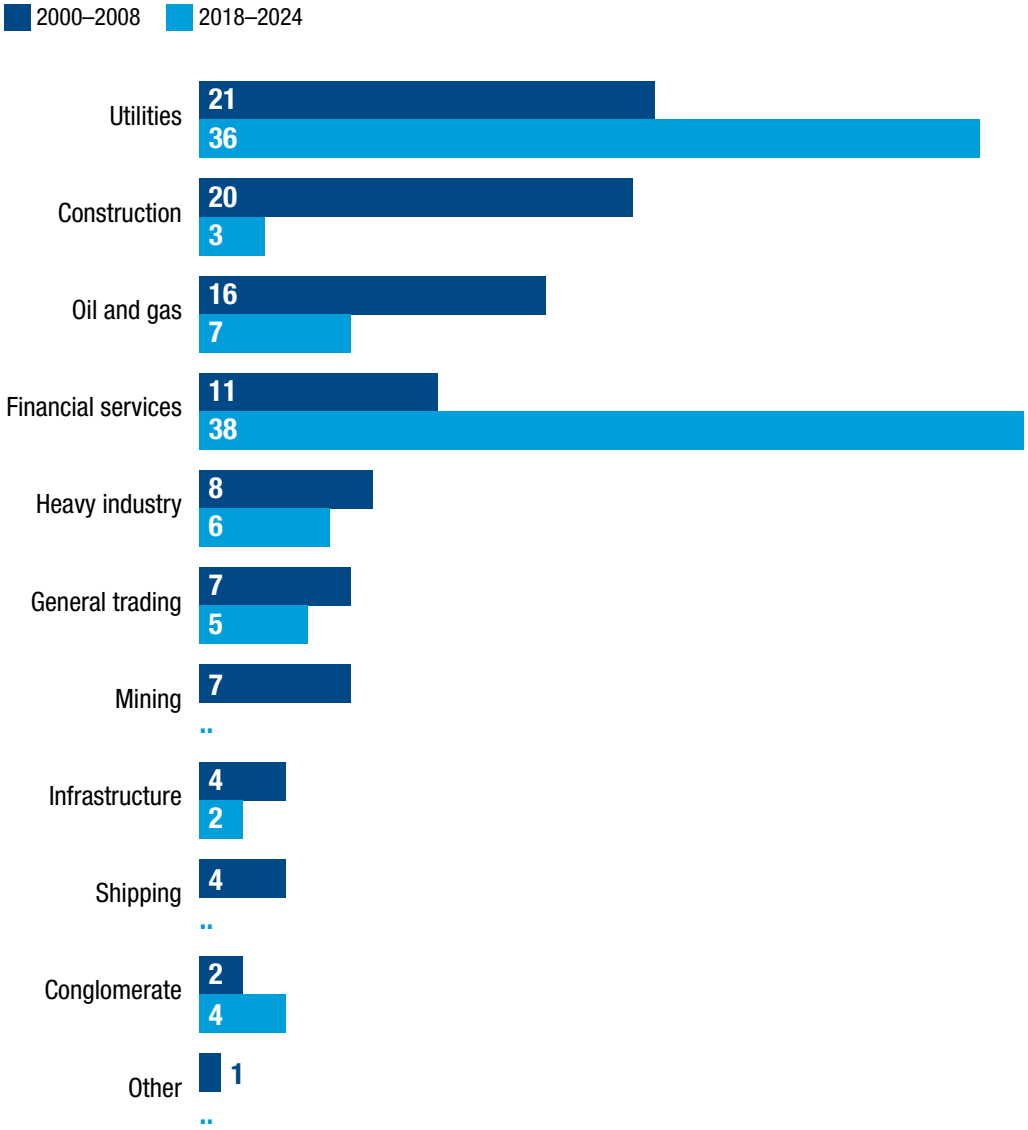
The investment strategies of financial sponsors are shaped by their pursuit of stable returns. As a result, they gravitate towards core infrastructure projects – such as utilities (electricity and water), telecommunications and transportation – which are typically regulated and offer predictable income streams. Within the electricity sector, they particularly favour renewable energy projects, attracted by both their financial stability and alignment with environmental and sustainability goals.

Financial investors tend to focus more on higher-income countries. Nevertheless, the top sponsors in developing countries increasingly include financial actors such as sovereign wealth funds – Dubai World (through DP World; United Arab Emirates) and GIC (Singapore) – as well as pension funds and other development finance institutions such as the World Bank Group, Norfund (Norway) and FMO (Netherlands).

In LDCs, sponsorship is more fragmented. Leading investors include Eni (Italy) and Al Nowais (United Arab Emirates), with 10 projects each since 2018. Masdar (United Arab Emirates) with nine projects, Power Construction Corporation of China (with eight) and Engie (France) (with seven) follow closely. Among development finance institutions, FMO and Africa Finance Corporation stand out, sponsoring five and four projects respectively in this period.

Figure I.26
Financial services companies are increasingly involved in sponsorship of projects

Primary industry of top 100 companies as ranked by number of international projects sponsored
(Number of companies)



Source: UNCTAD, based on LSEG Data & Analytics.

Note: Data cover 106 companies because several have the same number of projects.

* * *

Despite recent growth, IPF continues to face several challenges:

- Macroeconomic volatility: Global economic uncertainty, shifting interest rates, exchange rate volatility and inflationary pressures raise financing costs and dampen investor confidence.
- Regulatory and political risks: Policy changes, unstable regulatory environments and geopolitical tensions undermine project viability and deter investment.
- Debt sustainability: Sovereign debt distress affects credit ratings, and debt burdens linked to large-scale projects can strain public finances, particularly in developing economies.
- Climate and ESG risks: Growing emphasis on environmental, social and governance (ESG) standards is reshaping project evaluation. Stronger due diligence and compliance measures are now essential.

Looking ahead, IPF is expected to adapt and expand, with a stronger focus on sustainability, digital infrastructure and cross-border cooperation. Emerging tools such as blended finance, impact investing and digital platforms will likely enhance its reach and effectiveness, reinforcing its role in advancing global development goals.

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World Investment Report 2025

Chapter II

Investment policy trends

United Nations

Key findings

- **Geopolitical tensions and industrial policy drove investment policymaking**
  Activity reached near-record levels in 2024, driven by continued attraction efforts in developing countries and national security concerns in developed countries.

- **Incentives dominated investment promotion measures**
  Investment incentives accounted for a record 45 per cent of favourable measures, with a sharp rise in financial incentives, particularly in developed countries.

- **Facilitation remained a key focus across developing regions**
  More than 30 per cent of favourable measures in developing regions addressed facilitation. Liberalization continued in Africa and Asia. Promotion strategies for clean tech appeared in Latin America.

- **FDI screening was the main form of investment restriction**
  More than 40 per cent of restrictive measures expanded screening, nearly all in developed countries, increasingly targeting high-tech and critical raw materials.

- **Investment agreements increasingly focus on facilitation and cooperation**
  In 2024, countries concluded 30 treaties. Most turned to proactive facilitation and cooperation provisions, with relatively reduced reliance on investor–State arbitration.

- **Yet, new agreements are still implemented alongside an aging network of unreformed treaties**
  The network continues to limit regulatory space for key policy areas, including public health, climate change and digitalization.

- **Investor–State arbitration cases reached 1,401**
  Most of the cases – about 75 per cent – arose in the past 15 years. About 60 per cent of the claims for damages exceeded $100 million.

- **In 2024, investors initiated 58 arbitrations**
  Claims related to extractive activities and energy supply accounted for more than half of the cases.

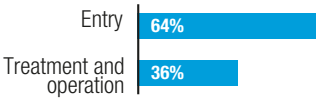
Developing countries continue to prioritize investment attraction

Share of measures more favourable to investors

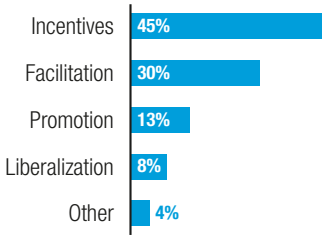
174
national investment policy measures adopted

Incentives are the dominant policy tool and FDI screening gains ground

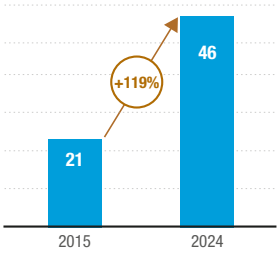
Less favourable to investors



More favourable to investors

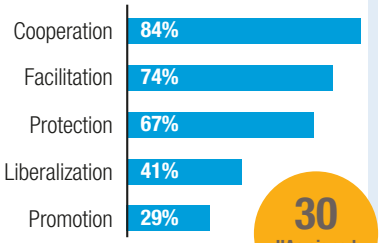


Number of countries with FDI screening



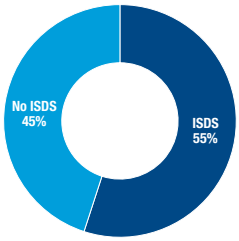
Investment agreements continued to evolve, yet more is needed to place sustainability at the core of the regime

IIA substantive content, 2020–2024

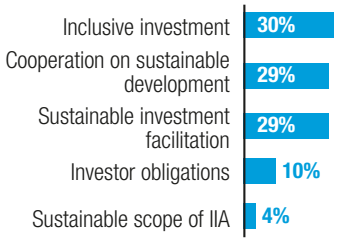


30
IIAs signed in 2024

Investor–State arbitration in IIAs, 2020–2024

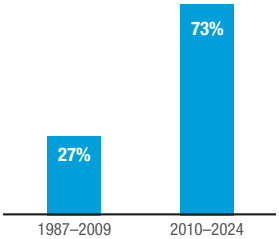


IIA proactive sustainable development content, 2020–2024



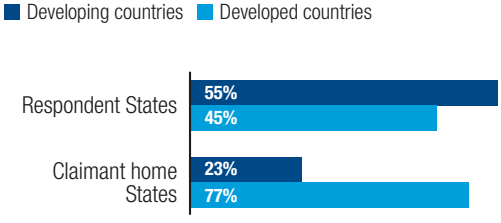
Most of the 1,401 investor–State arbitration cases arose since 2010. In 2024, about 55 per cent of new cases were brought against developing countries

Cases proliferated after 2010



58
new ISDS cases in 2024

Parties involved in 2024 cases



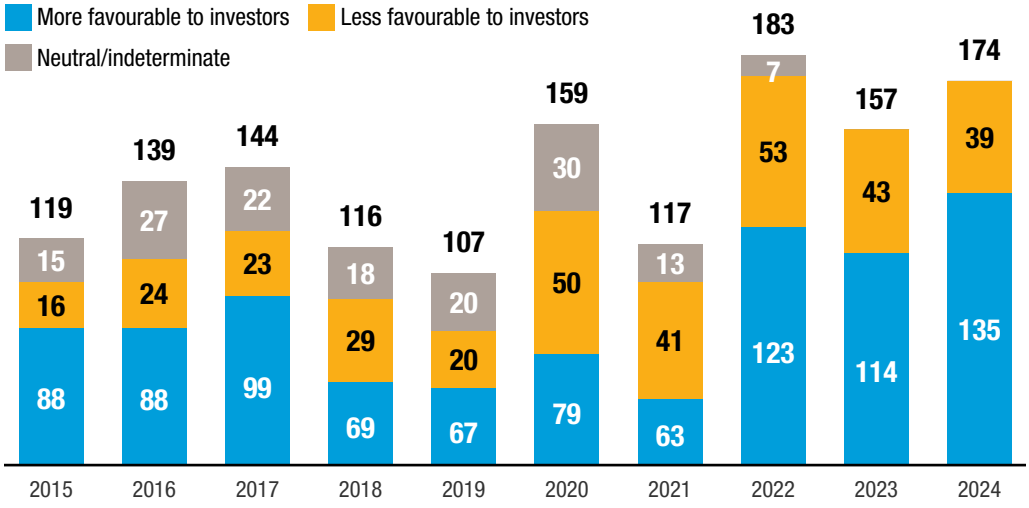
A. National investment policies

In 2024, global investment policymaking remained strongly influenced by geopolitical tensions and industrial policy goals. The number of new investment policy measures reached the second-highest level on record (174). Of these, 78 per cent were favourable to investors. In developing countries, the share favourable to investors increased marginally from an already high level, reflecting continued emphasis on attracting investment. In developed countries, the number of restrictive measures – particularly related to FDI screening for national security – continued to increase. Despite this, 63 per cent of new measures in those countries were favourable to investors, largely due to new incentives in Europe to support the energy transition.

1. Overall trends

In 2024, 174 policy measures affecting FDI were introduced across 83 countries, marking an 11 per cent increase from 2023 and the second-highest figure on record, surpassed only by the surge in measures implemented during the response to the coronavirus 19 (COVID-19) pandemic (figure II.1; box II.1).

Figure II.1
Investment policy measures rebounded in 2024
Measures by nature, worldwide
(Number)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

Box II.1
Methodology for analysing trends in national investment policy

The analysis of national investment policy trends is based on official measures affecting FDI that United Nations Member States adopted, as compiled in the UNCTAD Investment Policy Monitor database. They encompass FDI-specific measures as well as general investment measures with a clear impact on FDI. They are reported by Member States in annual surveys or identified from publicly accessible sources (e.g. government websites, specialized policy databases). The analysis excludes coercive economic measures that affect investment. Classification of measures as more or less favourable is based solely on their potential impact on investors (box table II.1.1). It does not reflect a value judgement on merit or suitability. When a measure contains more than one component, the components are analysed separately.

Source: UNCTAD.

Box table II.1.1
Classification of measures

More favourable to investors

Liberalization	Privatization
	Lifting of entry restrictions (e.g. opening of sectors to FDI) and entry conditions (e.g. minimum capital requirement)
	Removal (total or partial) of FDI screening or approval mechanisms
	Lifting of foreign exchange restrictions
	Liberalization of land access
Facilitation	Streamlining of investment procedures (e.g. one-stop shops)
	Greater transparency of investment-related laws and procedures
	Introduction by IPAs and others of new services (e.g. linkages programmes, investor visa facilitation or alternative dispute resolution mechanisms)
Promotion	Establishment of IPAs or other institutions with a remit as investment promoters and expansion of their mandate
	Adoption of investment promotion strategy and plans
	Introduction of PPPs, auctions, and concessions initiatives or framework
	Introduction of OFDI promotion initiatives
Incentives	Adoption of new tax and financial incentives schemes for investment
	Introduction of other incentives (e.g. citizenship by investment programmes)
	Adoption of new SEZ-related incentives
Other	Enhancement of investor treatment and protection guarantees
	Easing of labour or migration regulations on foreign hires and key personnel
	Removal of operational restrictions on investment (e.g. local content requirements)

Less favourable to investors

Entry	Introduction or tightening of entry restrictions (e.g. total or partial sectoral ban)
	Introduction or tightening of entry conditions (e.g. minimum investment threshold, joint venture requirements or State participation in strategic sectors)
	Introduction or expansion of screening mechanisms for national security
Treatment and operation	Introduction or expansion of foreign exchange restrictions
	Introduction or expansion of restrictions on foreign hires and key personnel
	Removal or reduction of investment incentives
	Introduction or expansion of post-establishment requirements for local content
	Reduction of guarantees for investment treatment and protection
	Introduction or expansion of restrictions on OFDI

Source: UNCTAD.

Abbreviations: FDI, foreign direct investment; IPA, investment promotion agency; OFDI, outward FDI; PPP, public-private partnership; SEZ, special economic zone.

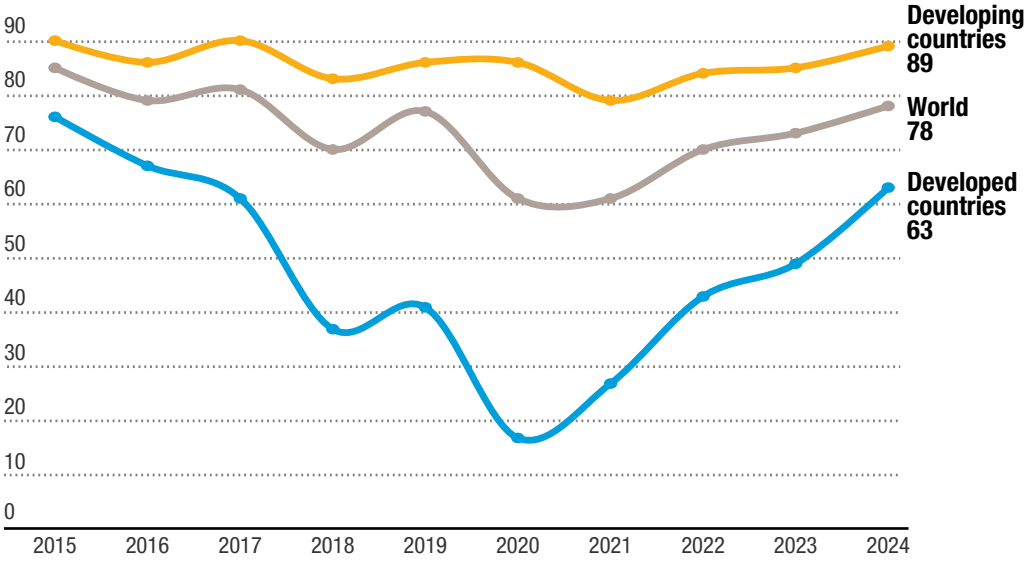
The share of measures more favourable to investors rose to 78 per cent, up from 73 per cent in 2023 and the highest level since 2017 (figure II.2).

This shift is driven primarily by developed countries, in which the share of measures more favourable to investors increased significantly – from one third of all measures over the past five years, to two thirds in 2024. In developing countries, the proportion of policies more favourable to investors also rose, though from an already high level, reaching 89 per cent in 2024. These converging trends signal a return to the mid-2010s balance between measures more and less favourable to investors in both developed and developing countries.

However, regional disparities among developed countries were pronounced. In Europe, despite the continued expansion of policy measures aimed at addressing national security concerns related to FDI, 78 per cent of newly adopted measures favoured investors, reflecting the rising emphasis on industrial policy and the expansion of State aid schemes for promoting renewable energy investment (section A.2). In contrast, in North America, 92 per cent of newly introduced measures were less favourable to investors. They focused primarily on national security concerns, tightening restrictions on foreign ownership of critical infrastructure, core technologies and other sensitive assets (section A.3).

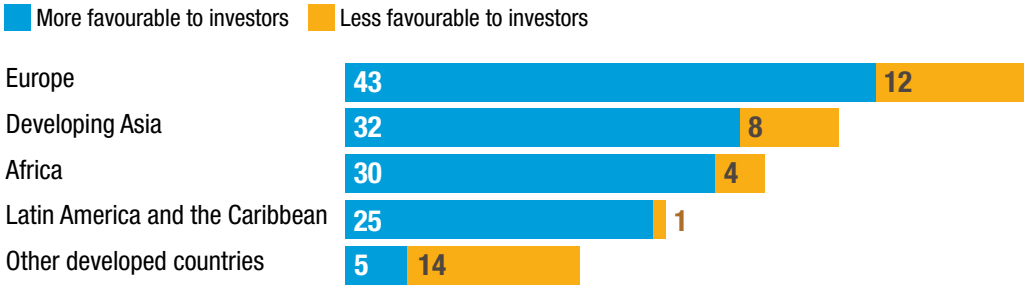
For the first time, Europe led in the number of new investment policy measures adopted, accounting for one third of all measures introduced globally – a notable increase from 2023. Among developing regions, Asia was the most active, introducing the highest number of new measures, followed by Africa. Latin America and the Caribbean recorded the highest share of measures favourable to investors. In other developed countries, three quarters of the measures introduced in 2024 were less favourable to investors, consistent with the 2023 trend (figure II.3).

Figure II.2
Policies favourable to investors became more prevalent in both developed and developing countries in 2024
Share of policy measures more favourable to investors
(Percentage)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

Figure II.3
Europe and developing Asia adopted the most investment policy measures in 2024
Nature of measures, by region
(Number)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

Note: Other developed countries include Australia, Canada, Japan, New Zealand, the Republic of Korea and the United States.

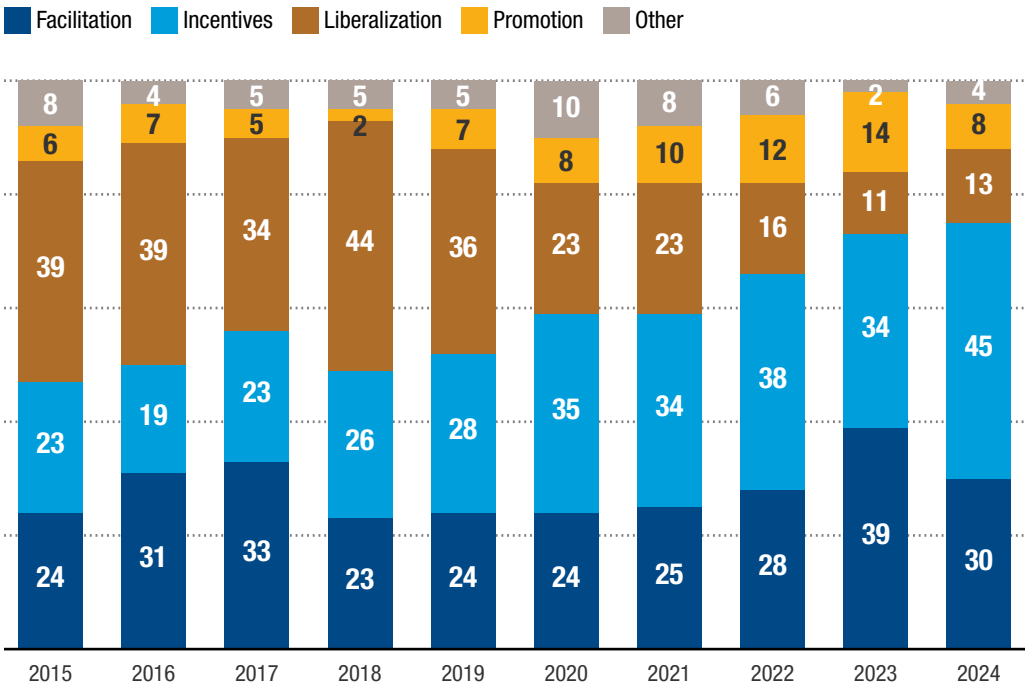
2. Policy measures more favourable to investors

Investment incentives accounted for a record 45 per cent of all policy measures more favourable to investors in 2024. Financial incentives, in particular, have proliferated since 2022, accounting for nearly half of all investment incentives adopted globally. Investment facilitation measures remained a key component of strategies to attract investment in both developed and developing countries.

In recent years, investment policies have undergone significant transformation, not only in the balance between measures more or less favourable to investors but also in type (UNCTAD, 2024c). This evolution continued in 2024, with a sharp rise in the use of incentives to stimulate investment, particularly in developed countries. This trend, which began before the pandemic, is the result of a broader shift towards industrial policy and a reduced emphasis on liberalization. Incentives, often targeting priority industries, have become the primary investment attraction tool, accounting for 45 per cent of all measures more favourable to investors.

While facilitation and investment promotion measures reached record highs in 2023, their relative importance declined in 2024, to 30 per cent and 8 per cent of measures favourable to investors, respectively. The share of liberalization policies remained modest at 13 per cent, still well below pre-pandemic levels (figure II.4).

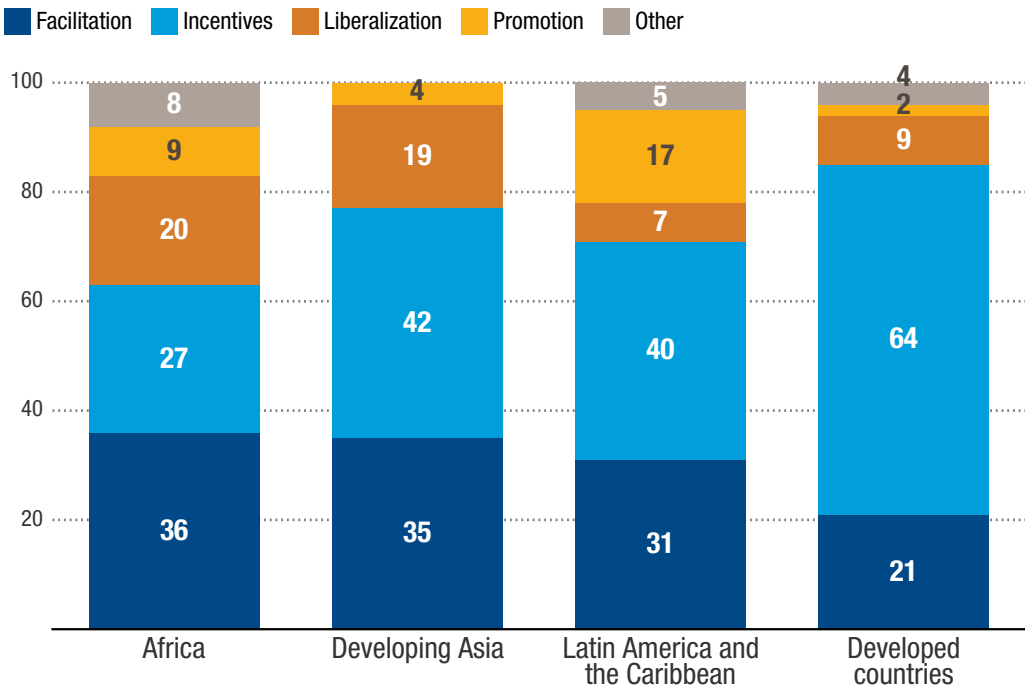
Figure II.4
The role of investment incentives has expanded over the past decade
Measures more favourable to investors, by category
(Percentage)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

In 2024, incentives emerged as the most prevalent policymaking instrument across most regions, comprising two thirds of measures favourable to investors in developed countries and approximately two fifths of measures in Asia and in Latin America and the Caribbean. In contrast, Africa prioritized facilitation measures, which rose to 36 per cent in 2024, from 29 per cent between 2014 and 2024. Liberalization remained a pivotal component of investment policymaking in Africa and in Asia, where it accounted for one fifth of measures adopted. In Latin America and the Caribbean, policymakers also concentrated relatively more on investment promotion, introducing novel FDI attraction strategies and public-private partnerships (PPPs) (figure II.5).

Figure II.5
Incentives were the main policy instrument to promote investment across most regions in 2024
Measures more favourable to investors, by category and region
(Percentage)



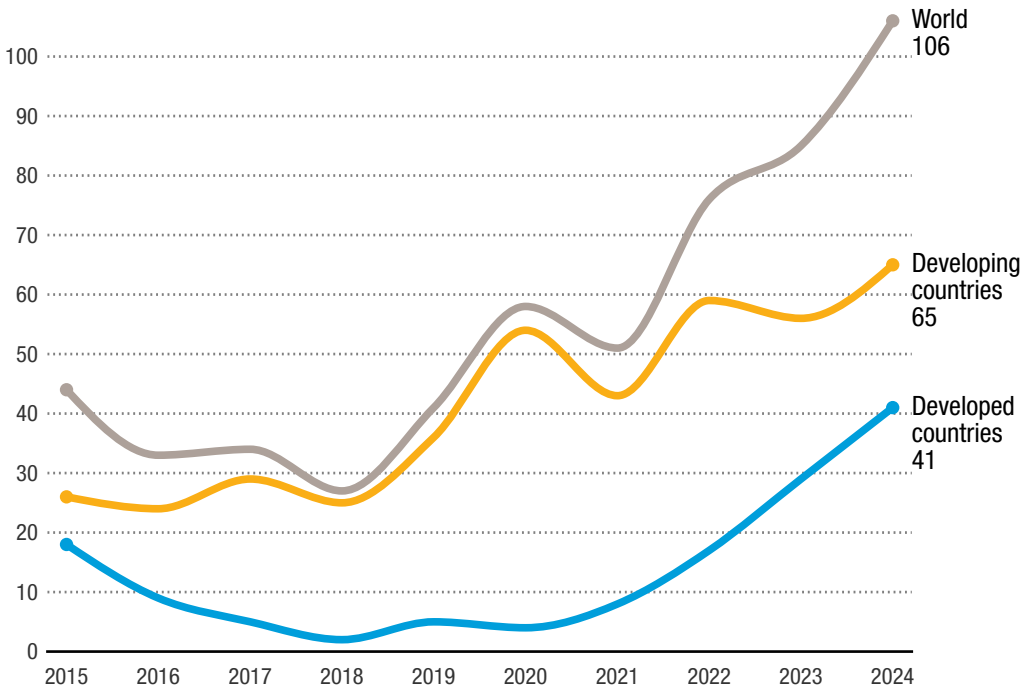
Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

a. Incentives

The rise in the adoption of investment incentives in 2024 marks an acceleration of a trend that began in 2018, driven by growing global trade tensions and uncertainties. It was reinforced by the pandemic, followed by a sharp rise since 2021 in policy measures that introduce or expand investment incentives across both developed and developing countries (figure II.6).

It is also evident in the evolution of investment laws, in which the growing inclusion of incentives has emerged as a key trend (box II.2). The greater reliance on incentives as investment attraction instruments runs counter to the objectives of international tax reform efforts aimed at curbing harmful tax competition for investment.

Figure II.6
The number of investment incentives has risen sharply since the COVID-19 pandemic
Policy measures introducing investment incentives, total and by economic grouping (Number)



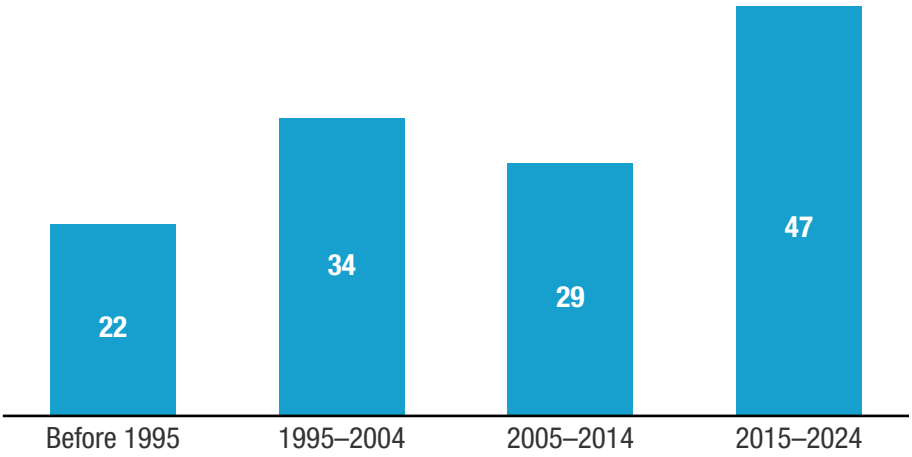
Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

Box II.2
Key trends in the evolution of investment laws

Many countries use investment laws to shape their investment policy frameworks. A recent issue of the UNCTAD Investment Policy Monitor catalogued 132 investment laws in force across 130 economies, including 115 enacted by developing economies and 15 by developed ones. Regionally, investment laws are more prevalent in Africa and in Asia, where 93 per cent and 79 per cent of countries, respectively, have adopted such legislation.

Between 2015 and 2024, at least 47 new investment laws were enacted globally, 43 of which replaced earlier legislation (box figure II.2.1).

Box figure II.2.1
Investment laws continue to be popular
Number of laws in force by period of adoption



Source: UNCTAD, Investment Laws Navigator database, accessed 1 April 2025.

Investment laws have evolved to align with changing national and international policy priorities and challenges. Compared with laws enacted before 1995, those adopted in the last decade display greater emphasis on sustainability, balancing investor rights with obligations and providing incentives tied to developmental goals. In particular:

- Recent investment laws have increasingly incorporated sustainability objectives, with 40 per cent of those enacted since 2015 including relevant provisions, up from just 5 per cent of those adopted before 1995.
- They also increasingly emphasize balancing investor rights with obligations, including adherence to environmental, labour and corporate social responsibility standards. Provisions addressing these obligations are present in 57 per cent of laws adopted in the last decade, compared with 14 per cent before 1995.

- The inclusion of incentives in investment laws has grown significantly, now featuring in 81 per cent of such laws enacted between 2015 and 2024. The proportion of investment incentives tied to specific development objectives has risen from 44 per cent before 1995 to 60 per cent in the last decade, with a stronger focus on projects that contribute to employment, regional development and green initiatives.

- Investment facilitation provisions are also increasingly present. Nearly half of investment laws globally include facilitation-related measures, rising to two thirds in Africa. Common provisions involve streamlining processes through one-stop shops and offering facilitation services such as permitting support, land access and dispute prevention mechanisms.

- Finally, reflecting trends in international investment agreements, the inclusion of clauses granting the State's consent to investor–State arbitration has declined. Such clauses appear in only one quarter of investment laws adopted in the last decade, down from more than half previously. Conversely, provisions designating domestic courts for dispute resolution now feature in more than two thirds of recent laws, compared with less than one third before 1995.

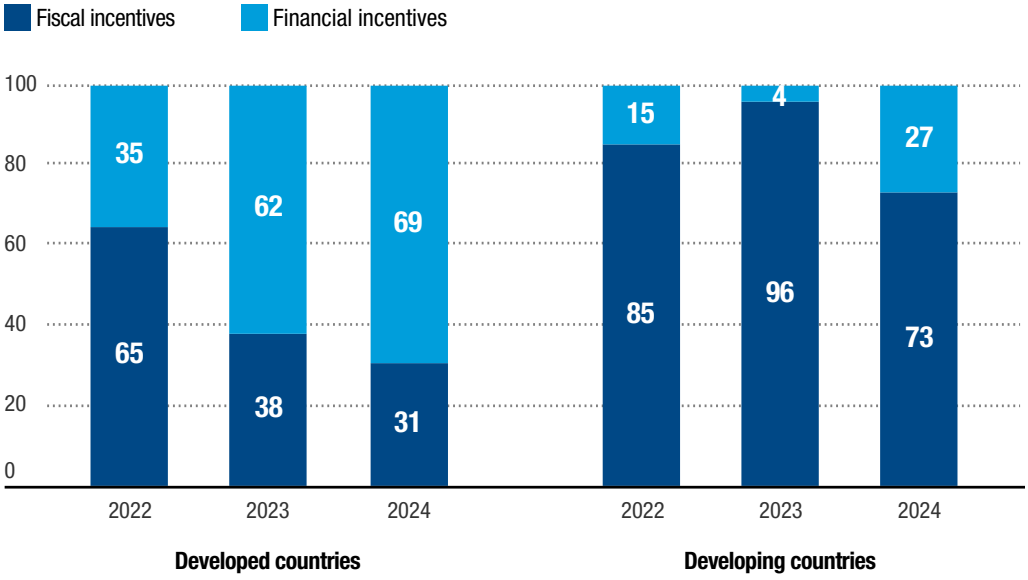
Source: UNCTAD (2024b).

The share of financial incentives, in particular, has increased, to account for 43 per cent of all investment incentives adopted globally in 2024 up from 19 in 2022. Although both developed and developing countries have expanded the use of financial incentives, the trend has been significantly more pronounced in developed countries, where the share grew from just above one third (35 per cent) in 2022 to more than two thirds (69 per cent) in 2024 (figure II.7).

The rise in financial incentives for investment in developed countries, from fewer than 5 new incentives schemes per year before 2022 to at least 27 in 2024, was largely driven by European countries, which have introduced several State aid schemes to promote renewable energy investment under the Temporary Crisis and Transition Framework introduced by the European Union in 2023. This framework aims to accelerate support for sectors relevant to the net zero transition, in alignment with the Green Deal Industrial Plan. In 2024, the value of new State aid schemes for investment by European countries exceeded €33 billion. This includes more than €14 billion for industrial decarbonization, another €14 billion for renewable energy and green hydrogen investments, and more than €5 billion to support clean technology manufacturing and energy efficiency. (Unless indicated otherwise, all examples provided in this section, including additional information and links to official sources, can be found in the UNCTAD Investment Policy Monitor database.[1])

In developing countries, fiscal incentives remain the predominant form of incentives, accounting for nearly three quarters of all incentives introduced in 2024, despite a rise in the use of financial incentives. As a result, fiscal incentives continue to represent the majority of new incentive measures adopted globally (57 per cent).

Figure II.7
Growing reliance on financial incentives across developed and developing countries
Incentive measures by type
(Percentage)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

[1] Accessible at https://investmentpolicy.unctad.org/investment-policy-monitor.

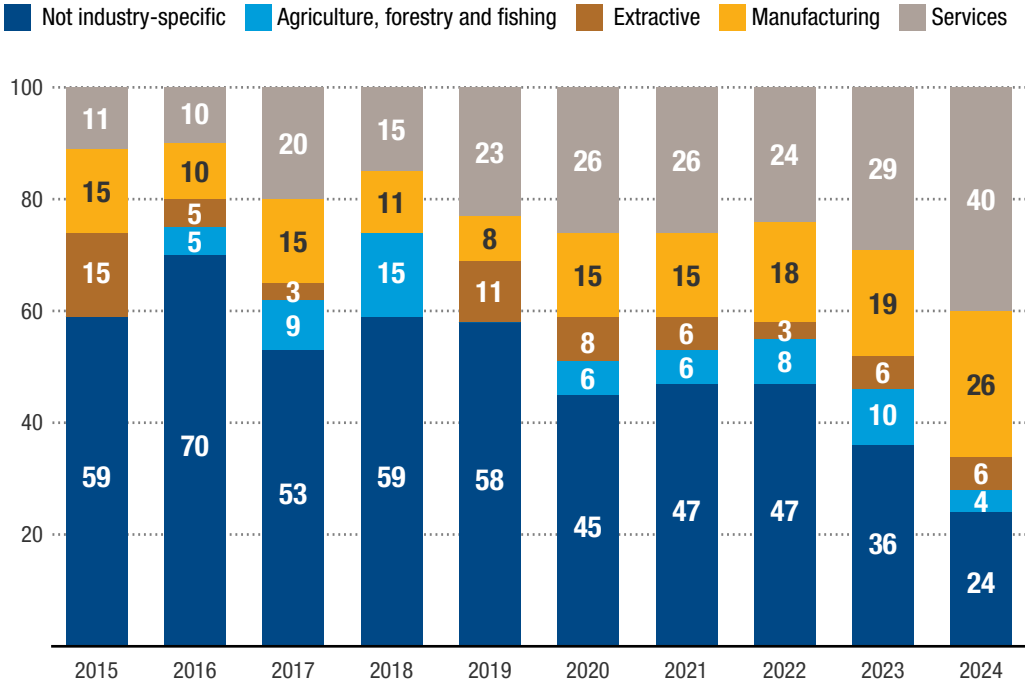
The sectoral distribution of incentives has also shifted over the past decade from broad, cross-sectoral measures to more targeted, sector-specific ones. Before 2020, cross-cutting incentives – such as horizontal tax breaks and general investment incentives – accounted for more than half of all incentives. However, by 2024, their share had dropped to less than a quarter of all incentives introduced globally (figure II.8).

This transition, observed in both developed and developing countries, is more pronounced in the latter. It reflects evolving economic policy priorities, with a stronger focus on directing investment towards strategic sectors, particularly the digital economy (see chapter IV) and the green transition. Notably, the number of incentives targeting services and manufacturing has increased significantly.

In 2015, incentives related to services accounted for only 10 per cent of the total; by 2024, this figure had surged to 40 per cent. In 2024, for example, several countries introduced new incentives for renewable energy production, including Bangladesh, Belgium, Ecuador, Italy and Panama. Others have targeted the digital sector: Brazil introduced incentives for artificial intelligence investment, Chile for data centres and Viet Nam for investment in research and development centres focused on semiconductors and artificial intelligence.

Prior to 2021, manufacturing incentives consistently accounted for 15 per cent or less of all incentives. Their share has since expanded significantly, exceeding 25 per cent of all incentives adopted globally in 2024. In addition to numerous European Union Member States implementing

Figure II.8
Incentives are increasingly targeting specific activities in services and manufacturing
Incentive measures by sector
(Percentage)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

schemes to support green hydrogen, several other countries introduced incentives in this sector (e.g. the Plurinational State of Bolivia, Brazil, Chile, Mauritania and Peru). Moreover, several countries have introduced incentive schemes to promote high-tech manufacturing, particularly of semiconductors, electric vehicles and batteries (e.g. Brazil, Costa Rica, Mexico, South Africa, Thailand, Türkiye and Viet Nam).

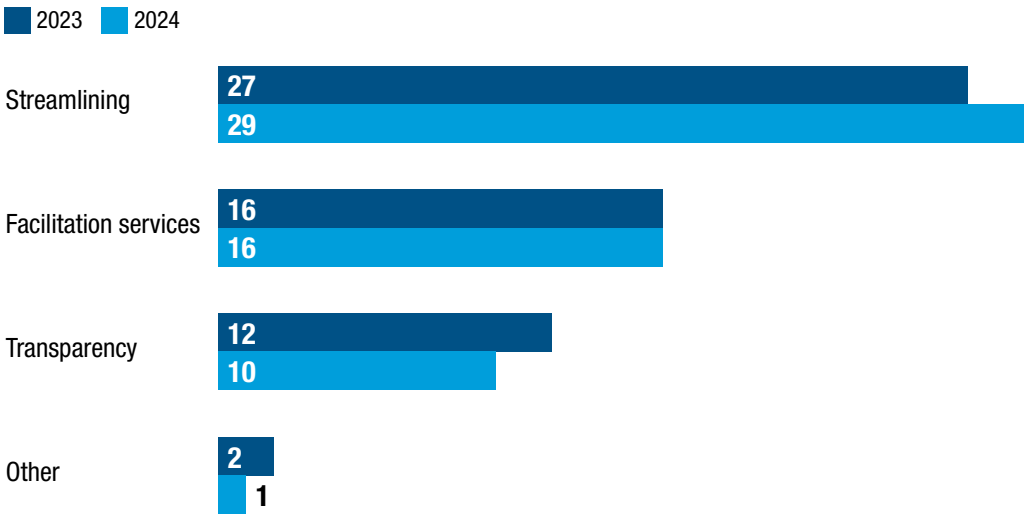
b. Facilitation

Investment facilitation efforts remained strong in 2024 (see figure II.4). Although facilitation measures accounted for just 30 per cent of policy measures, down from 39 per cent in 2023, this decline reflects a surge in investment incentives rather than a reduction in facilitation measures globally.

As observed in 2023, streamlining initiatives aimed at improving the efficiency of investment procedures remained the most prevalent, representing more than half (29) of facilitation measures adopted in 2024 (figure II.9). To enhance efficiency, several countries have introduced digital platforms to streamline procedures in 2024. Cambodia, for instance, launched the Investment Project Management System to digitize investment processes, Tonga introduced an online company registration system and Kazakhstan implemented a digital platform for licensing. Algeria launched the Investor's Digital Platform to facilitate access to State-owned land, and in Egypt the General Authority for Investment and Free Zones introduced an electronic service for company establishment.

Other streamlining measures include simplifying procedures, fast-tracking certain types of investment and establishing one-stop shops. Greece and Kazakhstan, for instance, introduced fast-track mechanisms to expedite procedures for priority investment projects, and Malawi established a one-stop shop for investors. Simplification efforts also include reforms in Chile to accelerate permitting for investment in green hydrogen and data centres, streamlined processes in Costa Rica for the semiconductor industry and unification of procedures for economic licence registration in the United Arab Emirates by Abu Dhabi.

Figure II.9
Streamlining remained the top investment facilitation initiative in 2024
Investment facilitation measures by category
(Number)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

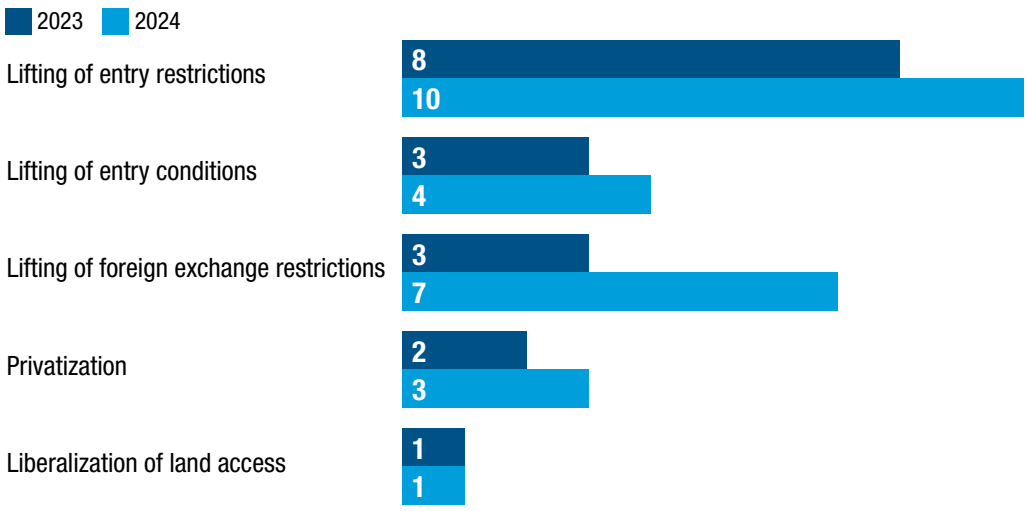
Facilitation services provided by investment promotion agencies (IPAs), special economic zones and other administrative entities accounted for 30 per cent of all facilitation measures in 2024. Malaysia, for instance, launched the Golden Pass scheme to attract unicorn start-ups and venture capitalists, facilitating visa, employment and licensing procedures. The Philippines adopted the Create More Act, allowing the IPA to issue special visas to foreign nationals with highly specialized skills or executive roles. Türkiye introduced facilitation services for employment and land access to support its growing high-tech sectors. Aftercare services are also a key component of investment facilitation. Kazakhstan, for instance, established a unified registry of investor issues and complaints to improve aftercare mechanisms and investor advocacy.

Key transparency measures adopted in 2024 include the introduction of information portals for foreign investors. For instance, Brazil launched a new platform to boost green investment, and Chile introduced a digital investment platform integrating data on energy, land use, fibre optics and environmental factors to guide investment in data centres. Jamaica launched a platform to engage its diaspora. Additional measures focused on clarifying investment-related procedures. For example, Belgium, Poland and the United Kingdom issued guidance on the approval processes of their FDI screening regimes, and Angola issued a decree clarifying licensing procedures and helping investors better understand compliance requirements in the pharmaceutical sector.

c. Liberalization

As in 2023, the removal of entry and foreign exchange restrictions accounted for the majority of the liberalization measures adopted in 2024, followed by the easing of FDI entry conditions, new privatization initiatives and the liberalization of land access (figure II.10). Countries that relaxed foreign exchange restrictions included Argentina, Ethiopia, Mozambique, South Africa and Ukraine. Ecuador and

Figure II.10
Most liberalization measures in 2024 lifted entry and foreign exchange restrictions
Liberalization measures by type
(Number)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

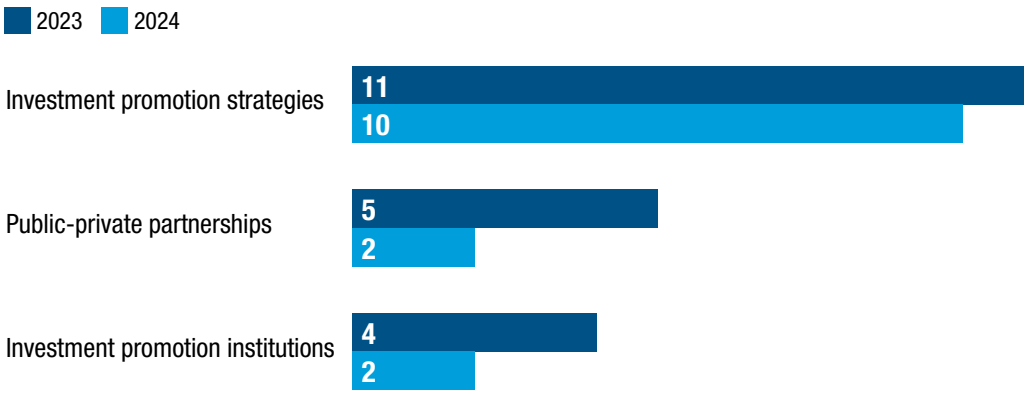
South Africa liberalized their electricity markets to attract additional investment in renewable energy. China opened telecommunication services to foreign investment and relaxed restrictions on investment in healthcare. India opened the space sector to foreign ownership.

d. Promotion

Most investment promotion measures adopted in 2024 involved the launch of investment promotion plans and strategies, either sector-specific or cross-sectoral. Other measures included the establishment of investment promotion institutions, the adoption of PPP laws and the opening of new concessions (figure II.11). For instance, the Plurinational State of Bolivia, Chile, Mauritania and Peru adopted green hydrogen plans and laws aimed at attracting investors in this sector. Cambodia introduced a national policy on the development of electric vehicles, and Costa Rica launched a semiconductor road map to attract FDI. Kenya expanded investor aftercare services, and Malawi established a new IPA. Colombia opened concessions for bidding to stimulate offshore wind development, and Rwanda adopted a new PPP law.

In measures related to outward FDI (OFDI), most developed countries (71 per cent), along with some developing ones (15 per cent), continued to implement programmes to promote OFDI. Globally, the most common mechanisms were investment facilitation services, followed by fiscal and financial support, investment guarantees and State equity participation in foreign investment projects. Among these, political risk insurance (PRI) has a critical and potentially expanding role to play in fostering investment in sectors relevant to the Sustainable Development Goals in developing countries, especially LDCs (box II.3).

Figure II.11
The adoption of new strategies led investment promotion efforts in 2024
Promotion measures by type
(Number)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

Box II.3
The role of political risk insurance in fostering investment

Climate change, geopolitical tensions and supply chain disruptions are amplifying investment risks. In this context, PRI is an investment guarantee that has a crucial role to play in facilitating FDI in developing countries, where real and perceived investment risks tend to be higher. Between 2018 and 2022, PRI providers insured projects worth approximately $150 billion in developing countries.

Although LDCs account for only 15 per cent of the total value of projects insured by PRI providers, the ratio of PRI to FDI inflows in developing countries underscores its critical role. Between 2014 and 2023, PRI issued by members of the Berne Union, the leading global association for the export credit and investment insurance industry, equated to 2 per cent of FDI inflows in developed countries and 6 per cent in developing countries. However, in LDCs, this ratio surged to 28 per cent, reflecting the higher reliance on PRI in countries with higher perceived risks (box figure II.3.1).

Box figure II.3.1
Political risk insurance equates to more than a quarter of FDI in least developed countries

PRI to FDI ratio by economic grouping, 2014–2023
(Percentage)

Source: UNCTAD, based on data from UNCTAD and the Berne Union Secretariat.

[a] Excludes Angola, which has recorded negative FDI flows in the last eight years.

Abbreviations: FDI, foreign direct investment; PRI, political risk insurance.

Excluding the financial services sector, PRI coverage is predominantly provided to industries involved in large-scale, capital-intensive projects with long-term payback periods, which heighten risks for private investors. Between 2019 and 2023, manufacturing accounted for the largest share of PRI coverage (20 per cent), followed by non-energy infrastructure (19 per cent), natural resources – including mining and fossil fuel extraction (14 per cent), and non-renewable energy projects (14 per cent). Renewable energy projects received only 4 per cent of total PRI coverage during this period, although their share of all projects increased from 3.7 per cent in 2019 to 6.2 per cent in 2023.

The analysis highlights the need for a more targeted and inclusive approach to PRI, to better support sustainable and climate-resilient investments while balancing the interests of investors and host countries. Expanding PRI coverage in underrepresented sectors in LDCs will require enhanced collaboration among multilateral institutions, export credit agencies and private insurers. Key priorities include fostering innovation in risk mitigation instruments, enhancing PPPs, streamlining PRI processes and leveraging blended finance to bridge the sustainable development financing gap.

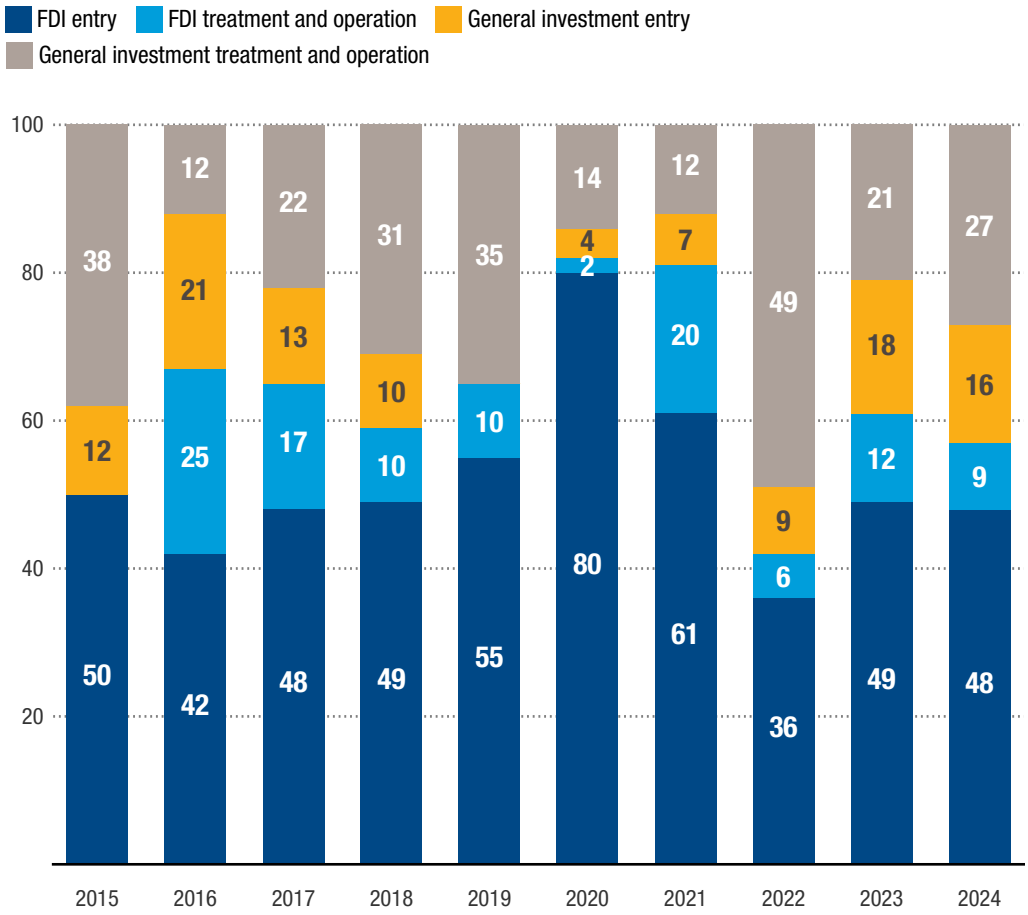
Source: UNCTAD (2025).

3. Policy measures less favourable to investors

More than 40 per cent of measures less favourable to investors concerned new or expanded FDI screening mechanisms. Almost all were adopted by developed countries and targeted high-tech sectors and critical raw materials essential for the energy transition and supply chain resilience. Concerns about national security are also prompting the introduction of new restrictions on OFDI. In developing countries, measures less favourable to investors primarily consisted of foreign equity restrictions and tightened permit requirements in extractive industries.

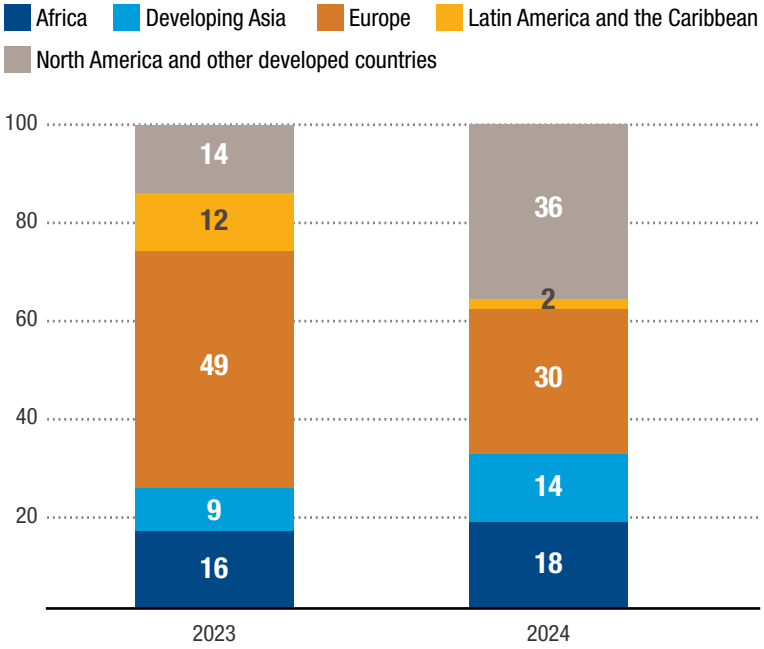
As highlighted in recent editions of the World Investment Report, numerous countries – particularly developed ones – have implemented stricter foreign investment entry regulations over the past decade, especially in sectors deemed critical to national and economic security. In 2024, investment screening mechanisms continued to expand across multiple sectors, with economic resilience and technological sovereignty emerging as central national security concerns (figure II.12).

Figure II.12
Foreign investor entry restrictions persisted in 2024
Measures less favourable to investors by category
(Percentage)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

Figure II.13
Developed countries adopted most investment restrictions in 2024
Measures less favourable to investors by region
(Percentage)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.
Note: Other developed countries include Australia, Japan, New Zealand and the Republic of Korea.

A notable shift in 2024 is the changing geography of investment restrictions (figure II.13). In 2023, European countries accounted for nearly half of all restrictive policy measures. This share declined to 30 per cent in 2024, while other developed countries – primarily Canada and the United States – became the main adopters of measures less favourable to investors, representing 36 per cent of the total.

Within developing countries, distinct regional patterns emerged in 2024. Developing Asia accounted for 14 per cent of all restrictive measures (up from 9 per cent in 2023), with entry-related regulations specifically targeting foreign investors on the rise. In Africa, restrictive measures affecting investor entry, treatment and operation remained general in nature, without specifically targeting foreign investors. In Latin America and the Caribbean, regulatory activity was minimal.

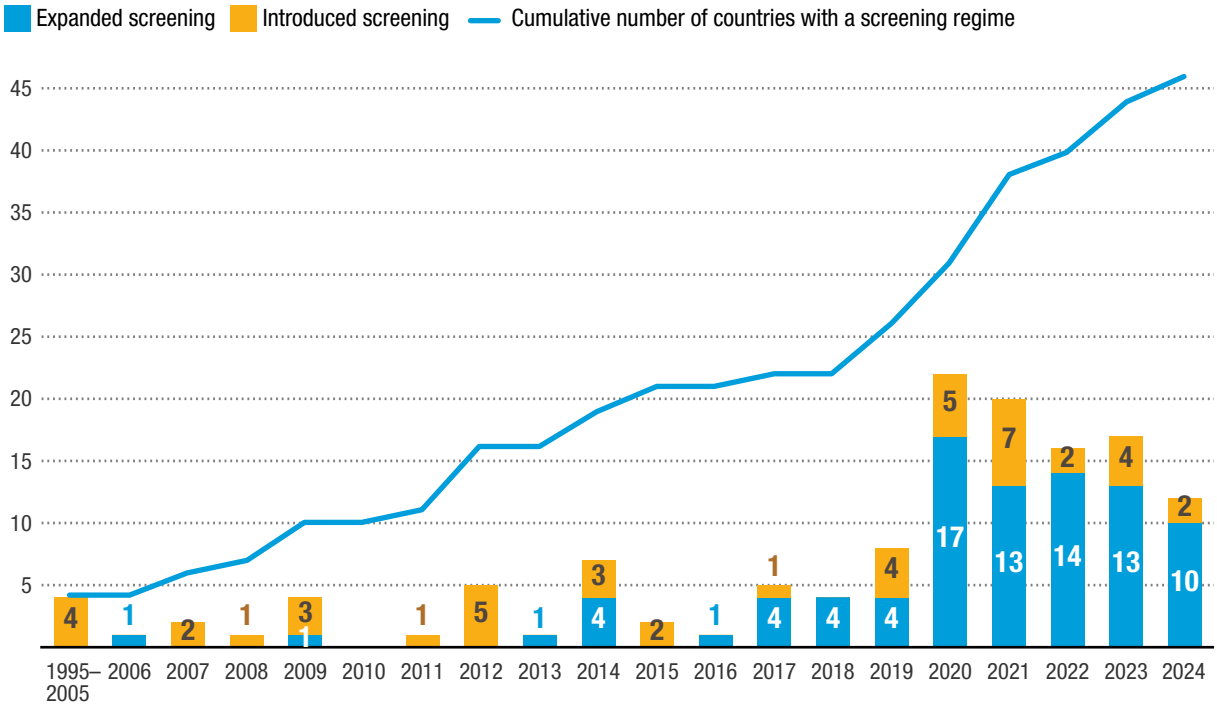
a. Entry

i. Investment screening for national security

In 2024, new or expanded measures to screen investment for national security accounted for 43 per cent of all restrictive investment measures, on par with 2023. Developed countries led the trend, introducing most of the new measures. New screening frameworks in Bulgaria and Singapore have raised the total number of countries with comprehensive investment screening regimes to 46 (figure II.14.[2])

[2] The database has been updated to include the FDI screening regimes of Andorra, Fiji and the Republic of Moldova, which were previously omitted from the Investment Policy Monitor. The screening regime introduced in 2024 by Kosovo (United Nations Administrative Region, Security Council Resolution 1244 (1999)) is excluded from the calculations.

Figure II.14
Screening regimes continued to gain ground in 2024
Countries introducing or expanding security-related investment screening (Number)



Source: UNCTAD, Investment Policy Monitor database, accessed 31 March 2025.

Countries that implement FDI screening for national security now account for 71 per cent of global FDI flows and 80 per cent of FDI stock.

The boundary between traditionally defined national security sectors and purely economic industries is increasingly blurring, as technology becomes central to geopolitical competition. This shift has prompted major economies to tighten their FDI screening mechanisms to maintain technological leadership and ensure resilient supply chains (see chapter IV). In 2024, the Republic of Korea, for instance, expanded its FDI screening regime by adding "national high-tech strategic technologies" to the list of sectors requiring security reviews. Japan broadened its screening framework to include industries related to semiconductor manufacturing, advanced electronic components, machine tool components and marine engines, aiming to secure supply chains and maintain industrial resilience. The United States reinforced its focus on high-priority technologies, particularly those related to artificial intelligence, clean energy and other security-critical innovations. It also emphasized protecting critical infrastructure, addressing supply chain vulnerabilities and preventing illicit access to sensitive information.

Concerns about access to personal, genetic and biometric data have also led to expanded scrutiny. Canada, for example, revised its screening regime to factor in intellectual property developed with Government support and the protection of personal information. In Sweden, the regime was expanded to cover public electronic communication services, data programming, educational platforms and biometric data handling. Another key area of concern is access to critical raw materials, particularly those necessary for a sustainable energy

transition. In 2024, Canada introduced stricter monitoring of foreign investments in critical minerals operations deemed vital for economic security and the transition to a low-carbon economy. France expanded its foreign investment controls to include activities related to critical raw materials, as well as research and development in photonics and low-carbon energy.

At the same time, screening frameworks continued to evolve to address vulnerabilities in traditional national security sectors. France, for instance expanded its foreign investment screening to prison security. Australia and the United States imposed new restrictions on investment near sensitive government facilities.

Finally, some European Union countries have adopted a more stringent approach to intra-European Union investments. Czechia, for instance, established a requirement that all investors notify acquisitions in critical energy infrastructure, and Romania extended sanctions for non-compliance with the notification requirements of their screening regime to European Union investors.

Table II.1 presents investment screening data compiled by UNCTAD from country surveys and official sources. Only an average 1.6 per cent of projects that undergo screening are prohibited or require divestment (in Canada, this figure stands at 5 per cent, while in the United States, it is 0.3 per cent). Conversely, 13 per cent are either conditionally approved or subjected to mitigation measures imposed by the screening authority. Country-specific figures differ sharply (e.g. Germany at 52 per cent and the United States at 29 per cent). Furthermore, 10 per cent of projects under review are withdrawn by the investor. Although some withdrawals may be driven by commercial considerations, others occur when investors are unable to resolve national security concerns raised by the screening authority and anticipate a likely rejection. Withdrawal rates, too, vary by country – exceeding 20 per cent in Canada, Germany and the United Kingdom.

The adoption and expansion of FDI screening regimes is set to continue. In 2024, Cyprus, Greece, Iceland and Switzerland all continued consultations on their proposed FDI screening frameworks. The European Union is also advancing economic security initiatives, including policies on both inward and outward FDI. The European Commission's 2024 proposal to reform the FDI screening framework highlights the need for all Member States to establish ex ante screening mechanisms and recommends broadening the scope of national regimes to include intra-European Union transactions involving foreign-controlled entities.[3]

Adoption and expansion of FDI screening regimes is set to continue

The Standing Committee of the European Free Trade Area States submitted comments that emphasized the importance of a balanced approach and cautioned that any new legislation should not create trade barriers, market fragmentation or discriminatory effects within the internal market of the European Economic Area.[4]

In the United States, the America First Investment Policy adopted in February 2025, proposes to significantly expand the scope of both inward and outward FDI screening (box II.4).

In 2025, UNCTAD added a catalogue of investment screening laws to its Investment Laws Navigator. This platform provides a comprehensive mapping of key aspects of screening frameworks across various countries, offering insights into regulatory approaches, procedural requirements and policy considerations.

[3] Proposal for a Regulation of the European Parliament and of the Council on the screening of foreign investments in the Union and repealing Regulation (EU) 2019/452 of the European Parliament and of the Council, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52024PC0023.

[4] European Economic Area, EEA EFTA Comment on the Proposal for a Regulation of the European Parliament and of the Council on the screening of foreign investments in the Union and repealing Regulation (EU) 2019/452 of the European Parliament and of the Council, https://www.efta.int/sites/default/files/uploads/2025-02/EEA%20EFTA%20Comment%20-%20Screening%20Proposal.PDF.

Table II.1
Few screened investment projects are rejected
Investment projects undergoing screening for national security, selected countries (Number)

Country	Period	Screened[a]	Authorized[b]	Modified or authorized with conditions	Rejected	Withdrawn
Belgium	7/2023–12/2024	8	98	1	0	1
Canada	2022	35	24	0	3	8
	2023	28	19	0	2	7
	2024	31	11	2	0	9
Czechia	2022	13	7	0	0	3
	2023	28	18	0	0	1
	2024	21	20	0	0	0
Germany[c]	2019–2021	119	..	38	..	..
	2022	27	..	13	..	..
	2023	20	248	12	0	6
	2024	18	231	8	0	2
Hungary	2023–2024	19	17	0	2	0
Italy	2019–2020	425	174	53	2	..
	2021	496	183	26	3	1
	2022	608	242	18	4	3
	2023	577	225	28	2	2
Malta	2021	81	2	6	2	0
	2022	22	0	10	1	3
	2023	20	1	2	0	3
Slovakia	2023	11	6	0	0	0
	2024	10	14	0	0	0
Spain	2019–2021	100	91	9	0	2
	2022	78	67	9	1	1
	2023	109	105	12	4	4
	2024	113	106	9	1	6
United Kingdom[d]	4/2022–3/2023	65	57	9	5	11
	4/2023–3/2024	41	23	5	0	10
United States	2021	130	..	31	0	11
	2022	163	..	52	0	20
	2023	128	..	43	0	14

Source: UNCTAD, based on official sources and country inputs.

Notes: Data may differ from previously published figures as a result of adjustments and corrections for prior periods. Includes data only from countries that report sufficient details to measure key indicators such as rejection rates, conditional approvals or other parameters required for cross-country comparison.

[a] Screened transactions are those that underwent extended review by the respective authorities.

[b] Authorized projects do not include projects modified or authorized with conditions.

[c] For Germany (2019–2022), conditions include prohibitions, side conditions, public legal contracts and administrative orders.

[d] The review mechanism applies equally to domestic and foreign parties.

Box II.4
America First Investment Policy

The America First Investment Policy adopted by the United States on 21 February 2025 is a two-pronged strategy that prioritizes economic and national security interests. The policy promotes FDI from some countries by streamlining security and environmental reviews and assigning additional administrative resources towards facilitating investment from partner countries, while simultaneously restricting FDI from other economies.

FDI promotion and facilitation measures

The policy establishes an expedited, fast-track review process for investment originating from specified countries, particularly in sectors such as advanced technology. Such investment remains subject to appropriate security safeguards.

To encourage large-scale investment, the policy mandates accelerated environmental reviews for projects worth more than $1 billion. In addition, an Investment Accelerator, announced on 31 March 2025, will support and streamline such high-value investment by reducing regulatory hurdles, enhancing access to national resources, facilitating research collaborations with national laboratories and coordinating efforts across federal agencies and state governments.

More administrative resources will be directed towards facilitating investment from partner countries.

FDI restriction measures

To safeguard critical sectors – such as technology, infrastructure, healthcare, agriculture, energy and raw materials – the policy directs the use of legal instruments, including the Committee on Foreign Investment in the United States, to limit investment from certain foreign countries. The policy proposes expanding the Committee's jurisdiction to include greenfield investment, especially in such sensitive sectors as artificial intelligence.

The policy indicates that for investment from certain countries, the use of open-ended mitigation agreements (agreements to address national security concerns deriving from foreign investment through compliance obligations) will cease.

The policy also seeks to restrict certain countries' access to United States talent and operations in sensitive technologies (especially artificial intelligence).

Outward FDI

The America First Investment Policy outlines a framework for reviewing and potentially expanding restrictions on outward investment. Specifically, it targets the following:

"Sectors such as semiconductors, artificial intelligence, quantum, biotechnology, hypersonics, aerospace, advanced manufacturing, directed energy, and other areas implicated by the PRC's national Military-Civil Fusion strategy" (ad litteram).

An expanding range of investment types, including private equity, venture capital, greenfield investment, corporate expansion and investment in publicly traded securities, from sources including pension funds, university endowments and other limited-partner investors.

Tax-related incentives to further discourage United States persons from investing in certain foreign countries.

The measures outlined in the directive are to be implemented through appropriate administrative actions by relevant authorities, including the Committee on Foreign Investment in the United States. They may require legislative or other necessary interventions.

Source: America First Investment Policy (accessible at https://www.whitehouse.gov/presidential-actions/2025/02/america-first-investment-policy/).

ii. Other entry-related measures

Other types of entry-related measures adopted in 2024 accounted for 21 per cent of all policies less favourable to investors, down from 27 per cent in 2023. Developing countries adopted more than two thirds of these restrictions, which aimed primarily to strengthen State oversight in critical sectors. Angola, for instance, banned foreign investment in mining and in oil and gas within natural reserves. Burkina Faso revamped its Mining Code to require partial local ownership, strengthening national stakes in resource extraction. Kazakhstan imposed new financial guarantees for land allocation in investment projects, ensuring greater State control. Mexico expropriated a hydrogen plant, citing concerns about national energy security. Oman reserved 28 additional business activities for local investors, ranging from handicrafts to traditional products. Meanwhile, Viet Nam tightened regulations on foreign investment in education, requiring universities to meet local facility and faculty standards before granting accreditation.

b. Treatment and operation

Treatment and operation provisions represented 36 per cent of policy measures less favourable to investors in 2024. They aimed at increasing transparency in ownership structures and corporate operations, imposing additional taxation on investment or reducing certain incentives.

Transparency has emerged as a central theme. The Republic of Korea introduced new requirements for foreign companies listed on the Composite Stock Price Indexes to disclose key business information in English, covering aspects such as dividends, capital changes and major decision-making processes. Similarly, the United States now requires companies to report their beneficial owners to the Financial Crimes Enforcement Network, with exemptions for certain entities such as banks and tax-exempt organizations.

Some countries have implemented additional taxation measures affecting foreign investors or have withdrawn previously established incentives. For instance, in 2024 Kenya introduced a 10-year cap on incentives for SEZ developers, and the United Arab Emirates imposed an annual 20 per cent tax on the taxable income of foreign banks.

In addition, stricter regulatory requirements have been introduced in various areas. Angola, for example, tightened environmental regulations for investment projects in protected areas. In Burkina Faso, post-establishment provisions for local content were introduced in the minerals sector, including the creation of a fund to support local content development. The United States enhanced protections for sensitive personal data to prevent access by countries of concern through investment, vendor or employment relationships.

As of 31 March 2025, at least 49 countries, primarily developed economies in Europe,

had adopted legislation integrating the Pillar Two model rules of the Organisation for Economic Co-operation and Development (OECD) in their national laws.[5]

Known as the Global Anti-Base Erosion model rules, this international tax framework is designed to ensure that multinational companies with annual revenues over €750 million are subject to a minimum effective tax rate of 15 per cent on any excess profits arising in each jurisdiction where they operate. However, recent policy developments – such as the United States withdrawing from the Pillar Two discussions and suggesting the introduction of retaliatory measures against countries that implement the global minimum tax on United States companies[6]– may alter the course of international tax reform efforts.

Restrictions on OFDI in sectors related to national security are gaining prominence in developed countries (UNCTAD, 2024c). In October 2024, the United States issued a Final Rule implementing an earlier executive order on outbound investment. The order prohibits certain outward investment in China and requires notifications for others in semiconductors, quantum technologies and artificial intelligence, covering various investment types and intangible benefits such as managerial support and market access. The America First Investment Policy of February 2025 proposed additional restrictions on OFDI (see box II.4).

In parallel to developments in the United States, at the European Union level, following the adoption of the White Paper on Outbound Investments in January 2024, the European Commission in January 2025 recommended that Member States review outbound investment in critical technologies. The recommendation urges the establishment of mechanisms to monitor outward investment transactions, assess technology leakage risks, and evaluate geopolitical and supply chain impacts.

Recent policy developments **may alter the course of international tax reform efforts**

[5] Based on data from the PricewaterhouseCoopers Pillar Two Country Tracker, accessed on 3 April 2025, https://www.pwc.com/gx/en/tax/international-tax-planning/pillar-two/pwc-pillar-two-country-tracker-summary-v2.pdf.

[6] Memorandum of the President of the United States dated 20 January 2025 regarding the Organisation for Economic Co-operation and Development (OECD) Global Tax Deal, accessed on 3 April 2025, https://www.whitehouse.gov/presidential-actions/2025/01/the-organization-for-economic-co-operation-and-development-oecd-global-tax-deal-global-tax-deal/.

B. International investment policies

The divergence between old and new international investment agreements (IIAs) continued to widen in 2024. New agreements are turning to proactive facilitation and cooperation, with relatively reduced reliance on investor–State dispute settlement (ISDS). Yet most of them are implemented alongside an aging network of unreformed treaties that limit regulatory space for key policy areas, including e.g. public health, climate change and digitalization. The ISDS case count reached 1,401 at the end of 2024, with the bulk of cases arising in the past 15 years. About 60 per cent of all ISDS cases involved damages claims of $100 million and higher, including 143 cases in which investors sought more than $1 billion. Building on the momentum to reform the international investment regime, and on its core policy guidance tools, UNCTAD is developing a set of guiding principles to facilitate the reform of IIAs for sustainable development.

1. Trends in international investment agreements

a. Conclusion and termination of investment agreements

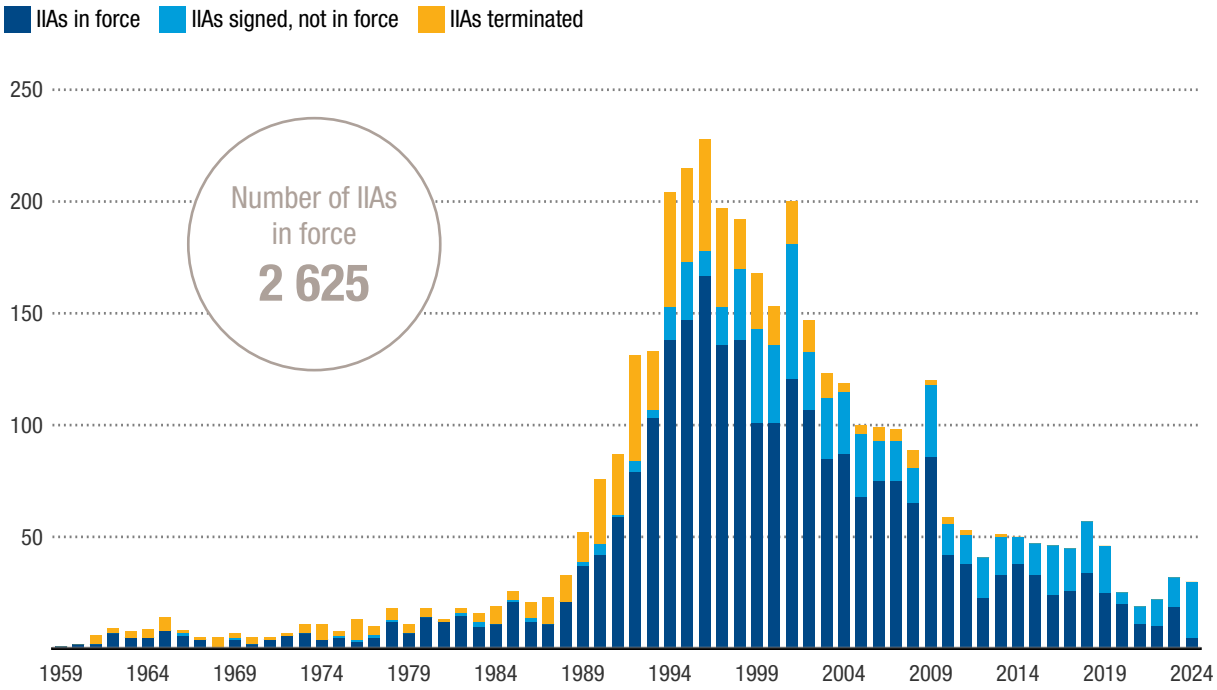
In 2024, countries concluded at least 17 bilateral investment treaties (BITs) and 13 broader economic treaties with investment provisions (TIPs). This brought the size of the IIA universe to 3,323 (2,843 BITs and 480 TIPs). In addition, at least 22 IIAs entered into force and 4 were terminated, bringing the total number of IIAs in force to at least 2,625 at the end of the year. Continuing the trend from previous years, most IIAs concluded in 2024 were implemented alongside existing agreements rather than replacing them. This leaves the IIA universe dominated by treaties signed in the 1990s and 2000s, thereby raising the risk of investor–State disputes (figure II.15).

Developing economies were signatories to all 30 of the IIAs concluded in 2024. The United Arab Emirates concluded at least nine agreements, followed by India (four), Türkiye (four) and China (three). Developed economies concluded 11 agreements. Of those, Australia signed three and the Republic of Korea two. In addition, two agreements were concluded by regional organizations – the European Union and the European Free Trade Association (EFTA).

As in the past four years, in 2024 the importance of TIPs in comparison to BITs continued to grow, both in terms of numbers and based on the number of new treaty relationships that they created. The regional coverage of three of the TIPs signed in 2024 created a treaty relationship among 47 countries.[7]

[7] The European Union–Kyrgyzstan Enhanced Partnership and Cooperation Agreement (2024), the EFTA–India Trade and Economic Partnership Agreement (TEPA) (2024) and the Indo-Pacific Economic Framework for Prosperity Agreement Relating to a Clean Economy (2024).

Figure II.15
Agreements from the 1990s and 2000s continued to dominate the international investment regime
Number and status of agreements by year of signature



Source: UNCTAD, IIA Navigator database, accessed 24 March 2025.
Note: The UNCTAD IIA Navigator is updated continuously as new IIA-related information becomes available.
Abbreviation: IIA, international investment agreement.

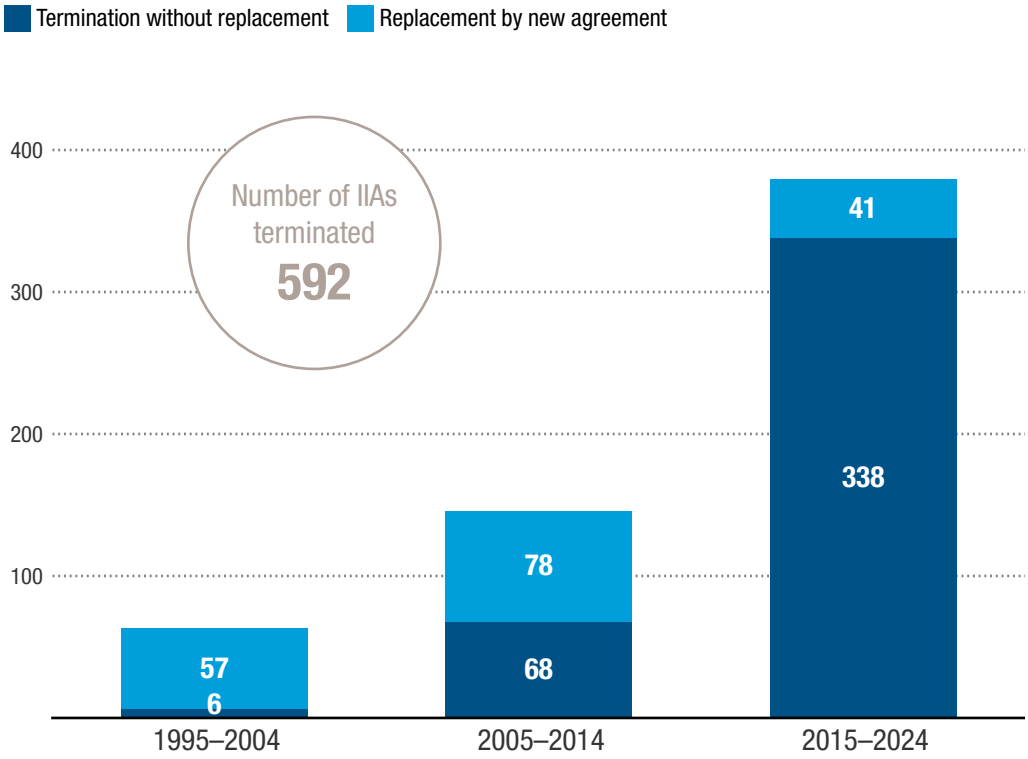
After the high number of terminations in 2020–2022 related to the coordinated termination of BITs between Member States of the European Union (UNCTAD, 2021; UNCTAD, 2022b; UNCTAD, 2023), the annual number of terminations in the past two years slowed down. Of the four IIAs terminated in 2024, two were terminated by consent, one was unilaterally denounced and one was replaced by a new agreement.

This brought the total number of terminations to at least 592 by the end of 2024. About 70 per cent of them took place in the last decade (figure II.16). Whereas in earlier decades the majority of terminated IIAs were replaced by new ones, in the last decade only 11 per cent of terminations have led to replacements. Notably, IIAs between developed economies, which represent less than 20 per cent of the IIA universe, account for 58 per cent of terminations without replacement in this period. Of the total number of IIAs terminated without replacement, 52 per cent were terminated by consent, 43 per cent were unilaterally denounced and the remaining 4 per cent expired. Terminations by consent mostly concerned IIAs among developed economies (95 per cent), while unilateral denunciations and expirations were prevalent methods for IIAs with developing-country participation (94 per cent).

Under sunset clauses, IIAs may continue to protect investments in existence at the time of termination or withdrawal and may grant investors access to ISDS for up to 25 years. In view of this risk, most terminations by consent included a provision neutralizing the sunset clause in the agreement (94 per cent).[8]

[8] Based on 206 IIAs for which information on the termination process was available.

Figure II.16
The past decade has seen few replacements of old-generation agreements
Number of terminations by decade



Source: UNCTAD, IIA Navigator database, accessed 24 March 2025.
Abbreviation: IIA, international investment agreement.

b. Developments in the content of investment agreements

IIAs concluded between 2020 and 2024 exhibit five salient trends:[9]

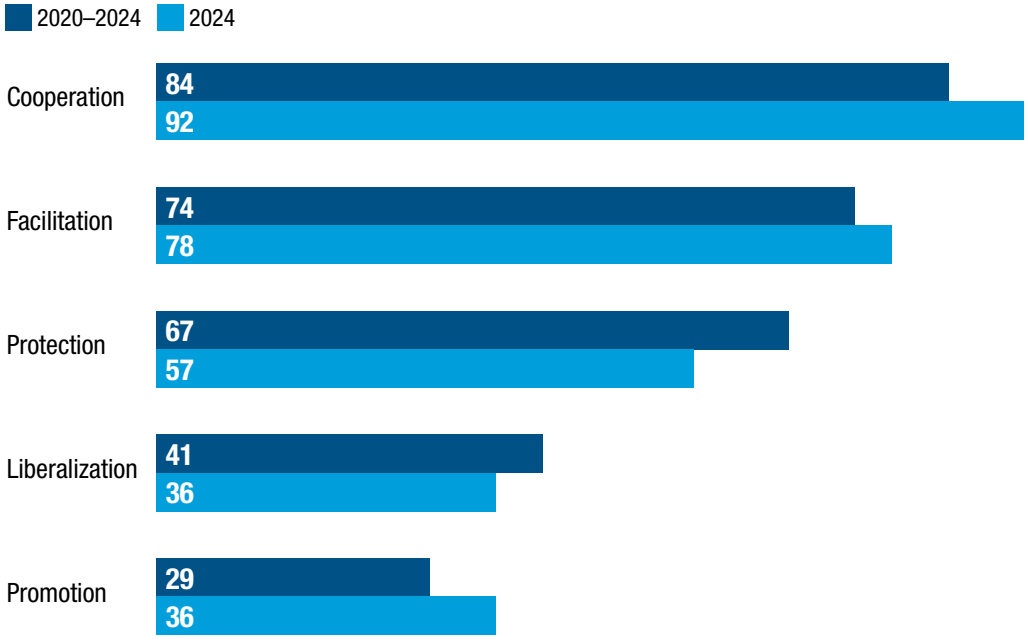
1. IIAs increasingly incorporate more proactive commitments aimed at cooperation, facilitation and promotion of investment.
2. Traditional investment protection standards are becoming more refined.
3. Liberalization commitments are on the rise.
4. ISDS is becoming less prominent.
5. Attention to sustainable development in IIAs continues to increase.

i. Cooperation, facilitation and promotion

IIAs concluded in the period between 2020 and 2024 continued to incorporate more proactive provisions on facilitation, cooperation and promotion compared with old-generation IIAs, which typically focused on protection (figure II.17).

[9] IIA texts often become available only upon entry into force (often two and sometimes more years after signature). Analysing the content of IIAs signed in the past five years provides a clearer analysis of the relevant trends.

Figure II.17
The content of investment agreements has continued to evolve
Agreements signed by type of provision, 2020–2024
(Percentage)



Source: UNCTAD, IIA Navigator database, accessed 24 March 2025.
Note: Based on 75 IIAs with investment content for which texts are available, 14 of which were signed in 2024.
Abbreviation: IIA, international investment agreement.

Cooperation

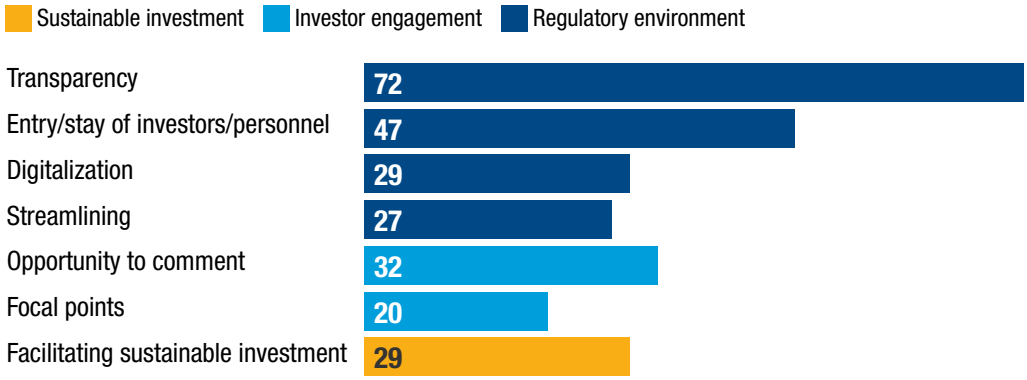
More than 80 per cent of IIAs concluded since 2020 contain cooperation provisions. They provide for an institutional mechanism for cooperation, such as an investment committee or a consultation process. In addition, a growing number of IIAs are becoming platforms for lasting engagement and cooperation between relevant domestic institutions on questions of common interest and they set schedules and targets for joint activities in sectors of particular relevance to the contracting parties. This can be done through novel green economy agreements that focus strongly on cooperation provisions (such as the Indo-Pacific Economic Framework Clean Economy Agreement (2024)) or chapters in broader TIPs (such as the European Union–Kenya Economic Partnership Agreement (EPA) (2023)). About a third of the IIAs analysed include such topic-specific cooperation provisions, often referring to infrastructure, information and communication technology and digitalization, agriculture, the blue economy, or renewable energy. In other agreements, cooperation goals are defined as part of joint working programmes (e.g. the Brazil–India BIT (2020)) or under complementary memorandums of understanding (e.g. the Australia–United Arab Emirates Comprehensive Economic Partnership Agreement (CEPA) (2024) includes six memorandums on investment cooperation on data centres and artificial intelligence projects, food and agriculture, green and renewable energy, and infrastructure development, as well as in the minerals sector).

Facilitation

Of IIAs signed in the past five years, 74 per cent contain commitments on investment facilitation. Most commonly, facilitation provisions require transparency

of the investment framework or other improvements to the regulatory environment, as well as improvements to the procedures for entry of investors and/or their key personnel. A small but growing number of such provisions call more specifically for the streamlining of administrative procedures (e.g. the Regional Comprehensive Economic Partnership (RCEP) (2020)) and for digitalization of investment procedures (e.g. the Angola–European Union Sustainable Investment Facilitation Agreement (SIFA) (2023)), mirroring the types of domestic facilitation measures known to be effective in improving the investment climate. Less than 30 per cent of facilitation commitments directly target sustainable investment, and a still smaller share include provisions that prescribe more specific actions in this respect (e.g. the African Continental Free Trade Agreement (AfCFTA) Investment Protocol (2023)) (figure II.18).

Figure II.18
Investment facilitation continued to gain ground in investment agreements
Agreements signed by facilitation feature, 2020–2024
(Percentage)



Source: UNCTAD.
Note: Based on 75 IIAs for which texts are available.
Abbreviation: IIA, nternational investment agreement.

Promotion

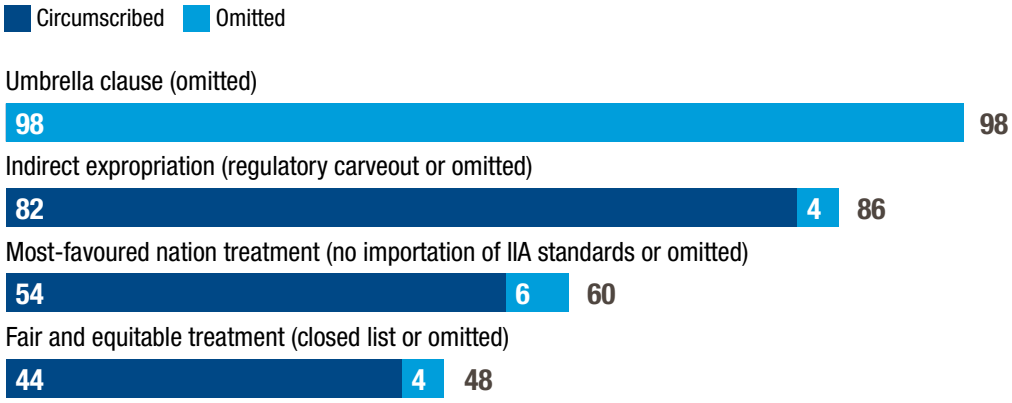
While remaining modest, the share of promotion provisions has more than doubled compared with old-generation IIAs. These provisions often complement facilitation ones (as in the Sri Lanka–Thailand Free Trade Agreement (FTA) (2024)) or constitute the focus of the cooperation provisions in the agreement (as in the Chile–United Arab Emirates CEPA (2024)). Some recent IIAs include commitments to promote investment with a view to achieving specific levels of investment flows (e.g. the EFTA–India Trade and Economic Partnership Agreement (2024)).

ii. Protection

Investment protection standards increasingly include refinements aimed at safeguarding the State's right to regulate, including for the provisions that are most commonly invoked in ISDS – the fair and equitable treatment (FET) standard and indirect expropriation. Most notably, close to 50 per cent of the IIAs with protection standards signed in the past five years replace the FET standard with a closed list of obligations (e.g. the Australia–United Arab Emirates BIT (2024), the Chile–European Union Advanced Framework Agreement (AFA) (2023), the

AfCFTA Investment Protocol (2023) and the Serbia–Türkiye BIT (2022)) or omit it (e.g. the Bolivarian Republic of Venezuela–Colombia BIT (2023) and the MERCOSUR (Southern Common Market)–Singapore FTA (2023)). More than 70 per cent provide a carveout from expropriation provisions for generally applicable regulatory measures and refine the scope of application of non-discrimination standards, thus limiting the systemic implications of the most-favoured-nation clause. Umbrella clauses, which could extend protection offered by the treaty to non-treaty commitments made by the host State, are omitted in almost all IIAs analysed (figure II.19).

Figure II.19
Protection standards increasingly safeguard regulatory space
Agreements signed by type of protection standard, 2020–2024
(Percentage)



Source: UNCTAD, IIA Navigator database, accessed 24 March 2025.
Note: Based on 50 IIAs with investment protection provisions for which texts are available.
Abbreviation: IIA, international investment agreement.

iii. Liberalization

The share of IIAs that include investment liberalization provisions is also growing. Forty per cent of IIAs concluded since 2020 contain pre-establishment provisions that commit to removing entry restrictions and conditions for new investments from the IIA counterparty. They typically provide national treatment and most-favoured-nation treatment for the admission of investment, often based on a negative-list approach. Two thirds of these IIAs also prohibit the imposition of performance requirements as a condition for entry of an investment. In a related upward trend, compared with old-generation IIAs, performance requirements specific to the operation of the investment are prohibited in about 18 per cent of IIAs analysed that provide solely for post-establishment protection of the investment (e.g. the Türkiye–United Arab Emirates BIT (2022)). Some countries have excluded strategic sectors or resources, including critical minerals, from liberalization commitments to ensure sufficient policy space for the management of these resources (e.g. Chile–European Union AFA (2023)). Carefully crafted flexibilities are of particular importance in liberalization commitments, including as they pertain to performance requirements, to ensure that IIAs can support the development of priority sectors of the economy without negatively affecting local enterprises or stifling technology transfer and diffusion.

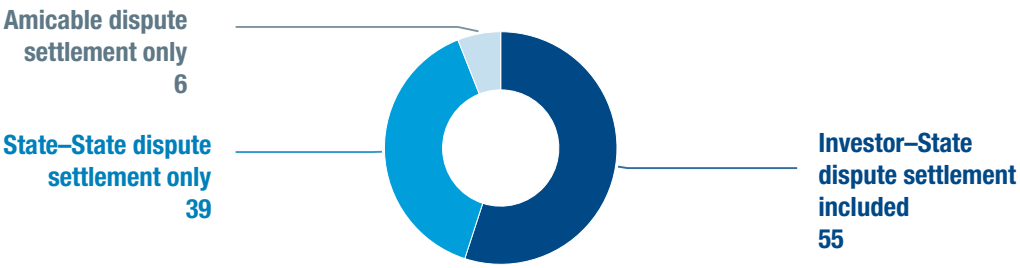
iv. Investment dispute settlement

In recent IIAs, reliance on investor–State arbitration has become less common: 45 per cent of those concluded in the past five years do not contain any ISDS provisions (figure II.20). The trend is prevalent in TIPs – 80 per cent of which do not contain such a mechanism – and is present in certain BITs as well (such as the Australia–United Arab Emirates BIT (2024) and the Brazil–India BIT (2020)).

Two complementary developments have contributed to this trend. First, with the greater share of IIAs focusing on facilitation, cooperation and liberalization, it is natural that ISDS – which emerged in relation to protection provisions of IIAs – is less prominent. IIAs that include only provisions on facilitation, cooperation or liberalization consistently opt for amicable dispute resolution mechanisms and/or State–State dispute settlement (see e.g. the Angola–European Union SIFA (2023), the Indo-Pacific Economic Framework Clean Economy Agreement (2024), the Türkiye–United Arab Emirates CEPA (2023), the European Union–New Zealand FTA (2023) and the EFTA–Moldova FTA (2023)). Where such provisions exist in IIAs that include protection provisions and ISDS, they are commonly excluded from the scope of ISDS as well. This is the case for the majority of facilitation commitments (e.g. the Indonesia–Switzerland BIT (2022), the Cabo Verde–Morocco BIT (2023) and the Sri Lanka–Thailand FTA (2024)) and of a growing share of liberalization commitments (e.g. the Chile–European Union AFA (2023), the China–Nicaragua FTA (2023), the Indonesia–Republic of Korea FTA (2020), the Israel–Viet Nam FTA (2024) and the Sri Lanka–Thailand FTA (2024)).

Second, the broad consensus on the need to reform the investor–State arbitration system drives new and more cautious approaches to dispute settlement in relation to protection provisions as well. Since 2020, half of the TIPs with protection content and one in five IIAs overall have opted for only State–State dispute resolution (as in the Australia–United Arab Emirates BIT (2024), the MERCOSUR–Singapore FTA (2023), the New Zealand–United Kingdom FTA (2022) and the Costa Rica–Ecuador FTA (2023)) or deferred negotiations on a possible ISDS mechanism (as in the RCEP (2020) and the AfCFTA Investment Protocol (2023)). Some countries also opted for a two-tier standing tribunal, moving away from the ad hoc arbitration system (e.g. the Chile–European Union AFA (2023)).

Figure II.20
Close to half of recent investment agreements did not include investor–State arbitration
Agreements signed by type of dispute settlement included, 2020–2024
(Percentage)



Source: UNCTAD.
Note: Based on 75 IIAs for which texts are available.
Abbreviation: IIA, international investment agreement.

IIAs concluded since 2020 that allow for ISDS also more commonly contain improvements to the dispute settlement process. Nevertheless, broad consent to arbitration with few procedural refinements continues to appear in some IIAs.

v. Sustainable development features

IIAs concluded since 2020 contain a variety of sustainable development provisions (figure II.21).

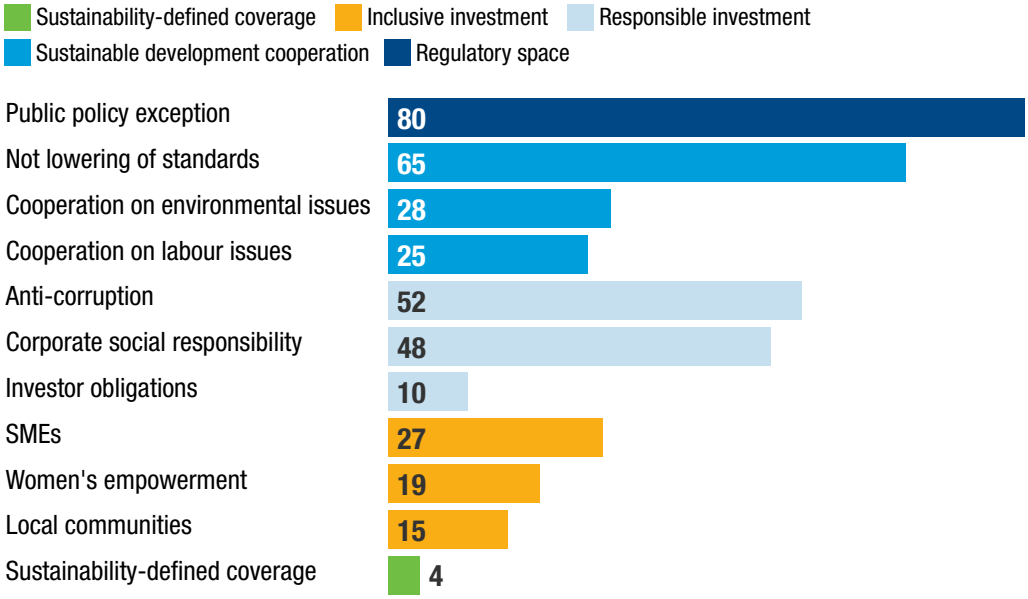
Right to regulate

The most common sustainable development-oriented provisions in IIAs remain safeguards to the right to regulate. Notably, the majority of recent IIAs contain public policy exceptions for the protection of the environment, health and labour standards (e.g. the Chile–European Union AFA (2023) and the Sri Lanka–Thailand FTA (2024)). At times IIAs also adopt a novel approach to exceptions, adapted to each protection standard (as in the AfCFTA Investment Protocol (2023)).

Sustainable development cooperation

The most common provision on investment and sustainable development is the not lowering of standards provision, present in two thirds of IIAs analysed. Examples of more specific commitments include requirements for human capital development (as in the EFTA–India Trade and Economic Partnership Agreement (2024)), environmental and social impact assessment (as in the Canada–Ukraine Modernized FTA (2023)) or cooperation on investment-related climate measures and technologies (as in the Australia–United Arab Emirates CEPA (2024) and the European Union–New Zealand FTA (2023); see also the Italy Model BIT (2024)). Such more detailed and proactive commitments continue to appear in less than a third of IIAs.

Figure II.21
More remains to be done to mainstream sustainable development in investment agreements
Agreements signed by sustainable development feature, 2020–2024
(Percentage)



Source: UNCTAD.
Note: Based on 75 IIAs for which texts are available.
Abbreviation: SMEs, small and medium-sized enterprises.

Responsible investment

About half of IIAs signed since 2020 contain responsible investment provisions. This shift represents a welcome development, yet the most common provisions on responsible business conduct – those on anti-corruption requirements and corporate social responsibility – remain soft references, applicable at the inter-State level. So far they have had limited effect in investor–State disputes. The small but growing share of IIAs that include direct investor obligations may offer a more effective tool for rebalancing investors' rights and obligations in that context. About 10 per cent of treaties signed during 2020–2024 include such obligations – on anti-corruption, transparent corporate governance practices, the environment, labour, local communities or taxation (e.g. the Belarus–Zimbabwe BIT (2021), the Brazil–India BIT (2020), the Indonesia–Switzerland BIT (2022), the AfCFTA Investment Protocol (2023) and the Cabo Verde–Morocco BIT (2023)).

Inclusive investment

Among the most recent developments in IIA drafting is a nascent trend towards encouraging traditionally disadvantaged economic actors or communities to benefit from the opportunities created by international trade and investment agreements. Most common among these provisions are commitments related to small and medium-sized enterprises (as in the RCEP (2020)), women's empowerment and gender (as in the Angola–European Union SIFA (2023)) and local communities (as in the Australia–United Arab Emirates CEPA (2024) and the AfCFTA Investment Protocol (2023)). Other inclusive investment commitments refer to the needs of persons with disabilities (e.g. the Australia–United Kingdom FTA (2021)) and youth (e.g. the AfCFTA Investment Protocol (2023)). IIAs with such commitments typically provide for joint promotion activities and cooperation, through dedicated information channels supporting the use of the IIA advantages (as in the Costa Rica–Ecuador FTA (2023)). They may also encourage the establishment of accessible financial support and mechanisms for local supplier linkages for small and medium-sized enterprises (as in the Kenya–United Kingdom EPA (2020) or provide for not lowering of standards regarding gender equality laws (as in the Canada–Ukraine Modernized FTA (2022)).

Sustainability-defined coverage

Notably, 96 per cent of recent IIAs continue to cover investors and investments across all economic sectors and do not condition treaty application on the sustainable development impact or performance of the investments. Under the handful of recent IIAs that break away from that trend, investment coverage is at times contingent on specific conditions: the contribution of the investment to the sustainable development of the host State (as in the AfCFTA Investment Protocol (2023)), the exclusion of certain assets from coverage (as in the modernized Energy Charter Treaty (ECT) (2024)) or, for cooperation-focused agreements, sector-specific proactive measures defined in line with the shared priorities of treaty partners (as in the Indo-Pacific Economic Framework Clean Economy Agreement (2024) and the Australia–Singapore Green Economy Agreement (2022)).

c. Other developments related to international investment rule-making

In July 2024, the United Nations Commission on International Trade Law (UNCITRAL) adopted in principle the Statute of the Advisory Centre on International Investment Dispute Resolution. The year witnessed progress in negotiations at the UNCITRAL Working Group III on ISDS reform that addressed other topics as well, including procedural and cross-cutting issues, the draft statute for the standing mechanism for ISDS and the multilateral ISDS reform instrument.

The 2024 Brazil Presidency of the Group of 20 identified sustainable development in IIAs as one of the key priorities for the Trade and Investment Working Group (box II.5). For the purpose of informing the discussions of the Group, UNCTAD provided a document Mapping Sustainable Development and Investment Facilitation Provisions in IIAs Concluded by G20 Members and Invited Countries. The report includes inputs from the Organisation for Economic Co-operation and Development (OECD). Key findings of the report, annexed to the Group of 20 Leaders' Declaration, were the growing presence of sustainable development and the stronger focus on investment facilitation considerations in recent IIAs.

The text of the Investment Facilitation for Development (IFD) Agreement was finalized during the Ministerial Conference of the World Trade Organization (WTO) in February 2024. In October 2024, IFD-participating members of the WTO formally requested the incorporation of the IFD Agreement into Annex 4 of the WTO Agreement.[10]

Box II.5
Sustainable development and facilitation in investment agreements in focus in the Group of 20

The 2024 Brazilian Presidency of the Group of 20 defined "sustainable development in international investment agreements" as a priority for the 2024 work of the Trade and Investment Working Group. The group's discussions and ministerial deliberations on trade and investment were informed by an UNCTAD report mapping and analysing IIAs concluded by Group of 20 members and the 15 invited countries.

Annex 1 to the Group of 20 Leaders' Declaration on Trade and Investment welcomed the report as "contributing to ongoing discussions on creating an international Investment welcomed the report policy environment that fosters sustainable development and as a reference for countries, where relevant, when designing future IIAs" (p. 2).

The report is based on UNCTAD data on more than 1,700 agreements and incorporates additional information from OECD. It documents the evolution towards greater attention to sustainable development and proactive facilitation provisions seen in recent IIAs concluded by members of the Group of 20. It also notes the divergence between these recently concluded IIAs and earlier treaties, which do not systematically address sustainable development and investment facilitation but which account for 85 per cent of IIAs in force among Group of 20 members.

Building on the outcomes of the Brazilian Presidency, the 2025 South African Presidency called on UNCTAD to develop a toolbox of voluntary, non-prescriptive policy options related to IIAs to be used to leverage investment to meet three critical policy objectives: cleaner energy, digital transformation and better public health.

Source: UNCTAD, based on various sources. See also https://unctad.org/publication/mapping-sustainable-development-and-investment-facilitation-provisions-iias-concluded and https://g20.gov.br/en/documents/sherpa-track.

[10] World Trade Organization, Communication from the Members parties to the Investment Facilitation for Development Agreement to the General Council on the Incorporation of the Investment Facilitation for Development Agreement into annex 4 of the WTO Agreement, WT/GC/W/927/Rev.2, 14 October 2024, https://docs.wto.org/dol2fe/Pages/FE_Search/FE_S_S006.aspx?DataSource=Cat&query=@Symbol=%22WT/GC/W/927/Rev.2%22%20OR%20@Symbol=%22WT/GC/W/927/Rev.2/*%22&Language=English&Context=ScriptedSearches&languageUIChanged=true.

The Energy Charter Conference adopted several decisions relating to the modernization of the ECT, including substantial amendments to the treaty, on 3 December 2024. The amendments are set to become effective on a provisional basis starting in September 2025. At least seven contracting parties – Belgium, Estonia, Finland, Japan, Lichtenstein, Lithuania and Switzerland – have opted out of the provisional application and will apply the amendments upon ratification only. Earlier in 2024, the European Union and the Kingdom of the Netherlands sent their notifications of withdrawal from the treaty to the ECT Depositary, and the withdrawals of Luxembourg and Slovenia took effect. The withdrawals of Portugal, Spain and the United Kingdom took effect in 2025 (in February and April).

The Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) is closing its 10-year work programme – AEC Blueprint 2025 and adopting the programme for the next decade. The AEC includes a significant IIA component – updating the existing network of TIPs and negotiating new ones with external partners. UNCTAD, through the ASEAN Investment Report 2024, supported ASEAN in taking stock of AEC 2025 and developing the next 10- year programme (box II.6).

Box II.6
ASEAN continues to reform its investment agreements

The *ASEAN Investment Report 2024: ASEAN Economic Community 2025 and Foreign Direct Investment* analysed the progress of the AEC Blueprint 2025 implementation. The report evaluates the relationship between regional integration, investment policy development and FDI inflows in ASEAN in the past decade. As a whole, the bloc has attracted record levels of FDI inflows, particularly since 2020. The report, prepared under a technical assistance agreement with UNCTAD, found that the investment environment continued to improve during AEC 2025, underpinned by significant policy developments.

TIPs continue to be a core element of the AEC toolbox, both for internal ASEAN relations and with external partners. In line with global trends, the evolution of ASEAN investment agreements has moved towards giving greater attention to liberalization and facilitation, including updating and consolidating the region's existing instruments.

AEC Blueprint 2025 saw the adoption and implementation of the ASEAN Investment Facilitation Framework (2021), an instrument for facilitating investment in the bloc. ASEAN also worked on expanding and operationalizing liberalization and promotion commitments under the ASEAN Comprehensive Investment Agreement (2009) through the Fourth and Fifth Protocols for its amendment. The Fourth Protocol, in force since 2023, expanded the commitment on prohibition of performance requirements. The Fifth Protocol, signed in 2024, will transition the reservations in the Agreement to a two-annex negative list; it includes the scheduling of the new commitments on performance requirements.

The bloc continued to develop a "global ASEAN" by negotiating new TIPs with external trading partners and reforming existing instruments. This work included conclusion and implementation of the RCEP agreement (2020), consolidating the ASEAN network of investment instruments with its dialogue partners. Amendments in other TIPs, such as the bloc's FTA with Australia and New Zealand (2023) and with Japan (2019), focused on liberalization and reform of investment protection and ISDS content. In April 2025, ASEAN concluded negotiations on the amendment of its FTA with China.

Source: ASEAN Secretariat and UNCTAD (2024).

In December 2024, at the UNCTAD-organized annual High-level IIA Conference, policymakers and experts discussed challenges in mainstreaming sustainable development in the IIA regime. They called for UNCTAD to develop guiding principles for sustainable development-oriented IIA reform (box II.7). The reform of the IIA regime has been gaining momentum since 2012 but is also becoming more complex, covering a broader set of issues related to the need for policy space and to proactively promoting and facilitating sustainable investment (UNCTAD, 2024c). Yet, the impact of these changes depends on large-scale action to reform the old-generation agreements that continue to dominate the regime and on better synchronization of reform efforts at all levels of policymaking (national, bilateral, regional and multilateral). Work on these and other aspects of international investment governance continued in various international forums (table II.2).

Box II.7
UNCTAD to develop Guiding Principles of IIA Reform

Following the call from stakeholders at the High-level IIA Conference 2024, UNCTAD is in the process of developing Guiding Principles on IIA Reform, to facilitate IIA reform for sustainable development.

The principles build on the leading role of UNCTAD as the convening forum on IIA reform over the past decade, on the basis of which consensus emerged on the need to reform the international investment regime. More than 130 countries and regional organizations have benefitted from the core policy guidance tools developed by UNCTAD – the Investment Policy Framework for Sustainable Development launched in 2012 and updated in 2015 (UNCTAD, 2015), the IIA Reform Package (UNCTAD, 2018) and the IIA Reform Accelerator (UNCTAD, 2020).

With the increase in IIA reform activity around the world in recent years, countries' experiences offer valuable insights on the effectiveness of different actions. The increasing activity has also translated into novel challenges, such as managing and overcoming fragmented approaches across countries and regions.

Building on UNCTAD expertise and incorporating lessons from the past decade of reform in action, the principles aim to provide a framework that guides international investment policymakers on both the process and the substantive aspects of IIA reform. The overarching goal is to embed sustainable development at the core of the international investment regime, covering all practical steps in the reform process. The principles will support countries in developing an IIA reform strategy, in designing and negotiating reformed IIAs and in operationalizing new-generation IIAs on the ground for maximum impact.

The draft principles will form the basis for discussion at the High-level IIA Conference 2025 and will gather comments from a broad range of stakeholders, including as part of the UNCTAD Multistakeholder Reform Platform.

Source: UNCTAD, based on various sources.

Table II.2
Work relating to international investment rule-making in international forums, 2024–2025

Organization or initiative	IIA-related coverage	Most recent outputs and events
AfCFTA	Negotiations, dispute settlement	Negotiations on the investment dispute settlement Annex to the Protocol on Investment
ASEAN	Investment treaty reform and implementation	AEC 2025 implementation progress report Amendments to IIAs internal to ASEAN and with external treaty partners
COMESA	Investment treaty reform, alignment with AfCFTA	Draft revising COMESA Common Investment Area Agreement under discussion by Member States (September 2024)
ECT	Investment treaty reform	Decisions relating to ECT modernization adopted (December 2024)
Group of 20 Trade and Investment Working Group	Sustainable development in IIAs	UNCTAD–OECD Trade and Investment Working Group report of mapping key provisions in IIAs related to the Group of 20 (October 2024)
Investment Facilitation for Development, WTO joint statement initiative	Investment facilitation	Request from Member States to incorporate the IFD Agreement into Annex 4 of the WTO Agreement (October 2024)
League of Arab States	Investment agreement reform	Draft of new Arab Investment Agreement under discussion by Member States (July and December 2024, April 2025)
OECD Work Programme on the Future of Investment Treaties	Modernizing investment treaties	OECD–UNCTAD–UNCITRAL investment treaty conference (March 2025)
OIC Intergovernmental Experts Group on ISDS	ISDS, permanent mechanism	Third expert meeting on the establishment of a permanent mechanism for the settlement of investment disputes (October 2024)
UNCITRAL Working Group III	ISDS reform	Draft statute of advisory centre for ISDS adopted (July 2024), followed by meetings on its operationalization (December 2024, May 2025) Negotiations on standing mechanism for ISDS, draft multilateral instrument, procedural and cross-cutting issues (latest meeting: April 2025)
UNCTAD	Sustainable development in IIAs Policy analysis, technical assistance, consensus building	2024 High-level IIA conference (December 2024) First and Second meetings of Multi-stakeholder Platform for IIA Reform (February and September 2024) Capacity-building and technical assistance on IIA reform provided for more than 90 countries
UNFCCC COP29	IIAs and climate change	Baku Initiative for Climate, Investment and Trade launched, led by the COP presidency and co-facilitated by UNCTAD and UNDP (November 2024) Draft papers on trade and investment policies to advance national climate plans under the Paris Agreement, published by UNCTAD (November 2024)
UNIDROIT and ICC Working Group	International investment contracts (codification)	Fourth working group meeting on international investment contracts (November 2024)

Source: UNCTAD, based on various sources.

Abbreviations: AEC, ASEAN Economic Community; AfCFTA, African Continental Free Trade Agreement; ASEAN. Association of Southeast Asian Nations, COMESA. Common Market for Eastern and Southern Africa, COP29, 29th Conference of the Parties to the UNFCCC; ECT, Energy Charter Treaty; ICC, International Chamber of Commerce; IIA, international investment agreement; ISDS, investor–State dispute settlement; OECD, Organisation for Economic Co-operation and Development; OIC, Organization of Islamic Cooperation; UNCITRAL, United Nations Commission on International Trade Law; UNDP, United Nations Development Programme; UNFCCC, UN Framework Convention on Climate Change; UNIDROIT, International Institute for the Unification of Private Law; WTO, World Trade Organization.

2. Trends in investor–State dispute settlement

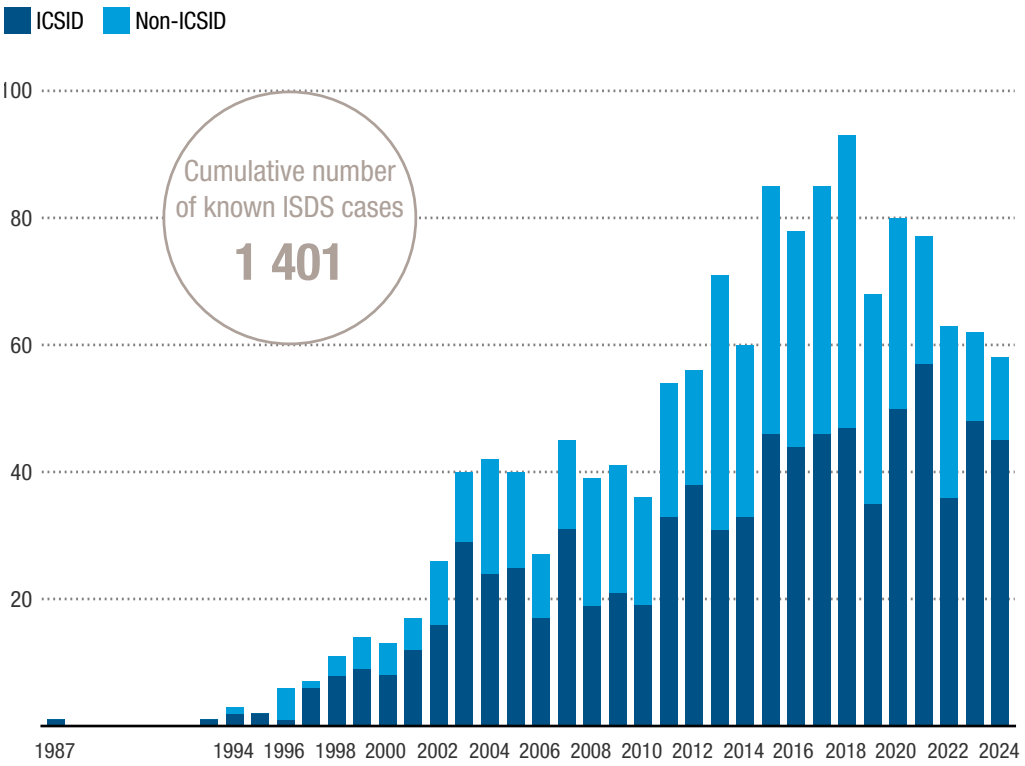
a. New cases initiated in 2024

In 2024, investors initiated 58 known ISDS cases based on IIAs (figure II.22). Annual caseloads have declined after a peak in 2018. As some arbitrations that are kept confidential at the time of initiation become public later in the proceedings, retroactive upwards adjustments can be expected for 2024 and preceding years. Annual case numbers initially reported between 2015 and 2022 have retroactively increased by about 20 per cent over time, incorporating previously unknown cases that surfaced after delays.

The total count of treaty-based ISDS cases reached 1,401 at the end of 2024. Three quarters of them were brought between 2010 and 2024.

To date, 135 countries and one economic grouping (the European Union) are known to have been respondents to one or more ISDS claims. The new cases in 2024 were initiated against 38 countries. Mexico and the Russian Federation were

Figure II.22
The bulk of investor–State dispute settlement cases emerged between 2010 and 2024
Annual number of known treaty-based cases



Source: UNCTAD, ISDS Navigator database, accessed 1 April 2025.

Note: Information compiled from public sources, including specialized reporting services. UNCTAD statistics do not cover 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 exactly match numbers reported in previous years.

Abbreviations: IICSID, International Centre for Settlement of Investment Disputes; ISDS, investor–State dispute settlement.

the respondents most frequently named, with four new cases each, followed by Honduras and Panama with three cases. Angola, Burkina Faso and Luxembourg faced their first known ISDS claims.

About 55 per cent of all new cases were brought against developing countries, including six least developed countries (Angola, Burkina Faso, Ethiopia, Mozambique, Rwanda and the United Republic of Tanzania). For context, only about one third of inward FDI stock is in developing economies. Least developed countries had less than 1 per cent of inward FDI stock in 2024.

Developed-country claimants initiated most of the 58 known cases – about 80 per cent. The highest numbers of cases were brought by claimants from the United Kingdom (10) and Canada (7). Investors from developed economies hold the largest share of outward FDI stock globally (about 80 per cent).

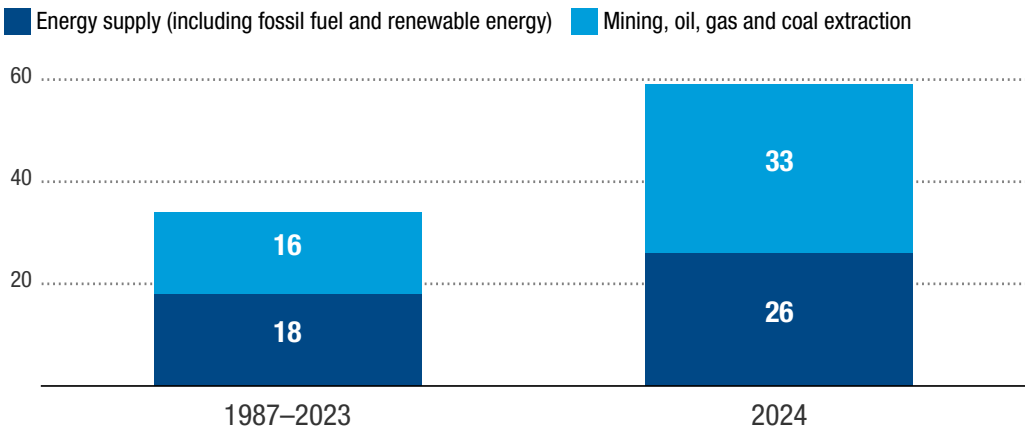
The amounts claimed by investors in 2024, disclosed in about one fourth of the cases at the time of research, ranged from $17 million (*Kent Kart v. Serbia*) to $45 billion (A$69 billion in *Zeph v. Australia (III)*). At least seven cases involved claims greater than $1 billion.

The ISDS cases filed in 2024 arose in different economic sectors, with disputes related to extractive and energy supply activities increasing to more than half of the new cases, a larger share than in previous years (figure II.23). Between 1987 (when the first ISDS case based on an IIA was brought) and 2023, one third of ISDS cases related to extractive activities and energy supply.

Five cases in 2024 involved the mining of critical minerals, such as copper (*Orla Mining v. Panama, Walnort Finance v. Armenia*), lithium (*Bacanora Lithium and others v. Mexico*), titanium potentially contained in heavy mineral sands deposits (*Rome Resources and IM v. Mozambique*) and zinc (*Vedanta v. India (II)*). Several other cases related to the mining of precious metals (e.g. gold and silver).

Claimants filed 13 fossil fuel-related cases in 2024, and at least 6 proceedings concerning investment in the renewable energy sector. ISDS cases in fossil fuels and renewable energy are particularly relevant to the sustainable energy transition (box II.8). The share of cases related to renewable energy started growing after 2010. Spain has faced 40 per cent of

Figure II.23
The share of disputes about extractive activities and energy supply grew in 2024
Cases in these sectors as a share of all cases
(Percentage)



Source: UNCTAD, ISDS Navigator database, accessed 1 April 2025.
Note: Some cases concerned both sectors.

these cases, which were filed primarily by solar power investors. Before 2010, only a small number of ISDS cases related to renewable energy projects, usually projects concerning hydroelectric power plants.

The ECT (1994) was the IIA most frequently invoked in 2024, giving rise to nine cases. They include four initiated by a claimant from one European Union Member State against another ("intra-European Union" investor–State arbitrations). In addition, one case arose under an intra-European Union BIT.

Box II.8
Fossil fuel and renewable energy-related dispute settlement cases based on investment agreements

ISDS cases related to fossil fuels and renewable energy have received growing attention in light of the urgency of climate action and the need for energy transition implementation (UNCTAD, 2023).

By the end of 2024, investors had filed at least 249 fossil fuel-related cases, encompassing economic activities in the fossil fuel supply chain (mining and extraction, transportation, the manufacturing of refined products and power generation). Fossil fuel investors challenged a range of State conduct, such as alleged treaty breaches with respect to changes in regulatory frameworks applicable to the investment and the denial or revocation of permits.

Not all of these disputes involved challenges to measures related to climate action or environmental protection. However, some high-profile cases concerned issues that are directly relevant to countries' efforts to combat climate change, for example the phaseout of energy production from coal:

- Two arbitrations against Australia brought in 2024 (*Zeph v. Australia (III)* and *Zeph v. Australia (IV)*) related to the decision by the Queensland Government not to approve permits for a coal project in conjunction with a proposed coal-fired power plant. An earlier court decision recommended the refusal of the coal mining project on the basis of factors that included the contribution of the project to carbon emissions and climate change. The legal basis invoked was the Agreement Establishing the ASEAN–Australia–New Zealand Free Trade Area (2009).

- A 2020 Government decision to phase out coal-fired power plants is the subject of an ongoing ISDS case (*AET v. Germany*) brought against Germany in 2023 under the ECT (1994).

- The disputes in *RWE v. the Netherlands* and *Uniper v. the Netherland*s arose out of a 2019 law prohibiting the use of coal for electricity production, which required the shutdown of the claimants' coal-fired power plant at the end of a 10-year transitional period. The two cases were intra-European Union arbitrations based on the ECT and were eventually discontinued.

- Two cases against Canada (*Westmoreland v. Canada (II)* initiated in 2019 and *Westmoreland v. Canada (III)* in 2022) challenged the 2015 decision of the Alberta Government to phase out coal-fired power plants in the province by 2030. The cases were decided in favour of the State for lack of jurisdiction, under the North American Free Trade Agreement (1992) and/or the United States–Mexico–Canada Agreement (2018). Another claim brought by the same claimant was withdrawn at an early stage in 2018.

The second group of cases particularly relevant to the sustainable energy transition are the 129 ISDS proceedings that have arisen in relation to renewable energy investments. Many of these concerned legislative changes that involved reductions in feed-in tariffs for renewable energy production.

Several countries that had introduced incentives to promote renewable energy investments and subsequently modified their regimes (e.g. Bulgaria, Italy, Romania, Spain) have faced ISDS cases. Spain has been the respondent in most of these cases, followed by Italy:

- At least 51 cases were brought against Spain starting in 2011. By the end of 2024, 43 were concluded and 8 were pending a final outcome; 70 per cent of the concluded cases (31 of 43) were decided in favour of the investor and Spain was ordered to pay damages to the claimants in these cases. The high share of cases won by investors stands in contrast to the overall outcomes of ISDS cases worldwide: about 29 per cent of the 1,050 total cases were decided in favour of the investor.

- Thirteen cases were brought against Italy, with four pending at the end of 2024. Of the nine concluded cases, three were decided in favour of the investor and six in favour of the State.

The outcomes of individual cases depend on the facts of each case and the circumstances surrounding the measures challenged in the respective country. Overall, however, fossil fuel and renewable energy cases show that IIAs with ISDS provisions may raise the costs of adapting energy-related regulatory frameworks in host States, including the shift away from fossil fuels. Whereas investors seek stability and guarantee of returns, States need regulatory flexibility for the transition to a low-carbon economy (UNCTAD, 2022a; UNCTAD, 2023).

Source: UNCTAD.

Between 1987 and 2024, about 75 per cent of the 1,401 known ISDS cases invoked BITs; the remaining cases invoked TIPs. A large share of the latter relied on the ECT (172 cases) or the North American Free Trade Agreement (1992) (92 cases).

About 85 per cent of ISDS cases in 2024 were brought under IIAs signed before 2010, including 60 per cent of cases based on treaties from the 1990s or earlier. This mirrors the fact that most investment treaties in force today (85 per cent) are pre-2010 agreements. Even as new reformed treaties enter into force, prospective claimants may still be able to access ISDS under older treaties. A significant share of new IIAs coexist with old treaties, with both in force for the same parties (e.g. with ISDS being available under a BIT and a plurilateral TIP; UNCTAD, 2023). Investors may also engage in treaty shopping by utilizing different corporate ownership structures across multiple countries (UNCTAD, 2016). When selecting the most advantageous IIA to pursue claims, an aggrieved investor may be more likely to choose an unreformed treaty that offers broader ISDS access and lacks substantive refinements than a newer reformed treaty that is equally in force.

b. Outcomes of investor–State dispute settlement cases

In 2024, ISDS tribunals rendered at least 78 known substantive decisions in investor–State disputes, 39 of which were in the public domain at the time of writing:

Seventeen of the public decisions principally addressed jurisdictional and preliminary objections. In 13 of them, tribunals upheld the objections and ceased the proceedings for lack of jurisdiction or admissibility; in 4, tribunals dismissed such objections (at least in part) and continued the arbitration proceedings.

Nineteen were rendered on the merits, with 11 holding the State liable for IIA breaches – typically accompanied by a compensation order – and 8 dismissing all investor claims.

Three concerned compensation after an earlier finding of treaty breaches and State liability, with two awarding compensation and one declining compensation.

In addition, eight were rendered in annulment proceedings at the International Centre for Settlement of Investment Disputes, five of which were publicly available. In four public and three non-public decisions, the ad hoc committees of the Centre rejected the applications for annulment; in one case (*Agility v. Iraq*) the award was partially annulled.

By the end of 2024, at least 1,050 ISDS proceedings had been concluded. The relative shares of case outcomes changed only slightly from those in previous years. Thirty-eight per cent of all concluded cases were decided in favour of the State (claims were dismissed either on jurisdictional grounds or on the merits), and 29 per cent were decided in favour of the investor, with monetary compensation awarded.

Seventeen per cent of the cases were settled; in most cases, the terms of settlement remained confidential. In the remaining cases, either proceedings were discontinued (14 per cent) or the tribunal found an IIA breach but did not award monetary compensation (2 per cent).

i. Breaches of IIA provisions most frequently alleged and found

The FET provision was invoked by claimants in about 85 per cent of ISDS cases for which information on breaches alleged was available; 70 per cent invoked the indirect expropriation provision (figure II.24). In cases decided in favour of the investor, ISDS tribunals most frequently found breaches of FET (about 70 per cent) and indirect expropriation (about 25 per cent).

ii. Damages claimed and awarded

Amounts claimed and awarded ranged from several millions to billions of dollars. About 60 per cent of ISDS cases initiated between 1987 and 2024 involved substantial damages claims of $100 million or more.[11] This share included 143 cases in which claimants sought more than $1 billion.

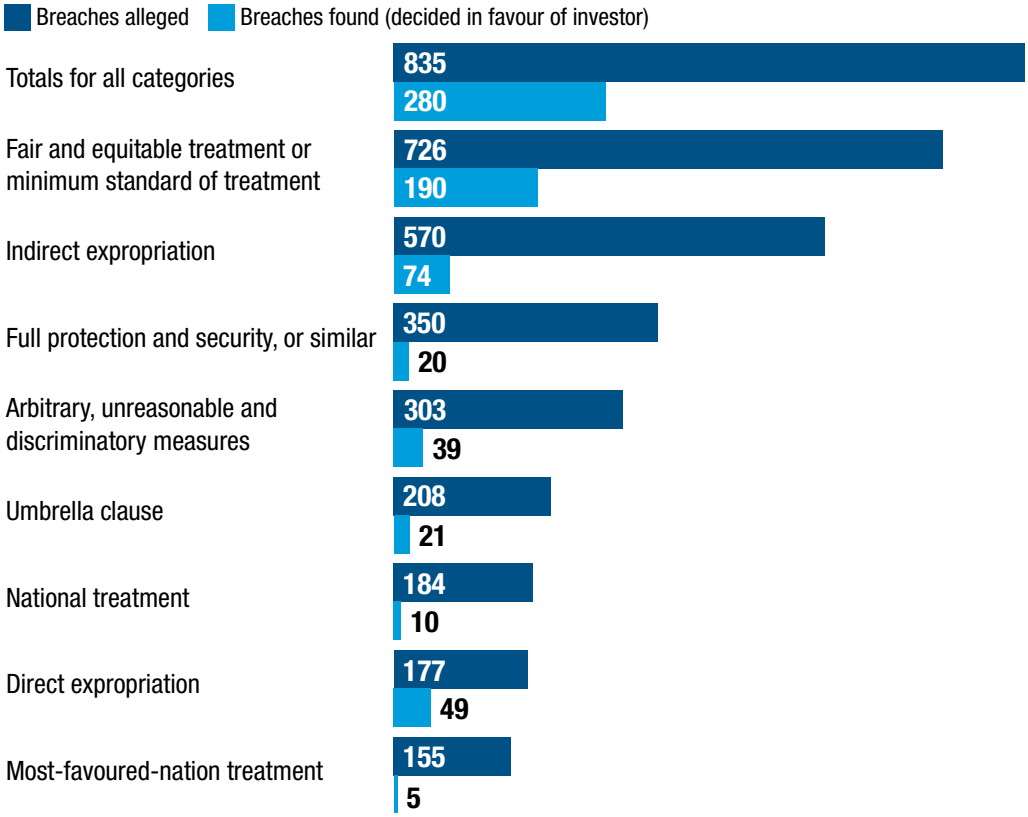
The $200 billion claimed in *Zeph v. Australia (I)*[12] and the combined $114 billion claimed in the three cases related to the Yukos company (brought by Hulley Enterprises, Veteran Petroleum and Yukos Universal against the Russian Federation) were the highest amounts sought in ISDS proceedings so far. The $50 billion awarded in the three Yukos-related cases remains the highest damages awarded in the history of investment treaty arbitration. Even when excluding these particularly large values as outliers, calculations show a shift towards larger claims and damages (figure II.25).

[11] Information on damages claimed is available for 943 treaty-based ISDS cases (1987–2024), including *Zeph v. Australia (I)* and three Yukos-related cases (*Hulley Enterprises v. Russia, Veteran Petroleum v. Russia, Yukos Universal v. Russia*).

[12] *Zeph Investments Pte Ltd v. The Commonwealth of Australia (I)* (PCA Case No. 2023-40), Procedural Order No. 2, 17 November 2023, para. 20.

Figure II.24
Fair and equitable treatment is the protection standard most often litigated

Breaches most frequently alleged and found, 1987–2024
(Number of known cases)



Source: UNCTAD, ISDS Navigator database, accessed 1 April 2025.

Note: Based on cases for which such information was available since the first ISDS case based on an IIA.

Between 2015 and 2024, the average amount claimed was $981.8 million.[13] The median amount claimed in this period was $162.4 million. The average amount awarded stood at $233.9 million, with a median of $40 million.

On average, successful claimants were awarded about 25 per cent of the amounts they claimed as damages or compensation.[14] Between 1987 and 2014, tribunals ordered payments of $98.6 million on average, whereas in the past decade (2015–2024) the average increased to more than $230 million. These figures are based on the principal amounts of damages awarded, excluding interest. The principal amounts may cover direct losses (e.g. lost tangible or intangible property of the investor) and the loss of projected future profits (UNCTAD, 2024a). The pre- and post-award interest incurred on the principal amounts can also be substantial (UNCTAD, 2024a). In addition, costs for the legal representation of each party, tribunal costs and administrative fees apply.

[13] Information on damages claimed is available for 411 treaty-based ISDS cases initiated in this period, excluding the $200 billion claimed in *Zeph v. Australia (I)* as an outlier. The three Yukos-related cases (*Hulley Enterprises v. Russia, Veteran Petroleum v. Russia, Yukos Universal v. Russia*) are outside the time frame, so the combined $114 billion claimed in those cases is not included in the calculations.

[14] For 2015 to 2024, information on damages claimed is available for 411 treaty-based ISDS cases (by year of initiation) and on damages awarded for 179 cases (by year of award).

Figure II.25
Average and median values of claims and awards trended upward in the past decade

Amounts claimed and awarded in treaty-based ISDS cases
(Millions of dollars)

Source: UNCTAD, ISDS Navigator database, accessed 1 April 2025.

Note: Principal amounts claimed and awarded, excluding pre-award and post-award interest (where possible). Calculations exclude *Zeph v. Australia (I)* and three Yukos-related cases *(Hulley Enterprises v. Russia, Veteran Petroleum v. Russia, Yukos Universal v. Russia)* as outliers. For amounts claimed, *n* = 528 for 1987–2014 and *n* = 411 for 2015–2024 by year of initiation; for amounts awarded, *n* = 106 for 1987–2014 and *n* = 179 for 2015–2024 by year of award.

Abbreviation: ISDS, investor–State dispute settlement.

* * *

New investment agreements increasingly include cooperation, facilitation and promotion provisions with relatively reduced reliance on ISDS. Investment protection standards are increasingly refined to ensure balance with States' right to regulate. At the same time, a growing share of IIAs include investment liberalization measures, requiring carefully crafted flexibilities. These developments are taking place against the backdrop of an aging network of investment treaties that continue to dominate the regime, placing constraints on governments' ability to regulate in the public interest and leaving them vulnerable to ISDS claims. About 60 per cent of all ISDS cases involved damages claims of $100 million and higher, including 143 cases in which investors sought more than $1 billion. The growing divergence between new- and old-generation IIAs is creating an increasingly complex IIA regime that is difficult for countries to navigate, especially developing ones and least developed ones.

UNCTAD has accelerated and deepened its collaboration with countries and regional organizations to reform the IIA regime effectively across all levels of policymaking. This work is conducted in partnership with relevant stakeholders through a combination of technical assistance, research and policy analysis, and consensus-building efforts, most notably through the UNCTAD Multi-Stakeholder Platform for IIA Reform and its Annual High-Level IIA Conferences. These efforts have delivered tangible outcomes in 2024, as more than 80 countries have embarked on the reform of older agreements, or the adoption and negotiation of modern ones designed to promote and facilitate sustainable investment. Building on this momentum, and on its core policy guidance tools, UNCTAD is developing a set of guiding principles to support countries in aligning old-generation IIAs with sustainable development objectives.

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World Investment Report 2025

Chapter III

Sustainable finance trends

United Nations


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Key findings

- **Sustainable finance markets presented a mixed picture in 2024**
  Sustainable bond issuance reached a record high, while sustainable fund inflows slowed and investor caution intensified.

- **Both voluntary and compliance carbon markets expanded**
  However, integrity concerns and uneven pricing undermine the effectiveness of such markets, and standardization and market access remain challenges.

- **Sovereign wealth and public pension funds continued to recognize the material financial risks posed by climate change**
  However, a significant minority still do not report on sustainability, limiting effective assessment of climate risk for these large and influential investors.

- **Divergence in sustainable finance policymaking widens among developed economies**
  The European Union focused on policy consolidation and regulatory refinement; in the United States, sustainable finance faced a continued backlash; other developed economies took steps to enhance market credibility.

- **Developing economies accounted for about 60 per cent of new sustainable finance policy measures**
  Yet in many, institutional and capacity gaps persist, requiring targeted support – especially as the disclosure burden increases on small and medium-sized enterprises.

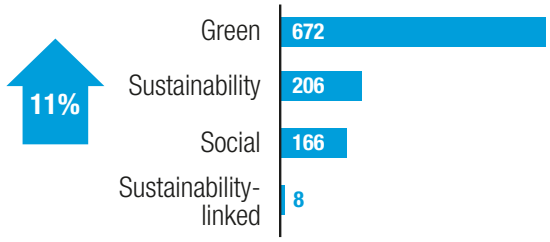
- **Consensus grows on mechanisms to achieve a scaling-up of sustainable finance**
  These mechanisms primarily focus on blended financing approaches, including guarantees, credit enhancement and additional derisking tools, as well as sustainable bonds and carbon markets.

- **The outlook for sustainable finance hinges on translating recent momentum into scaled, credible, and inclusive investment flows**
  Delivering on sustainability goals will require closing institutional and capacity gaps and ensuring the transition to a resilient and equitable financial system.

The sustainable finance market presented a mixed picture in 2024

Sustainable bonds reached a record high

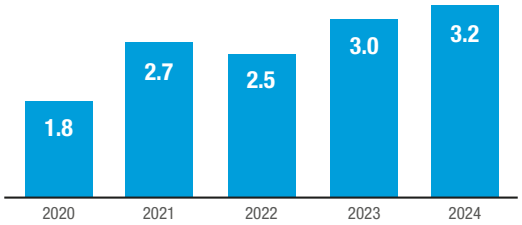
Global issuance, 2024: **$1,052 billion**



Cumulative issuance since 2019: **$5 trillion**

Sustainable funds lost momentum but remained buoyant

Market value, 2024: **$3.2 trillion** +8%



But… net inflows **45%** year on year

More countries introduced carbon pricing, boosted by Article 6 of the Paris Agreement, at COP29

Compliance carbon pricing

Global revenues hit **$75 billion**

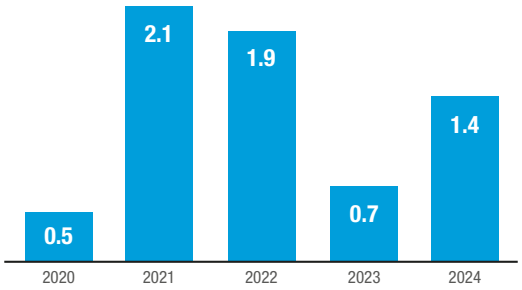
Compliance carbon markets and pricing covered **24%** of greenhouse gas emissions

Developing economies accounted for **5%** of revenue from emission trading systems; **14** more are implementing or considering them

But the **average carbon price** remains too low to meet climate targets

Voluntary carbon markets

Market value rebounded to **$1.4 billion**



Problems with credit integrity and standardization persisted

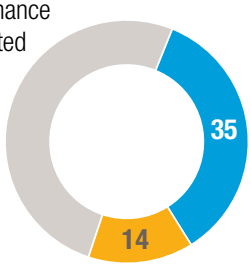
Long-term investors continued to prioritize climate risks

Sustainable finance policymaking remained active

73 new sustainable finance policy measures adopted

Sustainability disclosure measures remained the most common, accounting for **35%** of policies

Carbon market measures accounted for **14%** of policies



The UNCTAD top 100 asset owners:

90% of reporting funds set investment targets in renewable energy

12% set specific fossil fuel divestment targets

61% undertake climate scenario analysis

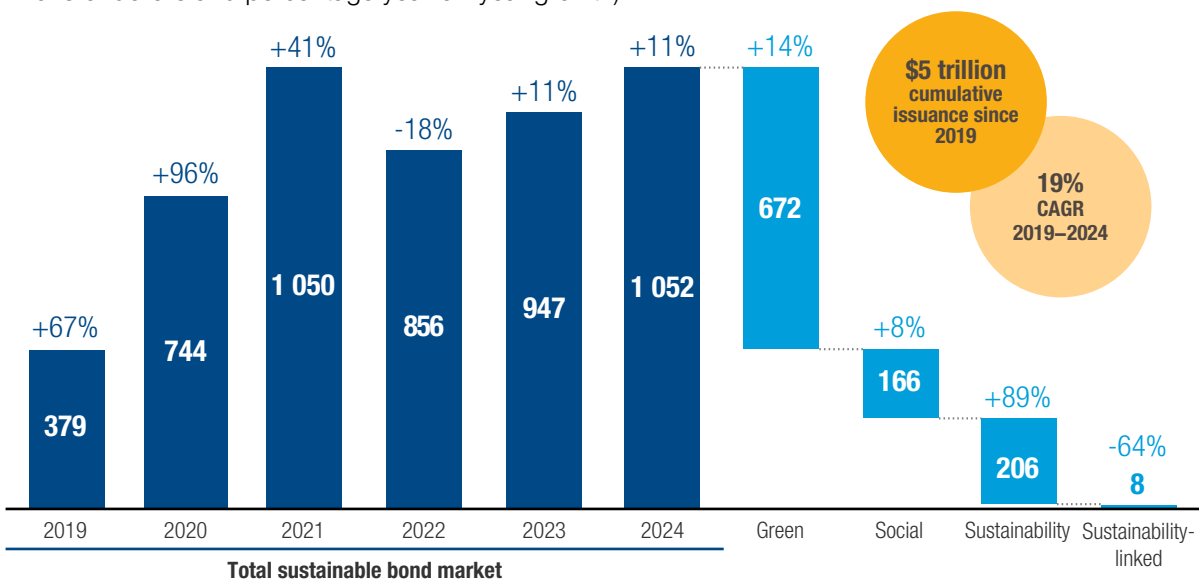
A. Sustainability-themed capital market products

The sustainable finance market grew to more than $8.2 trillion in 2024, up 17 per cent from 2023, but faced intensified headwinds and growing investor caution.[1] Accelerating growth in the sustainable bond market saw record issuance of over $1 trillion. The value of the sustainable fund market also reached a record high, at $3.2 trillion, but the number of new funds stalled and net inflows to the market declined to their lowest level since 2015.

1. Sustainable bond markets

Global issuance of green, social, sustainability and sustainability-linked bonds (SLBs) reached a record level of more than $1 trillion in 2024, up 11 per cent from 2023. Issuance trends varied by market segment (figure III.1).

Figure III.1
Sustainable bond issuance reached a record level in 2024
Global sustainable bond issuance by year and by category
(Billions of dollars and percentage year-on-year growth)



Source: UNCTAD, based on information from Climate Bonds Initiative.

Abbreviation: CAGR, compound annual growth rate.

[1] This chapter covers publicly traded sustainable finance products only, namely bonds and funds. It excludes derivatives, whose value may be unrealized.

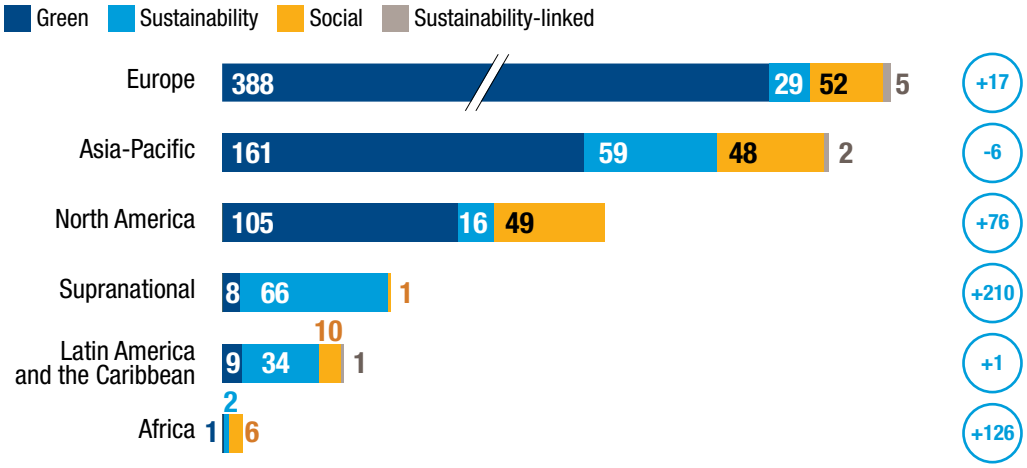
Annual issuance has grown at an average rate of 19 per cent since 2019, as the market continues to mature and investors align their strategies with sustainable outcomes, with the last six years of cumulative issuance now standing at more than $5 trillion. Annual issuance of sustainable bonds as a share of the global bond market has remained above 10 per cent since 2021, representing 11 per cent of the market in 2024.[2]

Green bonds accounted for 64 per cent of total issuance – the largest share – growing 14 per cent from 2023 to 2024, a reflection of both investor preferences for financing environmentally aligned projects and issuer interest in accessing new sources of finance. Growth in this segment has also been supported by expanding regulatory coverage, for example in developing economies (see section C), and net zero commitments by corporates and sovereigns.

Social bond issuance, which had been declining since the COVID-19 pandemic (partly as a result of fewer pandemic-linked bonds), saw a modest 8 per cent increase, driven by renewed interest from government issuers and multilateral development banks. Meanwhile, sustainability bond issuance surged by 89 per cent to a record $206 billion, as supranational issuers, including development banks and the World Bank, became the largest issuers (CBI, 2024b). In contrast, SLBs experienced a sharp decline to their lowest level since 2020. The decline is partly attributable to the lack of commonly agreed standards and transparent processes for measuring targets, which has led to scepticism about the effectiveness of SLBs in promoting genuine sustainability efforts (OECD, 2021). In turn, this has undermined their credibility relative to Use of Proceeds products, such as green bonds (*The Financial Times*, 2024).

In 2024, Europe remained the largest issuer of sustainable bonds, with euros still the most popular currency for bond denomination (figure III.2).

Figure III.2
Sustainable bond issuance increased across all regions except Asia-Pacific
Global sustainable bond issuance by region and category, 2024
(Billions of dollars and percentage change from 2023)



Source: UNCTAD, based on information from Climate Bonds Initiative.

[2] Claudia De Meulemeester (2025), Sustainable bond market expected to remain steady at $1tn in 2025, Sustainable Views, 7 February, https://www.sustainableviews.com/sustainable-bond-market-expected-to-remain-steady-at-1tn-in-2025-b5e70674/.

North America saw strong growth. Supranational issuance tripled from 2023, driven largely by government-backed entities and development banks (CBI, 2024b).

Although Asia-Pacific remains the second largest region for sustainable bond issuance, it experienced a small decline in 2024. China accounted for over a third of issuance in the region, mostly in green bonds targeting the energy sector. Over the past decade, the green bond market in China has grown significantly, driven by its net-zero goal for 2060. China had been promoting internationally aligned bonds that help improve comparability and, consequently, contribute to lower borrowing costs. Although transparency in reporting is generally widespread and of high quality, further enhancements are necessary to ensure greater consistency and strengthen trust within the market.

In Latin America and the Caribbean, issuance remained unchanged from the previous year. While the share of green bonds doubled, SLBs nearly disappeared and sustainability bonds were the biggest category of issuance in 2024. Chile and Brazil have been expanding their green finance markets. Towards this end, Chile has introduced a more robust standards framework (Reuters, 2024). Brazil's green bond issuance remains small but has been growing, with a recent sovereign bond issuance allocating 50 to 60 per cent to environmental projects and 40 to 50 per cent to social initiatives (Brazil, National Treasury, 2024).

Sustainable bond issuance in Africa provided an exception to trends in emerging markets, with issuance more than doubling in 2024. For example, the African Development Bank issued $6 billion in green, social and sustainability bonds in 2024 (CBI, 2024a), with South Africa the largest individual country issuer of green, social, sustainable and sustainability-linked products at $1.1 billion. The growing attractiveness of such bonds in Africa affirms the important role of sustainable finance in improving climate resilience, supporting infrastructure development and sustaining essential services for socioeconomic progress across the continent (CBI, 2024b). However, the large weight of development banks in African issuance also raises questions about how to develop capital markets in the region and diversify the issuance of sustainable bonds. While developing countries have seen issuance growing, the landscape is varied, and many countries face difficulties in issuing sustainable bonds and developing their own sustainable bond markets.

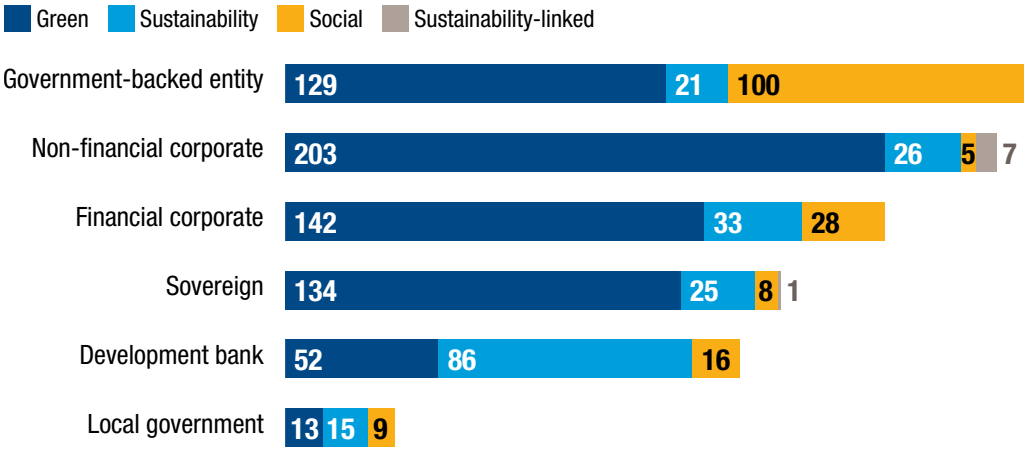
In 2024, the "greenium" – the premium that investors have historically been willing to pay for green bonds over conventional bonds – became less pronounced. The previous scarcity of green bond issuance in some segments had led to higher demand, pushing green bond prices up and yields down; however, this effect faded in 2024, with the interest rate spread in the Euromarket between conventional and green bonds averaging just 1 basis point by the end of the year. This suggests that as sustainable bond markets mature and supply increases, price differences between green and conventional bonds are narrowing (AXA Investment Managers, 2025; Chouard and Jourde, 2024).

In 2024, government-backed entities emerged as the largest issuers of sustainable bonds, raising $250 billion, a 43 per cent increase from the $175 billion raised in 2023 (figure III.3). Together with sovereign and local government issuance, public issuance surpassed corporate issuance for the first time since 2017. Development banks more than doubled their issuance, reaching $154 billion – up from $73 billion in 2023 – with sustainability bonds accounting for 55 per cent of the total. Meanwhile, corporate issuance continues to be a strong driver of growth in green, social, sustainable and sustainability-linked bonds: $444 billion worth of sustainable bonds were issued in 2024, with non-financial corporates posting a 15 per cent increase year on year.

Sustainable bonds: important, largely untapped project financing instrument for developing economies

Figure III.3
Public issuers edged past corporates; development bank issuance more than doubled in 2024

Global sustainable bond issuance by issuer type and category
(Billions of dollars)



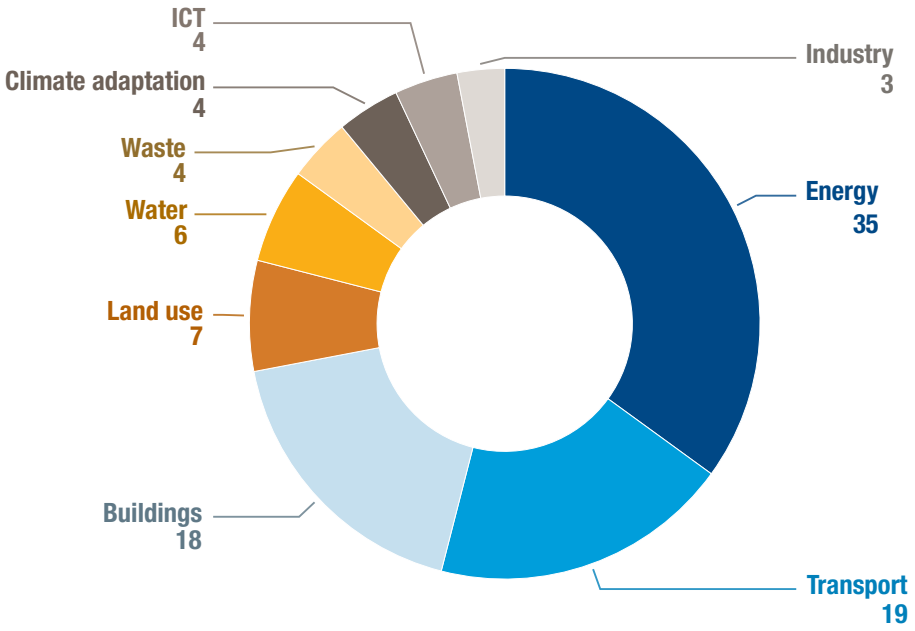
Source: UNCTAD, based on information from Climate Bonds Initiative.

a. Green bonds

Accounting for almost two thirds of total issuance, green bonds continue to dominate the sustainable bond market and provide an important source of finance for environment-related investment. The sectoral distribution of green bond issuance reflects investment priorities, with continued focus on renewable energy projects and infrastructure, as well as standard-setting activity. Recent developments in standards and regulation, such as the EU Green Bond standard, are helping to establish clearer guidelines and increase market confidence (European Union, 2023).

The energy sector, which accounts for the majority of green bond issuance, remained unchanged at 35 per cent (figure III.4). Although slightly down from last year, issuance for transport-related investment was the next largest sector at 19 per cent, including investment in sustainable mobility solutions. The buildings sector accounted for 18 per cent of issuance, unchanged from 2023, helping to finance sustainable construction and energy-efficient real estate. Issuance in water and waste projects, which accounted for 10 per cent, and land use and climate adaption projects (collectively 11 per cent), all remained almost unchanged from 2023. In light of the record global temperatures in 2024, which surpassed the 1.5° Celsius warming threshold for the first time (WMO, 2025), investment will increasingly be required for adaptation projects and more resilient infrastructure in water and transport, as well as land use and buildings. Green bonds are set to play an important financing role in this investment, and new demand for these products in various forms such as Islamic financial instruments is increasing (box III.1).

Figure III.4
Energy is the most common sector for green bond issuance
Global green bond issuance by sector
(Percentage)



Source: UNCTAD, based on information from Climate Bonds Initiative.
Abbreviation: ICT, information and communication technology.

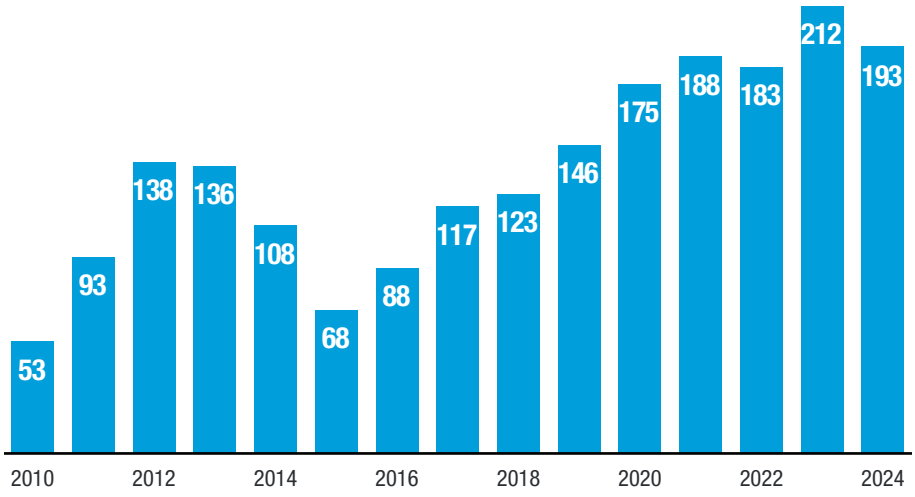
Box III. 1
Green sukuk

Sukuk are financial instruments for which the holders earn returns based on the performance of tangible assets, which spreads risk between the issuer and buyer and has a direct link with the intended use of proceeds. As asset-based or asset-backed products, sukuk do not constitute debt obligations.

Green sukuk can provide liquidity for economic growth and sustainable development projects, including investment in renewables, buildings, and water and sanitation (European Union, 2021). Because they require investing responsibly and in a sustainable manner, such financial instruments have the potential to channel private capital to sustainable projects and contribute to filling the Sustainable Development Goals funding gap (UNCTAD, 2024).

The global sukuk market is most active in Indonesia, Malaysia, Saudi Arabia, Türkiye and the United Arab Emirates. The market has grown from $68 billion in annual issuance in 2015, to a peak of $212 billion in 2023, before falling back to $193 billion in 2024 (box figure III.1).

Box figure III.1
The global sukuk market has experienced stable growth in the past decade
Global sukuk issuance, 2015–2024
(Billions of dollars)



Source: IIFM and S&P, 2024.

Malaysia is one of the largest issuers, at more than $60 billion in 2024, representing about 30 per cent of global issuance (S&P Global, 2025). The country has a dual banking system with both Islamic and non-Islamic financial institutions (IFSB, 2024). The Securities Commission of Malaysia is planning to establish a "social stock exchange" to enable private capital participation in projects that have positive social outcome goals. The exchange aims to promote social justice and investment in healthcare and infrastructure (GFIEF, 2024).

Source: UNCTAD.

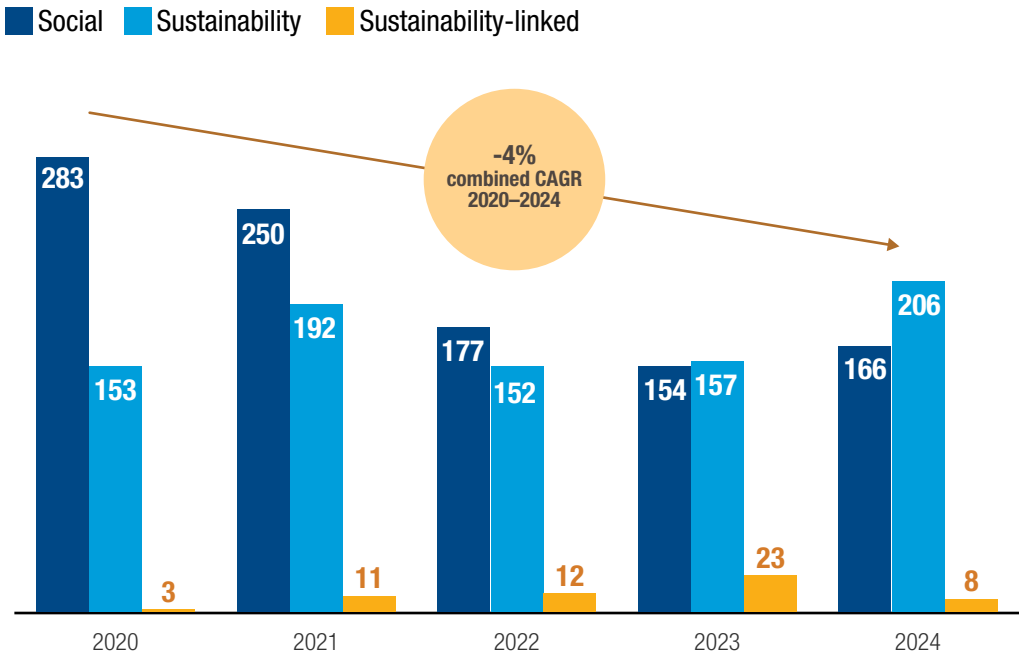
b. Social, sustainability and sustainability-linked bonds

In 2024, social and sustainability bond and SLB issuance rose to $380 billion, accounting for over a third of the total sustainable bond market. Despite year-on-year growth of 14 per cent in 2024, the compound annual growth of this segment from 2020 to 2024 is still on a downward trajectory of –4 per cent (figure III.5).

Social bond issuance recovered for the first time since 2020, reversing the downward trend that had followed the expiration of pandemic-related social bonds (UNCTAD, 2024). These products tend to be favoured by government entities rather than corporates and may finance social-related programmes rather than income-generating projects. This is visible in the high share of social bond issuance in Africa, at 65 per cent of total issuance.

Sustainability bonds continued their upward trend, rising by 31 per cent, driven by increased supranational issuance for financing multi-theme environmental, social and governance (ESG) projects (CBI, 2024a). Sustainability bonds were strongly preferred by development banks, local governments and, to an extent, sovereigns, possibly owing to the flexibility of their use. Sustainable Development Goal–labelled bonds are a subset of social and sustainability bonds that have been used to promote and market the financing of projects that have a clear Goals dimension,

Figure III.5
Social and sustainability bond issuance increased in 2024 while sustainability-linked bonds fell out of favour
Global issuance by category
(Billions of dollars)



Source: UNCTAD (2025).
Abbreviation: CAGR, compound annual growth rate.

although their use since the launch of the Goals has been limited (box III.2).

SLB issuance fell to $8 billion in 2024 – the lowest level since 2020 – accounting for less than 1 per cent of total issuance. This divergence between social and sustainability bonds on one hand and SLBs on the other highlights some challenges in the SLB market, especially concerning perceptions of greenwashing. For example, many SLB issuers provide only partial coverage of greenhouse gas (GHG) emissions, often excluding Scope 3 emissions, and some set targets that are not aligned with the Paris Agreement (CBI, 2023). Moreover, the alignment of SLBs with sustainability targets has been deteriorating, with less than a quarter of products meeting the criteria in some verification methodologies (CBI, 2024b).

Box III.2
The role of social and sustainability bonds in financing the Sustainable Development Goals

The Sustainable Development Goals and the Paris Agreement form the two pillars of United Nations-backed sustainable development efforts worldwide. All sustainable bonds link to or directly contribute to Goals targets. Nevertheless, a number of issuers have explicitly labelled their products as Sustainable Development Goals bonds. These self-labelled bonds are a subset of social and sustainability bond categories and offer a source of targeted additional financing for the Goals. More than 100 such self-labelled bonds have been issued since 2017, with a cumulative value of more than $67 billion, representing almost 3 per cent of all social and sustainability bond issuance. Annual issuance of these self-labelled bonds rose steadily from 2018 to 2022 before declining in 2023. However, issuance in 2024 reached a record level of $15.6 billion, or almost 4 per cent of social and sustainability bond issuance.

The majority of these self-labelled bonds are categorized as sustainability bonds and are used for projects covering health, education and other Goals targets, including projects with a positive gender impact. About 30 per cent of bonds fall in the social category, covering housing; however, these bonds are an emerging instrument for Goals financing and all bonds currently in the social category were issued by a public bank in the Kingdom of the Netherlands.

Most of these self-labelled bonds are issued by public institutions, including Government-backed entities, such as development banks, and sovereign issuers, which together account for $53.6 billion in issuance. Corporates account for the remainder by value but are not widely distributed among issuers. Thus, although the Goals were launched nearly a decade ago, self-labelled Sustainable Development Goals bonds remain a small subset of the sustainable bond market and have not contributed significantly to non-environmental Goals targets.

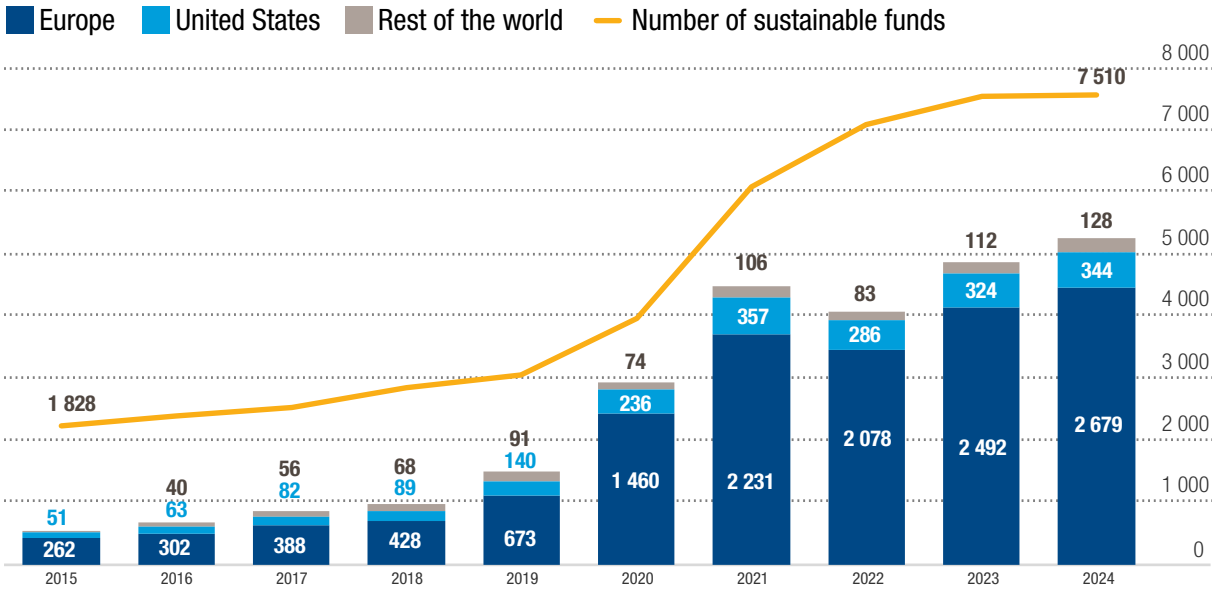
Source: UNCTAD, based on information from Climate Bonds Initiative.

2. Sustainable funds

a. Market trends

The expansion of sustainable funds stagnated in 2024, with marginal growth from 2023 (figure III.6). The total number of funds now stands at 7,510. The slowdown was mainly driven by a 45 per cent decline in new launches and an increase in fund closures, reflecting market consolidation and investor caution.

Figure III.6
Global issuance of sustainable funds slowed down in 2024
Value and number of funds by issuer location
(Billions of dollars and number)



Source: UNCTAD, based on Morningstar data.

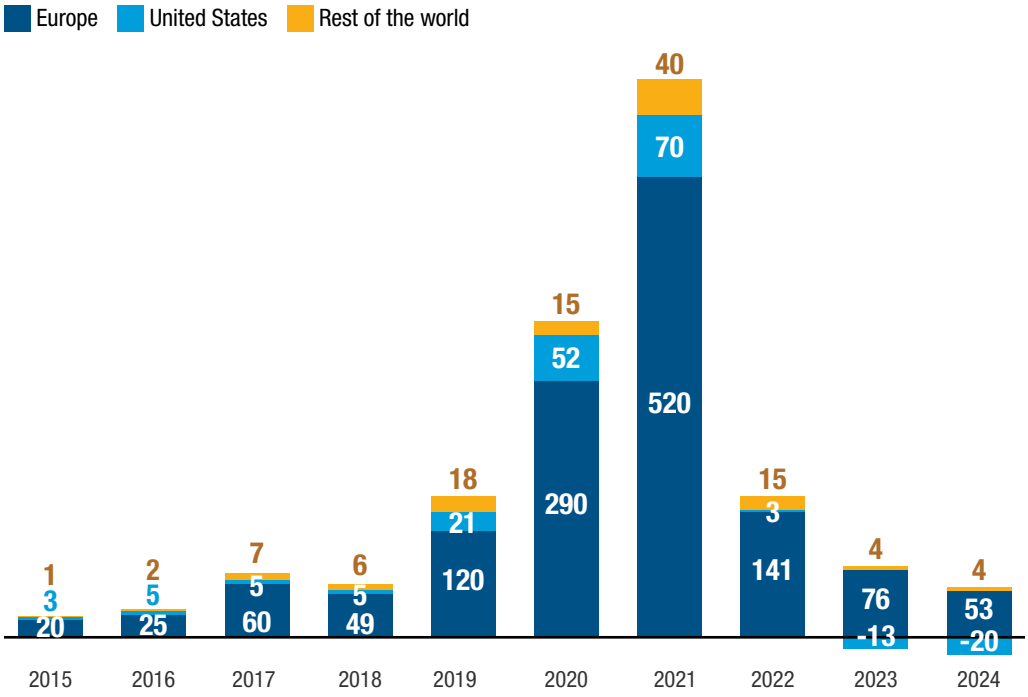
The total assets of sustainable funds reached nearly $3.2 trillion in 2024, marking an 8 per cent increase from 2023, mainly driven by strong equity market performance in Europe and the United States. Europe continued to dominate the market, with assets worth $2.7 trillion, or 84 per cent of the global market. The value of sustainable funds in the United States increased from $324 billion in 2023 to $344 billion in 2024, representing 11 per cent of the global market, despite a 5 per cent drop in the number of funds. The market share in the rest of the world remained small, at about 5 per cent.

The stalling interest in sustainable funds was reflected by the continuing fall in net inflows to sustainable funds. Global net investment inflows to those funds fell for the third consecutive year, reaching $37 billion in 2024, a drop of more than 40 per cent from 2023 (figure III.7). This compares to inflows to the total global fund market of $1.4 trillion, up from $66 billion in 2023.

European sustainable funds attracted $53 billion in net inflows in 2024, down 30 per cent from 2023. The United States market experienced a net outflow of $20 billion for the second consecutive year, apparently due to a growing backlash against ESG investing (Morningstar, 2025). Other developed markets also witnessed a net outflow, of $7 billion. Developing Asia attracted net inflows of $11 billion in 2024, driven mainly by investments in China and Singapore, but still down from about $13 billion in 2023.

A combination of factors contributed to the recent slowdown in the market, including regulatory and policy uncertainties, dampened enthusiasm and rising anti-ESG sentiment, elevated interest rates and the financial underperformance of ESG strategies. Sustainable funds generated median returns of 0.8 per cent while returns on traditional funds reached 1.5 per cent in 2024 (Morgan Stanley Institute for Sustainable Investing, 2025).

Figure III.7
Net investment flows to sustainable funds continued to plummet despite strong performance in the global equity markets
Value of flows by major markets
(Billions of dollars)



Source: UNCTAD, based on Morningstar data.

The evolving regulatory environment in Europe and in the United States had an impact on launches of sustainable funds, as well as closure and reclassification of existing funds. In response to stricter regulations in Europe, the market has seen a surge in fund rebrandings and closures. In 2024, 213 funds changed their names, with 115 removing ESG-related terms to comply with evolving disclosure and classification requirements.

In the United States, policy backlash against sustainable investing intensified with several states enacting legislation to restrict the use of sustainability or ESG criteria in investment decisions. Some asset managers in the country have chosen to reduce or close their sustainable funds while others have rebranded their products without changing the underlying strategy (Morningstar, 2025). In addition, relatively higher interest rates have continued to put pressure on key sustainable investment sectors characterized by large upfront costs, such as renewable energy.

b. Addressing greenwashing concerns

Greenwashing remains a significant concern in the sustainable fund market. The lack of reliable and consistent data at the company or product level continues to make it difficult to accurately evaluate the sustainability credentials of funds (Bondar et al., 2024). Nevertheless, some progress has been made in addressing this issue through recent policy developments.

The European Union has made continued progress in refining its regulatory framework

to enhance transparency and combat greenwashing in the sustainable fund market. The European Securities and Markets Authority introduced fund naming guidelines in December 2024, establishing minimum standards for funds that use ESG-related terms in their names. The rules, which came into force in May 2025, mandate stricter sustainability criteria, including mandatory exclusion of controversial activities in sectors such as fossil fuels and weapons, as well as a requirement for specific thresholds of a fund's portfolio to be allocated towards defined sustainable investment objectives.

The United Kingdom has adopted a similar approach with the introduction of the Sustainability Disclosure Requirements and investment labelling rules in July 2024. The Financial Conduct Authority has established four distinct sustainability labels to help investors differentiate between sustainable investment strategies: (i) sustainability focus, (ii) sustainability improvers, (iii) sustainability impact and (iv) mixed goals.

Meanwhile, both developed and developing economies continue to roll out policy measures on sustainability disclosures, standards and taxonomies, aiming to enhance market transparency and address greenwashing concerns (see section C).

c. Underrepresentation of developing economies

Another fundamental challenge facing the sustainable fund market is the very limited involvement of and benefits for developing economies. Currently, developing economies host only about 3 per cent of the world's sustainable funds in terms of number and assets, despite accounting for about 30 per cent of the global fund market by value (Precedence Research, 2025). Although developing Asia has seen increases in assets and investment in sustainable funds in recent years, this trend remains highly concentrated in a few emerging economies such as China, India and Singapore. Meanwhile, most other developing countries remain largely absent from the global sustainable fund landscape.

Moreover, excluding China, funds and equities in developing countries experienced net outflows of $11 billion in 2024, and the value of green assets in developing countries (still excluding China) remained negligible (Institute of International Finance, 2025). The perception of market risk in developing regions, as well the lack of sustainability data on developing-country equities, make the construction of sustainable funds dedicated to developing markets challenging.

The limited participation of developing economies presents a twofold opportunity for the sustainable fund market and developing regions: one, for global funds to increase their exposure to these regions and the growth potential that exists there, as well as ensuring that sustainable funds contribute more effectively to the Sustainable Development Goals; and two, for developing countries to strengthen their capital markets and regulated products so as to attract capital that otherwise flows to better-regulated markets and products. Expanding the sustainable fund market in developing economies and the exposure of funds to these markets therefore requires targeted policy measures to enhance transparency and regulatory oversight, improve data availability and support capital market development.

Developing economies host only about **3 per cent of all sustainable funds**

B. Carbon markets

Carbon markets, comprising voluntary and compliance mechanisms, are central to global decarbonization efforts. While voluntary carbon markets (VCMs) have seen declining credit issuance since 2021 due to integrity concerns, compliance carbon markets (CCMs) have grown steadily, generating over $100 billion in revenue by 2023. Developing economies are increasingly active in both markets, with growing participation in emissions trading systems and carbon tax schemes to finance sustainable transitions.

1. Overview

Carbon markets enable the trade of carbon credits or allowances, which contribute to achievement of decarbonization or carbon mitigation targets. VCMs operate as unregulated marketplaces in which companies and organizations voluntarily purchase carbon credits to offset emissions and support sustainability initiatives. In contrast, CCMs are regulated systems in which governments set emission limits and issue tradable permits to entities, enforcing specific reduction targets.

a. Trends in voluntary carbon markets

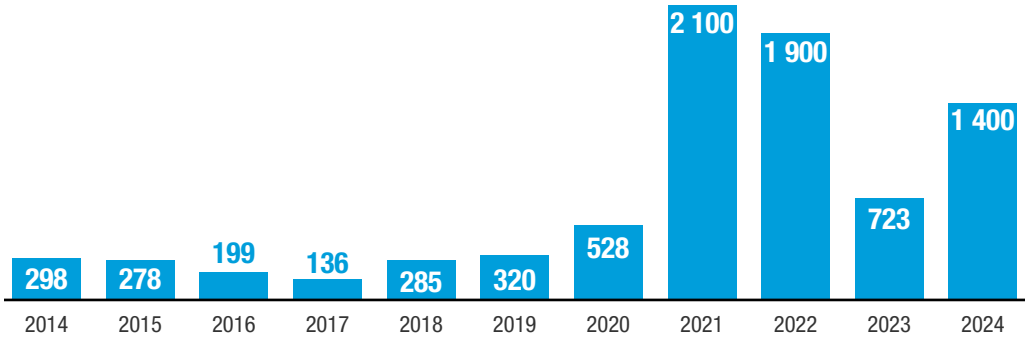
In 2024, VCMs worldwide issued credits for 287 million tons of carbon dioxide equivalent (tCO_2e), a 7 per cent decrease from 2023. Meanwhile, credits for 177 million tCO_2e were retired, leaving a gap of approximately 110 million tCO_2e credits not yet retired (figure III.8). The overall trend in global VCMs shows that the market gained significant traction from 2014 to 2021, with issuance increasing steadily almost every year to its peak in 2021, before declining by 20 per cent over the past three years. Since the Paris Agreement entered into force in late 2016, more than 4,700 projects have issued credits, with cumulative issuance exceeding 2.1 billion tCO_2e (MSCI, 2025). In terms of value, global VCMs rebounded significantly in 2024, reaching $1.4 billion, but still far from the 2021 peak at $2.1 billion (figure III.9).

The drop from the 2021 peak in both value and volume, as well as the divergence between issuance and retirement, can be attributed primarily to concerns over the integrity of carbon offsets. Since 2002, approximately 984 million tCO_2e of carbon credits, about 40 per cent of total issuance, have remained unretired, raising market integrity concerns, particularly regarding older issuance. The Integrity Council for the Voluntary Carbon Market (ICVCM) found that some methodologies for renewable energy projects failed to meet rigorous additionality criteria, rendering approximately 236 million unretired credits ineligible for high-integrity labelling under the Core Carbon Principles (ICVCM, 2024). These low-integrity credits contribute to an oversupply that depresses prices and weakens market effectiveness. Investor distrust has led companies to withdraw from offset purchases, amplifying uncertainty and further lowering prices (Reuters, 2023).

Figure III.8
The number of voluntary carbon market credits issued continued to fall year by year since 2021, while the retirement rate remained stable
Number of credits issued and retired
(Millions)

Source: Climate Focus (2024).

Figure III.9
The value of global voluntary carbon markets nearly doubled from 2023 but remained below 2021 and 2022 levels
Market size by value of traded carbon credits
(Millions of dollars)



Source: EcoSystem Marketplace, MSCI (2024).

Yet, several use cases for carbon credits will continue to drive demand and support the growth in global VCMs. With businesses increasingly integrating climate risk into their operations and seeking to offset their residual emissions, corporate voluntary purchases will remain the dominant source of demand in VCMs (World Bank Group, 2024). Meanwhile, linkages with compliance markets, international offsetting initiatives and government efforts to meet their nationally determined contributions (NDCs) also drive demand and point to continued market growth.

Nature-based solutions, designed to protect, manage and restore natural ecosystems, have accounted for the largest share of carbon credit issuance

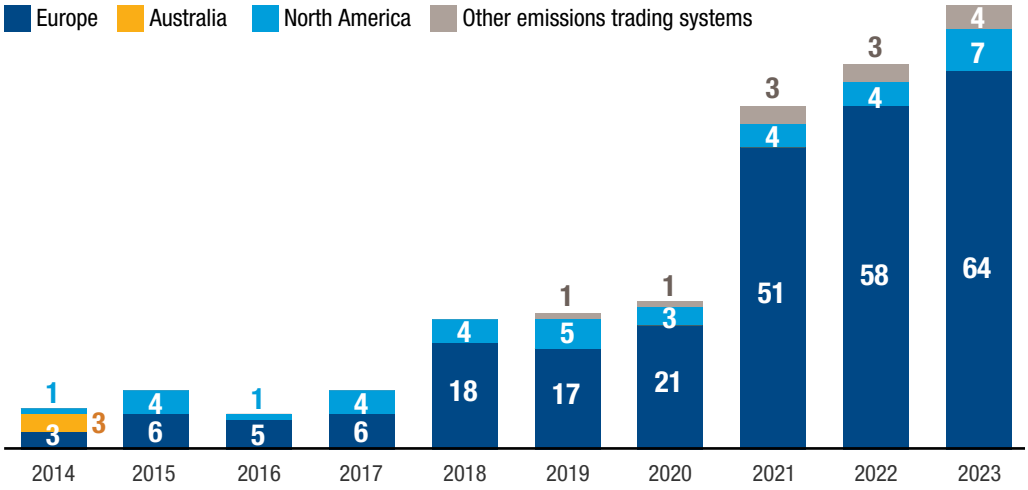
in the past three years, followed by renewable energy, household activities (such as clean water programmes, lighting efficiency improvements and cookstove enhancements), industry, waste and other activities. Since 2022, diversification in credit distribution has grown, potentially in response to concerns about the integrity of some nature-based solution credits (Ecosystem Marketplace, 2024). While these solutions are still set to lead credit issuance, the decline contrasts with the steady growth of issuance linked to household activities. Meanwhile, renewable energy projects have remained a stable source of credit issuance.

b. Trends in compliance carbon markets

As of 2024, global compliance carbon markets (CCMs) included 36 emissions trading systems (ETSs), which have become a key policy instrument for reducing carbon emissions. In parallel, 39 carbon tax schemes, another major form of carbon pricing, were also implemented worldwide. Together, these 75 carbon pricing instruments covered approximately 24 per cent of global GHG emissions, or 12.8 $GtCO_2e$. Government revenues from these instruments surpassed $100 billion in 2023 for the first time, with ETSs accounting for about 70 per cent of the total (World Bank Group, 2025). While their contribution to overall public budgets remains modest, carbon pricing revenues have the potential to become a significant source of climate finance if strategically allocated.

Global revenues from ETSs rose significantly from 2020 ($25 billion) to 2023 ($75 billion), with more than half used to fund climate- and nature-related programmes. The growth was driven primarily by European schemes (including those of the European Union, Germany and the United Kingdom), with $64 billion of revenue in 2023, or 85 per cent of the global total (figure III.10). The substantial increase in revenue in the European Union ETS was itself propelled by an upward trend in carbon prices and rising demand by carbon-intensive industries. North America contributed a relatively small

Figure III.10
Revenues from compliance carbon markets have continued to grow at a steady rate since 2021, driven primarily by European schemes
Global revenue from emission trading schemes by market
(Billions of dollars)



Source: World Bank Group (2025).

Note: European revenues include those from emission trading schemes in the European Union, Germany and the United Kingdom since 2020.

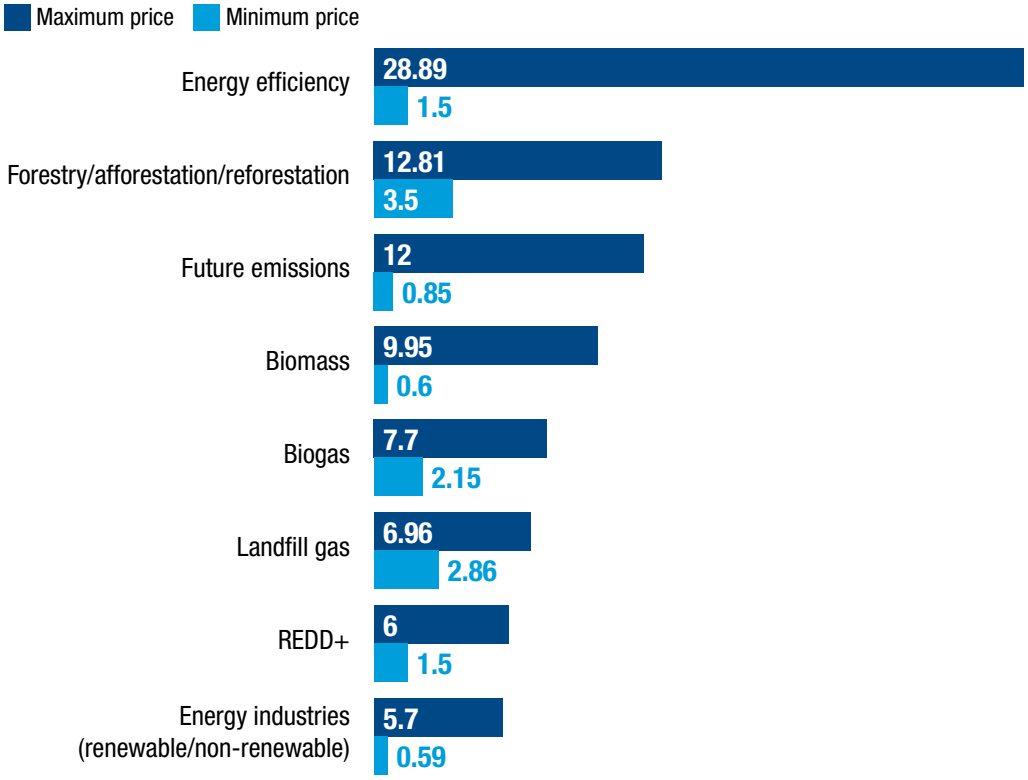
but expanding share of total revenues in 2023. ETS markets in developing economies have experienced significant growth and represent about 5 per cent of global revenue since 2021 (WTO et al., 2024). In China, the price of carbon traded on its ETS increased 54 per cent in 2024, from $8.15 to $12.57 per tCO_2e (World Bank, 2025).

Establishing climate mitigation mechanisms to raise the cost of domestic carbon emissions is essential to combating climate change. However, the fragmentation of standards and significant discrepancies in pricing pose severe policy concerns and could lead to the risk of carbon leakage – when industries shift their activities to jurisdictions with lower carbon costs – thereby threatening the overall strategy for reducing carbon emissions (WTO et al., 2024).

c. The price challenge

Although carbon pricing policies now cover a larger share of global emissions, their coverage and price levels remain insufficient to align with a global warming target below 2°C – let alone the more ambitious, Paris Agreement–aligned target of 1.5°C. Leading CCMs have huge disparities in carbon pricing, ranging from less than $1/$tCO_2$ to more than $160/$tCO_2$. According to the High-Level Commission on Carbon Prices, to provide sufficient incentives to meet the 2°C emissions pathway target, carbon prices should be in the range of

Figure III.11
Voluntary carbon market projects in energy efficiency command a substantial price premium
Price by project, 2025
(Dollars per credit)



Source: UNCTAD, based on Carbon Trade Exchange data.

Abbreviation: REDD+, Reducing emissions from deforestation and forest degradation, plus conservation of forest carbon stocks, sustainable management of forests and enhancement of forest carbon stocks.

$62–$127/tCO_2e. At present only seven carbon pricing mechanisms, covering less than 1 per cent of global GHG emissions, fall within this range; no mechanism currently falls within the price range of $226–385/$tCO_2e$, consistent with limiting temperature rise to 1.5°C (WTO et al., 2024).

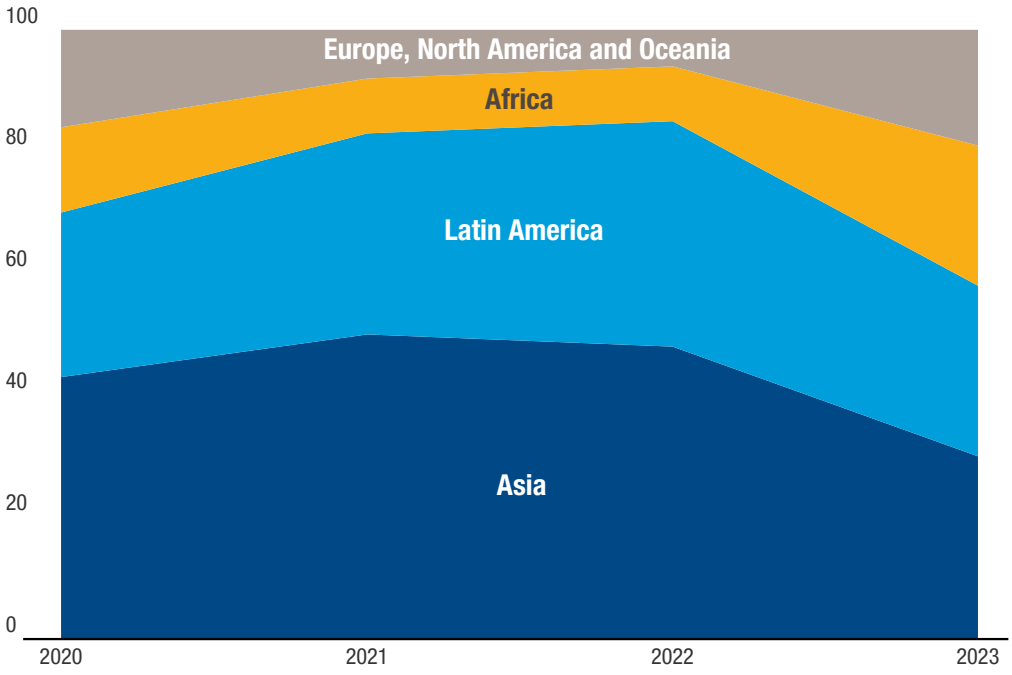
In VCMs, carbon prices vary significantly within and across market segments (figure III.11), but most remain in the single digits, a level insufficient to incentivize carbon reduction projects in most industries. The effectiveness and credibility of carbon offsets, along with the standards applied, together play a crucial role in carbon pricing. Varying project development costs across industries also have an impact.

Overall, carbon prices should increase significantly in order to incentivize emissions reduction and achieve countries' NDCs. Meanwhile, international coordination is essential to create a more level playing field and address potential carbon leakage across borders, as well as competitiveness concerns.

d. Carbon market trends in developing economies

A closer look at developing economies reveals that these economies have become important players in both VCMs and CCMs, showing growing interest in leveraging carbon markets to finance the energy transition. The market share of developing economies in global VCMs peaked in 2021, driven by Asia (153 million tCO_2e) and Latin America (103 million tCO_2e). However, trade volumes declined sharply in 2022 and 2023 in response to reduced demand linked to integrity concerns, particularly environmental integrity concerns and low weighted average prices (World Bank Group, 2024). Despite this recent decline, developing regions still accounted for more than 80 per cent of credits traded in VCMs globally (figure III.12).

Figure III.12
Developing regions account for more than 80 per cent of credit volume
Share of volume of credit traded
(Percentage)

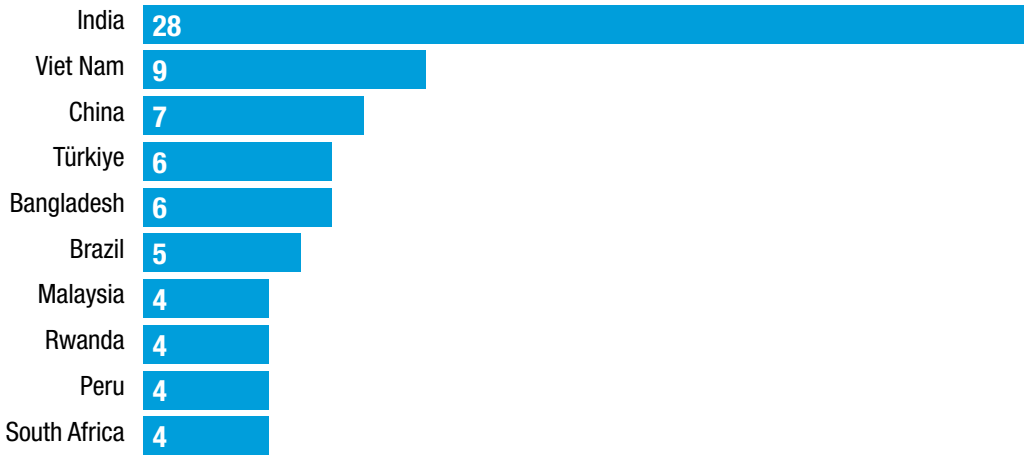


Source: UNCTAD, based on Ecosystem Marketplace data.

Countries in Asia contributed a large share of credits issued in VCMs, but some developing economies in Africa and Latin America, such as Brazil, Peru and Rwanda, were also among the top issuers in 2024 on the Verra Registry, one of the world's most widely used carbon standards (figure III.13). With more developing economies rolling out policy measures on carbon crediting (see section III.D), their market share is expected to grow further in the coming years.

Developing economies are also increasingly engaged in the development of CCMs. Four have implemented a national ETS (China, Indonesia, Kazakhstan and Mexico). Several other countries are either considering or actively developing an ETS; they include Brazil, Chile, Gabon, India, Malaysia, Nigeria, Pakistan, Thailand, Türkiye and Viet Nam (table III.1).

Figure III.13
India by far the largest carbon credit issuer in the Verra Registry
Top 10 issuers in the registry 2024
(Millions of credits issued, tons of carbon dioxide equivalent)



Source: UNCTAD, based on Verra Registry data.
Note: Verra is a standard-setter and certifier of voluntary carbon offsets.

Table III.1
Status of emissions trading schemes in developing countries, 2024

Implemented	In development	Under consideration
China	Brazil	Argentina
Indonesia	Colombia	Chile
Kazakhstan	India	Gabon
Mexico	Türkiye	Malaysia
	Ukraine	Nigeria
	Viet Nam	Pakistan
		Philippines
		Thailand

Source: UNCTAD, based on World Bank Group and International Carbon Action Partnership data.

Similarly, the adoption of carbon taxes as a policy tool for reducing emissions is gaining momentum, with countries such as Argentina, Colombia, Chile, Mexico, South Africa and Ukraine already implementing such measures. Meanwhile, Botswana, Kenya, Morocco and Uruguay, among others, are actively exploring carbon tax frameworks.

Although most of these countries already participate in VCMs, creating a national ETS requires robust legal frameworks; governmental entities to regulate, operate and monitor the ETS (and strengthening of these entities over time as the carbon markets expand); and capacity-building (box III.3). In addition, the implementation of CCMs could have significant implications for competitiveness and production costs in the targeted sectors.

Box III.3
Building partnerships and frameworks in Nigeria

In Nigeria, the absence of a regulatory framework for carbon pricing or offtake created uncertainty for project developers and investors, hindered green investments and posed an obstacle to the fair valuation of carbon credits. To address these challenges, the National Council on Climate Change of Nigeria has taken proactive steps to build partnerships and frameworks, in collaboration with key players in the carbon market ecosystem, including the Nigeria Sovereign Investment Authority. This has led to the establishment of a dedicated committee to focus on framework development and capacity-building.

The strategic goals of the initiative include the formulation of a comprehensive carbon market policy supported by detailed operational manuals and regulations. To provide a robust foundation for carbon trading, relevant efforts target both Article 6 compliance markets and VCMs but the focus is on VCMs. Another critical objective is to ensure premium pricing for carbon credits, which at the time of writing sold at an undervalued rate of $2–$3 per ton. One way to enhance the price is to establish a policy framework that provides certainty and assurance for investors and project managers.

In 2023, the Nigeria Sovereign Investment Authority launched the Carbon Vista platform with Vito Energy Trader, a carbon trading company owned by the Public Investment Fund of Saudi Arabia. This joint venture focuses on integrated carbon reduction and removal projects, combining development, methodology and financing. A flagship project is the distribution of clean energy, which has reached over a million households. Another project is a biogas initiative to meet energy needs while reducing agricultural waste.

Source: UNCTAD.

C. Institutional investors and sustainability integration

Institutional investors continue to prioritize sustainability considerations in their investment strategies and remain vigilant regarding the material impact of the climate crisis on their assets. Despite pushback, recent climatic events are forcing institutional investors, including pension and sovereign funds, to re-evaluate the financial sustainability of their business and actuarial models and to intensify their climate-related actions. Regulatory and policy initiatives are also driving sustainability integration and disclosure. However, the number of funds in the UNCTAD top 100 that report remains almost unchanged from last year, meaning that a persistent minority of funds still fail to disclose their sustainability performance and are potentially overexposed to the risks posed by climate change.

In 2024, assets of global public pension funds (PPFs) reached $25 trillion and assets of sovereign wealth funds (SWFs) hit $13 trillion. Because of their size and long-term investment horizon, these funds are in a unique position to drive investment in sectors, financial products and markets that can make a significant contribution to sustainable development and achievement of the Sustainable Development Goals. Since the 2008 global financial crisis, many public pension and sovereign investors have been allocating capital in developing-country markets and in alternative assets, such as infrastructure, as well as in co-investments with other domestic and foreign investors (UNCTAD, 2025). More recently, these investors have been allocating funds to sustainable products, such as green bonds, as well as issuing such products themselves.

In 2024, the top 100 public pension and sovereign asset owners managed almost $27 trillion, up from $24 trillion in 2023. Developing-economy funds represented 32 per cent of the top 100 funds by number but 43 per cent by value and have been growing more rapidly than developed-economy funds since 2022. Of the 30 SWFs in the top 100, 22 are from developing countries, with average assets under management growing at more than twice the rate of that of the 70 pension funds.

Although Africa has just two funds in the top 100, more than half of the continent's countries have launched a SWF or are in the process of doing so (UNCTAD, 2025). These funds can provide a valuable source of long-term patient capital for investment, including through green bonds or carbon markets (see section III.A). The UNCTAD partnership with the African Sovereign Investors Forum, established in 2023, aims to leverage these funds for sustainable development in Africa.

Among the top 100, the number of funds that report on sustainability dropped slightly from 58, in 2023, to 57 in 2024. This is partly explained by funds not updating their sustainability reporting since 2022. Of the top 100 funds, 35 are domiciled in North America but 19 of these are non-reporting – all in the United States. This is

the second highest share of non-reporting funds after the Middle East, reflecting the weaker regulatory environment and potentially the impact of recent pushback against sustainability disclosure.

Europe has the highest share of reporting funds, with all funds in the European Union disclosing their sustainability performance. It is closely followed by developed Asia, where 13 of the 16 funds report. Emerging Asia has the highest rate of reporting funds among developing-country regions, reflecting the impact of strong standards and frameworks on sustainability reporting (see section III.D).

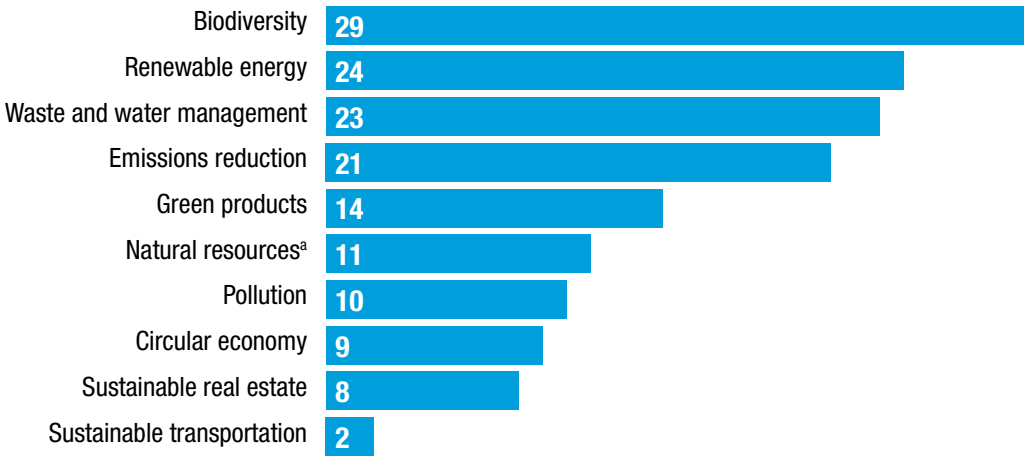
UNCTAD monitoring focuses on the climate actions and approach to climate risk management taken by the leading funds. It is based on the publicly available reports of the 57 reporting funds in the top 100.

1. Climate-related actions of public pension and sovereign wealth funds

A broad range of environmental considerations continue to shape the investment strategies of PPFs and SWFs, with biodiversity, renewable energy, and waste and water management emerging as key focus areas in 2024 (figure III.14). These priorities reflect the increasing alignment of funds with global sustainability goals, regulatory developments and investor expectations.

At the regional level, there are variations in the integration of climate and other environmental themes. In developing economies, renewable energy stands out, as countries seek solutions to the energy transition, such as the leveraging of green bonds by Chinese and Malaysian funds for sustainable projects. Funds in the Asia-Pacific region also place significant emphasis on climate adaptation, the circular economy and decarbonization, with funds in the Republic of Korea and Singapore in particular focused on energy efficiency.

Figure III.14
Climate and environmental priorities of reporting funds in 2024
Number of reporting funds; *n* = 57



Source: UNCTAD, based on latest fund reporting (2024); some latest reports from 2023.

[a] Natural resources includes categories on raw materials, conversation, forestry, agriculture, and resource management.

In Europe, biodiversity conservation and circular economy practices have become important themes, with funds emphasizing nature-based solutions, as well as renewable energy and decarbonization. This trend has been reinforced by the ongoing efforts of the European Union to expand its green taxonomy to encompass a wider range of environmental and social issues. North American funds have focussed on emissions reduction and sustainable infrastructure, with some funds increasing their investments in low-carbon technologies and pollution control. These regional variations highlight how environmental investment priorities are shaped by local economic and policy contexts.

a. Investment strategies

The climate crisis continues to influence SWF and PPF investment strategies. Reporting funds emphasize investment in green sectors over divestment from fossil fuel, with energy and decarbonization as the leading targets for sustainable investment. Major funds such as NBIM (Norway), PIF (Saudi Arabia) and GPIF (Japan) apply a broad range of sustainability considerations: for example, acquiring climate technology, circular economy businesses and sustainable agriculture assets in their portfolios. Although funds acknowledged biodiversity as a priority, translating it into an investment strategy remains a challenge, owing to the lack of structured financial instruments supporting this sector (Principles for Responsible Investment, 2020).

While more than 90 per cent of funds have set investment targets in renewable energy and other green sectors, only one in eight had established specific targets for fossil fuel divestment for 2024 – a modest increase from the preceding year. This indicates a stronger emphasis on positive investment strategies rather than exclusionary policies. Instead of fully divesting from fossil fuel holdings, many funds adopt negative screening approaches, particularly targeting thermal coal, high-carbon industries or companies that exceed emission thresholds. This approach is more common among European funds, while North American and Asia-Pacific funds tend to prioritize engagement and selective exclusions. Overall, the trend points to a preference for screening and active stewardship over rapid divestment, aligning more closely with a gradual transition strategy.

b. Engagement, targets and modelling

Institutional investors employ several key mechanisms to influence corporate climate action, such as direct voting on climate issues, engaging with companies, setting net zero targets and conducting climate risk analysis of their assets. Another critical strategy is directing investment towards domestic climate initiatives, supporting projects that align with national and regional sustainability goals.

Some 84 per cent of funds reported having a voting policy or guidelines focused on climate or ESG issues, with some funds aligning their voting policy with the Paris Agreement. Funds are prioritizing resolutions related to carbon emissions disclosure, corporate decarbonization targets and net zero transition strategies, in line with their broader focus on climate-related issues, ESG considerations and corporate governance.

A few funds, such as the New York State Common Retirement Fund, have integrated climate-related voting policies in their portfolio management, exercising voting rights on shareholder resolutions aimed at improving corporate climate transparency. Australian and Northern European funds report the intention to engage with companies and investment stakeholders, influencing their ESG policies and practices.

This highlights the importance of public markets for maintaining transparency and the benefits for institutional investors of making informed decisions and managing climate-related financial risks. Countries with strong regulatory frameworks tend to have more transparent institutional

Only one in eight funds had **specific targets for fossil fuel divestment** for 2024

investors, as they implement better regulations that enforce disclosure and accountability. Moreover, the international reach of funds can expose them to transparency requirements in host countries, forcing them to align with local regulations and governance standards (Amar and Lecourt, 2023).

About three quarters of reporting funds have committed to achieving net zero emissions in their portfolios by 2050, through a combination of decarbonization and offsets. European funds such as NBIM (Norway) and PGGM (Netherlands) are leading examples, with interim reduction targets for 2030. Some funds, such as Temasek (Singapore) and QIC (Australia), combine decarbonization with carbon offsets, whereas other funds (e.g. in China and the Middle East) align with national climate targets but still lack detailed transition pathways.

Over 90 per cent of reporting funds undertake some form of climate risk assessment, with over 60 per cent of funds reporting the use of more in depth, systematic climate scenario analysis. About 40 per cent of funds conduct stress testing, which includes portfolio assessments, and roughly one in three funds that conduct stress testing also integrate carbon measurement. Such assessments are complementary, and some funds do all three. Conducting scenario analysis, for example of the impact of a 1.5° Celsius versus a 2° Celsius climate warming pathway, provides greater granularity with respect to current and future climate risks. Implementing climate risk assessment frameworks can enhance resilience, while helping funds assess both transition and physical risks, as well as identify potential opportunities (table III.2).

One effective approach to analysing climate risks is to follow the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD) or other frameworks such as the Network for Greening the Financial System (box III.4). Systematically integrating climate risk monitoring and management into investment decision-making can ensure that long-term investors, including SWFs and PPFs, support the transition to a carbon-neutral economy, while mitigating physical and transition risks associated with climate change (UNCTAD, 2023a).

Most funds (79 per cent) have a mandate for climate-related investments, primarily in renewable energy, sustainable infrastructure and green real estate. There are some regional differences in sustainability commitments, with funds from Europe and Asia-Pacific having the strongest mandates.

Renewable energy projects dominate in terms of domestic mandates and investments. The Saudi Arabia SWF

Table III.2
Climate risk assessment strategies of reporting funds in 2024
Number of funds by type of strategy
(*n* = 53)

Category	Number of funds
Climate scenario analysis	35
Climate risk analysis[a]	31
Stress testing[b]	21

Source: UNCTAD (2025).

[a] Climate risk analysis includes transition and physical risks.

[b] Stress testing includes portfolio testing.

(PIF) plays a central role in Saudi Vision 2030, as it finances solar, wind and green hydrogen plants in the country, as well as desalination projects powered by renewable energy. Similarly, the Kazakhstan SWF (Samruk-Kazyna) is developing 6 gigawatts of wind and solar capacity in the country, including large-scale projects with global partners, alongside water and gas infrastructure to reduce coal dependence.

Sustainable infrastructure and smart urban projects are also key investment areas. ADQ (United Arab Emirates) supports industrial decarbonization and infrastructure efficiency projects that align with national net zero targets (ADQ, 2024). Similarly, in Canada, the British Columbia PPF (BCI) invests in low-carbon district energy systems that integrate sustainability into local development (box III.4).

Box III.4
Sustainable investment practices of BCI, Canada

British Columbia Investment Management Corporation (BCI) integrates environmental sustainability at the core of its investment strategy, ensuring that ESG considerations guide asset allocation across all investment classes.

A key focus of the fund's environmental commitment is climate resilience. To incorporate climate change risks into decision-making, the fund uses scenario analysis in line with the Network for Greening the Financial System. Such analyses enable assessment of physical risks such as extreme weather events, as well as transition risks arising from policy changes.

As part of efforts to attain net zero operating, the fund reduced the carbon footprint of its portfolio by 40 per cent, from its 2019 baseline. The fund also invests in renewable energy, supporting solar, wind and biofuel projects through partnerships with clean energy-focused companies, some of them in developing countries. In addition, the fund has invested more than $5 billion in sustainable bonds, contributing to sectors such as clean transport, water management and energy efficiency.

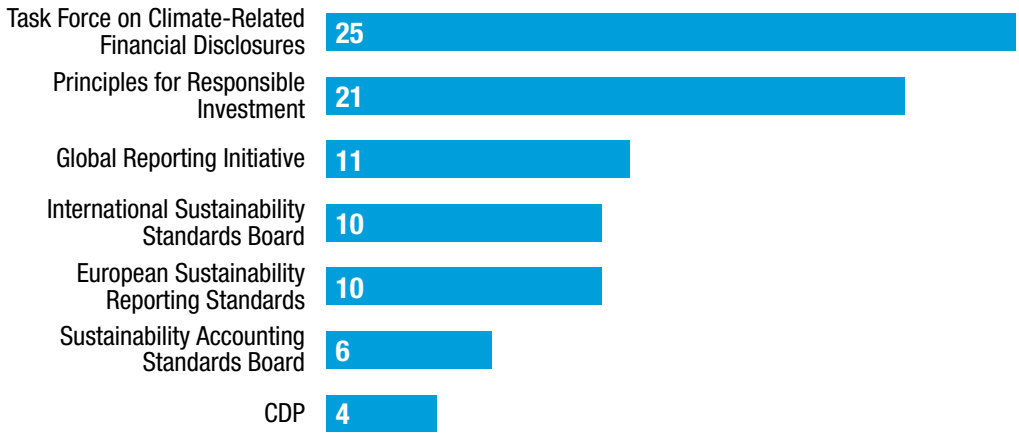
Source: BCI (2024).

2. Sustainability disclosure by funds

To support their disclosure and reporting efforts, institutional investors are using a number of sustainability frameworks that are helping to improve transparency and accountability. The International Sustainability Standards Board (ISSB), established by the International Financial Reporting Standards (IFRS) Foundation, now oversees both the TCFD recommendations and the Sustainability Accounting Standards Board (SASB). This consolidation aims to provide a global baseline for sustainability reporting. In 2024, 40 funds reported using a combination of the TCFD, SASB and ISSB frameworks, highlighting the growing importance of these standards for sustainability disclosure and integration. The Principles for Responsible Investment remain a key reference as funds continue to integrate sustainability into financial decision-making (figure III.15).

Many European funds also referenced other frameworks, including the Global Reporting Initiative (GRI) and the European Sustainability Reporting Standards (ESRS), which include the Corporate Sustainability Reporting Directive (CSRD). Despite a high degree of alignment among the standards and frameworks used by the funds, the ongoing fragmentation highlights the need for further harmonization to improve the

Figure III.15
International reporting frameworks used by funds
Number of reporting funds by framework (*n* = 50)



Source: UNCTAD (2025).

Note: The Sustainability Accounting Standards Board and the Task Force on Climate-Related Financial Disclosures have been integrated into the International Sustainability Standards Board since 2022 and 2023, respectively. The European Sustainability Reporting Standards includes the Corporate Sustainability Reporting Directive and the EU Taxonomy. The CDP was formerly the Climate Disclosure Project.

comparability of sustainability data across funds. The adoption of ISSB Standards S1 and S2 is a positive step towards achieving this harmonization, but further efforts are required to standardize reporting practices and enhance transparency. One distinction remains the difference between voluntary (GRI, ISSB) and mandatory (ESRS) disclosure, which could influence the direction of harmonization efforts.

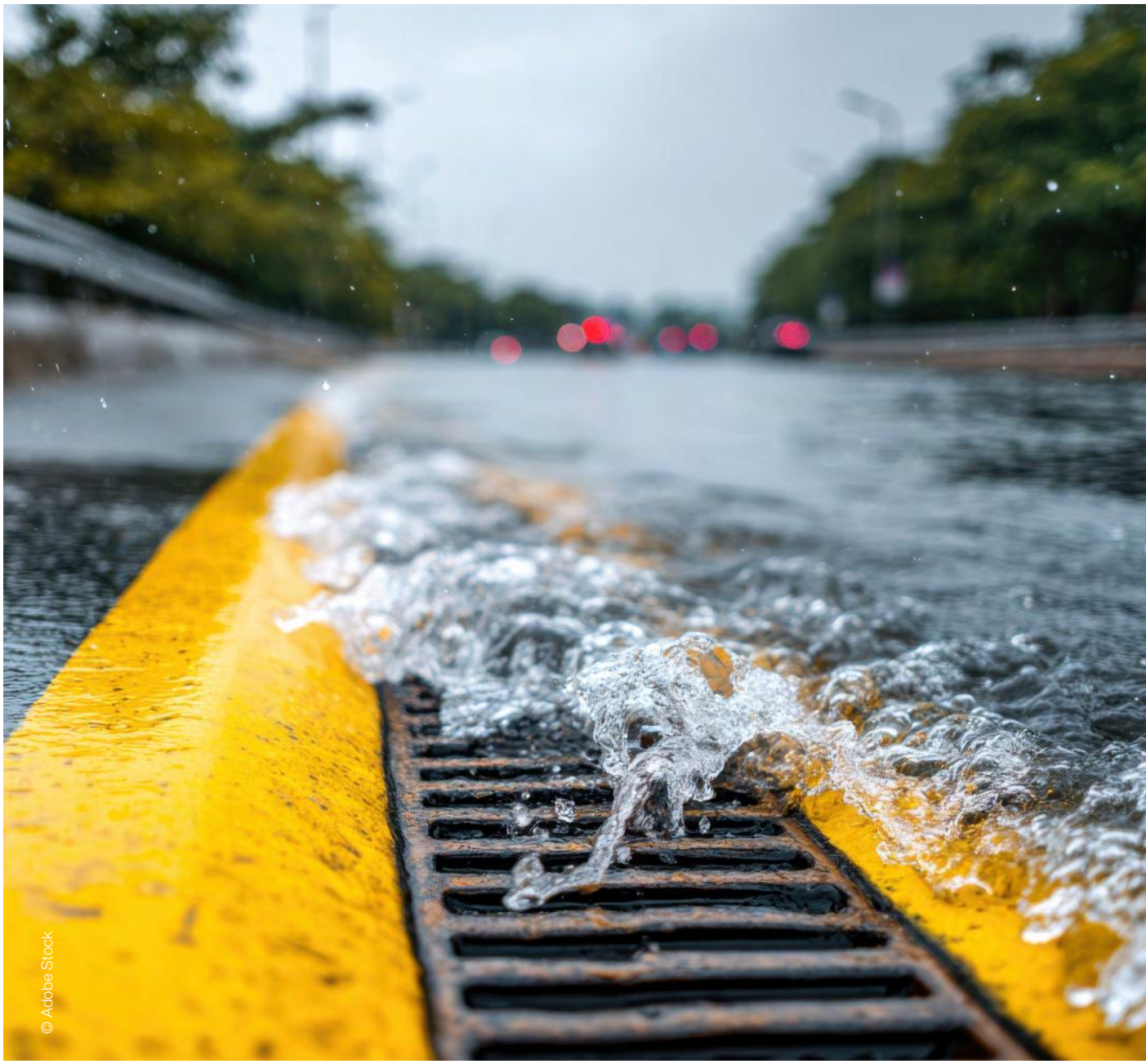
The reporting metrics used by funds are more comprehensive for climate-related disclosures. A large majority – 90 per cent – of reporting funds use standardized climate metrics to assess the sustainability performance of their portfolio. Total carbon emissions and carbon intensity are the key performance indicators most commonly used by funds. These metrics serve complementary purposes, as total carbon emissions measure the absolute carbon footprint of investments, whereas carbon intensity (emissions per unit of investment or revenue) enables more meaningful comparison between funds of different sizes and across different time periods.

This reporting aligns with global frameworks such as TCFD, helping funds assess their exposure to carbon-intensive assets. Several funds, including OMERS (Canada) and Australian Retirement (Australia), explicitly use climate metrics to track progress toward net zero targets within their portfolios. Although many funds incorporate other key performance indicators for sustainability, these focus primarily on environmental and governance metrics, with social indicators receiving limited emphasis.

One way to improve the relevance, transparency and credibility of reporting is through the use of external auditing – a mandatory requirement for financial performance. As of 2024, nearly half (47 per cent) of funds have their reporting audited by an independent external party. This is up from 25 per cent in 2023, indicating a growing commitment to transparency and accountability in sustainability reporting. Northern European countries continue to lead in external audits, with all Dutch funds reporting the use of external verification. North American funds are

making progress, with about half of funds undergoing independent verification. In Asia, efforts to improve audit practices are strengthening, with Chinese funds emerging as leaders in the use of external auditing.

In November 2024, the International Standard on Sustainability Assurance 5000 from the International Auditing and Assurance Standards Board (IAASB) was issued, establishing a global baseline for sustainability assurance engagement (see section III.D). By providing a consistent framework for assessing the relevance, reliability and comparability of reported information, it enhances trust and confidence in sustainability reporting.



D. Policies, regulations and standards

Sustainable finance standard-setting and policymaking maintained momentum in 2024. Key focus areas included sustainability disclosure, national strategies, and sector- or product-specific measures aimed at leveraging sustainable bonds, banking and carbon markets for climate financing. Developed economies, in particular the European Union, continued strengthening sustainable finance regulatory frameworks, while policy backlash grew in other advanced economies. Developing economies advanced taxonomies, carbon pricing and climate finance frameworks. To scale up sustainable finance in these economies will require reforms of multilateral banks, stronger climate strategies and increased investment flows, including de-risking and blended finance mechanisms.

1. International standard-setting and reporting trends

The global sustainability standards ecosystem has recently seen several developments, from complementary angles, aimed at reinforcing transparency and ensuring credibility in relation to sustainability reports. At the end of October 2024, the International Public Sector Accounting Standards Board (IPSASB) issued its first Sustainability Reporting Standards exposure draft, titled "Climate-related Disclosures". Using the multistakeholder focus of the TCFD, IFRS S2 and GRI as a basis, the exposure draft proposes requirements for public sector entities to report on climate-related risks and opportunities related to their own operations, as well as requirements for climate-related public policy programmes and their outcomes (IPSASB, 2024). The UNCTAD Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) organized a virtual consultative meeting to discuss the exposure draft and outline a response, bringing together the views of its experts and its formal membership. The ISAR feedback covered not only the substance of the proposed standard, but also implementation issues and developing-country perspectives, including inputs from ISAR's Regional Partnerships.

Concerning the private sector, an increasing number of countries have already adopted ISSB Standards and many others are working on adoption or on adaptation of the standards to local needs. According to the ISSB, at the end of 2024, 33 jurisdictions (including the European Union) had adopted or adapted (amended) IFRS S1 and IFRS S2 or were in the process of conducting a consultation to introduce the standards.

With a view to enhancing the reporting of climate-related and other sustainability risks in financial statements, in July 2024, the IASB published for comments eight

illustrative examples containing information on materiality judgements, disclosures about assumptions and estimation uncertainties, and disaggregation of information (IASB, 2024). The IASB will review and discuss the comments received to make a decision on the project's direction.

Now that the initial universal standards are being implemented by a large number of countries and issuers, a series of topic and sector standards are being developed to guide detailed sustainability disclosures and metrics. In this regard, the ISSB has conducted research to find out the state of entities' disclosure about biodiversity, ecosystem and ecosystem services (BEES) (IFRS Sustainability, 2025a) and human capital-related risks and opportunities (IFRS Sustainability, 2025b). The ISSB is also looking at the degree of alignment of such disclosures with the requirements of IFRS S1 and which BEES and human capital-related topics are sector based or universally applicable. In the next phase of these projects, the ISSB will discuss the need and feasibility of developing standards on these issues.

For its part, the GRI is consulting on a new set of sector standards for financial services. The public consultation includes three exposure drafts on sector standards for banking, capital markets and insurance (GRI, 2025a). In addition, a new standard on textile production, apparel and footwear is in development. Moreover, GRI has published for comment two topic standards: Training and Education, and Working Parents and Caregivers (GRI, 2025b). Likewise, the Taskforce on Nature-related Financial Disclosures issued four additional sector guidance documents, in June 2024, that supplement its guidance on assessment of nature-related issues. The documents cover aquaculture, biotechnology and pharmaceuticals, electric utilities and power generators, and food and agriculture (TNFD, 2024).

To reduce greenwashing and other unethical behaviour and foster trust in sustainability reports, the IAASB issued, in November 2024, a new International Standard on Sustainability Assurance 5000, General Requirements of Sustainability Assurance Engagements (IAASB, 2024). Similarly, in January 2025, the International Ethics Standards Board for Accountants (IESBA) published the International Ethics Standards for Sustainability Assurance (including International Independence Standards), revisions to the Code of Ethics relating to sustainability assurance and reporting, and a new standard on using the work of external experts (IESBA, 2025). These assurance and ethics standards are applicable across a range of sustainability topics; they are framework neutral and profession agnostic.

Against this background, countries need a robust reporting ecosystem capable of rapidly adopting or adapting sustainability reporting standards and other related requirements. However, many developing countries with weak reporting infrastructure need technical assistance to make the necessary changes and build capacity so as to be ready to produce high-quality sustainability reports. UNCTAD is supporting countries' efforts to reinforce their sustainability reporting infrastructure and is also collaborating with the ISSB and other key international organizations and institutions to facilitate capacity-building. The ISSB is working to support the implementation of IFRS S1 and S2. For this purpose, it has made available educational materials, webinars and webcasts. UNCTAD has also facilitated the creation of five regional partnerships for the promotion of reporting on sustainability and the Sustainable Development Goals, in Africa, Asia, Eurasia, Latin America, and the Gulf States and neighbouring countries. The partnerships foster exchanges of experience, consultations among peers and identification of good practices.

Many developing countries with weak reporting infrastructure need **capacity-building support to produce high-quality sustainability reports**

2. Sustainable finance policy and regulation trends

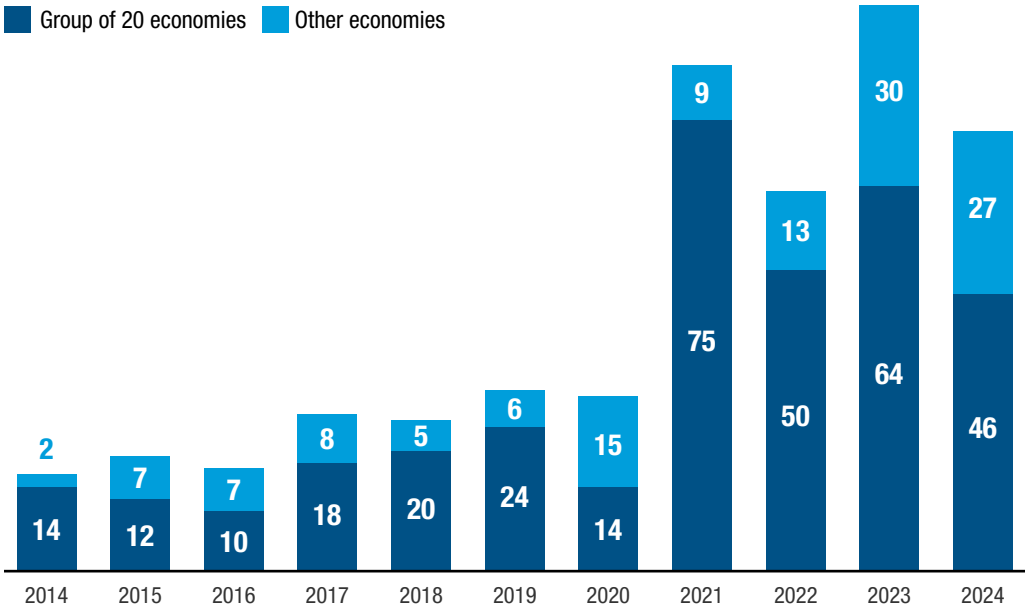
a. Overview

Recent developments in sustainable finance policymaking and regulation play an important role in shaping global economic transformation. There has been greater commitment by national and regional governments to implementing policies and regulatory frameworks related to sustainable finance.

According to the UNCTAD Global Sustainable Finance Observatory, such policymaking continued to advance in 2024. In total, 73 sustainable finance policy measures were adopted by members of the Group of 20 as well as 15 leading developing economies and selected financial centres outside the group, representing more than 93 per cent of global gross domestic product (figure III.16). In total, this group of economies had adopted more than 580 policy measures dedicated to sustainable finance by the end of 2024.

Of all the measures enacted by these countries from 2015 to 2024, sustainability disclosure was the most common policy category, accounting for 32 per cent of all measures. It was followed by national strategies and frameworks, with countries increasingly integrating sustainable finance into national development strategies and making it an important tool to meet commitments made under the Paris Agreement. Sector-specific measures

Figure III.16
Sustainable finance policymaking maintains momentum in 2024
Number of measures adopted by year



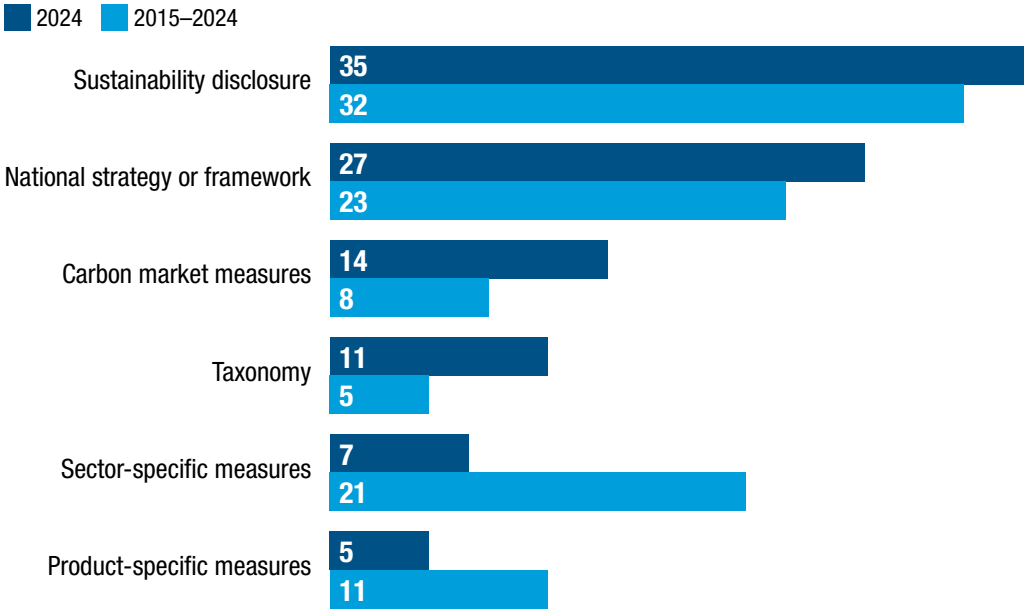
Source: UNCTAD Global Sustainable Finance Observatory (GSFO.org), based on UNCTAD, Principles for Responsible Investment and World Bank data.

Notes: Regulations and policy measures encompass seven key policy areas for sustainable finance: national strategy, national framework and guidelines, taxonomy, product standards, sustainability disclosure, sector-specific regulations, and carbon pricing. Other selected economies and territories include Switzerland, as well as 13 developing economies (Bangladesh, Chile, Colombia, Egypt, Kenya, Malaysia, Nigeria, the Philippines, Singapore, Thailand, the United Arab Emirates and Viet Nam, as well as Hong Kong, China), and ASEAN. Relevant measures of the European Union are included in the number for the Group of 20. The number of policy measures in 2021 was updated to include incentive-related measures.

(covering sustainable banking, insurance, and asset management) and product-specific measures (including sustainable bonds and funds) represented roughly a third of all policy measures (figure III.17).

In 2024, sustainability disclosure and national strategies or frameworks remained the most active areas of policymaking, accounting for 35 per cent and 27 per cent of all measures, respectively. Meanwhile, policymaking in carbon market measures gained strong momentum, representing 14 per cent of all measures, driven primarily by efforts in developing economies to harness the potential of carbon markets (section III.B). In addition, taxonomy development remained an active area of policymaking, particularly in developing economies.

Figure III.17
Sustainability disclosure measures remain the most common policy category
Sustainable finance policy measures by category
(Percentage)



Source: UNCTAD Global Sustainable Finance Observatory (GSFO.org).

b. Regional developments

In 2024, sustainable finance policymaking progressed steadily in many developed economies. While the European Union focused on policy consolidation and regulatory refinement, other developed economies took further steps to address greenwashing concerns and enhance market credibility, particularly through standard-setting and taxonomy development. In the United States, new policy measures related to sustainable finance were suspended, which highlights a growing divergence in policymaking among developed economies.

i. Europe

The European Union continued building a comprehensive regulatory framework and made efforts to consolidate its sustainable development regulations. In December 2024, it introduced the European Green Bond Standard, a voluntary framework designed to enhance transparency and

The European Union is building a comprehensive regulatory framework and **consolidating its sustainable development regulations**

accountability in the green bond market. The standard mandates the proceeds of green bonds to be allocated to activities aligned with the EU Taxonomy, ensuring that investments contribute substantially to environmental objectives. In November, the European Union adopted a regulation on ESG rating. The regulation established a supervisory framework for ESG rating providers, requiring them to be transparent about their methodologies and to avoid conflicts of interest, with the aim of enhancing the quality and reliability of ESG ratings. In addition, the European Union has initiated a comprehensive review of the three pillars of its sustainability disclosure framework – the CSRD, the Corporate Sustainability Due Diligence Directive and the EU Taxonomy Regulation – with the aim of streamlining and consolidating sustainability reporting through new "omnibus legislation" (European Union, 2025a).

In February 2025, the European Commission adopted a package of proposals to simplify European Union rules, improve competitiveness and promote additional investment capacity (European Union, 2025b). These proposals cover sustainability reporting, sustainability due diligence, EU Taxonomy, the carbon border adjustment mechanism and European investment programmes. One of the key changes in relation to sustainability reporting that affects the CSRD and the EU Taxonomy is the removal of about 80 per cent of companies from the scope of the CSRD, focusing on the biggest companies with the greatest impacts on the economy, people and environment. The changes also seek to ensure that the reporting requirements on large companies do not overload smaller companies in their value chains.

On 17 December 2024 the European Financial Reporting Advisory Group delivered the Voluntary Reporting Standard for non-listed small and medium-sized enterprises (SMEs). The standard is a simple and standardized framework expected to help non-listed SMEs to report on ESG issues and to obtain better access to lenders, investors and clients (EFRAG, 2024).

In the United Kingdom, the Government launched a £100 million seed fund to support businesses in investing in the Sustainable Development Goals and in climate mitigation and adaptation both in the United Kingdom and in developing countries.[3] The Government also started consultation on a UK Green Taxonomy and adopted anti-greenwashing guidance for the investment industry.

ii. Developed Asia-Pacific

In Australia, an important development was the establishment of the Australian Sustainable Finance Taxonomy, which will be implemented in mid-2025, as outlined in the Government's 2024 Sustainable Finance Road Map. The taxonomy is intended to assess and promote green investment, which is critical to attracting global capital. In addition, Australia prepared for the launch of a mandatory climate disclosure framework in January 2025, aiming to further align the country with global sustainability goals through the Treasury Laws Amendment Act 2024.

The Japanese Government introduced its Green Transformation Plan in 2023. It aims to achieve net-zero GHG emissions by 2050 and includes the issuance of climate transition bonds, which began in 2024. In February 2025, the Government approved the Seventh Strategic Energy Plan, which sets a 2040 target to reduce GHG emissions by 73 per cent from 2013 levels. In terms of climate disclosure, the Sustainability Standards Board of Japan is developing standards in line with those of the ISSB, which are expected to be finalized by March 2025.

[3] New partnerships with financial sector to unlock growth in UK and overseas. https://www.gov.uk/government/news/new-partnerships-with-financial-sector-to-unlock-growth-in-uk-and-overseas?utm_source=chatgpt.com.

iii. North America

In Canada, the Government announced plans to amend the Canada Business Corporations Act to require companies to disclose climate-related financial information. In addition, it is developing "Made in Canada" sustainable investment guidelines. They will serve as a sustainable investment taxonomy to provide guidance on investing in green or transition economic activities by establishing scientifically determined eligibility criteria for relevant sectors. In March 2025, Canada abolished the consumer carbon tax, but as of April 2025 the carbon price on businesses remains in place.

In the United States, progress was made in the implementation of the 2022 Inflation Reduction Act, with investment in clean technology totalling $493 billion, a 71 per cent increase from the two-year period preceding the Act (Bermel et al., 2024). Regarding market regulation, the Securities and Exchange Commission developed rules requiring public companies to disclose climate-related risks and GHG emissions in their filings but suspended its enforcement because of ongoing federal litigation (The Wall Street Journal, 2025). The Commission also expanded the "Names Rule" under the Investment Company Act, which requires registered investment funds with names that suggest a focus on specific characteristics, including ESG factors, to invest at least 80 per cent of their assets accordingly.[4] In January 2025, the United States declared its withdrawal from the Paris Agreement and the rollback of environmental regulations, including a halt to clean energy projects and the promotion of fossil fuel extraction.[5]

iv. Developing economies

Sustainable finance policymaking remained highly active in developing economies. In 2024, these economies accounted for approximately 60 per cent of new policy measures adopted by countries monitored by the UNCTAD Global Sustainable Finance Observatory. Developing economies such as Brazil, India, Kenya and Malaysia continued to roll out national strategies and frameworks for sustainable finance, focusing on integrating sustainable investment into national development strategies and establishing comprehensive policy frameworks.

In 2024, Hong Kong (China), Indonesia and Singapore implemented sustainable finance taxonomies, and ASEAN introduced Version 3 of its regional taxonomy. The new version incorporates technical screening criteria for six focus sectors and three enabling sectors, to improve sector-specific guidance and align sustainable finance standards across ASEAN. Kenya is in the process of developing its Green Finance Taxonomy. These initiatives represent progress in promoting sustainable investment through clear and standardized frameworks and classification systems.

Another notable trend is the rise of carbon market policymaking in developing economies. Brazil, Chile, Egypt, Kenya, Thailand and Viet Nam introduced new carbon pricing mechanisms or initiatives, in 2024, reflecting a growing commitment to leveraging carbon markets to finance the green transition (see section III.B).

In China, further efforts were made to further strengthen its sustainable finance regulatory framework. In August 2024, the central bank announced the extension of its low-carbon lending tool until the end of 2027, with continued provision of low-cost loans to support companies in reducing carbon emissions. In September, China revealed plans to expand its ETS to include the steel, cement and aluminium sectors, covering approximately 60 per cent of its GHG emissions. In December, the Ministry of Finance, in collaboration with nine other departments, released its Corporate

Policy commitments in developing economies are leveraging **carbon markets to finance the green transition**

[4] U.S. Securities and Exchange Commission (2025). Final Rule (33-11238A). 20 March. https://www.sec.gov/rules-regulations/2025/03/s7-16-22#33-11238Afinal.

[5] The Financial Times (2025). Donald Trump says he will withdraw US from Paris climate accord. 20 January. https://www.ft.com/content/cc7f60ea-6f42-49d0-8fde-5151e170c780.

Sustainability Disclosure Standards – Basic Standards. The framework provides guidance for businesses to align their sustainability practices with global ESG expectations, marking a critical step towards a unified national ESG reporting system. The standards were based on IFRS S1, helping to move towards alignment with international practices.

***

Collaborative efforts can grow the voluntary carbon market and enhance market liquidity, while harmonizing standards

Faced with the challenges of developing capital markets and promoting sustainable finance, countries need to address a common set of policy options that target reporting and transparency, standard-setting and regulation, and institutional and market development. At the global level, action is needed to channel the flow of capital from the Global North to the South, leveraging public and private sources and better aligning NDCs with international sources of finance and investment. Sustainable investment products, such as sustainable bonds and funds, and the carbon market can play important roles in this regard.

Accurately labelling sustainable products and ensuring that the quality of the product meets recognized standards are key for investor confidence and for the development of capital markets in all countries. With regard to sustainable bond issuance in developing countries, clear guidelines and taxonomies are essential for buyers to assess the sustainability credentials of products or their use of proceeds. From the issuer side, however, high verification and certification costs to meet international green bond standards can discourage smaller issuers that lack the expertise in their country.

Currency risk also remains a significant obstacle for many developing-country issuers that can be mitigated by issuance of local currency debt. However, high debt levels in some developing countries raise concerns about credit risk, which in turn can lead to higher borrowing costs. These factors contribute to the perception that green bonds from developing countries carry higher risk, often resulting in lower investor demand, lower bond prices and higher yields demanded by the buyer.

With regard to carbon markets, the question of investor confidence is also key. Concerns remain about the credibility of carbon offset projects, with economies needing to standardize validation and certification processes. Related to this, and given the fragmentation of international standards, international cooperation on standards and process harmonization, particularly through international frameworks such as the Core Carbon Principles, is crucial to improving market credibility and enhancing market efficiency. Regional cooperation can also play a crucial role in overcoming technical barriers. By sharing technology, resources and capacity-building initiatives, countries can reduce implementation costs for carbon markets. Collaborative efforts, including under Article 6 of the Paris Agreement, can also expand market size and enhance market liquidity, while facilitating the harmonization of standards.

Cross-border transactions are also essential for linking developing economies to global carbon markets. At present, very few CCMs allow the use of international credits for offsets. Adopting an offset mechanism that links VCMs with compliance markets in developed economies, while safeguarding the quality of carbon credits based on international standards, could expand the demand for carbon credits, while maintaining the goal of raising prices and enabling developing countries to access international funding. Meanwhile, developing economies also need to develop a clear policy stance

to encourage cross-border transactions through VCMs, in line with Article 6 of the Paris Agreement, while using CCMs as the primary tool for mandatory carbon emission reductions to fulfil their NDCs.

Implementing robust regulations is essential to enhancing market transparency and credibility, ensuring that sustainable finance products genuinely align with sustainability goals while addressing persistent concerns about greenwashing. Well-defined product standards and disclosure requirements play a critical role in this process. At the same time, strengthening regulatory frameworks for verification and impact assessment would further enhance investor confidence and attract long-term capital to climate-aligned projects in emerging markets.

Despite greater policymaking efforts in developing economies, sustainable investment flows to these economies remain low. Whereas developed economies attracted 84 per cent of climate finance, emerging and developing economies accounted for only 14 per cent of global climate finance, and least developed countries accounted for just 2 per cent in 2023 (CPI, 2023). Multilateral development banks and vertical climate and environmental funds, such as the Green Climate Fund, the Global Environment Facility and the Climate Investment Funds, play a pivotal role in addressing the climate finance needs of developing economies. Expanding the use of blended finance mechanisms and strengthening guarantee schemes can also help de-risk investments and attract private capital to developing economies (UNCTAD, 2023b). The collaboration among multilateral development banks, vertical funds and national stakeholders, such as national development banks and SWFs, is crucial for scaling up climate finance.

Consensus on the mechanisms to achieve a scaling-up of sustainable finance, especially in developing countries, has been growing and is reflected by processes such as the Financing for Development Conference, with the fourth conference (FfD4) taking place in July 2025, and the Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC), with the 30th meeting (COP30) taking place in Brazil in November 2025.

The Financing For Development Conference calls for systemic financial transformation. Amid widening financing gaps and structural challenges, Member States are calling for deep reforms to the international financial architecture, aiming to triple lending by multilateral development banks through tools such as hybrid capital and rechanneled special drawing rights, with a focus on attracting private finance at scale. Reinforcing multilateral cooperation is seen as essential for unlocking capital, addressing systemic risks, and ensuring fair and inclusive global economic governance (United Nations, Department of Economic and Social Affairs, 2025).

The Conference aims to foster global use of a sustainability investment lens and to support innovative financing instruments. It emphasizes the need for greater integration of sustainability by all investors, including sovereign and public investors. To improve disclosure and reporting, the Conference promotes the adoption of international standards and the refinement of measurements of sustainability performance. Aligning national sustainable finance regulations with international standards and improving the interoperability of standards are key to boosting the market and leveraging sustainable finance flows in order to close the gap in financing progress towards the Sustainable Development Goals.

With the third round of NDCs under way, countries are expected to strengthen their climate action plans and targets up to 2035. This process presents a unique opportunity to raise ambitions and improve the "investability" and impact of national climate strategies. A key step in achieving this is to embed detailed, sector-specific transition plans in the NDCs, with clear decarbonization targets, timelines and associated investment requirements. Providing this clarity helps investors direct

In this NDC review round, countries should strengthen the **"inevitability" of climate action plans and strategies**

their contributions where they can have the greatest impact. In addition, governments need to enhance policy predictability by fostering stable and transparent regulatory environments, thereby facilitating private investment and encouraging long-term commitments. In addition to mitigation, the agreements reached at COP29 underline the importance of integrating adaptation into national climate strategies and policies to strengthen resilience and reduce vulnerability to climate change (UNFCCC, 2024).

Capacity-building support is essential to promote a conducive environment for sustainable investment in developing countries. Technical assistance programs should focus on helping developing economies to meet international standards for sustainability compliance. This includes training on sustainability reporting, developing robust capital market architecture and establishing regulatory frameworks that support the creation of an enabling ecosystem. Towards this end, UNCTAD provides support to developing countries, including technical assistance, as well as research and monitoring on sustainability standards and reporting, policymaking and institutional investment.

Looking ahead, the outlook for sustainable finance hinges on translating recent momentum into scaled, credible and inclusive investment flows – particularly in developing economies. As global attention shifts towards FfD4 and COP30, delivering on sustainability goals will require converting high-level NDC commitments into actionable investment and financing strategies, closing institutional and capacity gaps, and ensuring the transition to a resilient and equitable financial system.

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World Investment Report 2025

Chapter IV

International investment in the digital economy

United Nations

Key findings

- **The digital economy is the fastest-growing sector of the global economy, yet investment remains highly concentrated**
  Between 2020 and 2024, developing countries attracted more than $530 billion in greenfield digital economy projects, nearly 80 per cent of which went to just 10 countries.

- **MNEs are the main international investors in the digital economy**
  The United States remains home to the top investors, but South–South investment is growing.

- **Data centres and fintech have become major foci for investment, yet flows remain uneven across regions and sectors**
  Infrastructure investment needs are still unmet – Sub-Saharan Africa captures only about 5 per cent of the $14 billion it requires annually for bridging the connectivity divide.

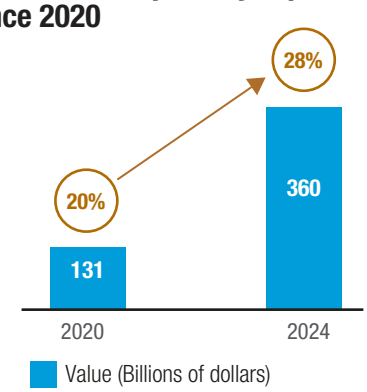
- **FDI can contribute to reducing the digital divide, but there are risks and the benefits are not automatic**
  Infrastructure, digital capacities and resources, market conditions and the regulatory framework all affect both the attraction and the impact of FDI in the digital economy.

- **Most developing countries now have national digital strategies**
  However, these are often not aligned with investment, industrial and environmental policies, and offer limited roles for IPAs.

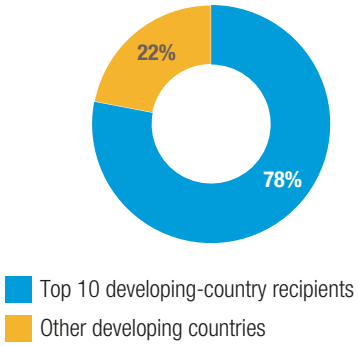
- **Regulatory gaps and FDI restrictions hamper investment in the digital economy**
  Data governance, intellectual property and competition frameworks need to be strengthened. International agreements can play an instrumental role in facilitating, promoting, liberalizing and regulating investment in the digital economy.

- **FDI in the digital economy should be not only transactional but also transformational**
  UNCTAD calls for a multi-stakeholder action agenda including policy toolkits, stronger international cooperation, investment in digital skills and infrastructure, and multilateral rules that reflect developing-country needs.

Greenfield investment in the digital economy nearly tripled since 2020



Most greenfield investment in the digital economy flows to 10 developing countries



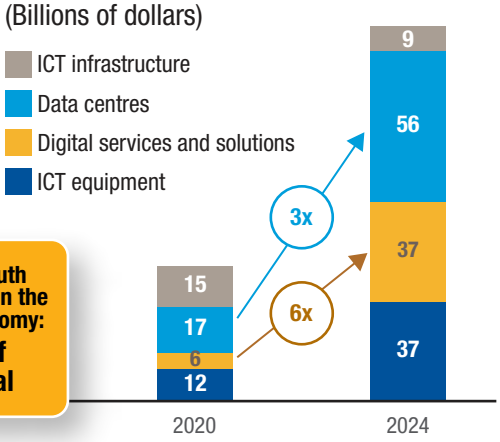
Investment gap persists in ICT infrastructure

$62 billion
annual need

2024 greenfield investment
$15 billion

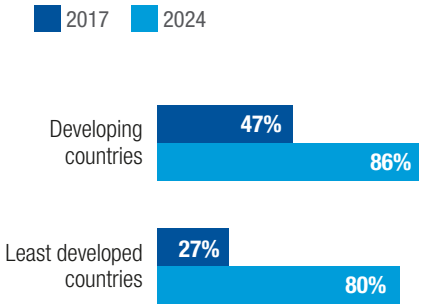
Data centres are now major investment targets in developing countries

(Billions of dollars)



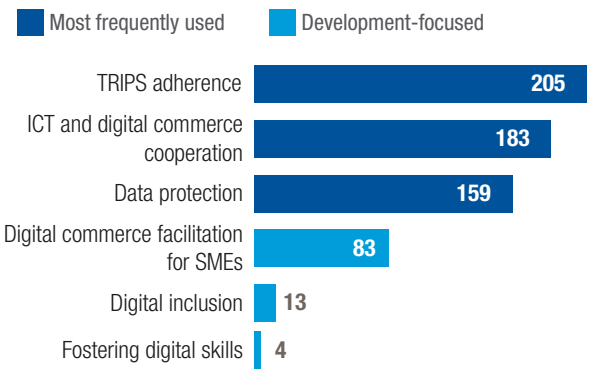
South–South investment in the digital economy:
40% of the total

Closing the gap: More developing countries adopt national digital strategies



Development-focused provisions are scarce in treaties regulating the digital economy

(Number of provisions)



A. Introduction

There is currently no universally agreed definition of the digital economy, complicating efforts to analyse international investment in this space. This section uses a three-tier framework – core, narrow and broad scopes – to better capture the expanding landscape of digital activities, which are growing rapidly in value and investment flows. The digital economy is a large component of the world economy and has become a main force driving global economic growth. It encompasses all activities that rely on digital technologies, from the creation to the consumption of digital and digitally enabled goods and services. With an expected annual growth rate of 10 to 12 per cent – significantly higher than the global rate of growth in gross domestic product (GDP) – the digital economy will represent more than two thirds of new value creation in the next decade.

While developed economies benefit from robust digital infrastructure and market access, many developing countries face critical challenges posed by limited infrastructure, connectivity and digital capabilities. In the new wave of digitalization driven by artificial intelligence (AI), big data and cloud computing, the digital divide has not narrowed but widened.

Bridging this divide requires significantly increasing investment in digital infrastructure and services, including by the private sector. Expanding digital networks, deploying fifth-generation (5G) broadband and investing in satellite technologies, for instance, all require substantial capital. The world faces an estimated $1.6 trillion gap in funding to achieve universal digital connectivity by 2030, with most acute needs in developing countries (ITU, 2025). Equally vital is investment in education and vocational training to build a digitally proficient workforce. International investment in the digital economy can help developing countries build digital infrastructure and access digital services.

Yet, as highlighted in the *World Investment Report 2017* (UNCTAD, 2017), international investment by multinational enterprises (MNEs) in the digital sector is associated with several risks, such as potential market dominance and regulatory challenges.

Since the publication of that report, digital technologies have continued to evolve, most recently with the spread of AI. These developments have heightened the rising demand for digital infrastructure, services and skills. In September 2024, the United Nations adopted the Global Digital Compact, which commits to closing the digital divide, expanding inclusive access to the digital economy, ensuring an open digital space in which rights are respected, advancing equitable data governance and strengthening international AI governance for the benefit of all humanity. A central element of the Compact is the call for increased investment and funding towards the development of digital public goods and infrastructure, particularly in developing countries.

The Compact advocates for investment in sustainable digital practices, including the development of green digital infrastructure and the promotion of digital solutions that support sustainable development.

Given the digital economy's evolving scope and cross-sectoral nature, defining it remains a challenge. Digital economic activities span everything from production of information and communication technology (ICT) goods and services to e-commerce and digital services, to the integration of advanced technologies in traditional industries. Complicating efforts to pin down a universal definition are the pace of innovation, the variety of digital capacities across countries and the interplay with disciplines such as law and economics. Therefore, definitions differ across economies and international organizations (box IV.1).

Box IV.1
Various perspectives on the scope of digital economy

The **Organisation for Economic Co-operation and Development** (OECD) considers the digital economy as encompassing all economic activities that rely on digital technologies. It places particular emphasis on the role of data as an economic asset, thus highlighting the transformative impact of digital platforms, e-commerce and innovation in shaping modern economies.

The **World Bank** takes a more development-focused approach, looking at how the digital economy drives inclusive growth, fosters poverty reduction and supports sustainable development. Its analysis often centres on the role of digital financial services, e-governance and infrastructure development in achieving these goals.

The **International Telecommunication Union** (ITU) regards the digital economy as the part of the economy empowered by telecommunications, digital data and digital technologies. It focuses particularly on connectivity and broadband access, emphasizing their critical roles as enablers of digital inclusion and economic participation.

The **European Union** considers the digital economy as encompassing all economic activities that rely on or are significantly enhanced by digital technologies, digital infrastructure, digital services and data. This includes the use of digital inputs in various sectors to drive innovation, productivity and economic growth.

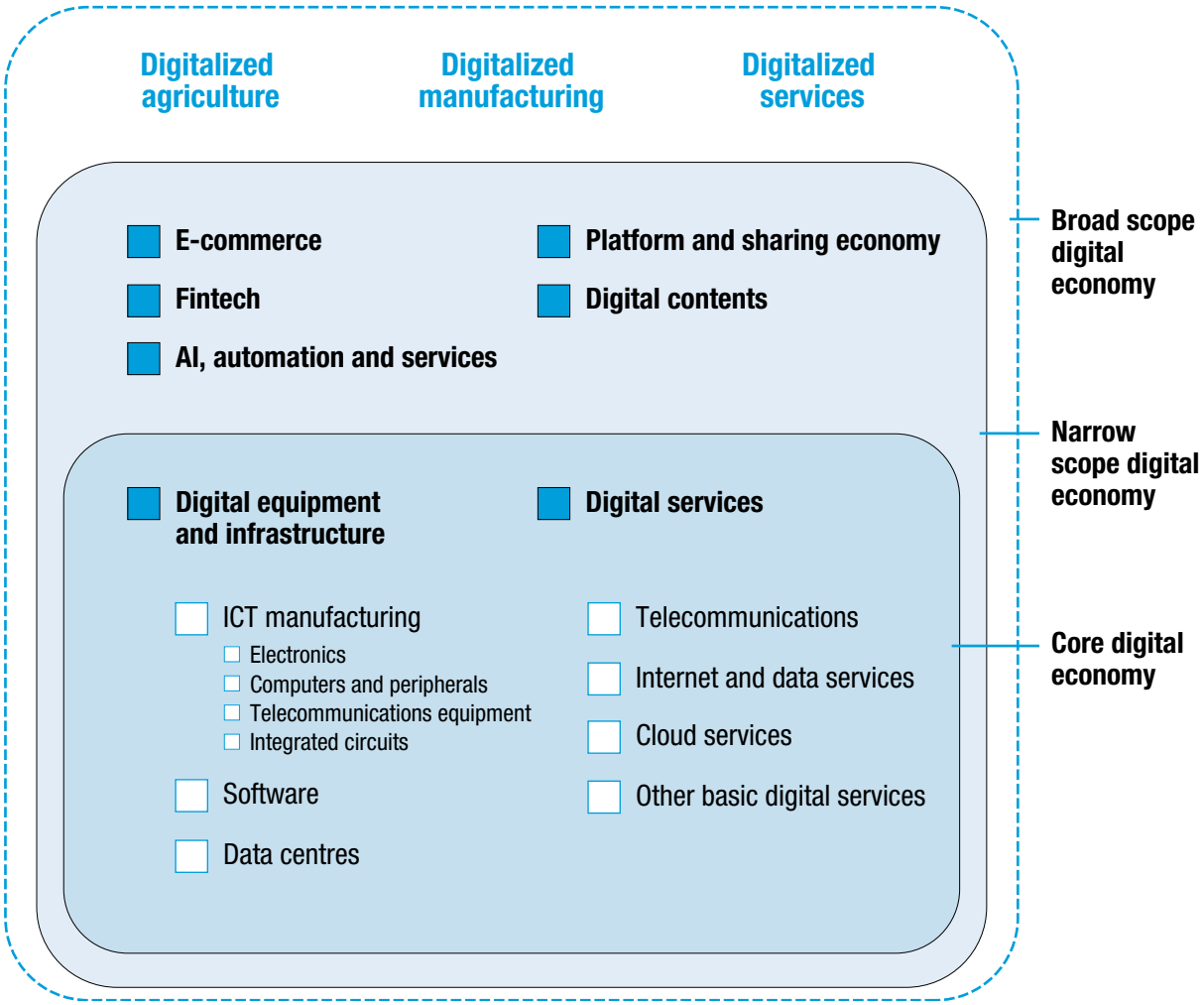
In the **Group of 20**, the approach to defining and measuring the digital economy centres on fostering inclusive and sustainable development. Under the 2025 presidency of South Africa, the Digital Economy Working Group plays a pivotal role in this effort, focusing on key priorities such as connectivity for inclusive digital development, digital public infrastructure and transformation, digital innovation ecosystems, and equitable, inclusive and just AI. The Group's work involves developing frameworks to guide the adoption of new technologies, optimizing their benefits while minimizing potential harm. By leveraging standardized indicators and methodologies, the Group of 20 aims to monitor and assess the digital economy's size, penetration and impact, providing policymakers with precise diagnostics for addressing challenges and opportunities. This comprehensive approach underscores the Group of 20's commitment to harnessing the transformative power of digital technologies for global economic and social reconstruction.

Source: UNCTAD, based on public information from OECD, the World Bank, ITU, the European Union and the Group of 20.

Understanding the structure of the digital economy is crucial for effective investment policymaking. In the *2017 World Investment Report*, UNCTAD defined the digital economy in terms of production, distribution and consumption of goods and services enabled by digital technologies. Following some scholars and other international organizations, in the *2019 Digital Economy Report*, UNCTAD identified three tiers to the economy: (1) the core ICT sector; (2) the narrow scope digital economy, including digital platforms and services and e-commerce; and (3) the broad scope, digitally transformed economy.

As technological advancements rapidly expand in range and complexity, the industrial classification of the digital economy continues to evolve. Recognizing the latest developments in this regard, the conceptual framework utilized in this chapter to analyse international investment in the digital economy also follows the three-tier approach (core, narrow and broad scopes), but with a revised set and structure of components (figure IV.1).

Figure IV.1
Mapping the digital economy for investment analysis



Source: UNCTAD, based on various sources.
Abbreviations: AI, artificial intelligence; ICT, information and communication technology.

The core digital economy consists of digital infrastructure (including ICT manufacturing, software and data centres) and digital services such as telecommunications, Internet and data services, and cloud services. The narrow scope digital economy comprises the core and builds on it by including platform-based activities, the sharing economy, e-commerce, fintech, AI automation and services. The broad scope digital economy encompasses the core and narrow scopes and expands to include digitally enabled sectors such as agriculture, manufacturing and services, where technology drives greater accessibility, better customer experience and improved efficiency. Unless otherwise specified, in this chapter the term "digital economy" refers to the narrow scope – in other words, the first two tiers.

At an average growth rate of 7 per cent, the value of the digital economy in its narrow scope is expected to reach $16.5 trillion by 2028 (ITU, 2025), owing primarily to investment in technology. This includes investment in digital infrastructure – such as data centres –- and cloud services, as well as ICT exports, which are major factors driving the expansion of the digital economy.

Recognizing the evolving and dynamic nature of the digital economy, this chapter presents an in-depth and updated analysis of international investment trends in the digital economy, including key players, challenges and opportunities. It also reviews recent developments in strategies, policies and initiatives for international investment in the digital economy at the national and international levels. This analysis and review lead to key recommendations for better leveraging international investment for inclusive and sustainable digital development.

B. International investment in the digital economy

The main international investors in the global digital economy are large MNEs, private equity and venture capital funds, and sovereign wealth funds. Driven by different motives and factors, these investors' activities continue to expand across borders, playing an increasingly significant role in the provision of digital infrastructure construction and services. Major digital MNEs originate not only from developed countries but also from emerging economies, actively fostering South–South investment in the digital economy. Through greenfield investment in data centres, fintech and other key digital industries, MNEs contribute to deepening digitalization, in both developed and developing countries. However, the benefits remain unevenly distributed, with lower-income developing countries still lagging.

1. Digital multinational enterprises and other key investors

The UNCTAD ranking of the top 100 MNEs has evolved significantly, reflecting shifts from traditional industries to service-oriented and technology-driven ones. Over the past decade or so, among the world's largest MNEs, technology firms have significantly increased their share of total sales and assets, including – in alphabetical order – Alphabet, Amazon, and Microsoft (all United States), Huawei and Tencent (both China) and Samsung (Republic of Korea). This shift highlights the growing importance of digitalization (see chapter I). The top 20 players in the global digital economy are almost exclusively companies from China and the United States (table IV.1).

MNEs operating in the digital economy can be categorized into two groups: digital enterprises and ICT enterprises. Digital MNEs are characterized by the central role of the Internet in their operating model, enabling them to reach overseas markets seamlessly with minimal tangible investment. ICT MNEs provide enabling infrastructure (telecommunications and connectivity) and hardware (devices and components) that makes telecommunications and data services accessible. For this report UNCTAD updated the top 100 digital MNEs list with new criteria to reflect the rise of rapidly emerging digital firms (box IV.2).

Table IV.1
Top 20 players in the digital economy: Digital and ICT enterprises
Rank by total sales

Company name	Home economy	Industry classification	Sales (Billions of dollars)		Assets (Billions of dollars)	
			Total	Foreign	Total	Foreign
Amazon.com	United States	E-commerce	573	155	528	138
Apple	United States	IT devices	383	245	353	84
Alphabet	United States	Platforms	307	161	402	104
Microsoft	United States	Digital solutions	212	105	412	160
Hon Hai Precision Industry	Taiwan Province of China	Semiconductors	201	197	128	119
Samsung Electronics	Republic of Korea	IT devices	200	165	352	79
JD.com	China	E-commerce	153	48	89	0
China Mobile	China	Telecommunications	143	5	281	12
Meta Platforms	United States	Platforms	135	85	230	37
Alibaba Group Holding	China	E-commerce	126	13	255	10
Deutsche Telekom	Germany	Telecommunications	124	95	320	258
AT&T	United States	Telecommunications	122	5	407	13
Comcast	United States	Telecommunications	122	27	265	49
Bytedance	China	Platforms	120	40	NA	NA
China Communications Construction	China	Telecommunications	107	16	237	37
Dell Technologies	United States	IT devices	102	53	90	30
Huawei	China	IT devices	99	33	178	98
Nippon Telegraph and Telephone	Japan	Telecommunications	99	21	191	85
Walt Disney	United States	Digital content	89	19	206	23
Tencent Holdings	China	Digital content	86	8	222	80

Source: UNCTAD, FDI/MNEs database.
Abbreviation: IT, information technology.
Note: Data on sales correspond to fiscal year 2023.

Box IV.2
Methodology for UNCTAD ranking of top MNEs in the digital economy

The data compilation for the 2025 ranking of digital MNEs began with screening large technology companies on the basis of activity codes, business descriptions and financial reporting to determine their core activities. The ranking focuses on primary business activities and foreign operations, assessed through criteria such as foreign sales and foreign assets. The 2025 ranking updates the methodology used in the *World Investment Report 2017* to include criteria such as involvement in foreign projects (greenfield project announcements, international project finance (IPF) deals or mergers and acquisitions (M&As)) and venture capital investment in foreign start-ups. These additional criteria help include relevant digital MNEs, especially private companies in emerging economies that provide limited financial information on their foreign operations.

Another methodological change relates to the relationship between digital and ICT MNEs. Technological advancements, especially in AI, have diversified and broadened the category of digital MNEs. In recent years, technology has shifted the revenue sources of digital MNEs from hardware to digital and cloud services. For example, IBM (United States) now derives more than 40 per cent of its revenues and 80 per cent of its profits from software and digital solutions, leveraging its hybrid cloud platform for data management and system automation. Likewise, through its network of apps Apple (United States) has created a digital ecosystem that drives much of its revenues.

This update also includes a new list of ICT MNEs, ranking all providers of tangible infrastructure, devices and components that form the core digital economy. All other multinational enterprises (MNEs that generate substantial revenue from digital services are included in the list of digital MNEs). In a limited number of cases, particularly among cloud-based service providers, firms appear in both rankings; examples are Apple and IBM. For the digital MNEs ranking, see annex table A.1 at the end of the chapter and for the ICT MNEs ranking, see annex table A.2.

Source: UNCTAD.

a. The 100 largest digital MNEs

Large digital multinational companies are major international investors in the global digital economy. The top 100 digital MNEs operate in four major segments of the digital economy, reflecting diverse business models:

1. **Digital platforms and services.** Includes social media, search engines and cloud services. Companies such as Alphabet and Meta (both United States) and ByteDance (China) dominate, leveraging platform-based models to connect billions of people. Rapid growth in advertising-driven platforms is led by widespread adoption of digital services.
2. **Digital solutions.** Encompasses enterprise software, ICT services and cybersecurity. Key players include IBM, Microsoft and Salesforce (all United States). Fast-growing segments are cloud-based solutions, AI applications and digital finance platforms, which enable seamless transactions and financial inclusion. These MNEs expand globally through innovation centres and alliances.

3. **E-commerce.** Includes giants such as Alibaba and JD.com (both China) and Amazon (United States), which have transformed retail and supply chains. Cross-border e-commerce and last-mile delivery are the fastest-growing segments, driven by global consumer markets. These MNEs invest in logistics, analytics and emerging technologies, providing small and medium-size enterprises (SMEs) in developing economies with access to international markets.
4. **Digital content.** Includes streaming services, gaming and digital publishing. Notable players are Netflix (United States), Spotify (Luxembourg) and Tencent (China), leveraging the growing consumer preference for readily accessible on-demand entertainment. Streaming platforms are the fastest-growing segment, driven by consumer preferences and content delivery advancements.

These categories highlight the multifaceted nature of digital MNEs. As the sector evolves, the distinctions between types of enterprises are becoming less clear, making it more challenging to categorize them (see annex table A.1). For example, Amazon, which initially had a strong presence in e-commerce, now derives a significant share of revenues from digital solutions.

The 2025 update of the top 100 digital MNEs highlights several trends and shifts. The number of digital solutions providers has increased significantly, replacing many MNEs in the digital content category (table IV.2). The transition of several ICT-focused firms to digital and cloud-based services and software platforms – including those for technology, operations, service delivery and data management – has resulted in their reclassification. Technological advancements, especially in AI, have boosted the importance of integrating these technologies for business services providers. Meanwhile, consolidation has occurred in the digital content sector.

Table IV.2
Evolution of the top 100 digital enterprises

		Number of MNEs			Average sales per company[a] (Billions of dollars)		
		2017	2025	Change	2017	2025	CAGR (Percentage)
Internet platforms	Search engines	3	3	0	28	111	19
	Social network	5	7	2	5	39	28
	Other platforms	4	7	3	4	69	44
	Total	**12**	**17**	**5**	**10**	**64**	**26**
Digital solutions	Cloud-based solutions	2	9	7	7	25	18
	Fintech	6	6	0	6	12	9
	Software	4	20	16	5	23	22
	Other digital solutions	13	8	-5	3	10	16
	Total	**25**	**43**	**18**	**4**	**19**	**21**
E-commerce	Delivery		3	3	..	6	..
	Internet retailer	13	18	5	12	55	21
	Other e-commerce	5	2	-3	5	9	9
	Total	**18**	**23**	**5**	**10**	**44**	**21**
Digital content	Digital media	23	5	-18	12	45	18
	Games	6	7	1	3	6	10
	Information and data	16	5	-11	4	6	7
	Total	**45**	**17**	**-28**	**8**	**17**	**11**
Total		**100**	**100**	**0**	**8**	**32**	**20**

Source: UNCTAD, FDI/MNEs database.

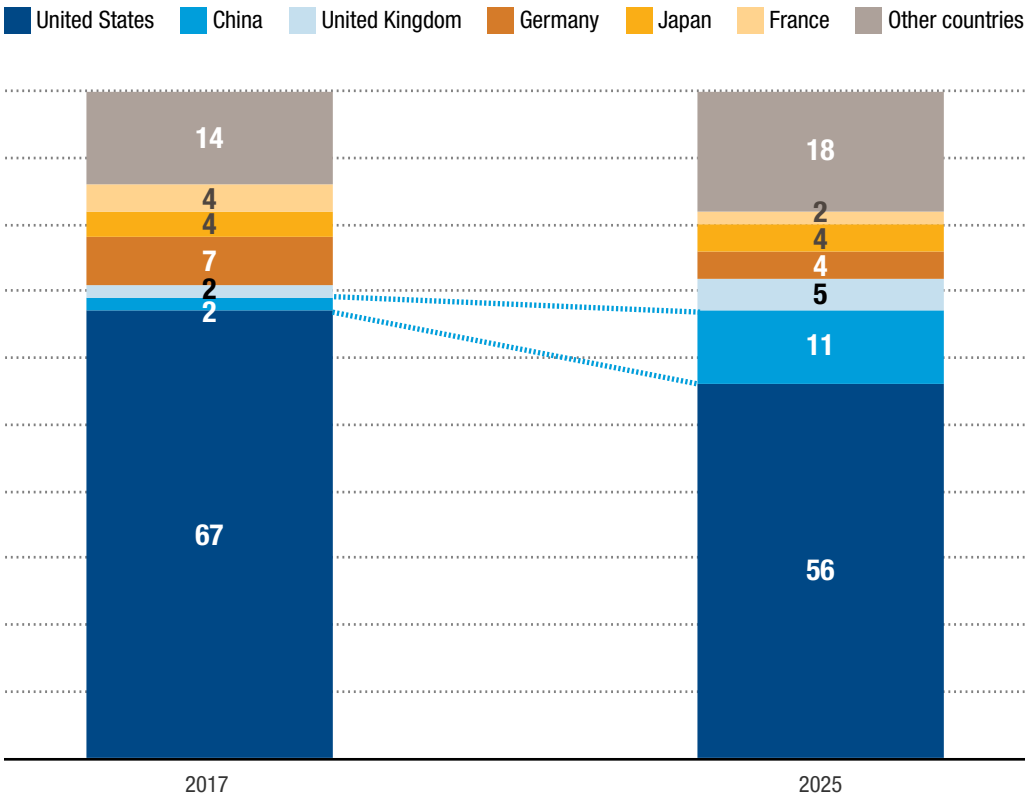
[a] Data on sales correspond to fiscal years 2015 and 2023, respectively.

Abbreviations: CAGR, compound annual growth rate; MNE, multinational enterprise.

Sales growth varies among the four segments of the narrow digital economy. Digital media, for example, has more than doubled its turnover in recent years. Three categories of digital MNEs are distinguished: platforms driving overall growth, e-commerce relying on geographical expansion and commoditized services such as payment solutions growing more slowly. The digital MNEs are concentrated in developed economies, with 57 of the top 100 headquartered in the United States. MNEs from China are gaining ground in digital content, while the presence in the ranking of those in Europe and other developed economies is relatively unchanged (figure IV.2).

Most new entrants to the ranking of top digital MNEs are also headquartered in developed countries. Although the number of firms from China is increasing, many of them maintain a strong domestic focus, limiting their global footprint. Notably, market concentration within the top 100 has grown significantly: from 2017 to 2025, the combined share of sales held by the top five digital MNEs more than doubled – from 21 to 48 per cent. A similar trend is observed in asset concentration, with the top five firms increasing their share

Figure IV.2
Multinational enterprises from the United States and China lead the digital ranking
Top digital firms in the narrow digital economy, by home country
(Number of firms)



Source: UNCTAD, FDI/MNEs database.

Note: The narrow digital economy builds on the core economy by including platform-based activities, the sharing economy, e-commerce, fintech, artificial intelligence and automation. The core digital economy consists of digital infrastructure and digital services such as telecommunications, Internet and data services, cloud services and cybersecurity protocols.

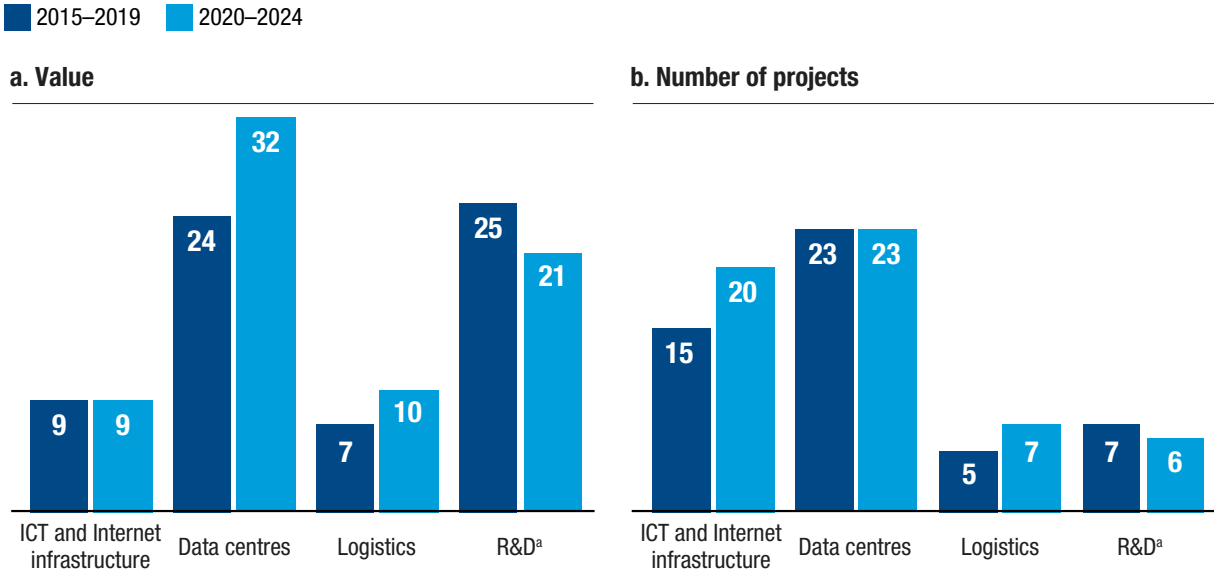
of total assets from 17 per cent in 2017 to 35 per cent in 2025. This indicates the growing dominance of a few leading firms in the digital MNE landscape. This trend may have implications for market dynamics, potentially affecting competition and the pace of innovation (figure IV.3).

Between 2020 and 2024, digital MNEs accounted for almost one third of announced greenfield projects in data centres, and their share of projects in the logistics sector reached 10 per cent, underscoring the growing role of e-commerce MNEs in global supply chains. Their share of global foreign direct investment (FDI) in research and development (R&D) in IT and software peaked at 26 per cent before 2015, then declined to 21 per cent during 2020–2024.

ICT MNEs provide the enabling hardware infrastructure that makes the Internet accessible to individuals and businesses. They include manufacturers of devices and components and providers of telecommunications and connectivity infrastructure (see annex table A.2). Among manufacturers of information technology (IT) devices and components, producers of semiconductors have increased in number and size since 2017, with most of the revenues concentrated among a few ICT MNEs: Intel and Nvidia (United States)

Figure IV.3
Top 100 digital multinational enterprises account for one third of greenfield investment in data centres

Share of announced greenfield investment, value and number of projects, by selected business activity
(Percentage)



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

[a] R&D in software and IT services.

Abbreviations: ICT, information and communication technology; R&D, research and development.

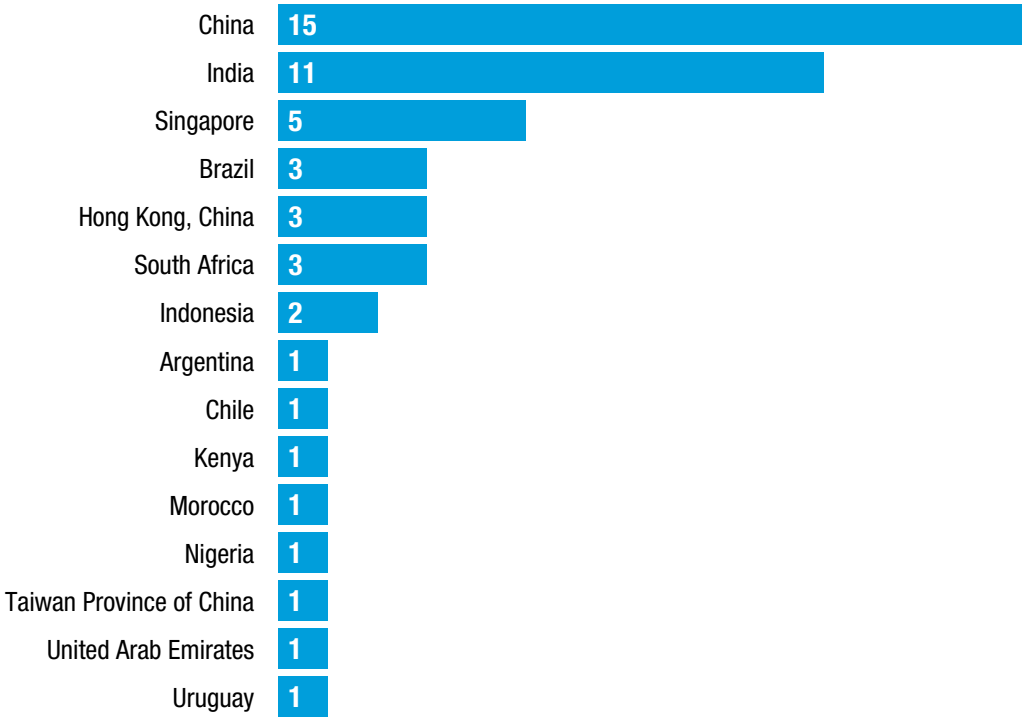
and TSMC (Taiwan Province of China). This concentration is mirrored in the staggering share that these MNEs account for in some industries: more than three quarters of the value of announced greenfield projects in IT devices and semiconductors, and more than a third of those in ICT infrastructure (excluding data centres).

Despite growing rapidly and playing significant regional roles, digital MNEs from developing economies remain underrepresented in the top 100 ranking. An overview of the top 50 digital MNEs from developing economies, categorized in the four main segments of the narrow scope of the digital economy – Internet platforms, digital solutions, e-commerce and digital content – provides valuable insights regarding this evolving sector (figure IV.4).

Digital MNEs from developing countries mainly feature digital solutions and e-commerce companies, with Chinese MNEs such as Alibaba, JD.com and Shein leading the list. In South-East Asia, digital companies often start as smartphone apps and quickly expand to offer services such as delivery, e-commerce, e-payments and video sharing. For example, GoTo (Indonesia), formed from a 2021 merger, is a notable super-app in the region.

Internet platform providers, including search engines, social networks and other platforms, reported average sales per company of $34 billion in 2023. Providers of digital solutions, encompassing cloud-based solutions, fintech, software and others, recorded average sales of $5 billion per company. E-commerce, divided into Internet retailers and other e-commerce

Figure IV.4
Asian multinational enterprises lead in global digital ranking of developing economies, 2025
Top 50 digital enterprises from developing economies, by home country
(Number of firms)



Source: UNCTAD, FDI/MNEs database.

businesses, boasted average sales per company of $31 billion. In comparison, providers of digital content – covering digital media and games – reported average sales per company of $23 billion.

The revenue of top digital MNEs from developing economies is, on average, 28 per cent lower than that of leading global digital MNEs. Their foreign operations are more regionally concentrated, such as those of NuBank (Brazil) and Mercado Libre (Argentina) in Latin America and of Chinese companies in Asia. For example, NuBank, a digital bank founded in 2013, launched operations in Mexico in 2019 and in Colombia in 2020, before its initial public offering (in 2021). One of the motivations is the similarity of the inefficiencies that these markets face, including concentrated banking sectors, poor customer service and a large unbanked share of the population. NuBank, now the largest digital bank by market value, recently invested $150 million in Tyme Group (Singapore), extending its reach outside of Latin America (NuBank, 2024).

b. Other international investors in the digital economy

i. Private equity and venture capital

Private equity and venture capital firms are key investors in early-stage companies and start-ups, particularly in the technology sector. They provide funds in exchange for equity to foster growth. They invest in firms at different stages of development, aiming to accelerate expansion, develop products or restructure operations. Private equity investors fall into three categories: venture capital, growth equity and buyouts.

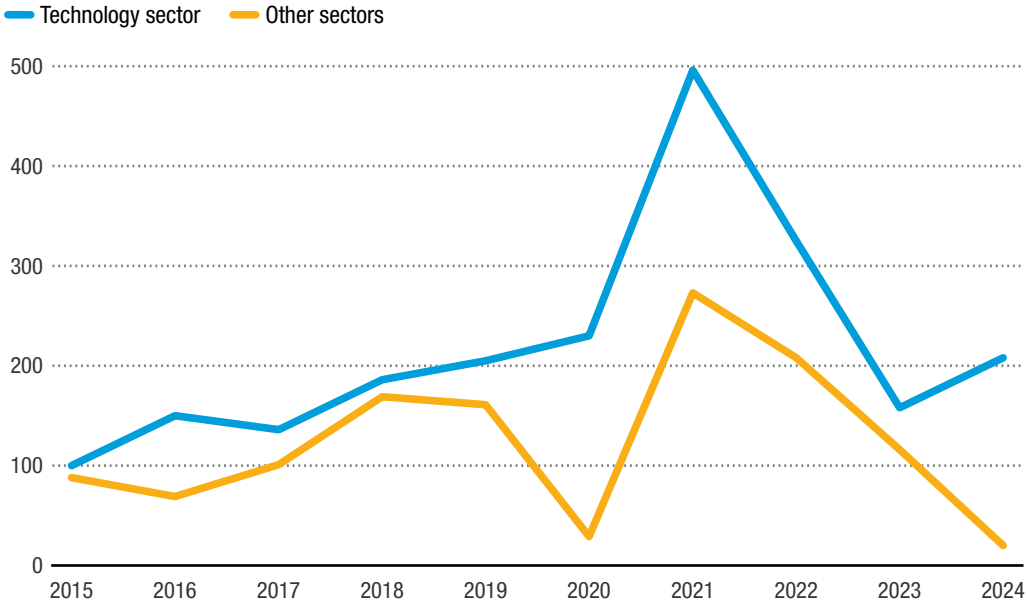
Venture capital fuels both innovative start-ups and established companies. The analysis in this report focuses on venture capital and growth equity, excluding buyout financing. Start-ups can be both recipients and providers of FDI, attracting international venture capital and expanding into new markets.

Almost two thirds of private equity investment goes to the technology sector, which saw robust growth from 2015 to 2021, peaking at $490 billion worldwide. The industry faced a decline from 2021 as a result of rising interest rates, inflation and geopolitical instability, but signs of recovery emerged in 2024, with venture capital investment rebounding to $210 billion (figure IV.5).

In 2024, venture capital and private equity investment in digital technology were concentrated in AI, data processing and business digital solutions, which together attracted more than $80 billion in investment. Fintech and e-commerce attracted $7 billion and $4 billion, respectively. This trend reflects investors' focus on digital infrastructure and operational efficiencies, which drive digital transformation across industries. Blended finance often plays a crucial role in enhancing logistics and distribution centres in developing economies, thereby supporting e-commerce and ICT equipment manufacturing.

Less than half of private equity investment is cross-border, with only one third reaching developing economies. Between 2020 and 2024, technology companies in developing economies received $206 billion in foreign private equity investment, averaging $40 billion per year.

Figure IV.5
Private equity investment in the technology sector experienced significant growth until the pandemic
Private equity and venture capital investment in technology and other sectors (Billions of dollars)



Source: UNCTAD, based on LSEG Data & Analytics.

Foreign private equity accounted for more than 60 per cent of total tech investment in developing economies, with more than 50 per cent from the United States, 7 per cent from the United Kingdom and 6 per cent from other European markets. Asia received the largest shares: 40 per cent in South Asia, 24 per cent in East Asia, 17 per cent in South-East Asia and 5 per cent in West Asia. Latin America and the Caribbean accounted for 12 per cent, and Africa received 3 per cent. Policies that promote venture capital, support credit guarantee schemes and encourage investment in innovation can bridge financing gaps in developing economies. For example, venture funds such as Partech Africa scale up tech start-ups across the continent, demonstrating the potential for private capital to foster innovation. By investing in digital start-ups, developing economies can cultivate a thriving ecosystem of technology-driven businesses that solve local problems while creating new economic opportunities (World Bank, 2024).

Private equity firms investing in developing economies are mostly from North America and some advanced economies in Asia (China, some Gulf States, Singapore). Top investors in tech companies include Softbank (Japan) and various United States firms such as Tiger and Global Sequoia. Digital MNEs from developing economies, such as Naspers (South Africa) and Tencent (China), also provide venture capital to tech start-ups. Sovereign wealth funds (SWFs) and public pension funds, including the Abu Dhabi Investment Authority (United Arab Emirates) and GIC (Singapore), are significant sources of venture capital. Start-ups in developing economies rely heavily on international venture capital funding, making them vulnerable to global investment declines. Private equity and venture capital investment drive innovation growth in emerging markets. Economies in South-East Asia receive more than half of private equity investment in technology sectors, as 40 per cent of the world's start-ups are in developing Asia.

China, India, Malaysia, Singapore and Thailand are prominent hubs for start-ups.

A thriving start-up ecosystem relies on governmental support through comprehensive policies, funding and mentorship programmes to strengthen local venture capital and private equity industries. Regional integration initiatives help start-ups scale up beyond national borders. Attracting foreign start-ups, venture capital and entrepreneurial talent through targeted programmes, such as Start-Up Chile and the Tech Entrepreneur Programme in Malaysia, can enhance local ecosystems. A recent example of FDI contributing to national digital development is Google's planned investment in Malaysia, which includes the establishment of a data centre and a cloud region. According to the Malaysian Investment Development Authority, this initiative aligns with the country's Cloud First Policy and is expected to support digital infrastructure, job creation and innovation (ASEAN, 2023).

Broader research highlights how FDI in South-East Asia can help bridge the digital divide and support sustainable growth. Similarly, the United Nations emphasizes the importance of collaborative digital infrastructure investments involving governments, private sector actors, and academia (ITU and Department of Economic and Social Affairs, 2025).

These advancements are especially crucial for SMEs, which are increasingly leveraging digital tools to compete globally (box IV.3). SMEs play a significant role in domestic economies, and their internationalization through exporting or investing abroad can bring economic benefits to home and host countries (UNCTAD, 2024a). This is particularly important for SMEs in landlocked developing countries and small island developing States, where digitalization can help address the logistical and connectivity challenges associated with their geographical constraints. Internationalization by SMEs improves their productivity and strengthens their resilience to external shocks.

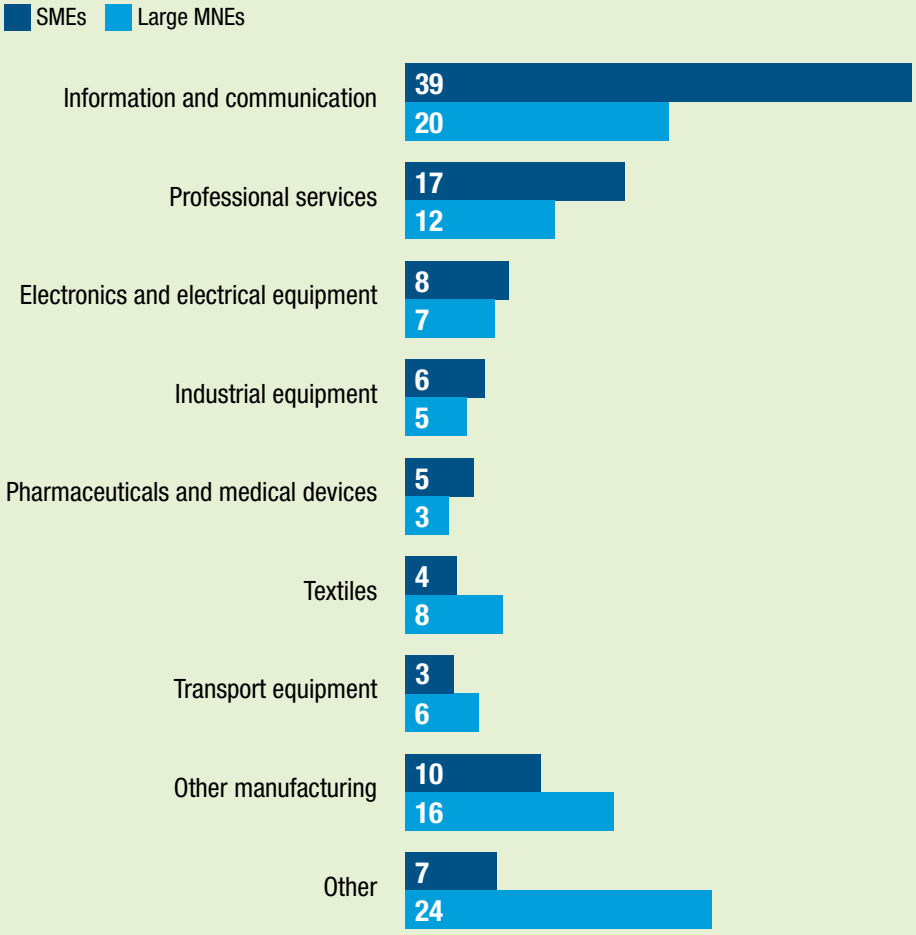
Box IV.3
SMEs in the digital economy

SMEs are enterprises with revenues of less than $15 million and fewer than 300 employees (International Finance Corporation, 2012). Digitalization and technology adoption enable SME growth. ICT reduces costs and improves transparency, lessening SMEs' networking and information disadvantages and facilitating international investment. Digital technologies improve access to global value chains by reducing governance and transaction costs (UNCTAD, 2020b). They help SMEs overcome barriers through the use of payment apps, collaboration platforms, cloud-based services and crowdfunding (UNCTAD, 2024a). Fourth Industrial Revolution technologies have facilitated foreign investment by SMEs, with smaller companies leveraging digitalization to gain market presence, especially in services (UNCTAD, 2024a; Park et al., 2022). The importance of digital technologies for the internationalization and growth of SMEs is confirmed by their investment abroad: 40 per cent of greenfield investment projects by SMEs are in IT and software (box figure IV.3.1).

Digitalization empowers SMEs by lowering barriers to entry, reducing costs and enabling innovative business models, thus enabling them to compete globally. As emerging investors, SMEs drive innovation, create jobs and foster economic growth, particularly in IT and software sectors.

Source: UNCTAD.

Box figure IV.3.1
Almost 40 per cent of greenfield projects by SMEs are in information and communication
Top industries of multinational enterprises investing abroad, 2015–2022, by firm size
(Percentage of number of projects)



Source: UNCTAD (2024b).
Abbreviation: MNEs, multinational enterprises; SMEs, small and medium-size enterprises.

For knowledge-intensive enterprises, FDI can bring significant learning benefits, accelerating the technological catch-up of developing countries. This contributes to developing a dynamic and competitive local private sector, key to economic growth and attractive to foreign investors. However, when engaging in FDI SMEs often face greater risks and challenges than larger firms. This underscores the importance of supportive policies and programmes to mitigate risks and foster sustainable growth for SMEs in the global market.

ii. Sovereign wealth funds

SWFs have become increasingly influential players in global foreign investment. Their investment modes, preferred sectors and geographical focus vary depending on their strategic objectives, mandates and home countries. Common approaches are to

invest indirectly through private equity and venture capital funds, or co-invest directly through established fund managers.

The analysis of international equity investment in this report shows that over the past decade SWFs participated in private equity deals in the digital economy totalling $36 billion, accounting for approximately 5 per cent of total investment in the sector. Virtually all were cross-border deals and evenly distributed between developed and developing countries as host economies. Developed economies received 53 per cent of total international private equity investment, led by the United States as the primary destination. In comparison, developing Asia attracted 46 per cent, with India emerging as the main recipient, followed by China.

Over the past five years, investment in tech start-ups by SWFs has doubled, reaching a total of $21 billion – an average of about $4 billion per year. Three funds account for most of this activity: Temasek Holdings (Singapore) with 27 per cent, Mubadala Capital (United Arab Emirates) with 26 per cent and GIC (Singapore) with 18 per cent. Some SWFs are increasingly investing in greenfield infrastructure projects – particularly data centres – despite their traditionally higher risks and longer time horizons, drawn by the appeal of stable, long-term cash flows.

Between 2020 and 2024, two SWFs announced greenfield investment projects in data centres that represented 30 per cent of total investment by SWFs in the digital economy, almost equally divided between developed and developing economies. The largest number of projects (42 per cent of the total) were announced in 2023, followed by a slight slowdown in 2024. SWFs contribute 5 per cent of total investment in data centres across developing economies, highlighting their role in strengthening the digital infrastructure essential for digital transformation. India is the main destination for such investment in terms of value (24 per cent of the total), and SWFs from Japan lead in the number of projects sponsored, with six between 2020 and 2024 (table IV.3).

Table IV.3
Announced data centre projects by sovereign wealth funds, 2020–2024

Recipient economy	Number of projects	Value (Millions of dollars)	Share of total data centre investment (Percentage)
India	33	3 593	24
Germany	33	3 585	24
Malaysia	44	2 153	14
Japan	6	1 636	11
Philippines	4	763	5
Mexico	1	424	3
United States	1	357	2
Finland	1	332	2
Republic of Korea	1	317	2
Thailand	1	266	2
France	1	249	2
Poland	1	245	2
Italy	1	213	1
Indonesia	1	192	1
Viet Nam	1	191	1
Spain	1	190	1
Ireland	1	179	1
Brazil	1	144	1
Total	**133**	**15 027**	**53**

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

2. Foreign direct investment in the digital economy: Latest trends and developments

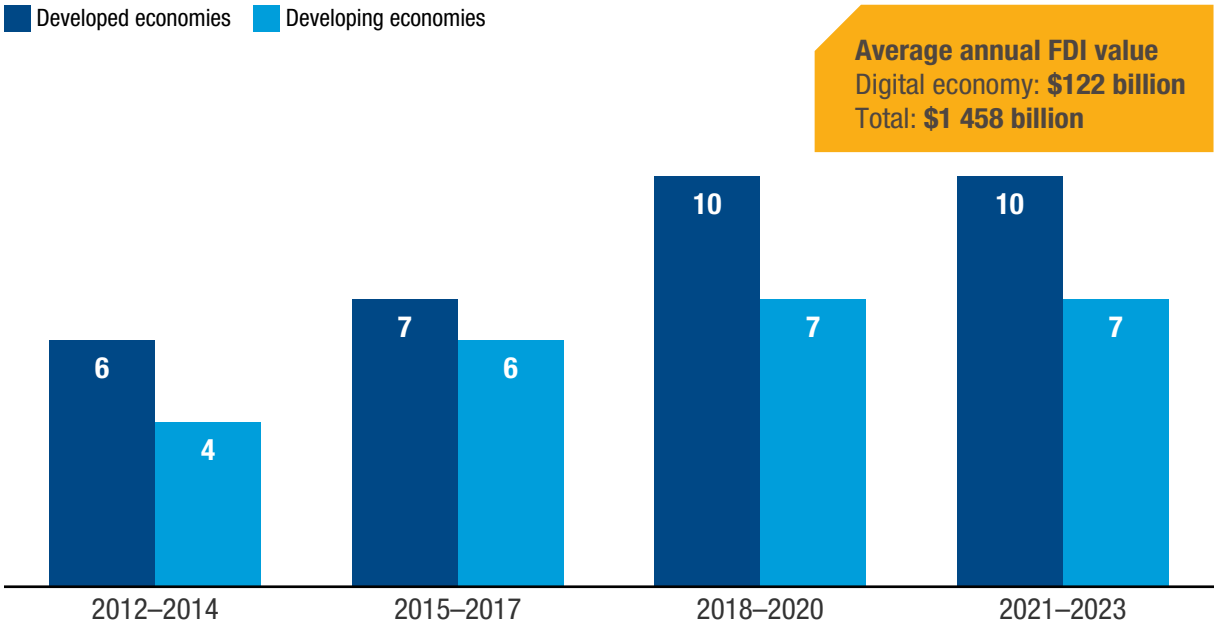
a. Trends and features of FDI in the digital economy

Between 2012 and 2023, 72 per cent of FDI inflows in the digital economy went to the information and communication sector, and 28 per cent to computer, electronic and optical product manufacturing. This distribution aligns with projections that digital information and telecommunications will account for 71 per cent of $6 trillion in future profits across 18 promising sectors (McKinsey & Company, 2024).

However, investment in digital economy manufacturing still represented only 7 per cent of total FDI inflows during this period. Although the data reveal volatility – particularly in developed economies – FDI in the core digital economy continued to gain importance in developing economies after 2012, with modest growth continuing through 2018 (figure IV.6).

Among the 15 largest recipients of FDI inflows in information and communication between 2012 and 2023, only 5 are developing economies.

Figure IV.6
Developed economies attract more foreign direct investment in core sectors of the digital economy
Inflows to core sectors as a share of total investment, by economic grouping
(Percentage of the value)



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

Note: Data available for 93 economies (49 developing economies, 44 developed economies). Core sectors include ICT manufacturing industries and ICT services industries, according to the ISIC4 classification available in UNCTAD (2020).

[a] Average of the yearly sum of values.

Abbreviation: FDI, foreign direct investment; ICT, information and communication technology.

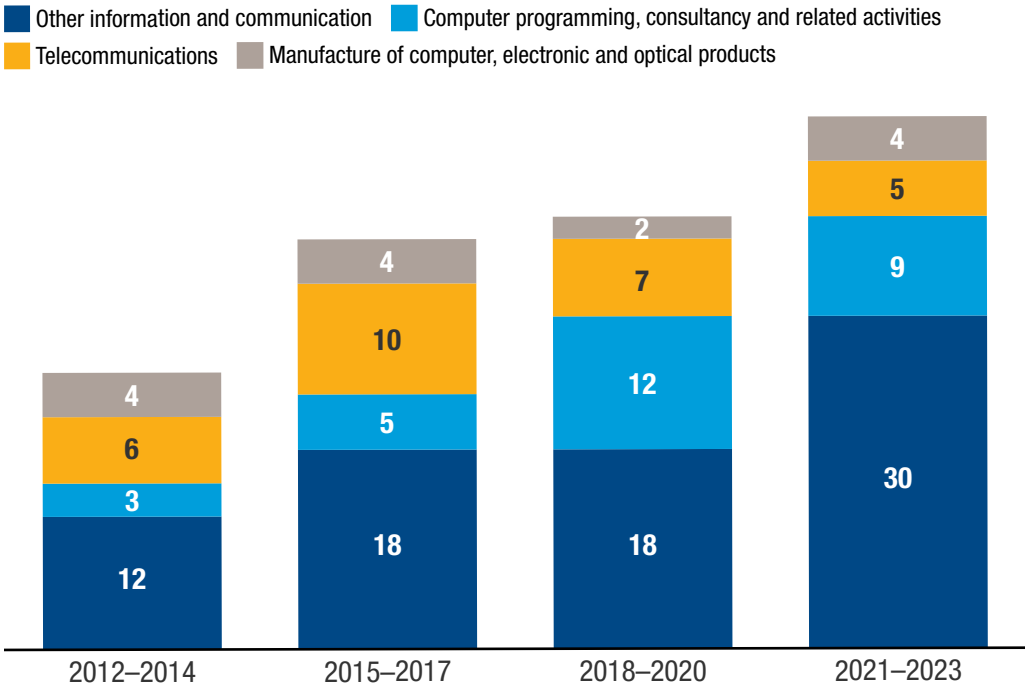
This share is even lower in computer, electronic and optical products manufacturing, with only 4 developing economies among the top 15 recipient countries. The United States is the largest recipient in both sectors; among developing economies, China, Brazil and Mexico attract the most significant investment.

Investment trends in developing economies reveal evolving patterns within key sectors of the digital economy (figure IV.7).

The telecommunications sector saw strong investment in the early 2010s but investment has since stabilized. In contrast, investment in computer programming, consultancy and related activities has grown since 2018. The core digital economy in developing economies has diversified, with peaks in inflows often driven by surges in individual countries. For example, the growth in computer programming inflows after 2020 was largely attributable to India. These shifts have been driven by the diversification of digital services, greater demand for software solutions, and the growth of tech talent and start-up ecosystems in specific countries. Difficult financing conditions, including high interest rates and tighter credit markets, have made it harder for investors to fund large-scale telecommunications projects.

Figure IV.7
International investment in digital economy sectors is increasing, except in telecommunications

Inflows to developing economies in core sectors of the digital economy
(Billions of dollars)



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

Note: Data are available for 52 economies. Other information and communication includes unspecified information and communication; information service activities; motion picture, video and sound recordings; programming and broadcasting activities; and publishing activities.

Many investors prefer sectors that offer higher returns or lower risks, such as renewable energy or healthcare, over telecommunications (UNCTAD, 2024c).

Data on investment in data centres are limited, with only Mexico and the United States reporting inflows in data processing, hosting and related activities. United States inflows are higher and more consistent, peaking at $1.5 billion in 2014 and $1.1 billion in 2023, 39 per cent lower than the $1.8 billion in announced greenfield projects. Data centre-related FDI outflows in the digital economy mirror inflows, averaging 5 per cent of the total. Developed economies drive these outflows, with China accounting for nearly half of FDI outflows from developing economies between 2010 and 2023 and 66 per cent of outflows to the digital economy. Taiwan Province of China is notable for FDI in manufacturing of computer, electronic optical products and electrical equipment.

b. Greenfield projects in the digital economy

Digital MNEs invest internationally through both greenfield investment and cross-border mergers and acquisitions (M&As). Greenfield investment is in construction and expansion projects in digital industries, contributing to the build-up of digital infrastructure and the provision of additional digital services, and cross-border M&As are the acquisition of enterprises in the host country without directly creating digital facilities or employment (box IV.4). Greenfield investment in the digital economy includes projects to develop digital infrastructure, services and innovation ecosystems (table IV.4). These projects are crucial for building and sustaining a digital economy and can have significant developmental impacts.

The relevance and impact of digital greenfield projects vary based on a country's development and digital maturity levels. For lower income economies, broadband infrastructure and e-commerce logistics are crucial for bridging the digital divide. More advanced countries – middle-income and upper-income ones – benefit from R&D centres and manufacturing projects, with AI investment gaining prominence in healthcare, agriculture and education.

In addition to traditional manufacturing centres and R&D facilities, technology-focused special economic zones (SEZs), including science and technology parks and areas of innovation, have emerged as key players (see *World Investment Report 2019* (UNCTAD, 2019)). These zones attract substantial international investment by offering stable, knowledge-intensive environments that foster innovation and collaboration. They serve as critical hubs for developing and attracting talent, with diverse ownership structures and governance models enhancing their effectiveness. Examples include the pilot free trade zones in China, the Multimedia Super Corridor (now MSC Malaysia) in Malaysia and the three high-tech parks in Viet Nam, all of which focus on advancing the digital economy through various incentives and innovative practices.

Greenfield investment in the digital economy has grown rapidly. It surged to $360 billion in 2024, accounting for 28 per cent of all greenfield investment, second only to the 33 per cent peak reached in 2021 during the pandemic (figure IV.8).

Table IV.4
Types of greenfield investment projects in the digital economy

Type of project	Description
ICT infrastructure	Projects that focus on expanding high-speed Internet access and mobile network coverage, both foundational to any digital economy, providing the connectivity required for all other digital activities.
Data centres	Projects that provide essential local data storage and processing capabilities, supporting cloud computing, digital services and local data sovereignty while reducing latency in service delivery.
Digital services and solutions	Projects that include online payment systems and applications such as fintech, healthtech, agritech and edtech, as well as e-commerce, all services that expand functionality and accessibility of digital ecosystems, supporting innovation and digital tool adoption across sectors.
	Projects in AI, automation and R&D that drive technological advancements, development of new digital products and services, enhancement of skills and creation of high-value jobs.
ICT equipment	Projects in production of digital devices, telecommunications equipment and semiconductors, all essential for technological self-sufficiency and global supply chains.

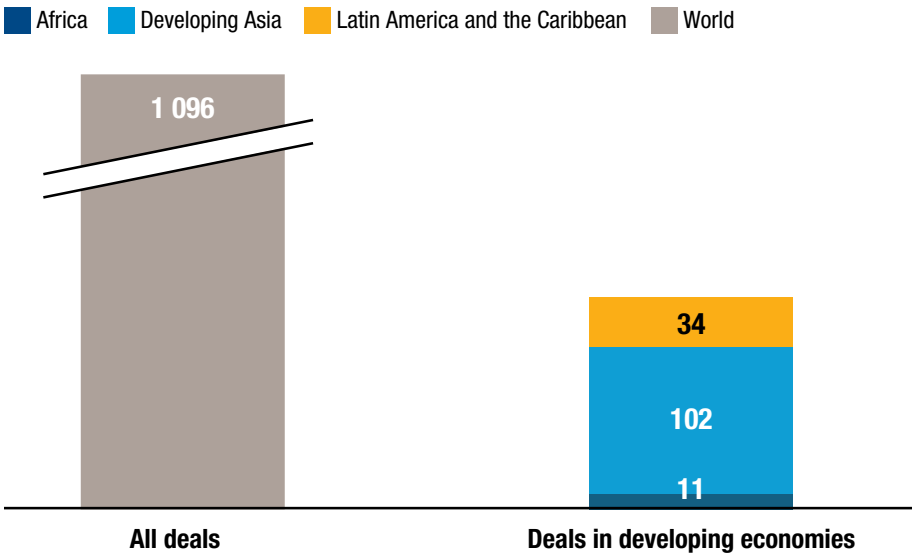
Source: UNCTAD.

Abbreviations: ICT, information and communication technology; R&D, research and development.

Box IV.4
Cross-border M&As in the digital economy in developing economies

Cross-border M&A deals in the technology sector have averaged nearly $1 trillion annually over the past decade. Less than 15 per cent have involved companies from developing economies, with nearly half of the deals targeting firms in China, India and Singapore (box figure IV.4.1). Most deals aim to accelerate revenue growth by acquiring new capabilities and accessing faster-growing markets. Software companies accounted for 40 per cent of deal value, whereas in developing economies ICT companies were more often targeted. The top 100 digital MNEs are key players in international M&As, especially in developed economies, seeking innovative companies to complement their R&D efforts. Most acquisitions by top players are domestic, as in the $70 billion acquisition of Activision by Microsoft (both United States) in 2022.

Box figure IV.4.1
Limited activity in cross-border mergers and acquisitions in developing economies, with developing Asia leading as host
Value of international deals in the digital economy, 2020–2024
(Billions of dollars)



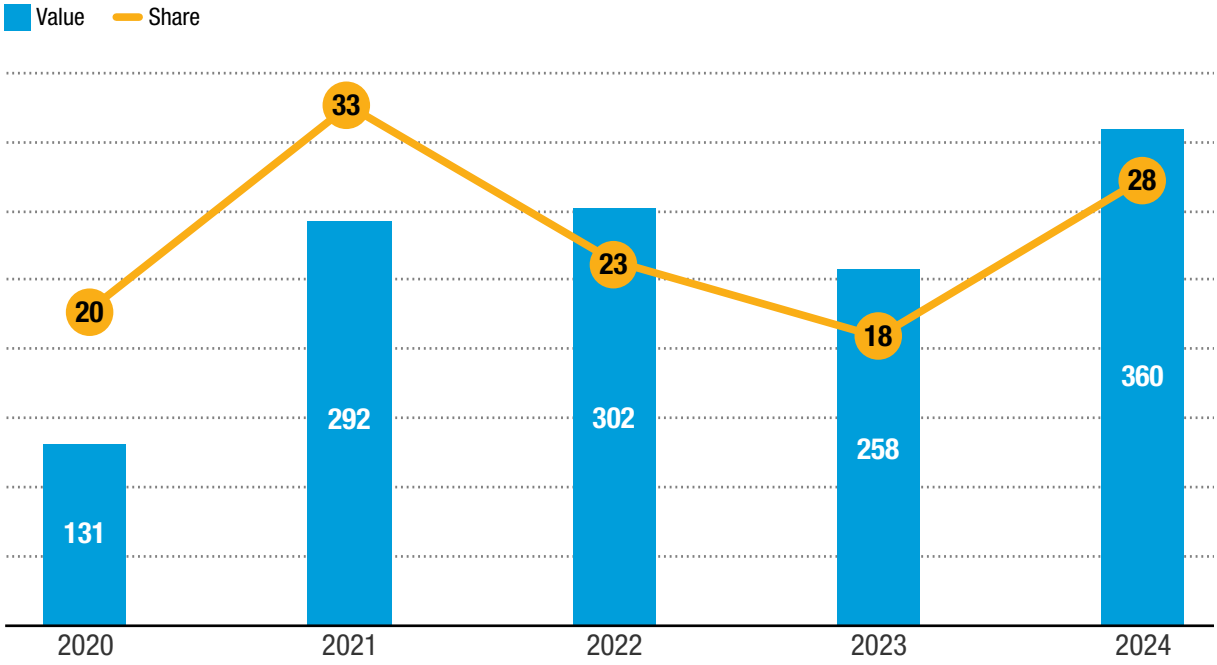
Source: UNCTAD, based on LSEG Data & Analytics.

In developing economies, the impact of digital economy drivers on M&A values is mixed because there are fewer deals. Digital readiness and regulatory clarity are crucial for fostering M&A activity. Developed economies benefit most from digital capacity and incentives, while developing countries gain from clear, consistent and open data governance frameworks.

Source: UNCTAD.

Figure IV.8
The share of greenfield investment in the digital economy rose to 28 per cent in 2024

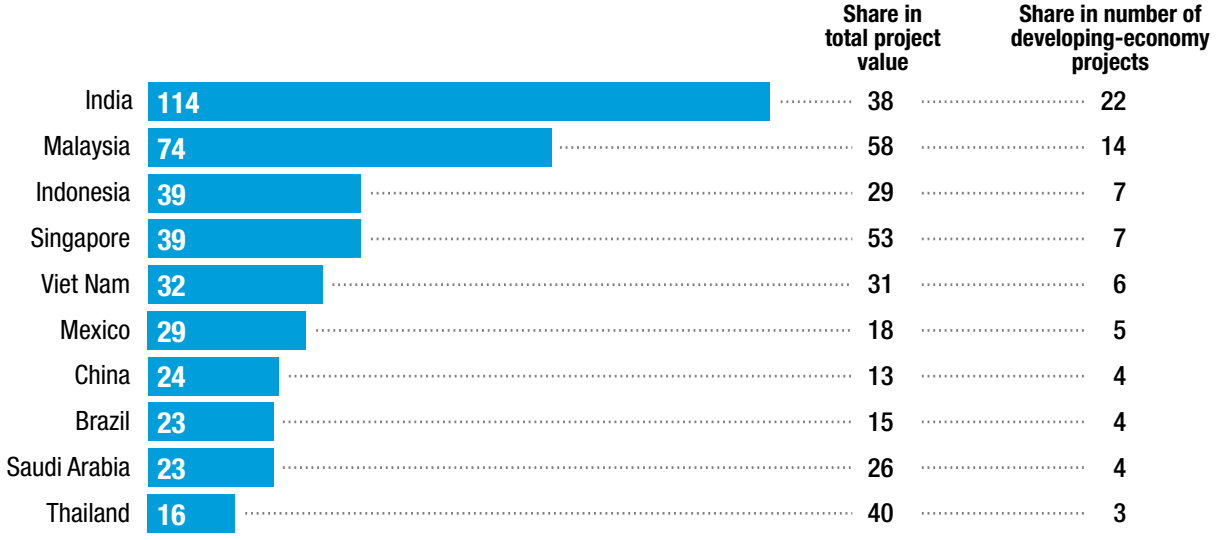
Value of announced greenfield investment in the digital economy and share in total greenfield investment
(Billions of dollars and percentage)



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

Figure IV.9
Greenfield investment highly concentrated in the digital economy, with 78 per cent of flows going to 10 developing economies

Top 10 developing economies by project announcements in digital economy sectors, 2020–2024
(Billions of dollars and percentage)



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

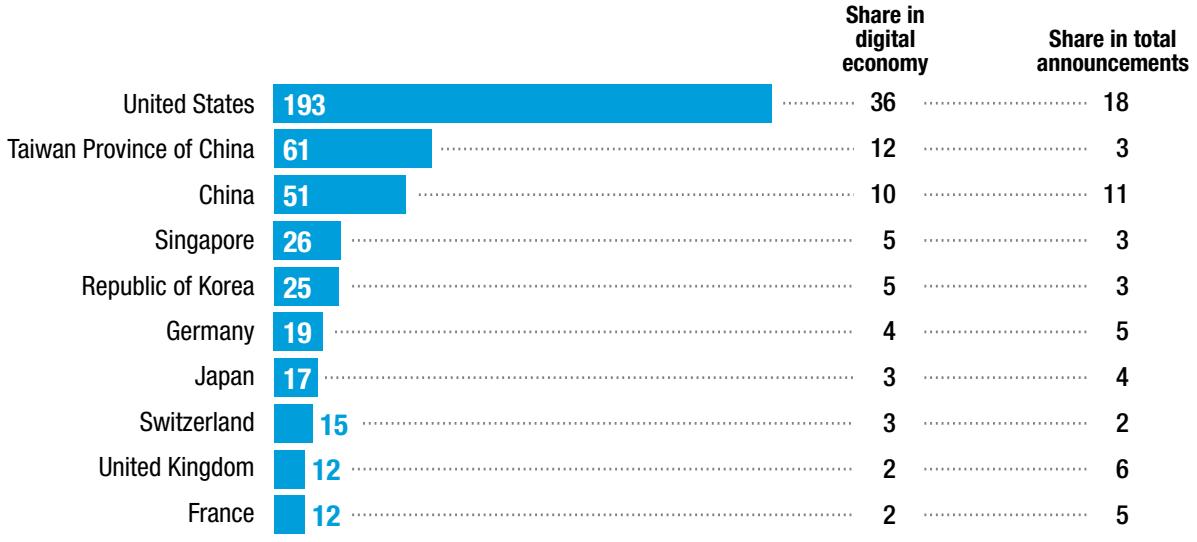
Between 2020 and 2024, developing countries have attracted a total of $531 billion in announced greenfield projects in the digital economy. FDI in digital projects is highly concentrated among developing economies, with nearly 80 per cent directed to 10 countries (figure IV.9). Six Asian economies – India, Malaysia, Indonesia, Singapore, Viet Nam and China by order of announced projects – account for more than 60 per cent of digital greenfield investment. Saudi Arabia and the United Arab Emirates lead in West Asia, and Brazil and Mexico are the primary destinations in Latin America. Egypt and Nigeria rank just outside the top 10, leading in Africa.

Developed economies drive greenfield investment in the digital economy of developing regions, reflecting the concentration of leading digital companies and ecosystems. MNEs from the United States are particularly prominent, accounting for more than a third of these digital-related projects (figure IV.10).

Investment in the digital economy by and between developing economies is increasing, driven by developing Asia. China and Taiwan Province of China are the first and the second leading sources of investment by value, reinforcing Asia's role as both host and origin of capital (figure IV.11). MNEs and SWFs from the Middle East, led by those from the United Arab Emirates and Qatar, lead investment in e-commerce, semiconductors and telecommunications.

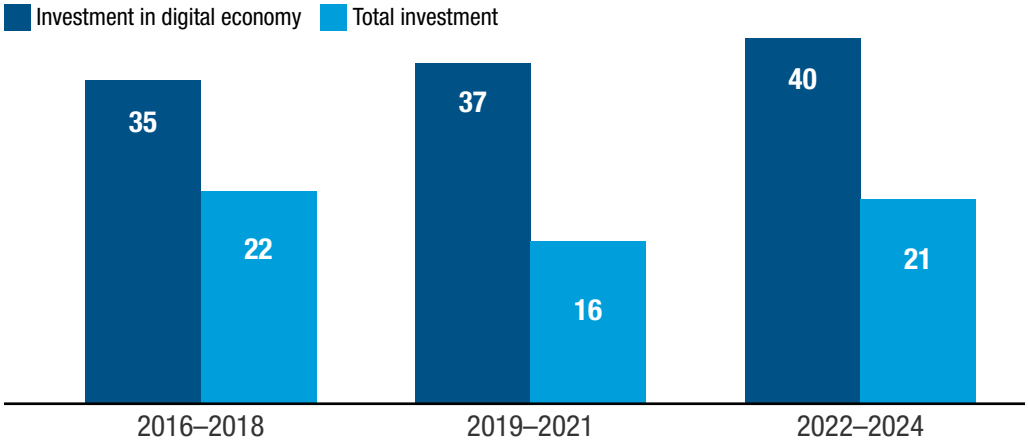
The sectoral distribution of greenfield project announcements in developing economies has transformed significantly. Between 2020 and 2024, ICT manufacturing attracted the highest inflows; recently, digital services and solutions have gained prominence, indicating a shift towards higher-value segments such as AI (figure IV.12). Investment in enabling infrastructure in 2024 remained below 2020 levels but is steadily increasing, emphasizing the importance of connectivity.

Figure IV.10
Developed economies are the main source of greenfield investment in the digital economy
Top 10 home economies of investors in developing economies by project announcements in digital economy sectors, 2020–2024
(Billions of dollars and percentage)



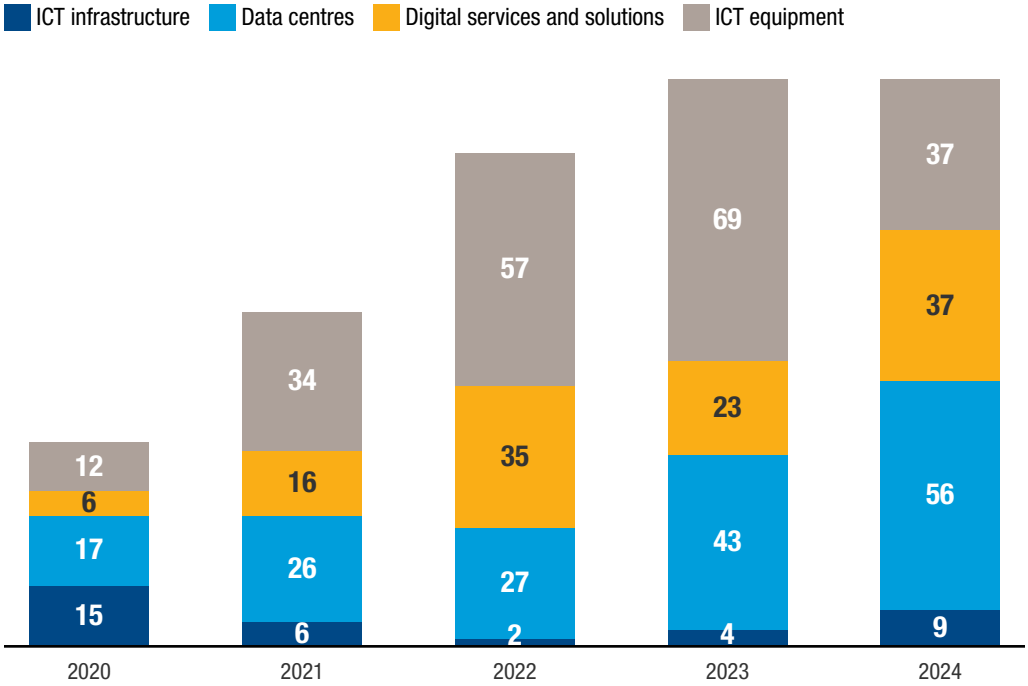
Source: UNCTAD, based on information from The Financial Times Ltd., fDi markets (www.fdimarkets.com).

Figure IV.11
Growing role of South–South greenfield investment in the digital economy
Share of South–South investment in greenfield projects in the digital economy and in all sectors
(Percentage of value)



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

Figure IV.12
Greenfield investment grew more than fivefold in digital services and solutions since 2020 and more than threefold in data centres
Announced greenfield projects in selected sectors of the digital economy in developing economies
(Billions of dollars)



Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fdimarkets.com).
Abbreviation: ICT, information and communication technology.

Distribution networks and logistics, though not part of the core digital economy, are crucial for e-commerce and in developing economies have attracted rising investment.

c. International investment in key industries of the digital economy

i. ICT infrastructure

In 2019, nearly half of the global adult population remained unconnected to broadband (ITU, 2020). Achieving the goal of bridging the connectivity gap by 2030 requires substantial investment in enabling infrastructure, which remains critically underfunded. In 2024, the value of global greenfield investment announcements in ICT infrastructure reached $14.9 billion, less than 25 per cent of the estimated $62 billion required annually to meet financing needs (table IV.5). According to the International Telecommunication Union (ITU), nearly 70 per cent of the necessary investment should be directed towards low- and lower-middle-income developing countries, with a particular focus on connecting rural and remote populations that remain underserved (ITU, 2020). Despite some progress in 2024, the current pace of investment is insufficient to meet the demand for core ICT infrastructure.

Two regions combined – North America and Latin America and the Caribbean – saw a significant rise in the value of announced greenfield projects (from $3.3 billion in 2023 to $8.2 billion in 2024) – a level of investment sufficient to meet their needs for bridging the connectivity divide.

Table IV.5
Annual financing needed to bridge the connectivity divide and greenfield investment in ICT infrastructure, by region, 2023–2024
(Billions of dollars)

		Value of announced greenfield projects in core infrastructure	
Region	**Annual financing needs[a]**	2023	2024
Americas	7.4	3.3	8.2
East Asia and Pacific	12.1	0.4	3.8
Europe and Central Asia	4.8	2.5	1.1
Middle East and North Africa	4.1	0.3	0.0
South Asia	19.6	0.8	1.0
Sub-Saharan Africa	14.1	1.0	0.7
Total	**62.0**	**8.3**	**14.9**

Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fdimarkets.com) and ITU (2020, 2025).

[a] The estimation of the investment needed for global broadband access by 2030, according to preliminary data from the ITU, includes analysis of capital expenditures for infrastructure deployment. Estimations include fixed and mobile infrastructure, and backbone infrastructure. The methodology uses a country-level approach, starting with the number of unconnected people, particularly those not connected to 4G or equivalent broadband. These estimations are valid for the lower band of the projected investment gap; the upper band could reach up to $910 billion by 2030 (approximately $182 billion annually). The data are based on preliminary estimations from the Digital Infrastructure Investment Initiative white paper (ITU, 2025), divided by the five years remaining to 2030 and proportionally attributed to regions using the regional split from the 2020 Connecting Humanity study (ITU, 2020). Country classifications are based on ITU categorization owing to data availability.

Abbreviation: ICT, information and communication technology; ITU, International Telecommunication Union.

Yet, that investment remains highly concentrated in just a few countries (Mexico: 53 per cent, the United States: 29 per cent, Colombia: 12 per cent), while other countries in the region remain excluded from those resources.

In contrast, regions that have the highest financing needs, such as South Asia and Sub-Saharan Africa, remain critically underserved. In 2024, Sub-Saharan Africa attracted projects covering only 5 per cent of its $14.1 billion annual need. Greenfield project announcements in South Asia remained mostly stagnant, at only $1 billion in 2024 against a $20 billion annual need, while the Middle East and North Africa saw no new investment announcements, despite an annual gap of $4.1 billion. Europe and Central Asia saw a sharp decline in announced projects, from $2.5 billion in 2023 to just $1.1 billion in 2024, meeting less than 24 per cent of its needs.

The investor landscape is evolving, with new categories of investors influencing ICT infrastructure projects. Top digital MNEs are involved in hyperscale data centres, while telecommunications companies focus on smaller projects. Financial companies, including those focused on investment and on real estate, are increasingly supporting infrastructure projects.

Investment in telecommunications networks, including cables and wireless infrastructure, is typically financed through project finance schemes based on projected cash flows. ICT infrastructure investment is often domestic, aiming to serve social and inclusive purposes. The cost of capital remains a significant barrier. Globally, less than half of telecommunications infrastructure investment involves foreign sponsors or equity investors.

International project finance accounts for almost 60 per cent of investment in connectivity infrastructure, as these projects are typically larger and more costly (e.g. undersea cables, satellite connectivity). Almost a third of this investment involves equity stakes by host-country governments.

Developing countries' share of international project finance in ICT infrastructure is lower than the global share, although in least developed countries (LDCs), foreign sponsors account for half of the projects and more than 70 per cent of the investment value (table IV.6). Public sector involvement is higher in developing countries both for domestic and international projects. Government equity participation can attract foreign private investors by reducing perceived risks.

Developed economies are the main destinations for greenfield investment in ICT and telecommunications infrastructure. Between 2020 and 2024, developed economies secured $39 billion, while developing economies received $36 billion (figure IV.13). Among developing economies, the largest recipients are Mexico, followed by Nigeria and Malaysia, reflecting the scale of their consumer markets and the need to expand digital infrastructure.

Telecommunications MNEs from Europe and developing Asia are key investors in ICT infrastructure in developing economies (figure IV.14). From 2020 to 2024, firms from Europe led global ICT and telecommunications investment, with a 26 per cent share of the total, followed by firms in North America (25 per cent) and developing Asia (24 per cent).

Large investment gaps in digital infrastructure pose significant barriers for developing countries, limiting their ability to bridge the digital divide and achieve the Sustainable Development Goals. Currently, investment flows are highly concentrated, with a few major players dominating regional markets.

China Mobile Communications is the main investor in developing economies, with two thirds of its investment in Africa, 17 per cent of that allocated specifically to Nigeria. Alphabet (United States) leads non-telecommunications investment, focusing on developing Oceania (39 per cent) and Africa (25 per cent). The SWF Temasek (Singapore) is key in developing Asia, especially in Malaysia and in Viet Nam.

Development finance institutions including multilateral development banks can play a pivotal role in accelerating the development of connectivity infrastructure by addressing financing constraints, including the high cost of capital (box IV.5). They provide direct loans and grants, thereby catalysing private investment. This is particularly important since guarantees are in place for only 5 per cent of loans to project finance in developing countries.

Table IV.6
Project finance in ICT infrastructure, by investor type and country grouping, 2015–2024
(Percentage)

		Global		Developing countries		Least developed countries	
Type of project	**Unit**	Domestic	International	Domestic	International	Domestic	International
Total	**Number**	**53**	**47**	**58**	**42**	**50**	**50**
	Value	**41**	**59**	**43**	**57**	**29**	**71**
Public	Number	21	10	27	12	38	16
	Value	18	19	17	32	21	40
Private	Number	32	37	30	31	12	34
	Value	23	40	26	25	8	31

Source: UNCTAD, based on information from LSEG Data & Analytics.

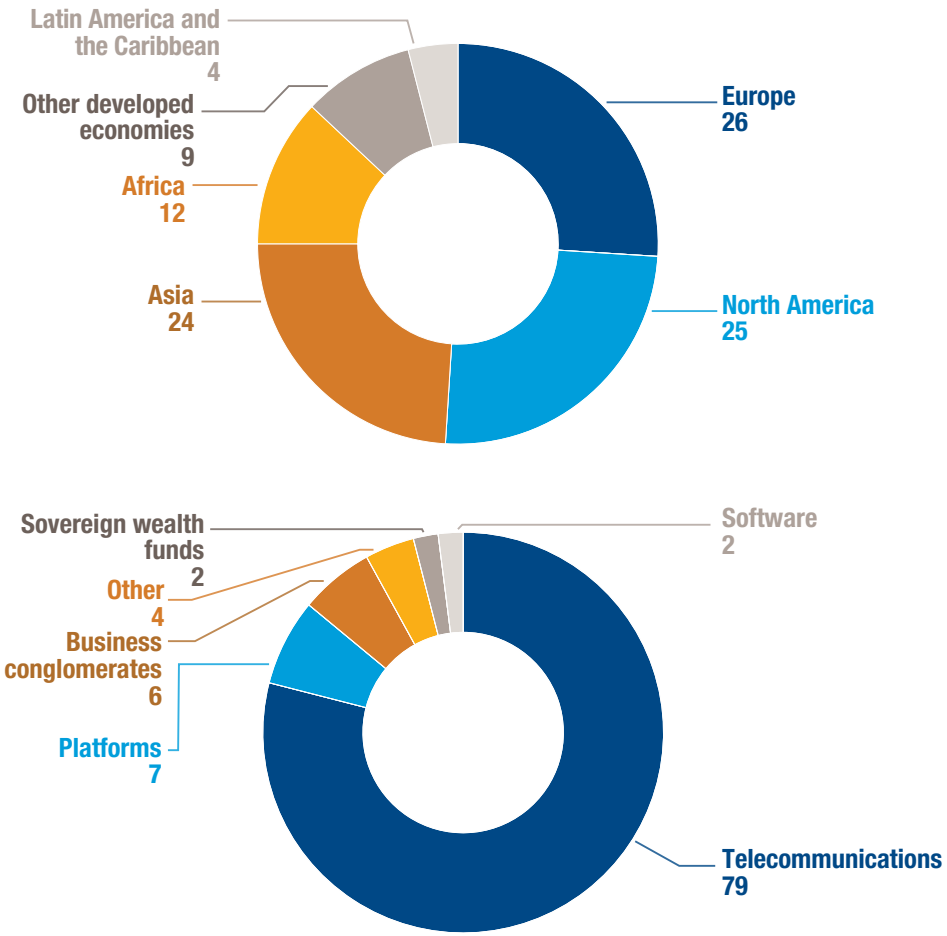
Note: A project is defined as public if the ultimate owner of the project company is a government agency or a State-owned enterprise or has an equity participation from the host State. A project is defined as international if at least one sponsor is foreign.

Figure IV.13
Large developing economies are key destinations for investment in ICT infrastructure
Announced greenfield projects in ICT Infrastructure, share by region and top five host developing economies, 2020–2024
(Billions of dollars)

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

Abbreviation: ICT, information and communication technology.

Figure IV.14
Telecommunications companies are the backbone for ICT infrastructure
Value of greenfield investment in developing economies in ICT infrastructure by investor home region and investor type, 2020–2024
(Percentage)



Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fdimarkets.com).
Abbreviation: ICT, information and communication technology.

Since 2018, development finance institutions including multilateral development banks have extended an average of $600 million annually in loans and grants to developing countries for ICT infrastructure, covering approximately 10 per cent of total project costs. Although this amount has increased significantly since the onset of the pandemic, it remains only about half of what development finance institutions alone have invested in transport infrastructure (approximately $1.1 billion annually since 2018) and represents only a modest share of the investment directed towards renewable energy (about $3.7 billion annually).

ii. Data centres

Investment in data centres is crucial for digital infrastructure, and cloud computing MNEs are playing a leading role as primary investors (table IV.7). Statistics on the share of international investors involved in project finance deals aimed at creating data centres are less accurate than the statistics on core ICT infrastructure.

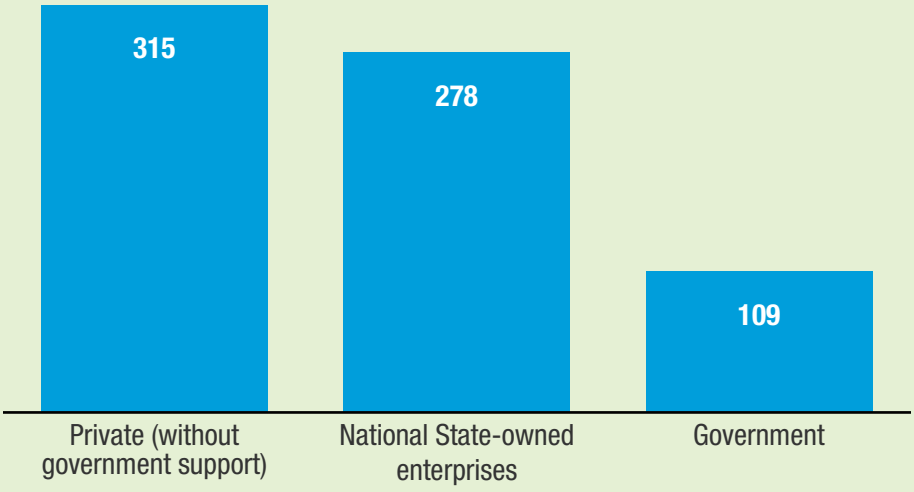
Box IV.5
Financing digital infrastructure

High costs and uncertain returns deter investment in underserved markets in the digital economy, making concessional funding and policy support crucial to bridge the digital divide. Basic digital infrastructure projects are capital-intensive, requiring significant upfront investment, long construction times and coordination across multiple sectors, making them better suited for loans with project finance as use of proceeds than for other types of capital-raising mechanisms. This emphasizes the need for infrastructure finance, public-private partnerships (PPPs) and support by development finance institutions.

As venture capital and international project finance become increasingly global, long-term infrastructure loans in developing economies remain limited and typically bear higher yields because of the high-risk environments. These loans also require greater equity participation than those in developed economies (box figure IV.5.1). One potential approach to mitigate their cost is through the support of national governments, development banks and export-import agencies. Projects executed by State-owned companies are associated with marginally smaller loan spreads, and projects receiving government sponsorship secure loans with spreads that are 200 basis points lower than those of private companies that lack government or development bank.

Box figure IV.5.1
Government participation reduces spread of project finance loans in developing economies

Average spread of cross-border telecommunications project finance loans in developing economies by sponsor type, 2000–2024
(Basis points)



Source: UNCTAD, based on information from LSEG Data & Analytics.

Note: The spread values are the amount charged over the underlying pricing instrument at the drawing of the loan, e.g. EURIBOR.

Source: UNCTAD.

Top investors in data centres, such as Amazon, Alphabet and Microsoft (all United States), finance projects from corporate funds, rather than using a project finance structure. As a consequence, many of their projects, especially domestic ones, are not captured in project finance data. This explains the high share of international project finance investment in data centres globally. In contrast, in developing countries, foreign sponsors account for about half the number of projects and for less than half (45 per cent) of their value. Large developing economies such as India, Malaysia and Saudi Arabia host large domestic projects sponsored by local firms and SWFs. Investments in data centres feature limited government involvement: in developing economies, less than 20 per cent of projects (14 per cent domestic and 4 per cent international) have a national authority or ministry as sponsor.

Greenfield investment in data centres is unevenly distributed across developing economies. Between 2020 and 2024, middle-income developing economies accounted for 80 per cent of investment in data centres in developing economies, with balanced values across mega-, medium- and small-scale projects (figure IV.15). Major emerging markets such as Brazil, China, India and Mexico have attracted nearly 160 companies to invest in data infrastructure. In contrast, LDCs received only 3 per cent of all data centre projects by value, and all were small, mainly because of infrastructure and connectivity constraints, and small markets with low levels of digital readiness (UNCTAD, 2024a).

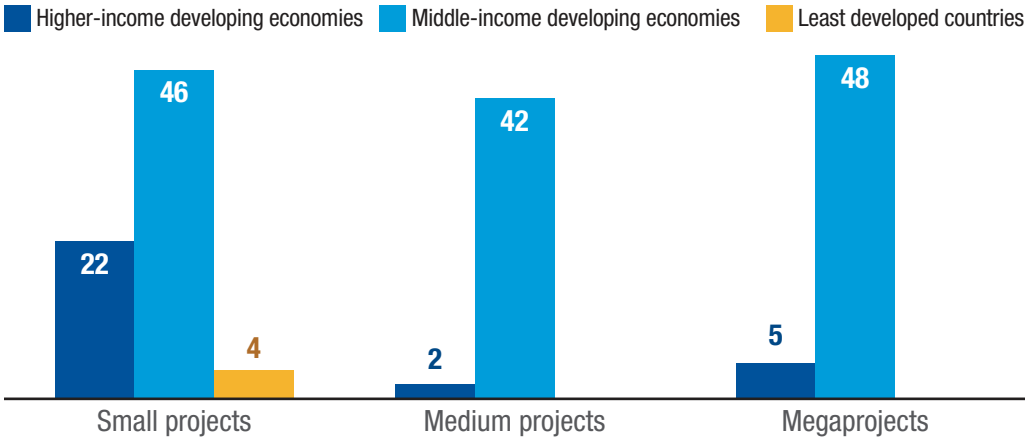
Table IV.7
International project finance in data centres, by investor source and country grouping, 2015–2024
(Percentage)

		Global		Developing countries	
Type of project	**Unit**	Domestic	International	Domestic	International
Total	**Number**	**47**	**53**	**48**	**52**
	Value	**41**	**59**	**55**	**45**
Public	Number	7	5	14	4
	Value	4	11	13	6
Private	Number	40	48	34	48
	Value	37	48	42	39

Source: UNCTAD, based on information from LSEG Data & Analytics.

Note: A project is defined as public if the ultimate owner of the project company is a government agency or a State-owned enterprise or has an equity participation from the host State. A project is defined as international if at least one sponsor is foreign.

Figure IV.15
Middle-income developing economies have attracted the largest share of investment in data centres
Projects by income group and project size, 2020–2024
(Billions of dollars)



Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fdimarkets.com).
Note: Low-income countries are least developed countries.

During 2020–2024, 16 companies have announced investment in data centres in LDCs, focusing on small-scale projects (with a total value of $12.6 billion) and medium-scale projects (with a total value of $2.5 billion) in middle-income countries such as Malaysia, Mexico and Nigeria.

Notable investors include Djibouti Data Centre (Djibouti), Econet Global (Mauritius), Hiranandani Developers (India), Paratus Africa Group (Namibia) and ST Digital (Cameroon). Other investors focus on LDCs, where CloudFlare, Digital Realty Trust and Raxio Group (all United States) and Vodafone Group (United Kingdom) have announced greenfield projects totalling $2.07 billion.

North American investors lead digital services projects in developing economies, with major companies such as Amazon, Cloud HQ and Oracle (all United States) focusing on data centres (figure IV.16). Amazon concentrates its investment in four countries: India, Malaysia, Saudi Arabia and Thailand. Companies such as CITIC Group (China) and Temasek Holdings (Singapore) are significant investors in data centres, and GIC (Singapore) leads investment in digital services in India. Asian companies dominate investment in e-commerce, with Alibaba (China), ESR and Morning Express and Logistic (both Hong Kong, China) and Pluugin Ecommerce (United Arab Emirates), and are investing in other Asian economies.

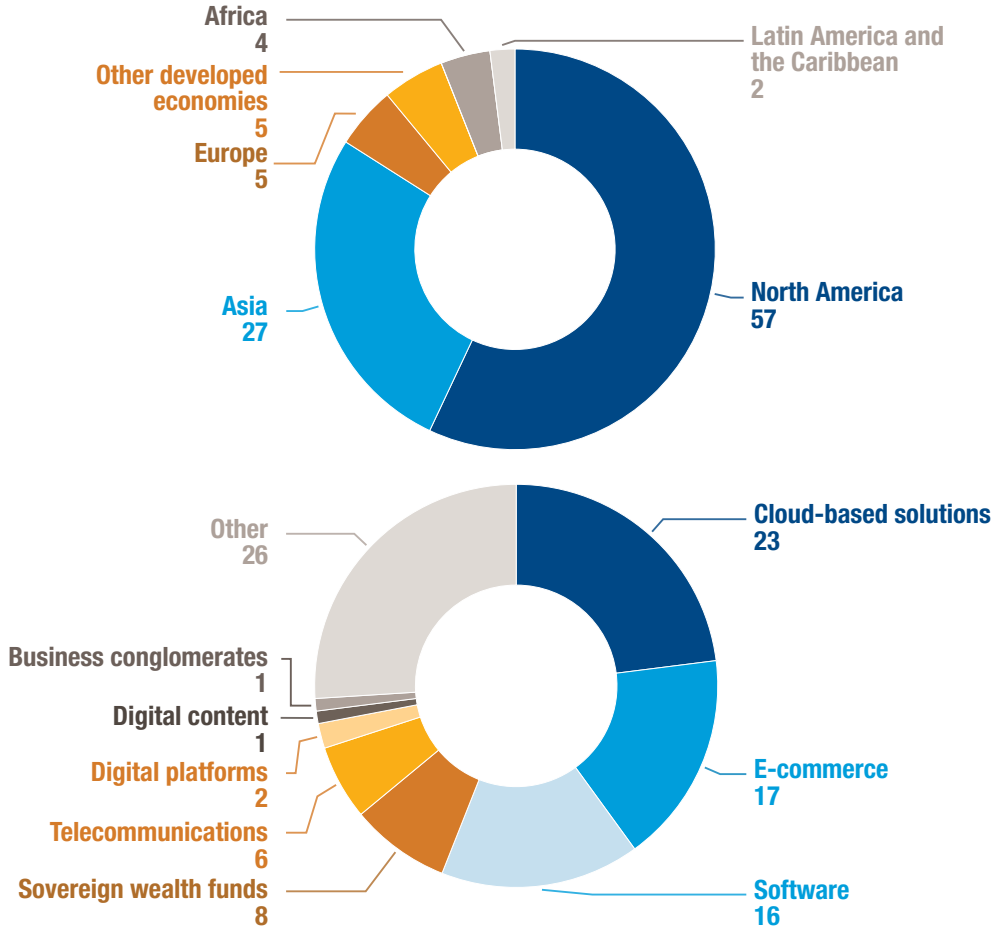
iii. Digital services and solutions

Developed economies attracted 60 per cent of announced greenfield projects in digital services and solutions between 2020 and 2024 (figure IV.17). Regions with connectivity gaps, such as in Africa and parts of Latin America and the Caribbean, lag in greenfield investment. Brazil is a notable recipient in Latin America, ranking third among developing economies. India ($54 billion) and Singapore ($12 billion) are key investment hotspots because of their strong IT service sectors and their strategic positions in global digital supply chains.

Fintech – the application of technology to enhance financial services – holds significant potential to advance development.

Figure IV.16
Cloud-based solutions companies from the United States are the main investors in data centres

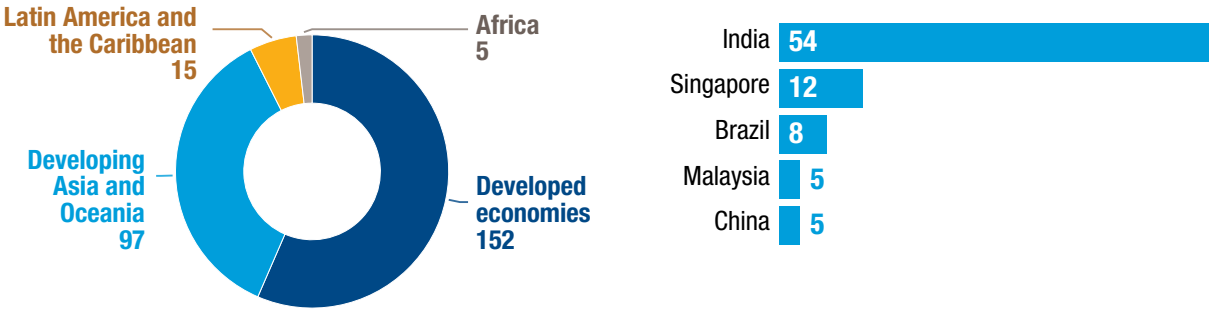
Value of greenfield investment in data centres in developing economies by investor home region and sector, 2020–2024
(Percentage)



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

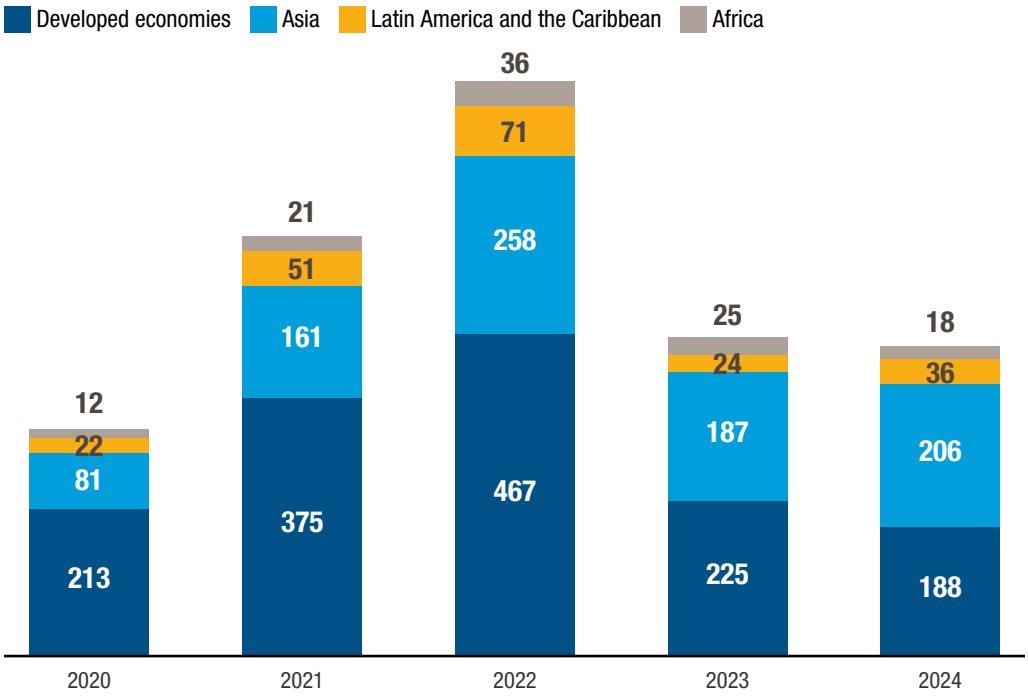
By improving efficiency, accessibility and affordability, fintech can expand financial inclusion, empower underserved populations and foster economic growth. The COVID-19 pandemic accelerated this trend, as lockdowns and store closures spurred the adoption of digital financial solutions. Emerging markets in Asia and in Latin America saw a notable increase in fintech-related greenfield projects, driven by the rise of e-commerce and growing financial inclusion. In 2024, developing Asia saw 206 project announcements, surpassing the 188 in developed economies. Latin America had 36, while Africa faced challenges with only 18 (figure IV.18).

Figure IV.17
Developing Asia attracts more than one third of investment in digital services and solutions
Announced greenfield projects in digital services and solutions by region and top five host developing economies, 2020–2024
(Billions of dollars)



Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fdimarkets.com).
Note: Digital services and solutions include e-commerce, foundational technologies (software and the like), digital services and payment solutions (such as fintech, agritech, and healthtech), and AI, automation and R&D.
Abbreviations: AI, artificial intelligence; R&D, research and development.

Figure IV.18
Surge in fintech projects in developing economies: Asia leads the way
Fintech projects by destination region or economic grouping
(Number)



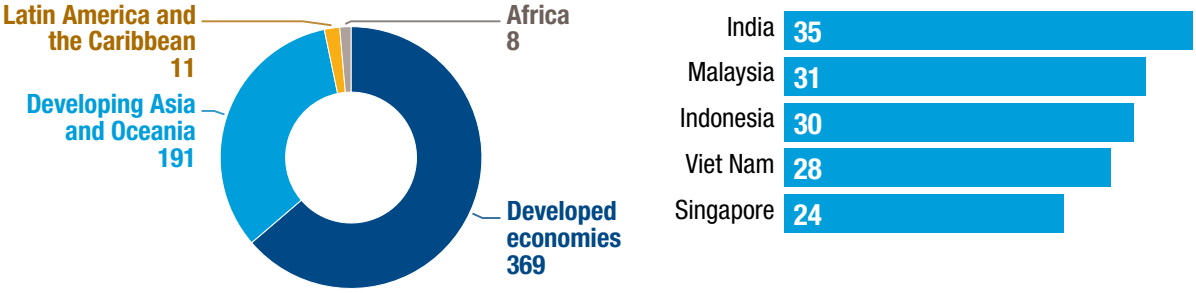
Source: UNCTAD, based on information from The Financial Times Ltd, fDi Markets (www.fdimarkets.com).

In today's global economy, secure and efficient payments infrastructure is critical for enabling cross-border transactions and investment. Fast, reliable fund transfers build trust between investors and host countries, strengthening investor confidence. Recognizing this, public institutions are increasingly investing in digital public infrastructure. Despite progress – such as 90 per cent of cross-border payments reaching beneficiary banks within an hour (SWIFT, 2024) – retail transactions still face delays caused by outdated market practices. Addressing these inefficiencies is key to improving the investment climate. The growing adoption of the International Organization for Standardization's ISO 20022 for financial services has enhanced transparency, allowing financial institutions to identify frictions, improve decision-making and drive innovation. For emerging economies, leveraging this data-driven approach is vital to streamline payments and attract foreign investment.

iv. Digital equipment manufacturing

Developed economies attract the highest levels of greenfield investment in ICT manufacturing – totalling $369 billion – because of their strong high-tech manufacturing base and supportive policies (figure IV.19). Among developing regions, Asia is the primary growth hub, attracting $191 billion in investment between 2020 and 2024. India and South-East Asia have substantial inflows for their integration into global supply chains and robust manufacturing capabilities.

Figure IV.19
Developing Asia attracts the majority of investment in ICT manufacturing
Announced greenfield projects in ICT manufacturing by region and top five host developing economies, 2020–2024
(Billions of dollars)



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

Africa and Latin America attract only $8 billion and $11 billion, respectively, in ICT equipment manufacturing, which is critical for industrial development.

The underlying analysis reveals that MNEs specializing in equipment, devices and components, particularly semiconductor manufacturers such as Nvidia (United States), have grown significantly with the rise of the digital economy and AI. Asian MNEs, especially companies such as Hon Hai, TSMC, UMC and Vanguard (all Taiwan Province of China) along with investors such as Huawei and Lenovo (both China), lead investment in ICT manufacturing in developing economies, accounting for more than 40 per cent of investment from 2020 to 2024. Investment in communication equipment and components is concentrated, with the top 10 investors holding 74 per cent of global project value. North American firms such as Amazon and Apple (both United States) dominate ICT manufacturing services in countries such as India, Singapore and South Africa.

3. Drivers and determinants

The digital economy includes a wide range of industries from equipment manufacturing to service provision (see figure IV.1), and the drivers and determinants of international investment in each industry are different. At the firm level, digital MNEs' motivation and capability for international investment has been enhanced by the rapid advancement of digital technologies, while industry-specific market-, efficiency- and asset-seeking motives continue to drive investment (see also WEF, 2020).

In ICT equipment manufacturing, international investment still follows the basic pattern of efficiency-seeking FDI, with production cost as a main factor in location decisions; however, supply chain security and resilience have become increasingly important factors. In high-end ICT, geopolitical considerations have started to dominate. With digital MNEs placing greater emphasis on building up computing power for AI, international investment in data centres has been rising rapidly, and the power supply of the host country has become an important factor in investment decisions. In the meantime, investment by global e-commerce enterprises focuses more on the construction of international logistics systems, and storage facilities have become a key area of foreign investment.

For various types of digital service enterprises, a major determinant of international investment is the quality and supply of the labour force, especially in terms of digital skills. In their international operation, these enterprises rely increasingly on intangible assets, platform-based delivery modes and data-driven business models (UNCTAD, 2017). While the normal drivers and determinants of FDI apply universally, their importance varies across digital industries and different stages of the digital value chain. Overall, in shaping FDI flows in the digital economy, four main factors stand out: infrastructure (both digital and basic, such as electricity), digital capacities and resources, regulatory framework and market conditions; another factor is the business environment).

ICT equipment manufacturing. FDI in ICT goods manufacturing follows traditional patterns of FDI attraction, with added emphasis on technology integration and supply chain precision. Key factors include cost efficiency, logistics access, policy incentives and access to skilled technical workers. Countries need to provide stable industrial policies, trade facilitation and links to global production networks. These activities often cluster in industrial zones or special economic areas with well-developed infrastructure and services.

ICT infrastructure. Investment in telecommunications networks, cloud services and data centres focuses on expanding connectivity. Key drivers include reliable broadband, electricity and

spectrum access, and transparent licensing procedures. Investors consider policy consistency, digital infrastructure taxation, opportunities for project financing, risk-sharing and PPPs. Top priorities are the ease of obtaining licenses, skilled engineers and regional coordination. Given the high upfront costs of this type of investment, countries should offer a stable operating environment and streamlined regulatory processes.

Digital services and solutions. Applications such as e-commerce, digital solutions and fintech depend on consumer demand, financial inclusion and digital technology adoption. Investor interest grows with widespread mobile usage, trust in digital transactions and supportive regulatory frameworks. Key factors include start-up support, digital payment systems and responsive financial regulators. In emerging markets, FDI in digital services and solutions has a prominent role, driven by dynamic entrepreneurial ecosystems and access to early-stage funding.

AI, automation and R&D. FDI in the most advanced segment of digital services and solutions – software development, AI and automation – is concentrated in countries that have strong digital capabilities and supportive innovation systems. This type of investment relies on high-skilled labour, quality data sets, legal frameworks for intellectual property (IP) protection, data governance regulation and platform competition. Investors seek connections to research institutions, venture capital and public R&D support. Data security, copyright protection and privacy regulations are key factors in location decisions.

In addition, openness to trade and regional economic integration – particularly for some types of FDI, such as ICT goods manufacturing, e-commerce logistics and digital services – are important enablers, alongside investment-specific factors. Digital MNEs rely on importing intermediate inputs and exporting goods or services across borders. Trade policies that reduce barriers, facilitate customs procedures and enhance market access can significantly influence investment decisions and strengthen linkages to global value chains (WTO et al., 2023).

As shown in figure IV.20, different types of FDI in the digital value chain are driven by distinct sets of enablers. Countries are not equally positioned across all stages: their ability to attract specific types of FDI depends on the enabling conditions they can offer across infrastructure, regulation, market readiness and digital capabilities, all of which are closely linked to their level of development. These differentiated investment profiles form part of a broader digital development chain, one that reflects where countries stand in attracting investment in the digital economy, as well as how they can harness such investment to drive broader digital transformation.

LDCs primarily attract FDI in ICT infrastructure, focused on basic connectivity and often supported by donors or public operators. Middle-income developing economies present more diverse profiles, engaging in ICT manufacturing and attracting growing investment in digital services, driven by expanding Internet access and emerging innovation ecosystems. In some cases, improvements in regulation and digital skills are facilitating a shift towards innovation-driven segments. Higher-income economies, by contrast, are most specialized in digital services and innovation activities such as software, platforms and AI, supported by advanced skills, strong data ecosystems and robust governance frameworks.

For developing countries, capturing opportunities along the digital development chain requires deliberate and targeted policy action. Priorities include investing in digital infrastructure, advancing digital skills, strengthening regulatory frameworks and fostering innovation ecosystems. By aligning FDI attraction with their comparative advantages and development objectives, countries can progressively integrate into more complex and value adding segments of the digital economy.

Figure IV.20
Drivers and determinants of FDI in the digital economy – summary view

Types of FDI	Drivers and determinants: Enabling infrastructure	Digital capabilities and resources (skills, data access)	Digital regulation	Market conditions and business environment
ICT manufacturing	Industrial zones, energy and logistics infrastructure, connectivity	Skilled technical workforce, ability to integrate into production networks	Trade and investment policies, product safety and standards	Cost competitiveness; local supplier base, policy stability, export platforms
ICT infrastructure	High-speed broadband, power reliability, data centres, spectrum access	Telecommunications engineers, cloud professionals, basic data operations personnel	Transparent licensing, spectrum policy, infrastructure-sharing rules	Demand for connectivity, public-private partnerships, stable investment climate
Digital services and solutions	Mobile coverage, Internet access, payment systems	Digital entrepreneurs, UX/UI skills, early-stage innovation hubs	Consumer protection, fintech rules, interoperability standards	Growing user base, SME digitalization, startup ecosystems, access to finance
AI, automation and R&D	Advanced computing infrastructure, cloud platforms	AI engineers, data scientists, cybersecurity professionals; access to quality data set	IP rights, data governance, cross-border data rules, competition policy	R&D incentives, venture capital, innovation clusters, university–industry linkages

Source: UNCTAD.

4. Development implications

International investment in the digital economy has considerable developmental effects, such as providing investment and finance, enhancing productivity and creating jobs. In host developing countries, it can play an essential role in the development of digital infrastructure, such as telecommunications networks, broadband access ports and data centres, and the provision of critical services to underserved populations. In addition, international investment in digital industries can help enhance human resources, foreign market access and digital transformation in the host economy. Nevertheless, there are various potential risks, including market dominance, environmental impacts and regulatory challenges. The final outcome depends on a country's digital maturity, its institutional setting and its regulatory frameworks.

a. Direct contributions of FDI in the digital economy

Digital investment is crucial for economic growth and development (UNCTAD, 2017). AI, data analytics, the Internet of Things (IoT) and blockchain drive change in economies, enhancing productivity and addressing challenges such as food security, healthcare access and climate resilience. As highlighted in the *2024 Digital Economy Report* (UNCTAD, 2024a), business-to-business e-commerce sales grew nearly 60 per cent from 2016 to 2022, reaching $27 trillion.

Infrastructure is critical for digital development, especially in emerging economies with connectivity gaps. Investing in ICT infrastructure and 5G is critical to bridging the digital divide. Digital exclusion limits access to education, healthcare and financial services, exacerbating disparities and limiting economic opportunities. Investment in digital infrastructure and services improves the digital inclusion of marginalized communities.

Policymakers can prioritize investments and policies to maximize benefits while addressing inequality, data privacy and cybersecurity. Different kinds of platforms promote digital inclusion by providing markets, information and services. E-commerce platforms empower small businesses and entrepreneurs, social media facilitates knowledge-sharing, and cloud services offer scalable solutions for start-ups and SMEs. These platforms foster innovation and diversification, reducing transaction costs and increasing market efficiency, contributing to broader economic development.

While not the focus of this report, the broad scope digital economy uses digital applications to address sector-specific development goals. Healthtech and edtech expand access to healthcare and education, reducing inequalities. Smart cities and grids optimize resource management and energy efficiency, supporting sustainable urban development. Agritech enhances agricultural yields and rural incomes, helping reduce poverty and improve food security. These applications can accelerate progress towards the Sustainable Development Goals, more than 70 per cent of which have been identified as possible to achieve through digital solutions (ITU and UNDP, 2023).

b. Impact of FDI in the digital economy on sustainable development

The growing digital divide and low Internet usage in developing countries, in particular LDCs, risk hindering progress towards the Sustainable Development Goals. Investment is needed in affordable Internet access, online safety, digital literacy and language-accessible content. Recent research highlights disparities in the digital divide (UNDP, 2024; ITU, 2025). Lack of Internet access limits opportunities, educational resources and services, entrenching poverty. Women are affected disproportionately, having lower usage rates than men. High costs and inadequate infrastructure are barriers.

In low-income countries, FDI acts as a critical enabler for developing digital infrastructure and services. These countries face constraints such as insufficient domestic capital, limited access to advanced technologies and lack of skilled human resources. Foreign investment thus is essential for building broadband networks, data centres and e-commerce logistics facilities.

FDI facilitates access to advanced technologies such as AI, cloud computing and fintech solutions. Digital MNEs raise technological standards and create opportunities for knowledge transfer to local firms and workers, leading to improved productivity and innovation capacity.

Developing the digital economy through FDI opens doors to global markets. E-commerce platforms enable local SMEs to integrate into international production networks, amplifying their reach and enhancing competitiveness.

However, FDI in the digital economy has potential downsides. The market power of global platforms can lead to negative effects on market competition, affecting small local players and traditional sectors such as retail. The business models of digital MNEs often enable aggressive tax minimization strategies, undermining efforts to mobilize local resources.

The United Nations Framework Convention on International Tax Cooperation, currently in negotiation, aims to strengthen inclusiveness and equity in global tax governance.

In the Base Erosion and Profit Shifting project led by the OECD and the Group of 20, Pillars One and Two focus on addressing tax challenges posed by digitalization, including taxation of intangible assets, profit allocation to market jurisdictions and introduction of a 15 per cent global minimum corporate tax. In contrast, the United Nations process is intended to offer a broad and inclusive intergovernmental platform. In many developing countries, it is seen as a way to ensure more fair outcomes in the taxation of MNEs, in particular those operating in the digital space, and to align international tax cooperation with development priorities.

Technological advances in artificial intelligence and digital platforms are contributing to innovation in public service delivery, particularly in developing economies. For example, in Malaysia the Digital Economy Framework Agreement of the Association of Southeast Asian Nations (ASEAN) aims to promote open-source and shared digital infrastructure for rural digital connectivity and encouraging responsible, climate-aligned digital investment in line with ASEAN sustainability goals. Open-source models, such as Meta's Llama (United States), have been deployed in the Asia-Pacific region to support governments in strengthening administrative efficiency, improving healthcare diagnostics, and preserving cultural assets. Secure on-premise implementation has facilitated compliance with data protection standards, as illustrated by its use in Pakistan's health sector (Meta and Deloitte, 2025).

Other initiatives by multinational enterprises also contribute to inclusive digital development in social areas. Google.org has supported efforts to expand digital literacy and Internet access in underserved areas (Google.org, 2021). Microsoft's AI for Good programme applies machine learning solutions to domains such as healthcare, environmental sustainability, and accessibility, while its Global Skills Initiative promotes digital upskilling (Kshirsagar et al., 2021; Microsoft, 2025). Similarly, Amazon Web Services' Imagine Grant supports non-profit and educational institutions in using cloud technologies to enhance service delivery. According to company reports, Chinese technology firms also play a growing role: Tencent has invested in rural digital inclusion through WeChat and its philanthropic foundation, and Alibaba's Rural Taobao connects agricultural producers and small enterprises to e-commerce platforms, fostering local economic development (Tencent, 2024; Alibaba, 2025).

Gender inclusion in the digital economy has seen gradual progress. From 2020 to 2023, the share of women employed in the ICT sector increased by 7.7 per cent annually. Initiatives such as Women Who Code (which operated in 145 countries until it announced its closure in April 2024) and PrograMaria (Brazil) have expanded opportunities for women. The gender gap in mobile Internet access in low- and middle-income countries narrowed to 15 per cent in 2023. Ongoing efforts to mitigate algorithmic bias and support diversity in AI development are contributing to more inclusive digital ecosystems (ITU, 2023).

The Global Digital Compact (part of the Pact for the Future adopted at the 79th United Nations General Assembly) aims to ensure that women and girls can access the benefits of the digital economy. It focuses on bridging the digital divide and promoting gender equality with commitments to sustainable development and human rights. The Pact emphasizes international cooperation, including for an inclusive digital landscape. The 2025 Political Declaration of the Commission on the Status of Women stresses closing the digital gender divide, investing in gender data and ensuring that women have access to science, technology, engineering and math education, while eliminating digital violence and harassment.

c. Impact of the digital economy on environment

The digital economy has significant environmental impacts. Recent studies have identified several critical areas where the digital economy intersects with environmental sustainability, including through increased consumption of energy and increased production of electronic waste.

The rapid expansion of digital infrastructure has significantly boosted global energy demand. In 2024, demand grew by 2.2 per cent, with the power sector experiencing a 4.3 per cent surge in the context of record temperatures and growing demand for electrification and digitalization. The consumption by data centres alone of approximately 200 billion litres of water a year for cooling purposes poses a rising risk to environmental sustainability and water security. In 2020 the ICT sector emitted an estimated 0.69 to 1.6 gigatons of carbon dioxide equivalent, corresponding to 1.5 per cent to 3.2 per cent of global greenhouse gas emissions that year. Between 2010 and 2022, electronic waste from screens and small IT equipment rose 30 per cent, reaching 10.5 million tons, according to the comprehensive study of the environmental impact of the digital economy contained in the UNCTAD *2024 Digital Economy Report* (UNCTAD, 2024a).

Digital technologies such as AI and IoT can enhance energy efficiency by optimizing consumption in buildings, transportation and industrial processes. Advanced technologies such as liquid cooling and AI can optimize water resources. Smart grids and energy management systems can reduce waste and improve the integration of renewable energy sources. As lithium, cobalt and rare earth elements are essential for digital devices and renewable energy technologies, efforts to recover critical minerals from nontraditional sources and increase recycling are being explored. Cloud computing and virtualization can reduce the need for physical hardware.

Digital platforms can facilitate the sharing economy, reducing resource-intensive production (e.g. ride-sharing apps, online marketplaces for second-hand goods). Data-driven technologies such as AI and IoT can improve climate change monitoring by providing real-time data on environmental conditions.

Blockchain technology can create transparent systems for tracking carbon credits, encouraging investment in green projects. Digital finance platforms can facilitate investment in renewable energy and sustainable infrastructure.

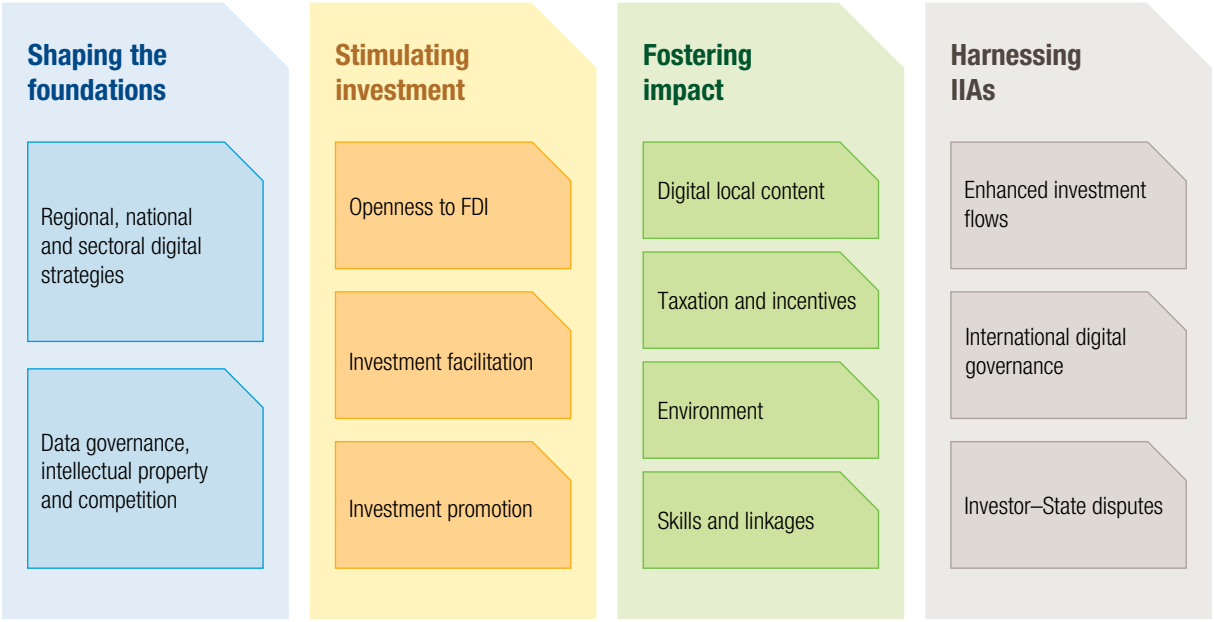
C. Policies to leverage international investment in the digital economy

In developing countries, national digital strategies have become more widespread and comprehensive; however, integration with broader development, industrial and environmental goals remains limited. Many strategies overlook the role of FDI, and investment promotion agencies (IPAs) are seldom involved in strategy design – highlighting the need for more coherent, investment-oriented digital policy frameworks. Restrictions on FDI in core digital infrastructure and regulatory gaps in key areas such as data governance and IP protection are key bottlenecks to attracting FDI in the digital economy. Moreover, in many developing countries the level of digital skills calls for initiatives to enhance local capabilities through talent attraction, knowledge transfer and business linkages, including with the use of FDI.
At the international level, new-generation international investment agreements (IIAs) increasingly facilitate, promote and liberalize investment in the digital economy. They include cooperation provisions aimed at promoting investment in skills development, digital literacy and ICT infrastructure. In addition, new-generation IIAs can support technology transfer on mutually agreed terms to developing economies in areas relevant to the digital economy. The inclusion of specific commitments on AI, e-payments, data flows and cybersecurity is also on the rise. However, more can be done to include binding development-focused provisions to enhance digital skills training, SME support and digital infrastructure development.

This section analyses key elements of the national and international policy framework for international investment in the digital economy. The analytical approach is articulated through four pillars – shaping the foundations, stimulating investment, fostering impact and harnessing IIAs (figure IV.21). It also reflects policy lessons from 15 developing countries, referred to in this chapter as the "top 15 countries". These countries were selected on the basis of the maturity of their policy framework for the digital economy (in data from ITU, they are classified as "generation 4" in its ICT Regulatory Tracker and "advanced" or "leading" in its digital development score or G5 Benchmark). They are also characterized by a significant presence of FDI in digital economy sectors, with cumulative announced FDI in these sectors representing more than 15 per cent of the total cumulative FDI announced over the period from 2015 to 2024.[1]

[1] The 15 countries are Armenia, Brazil, Colombia, Costa Rica, Kenya, Mexico, Nigeria, Pakistan, Peru, Rwanda, Saudi Arabia, Singapore, South Africa, Thailand and Türkiye. Information provided for these countries is based on analysis of policies, laws, regulations and information available on official government websites.

Figure IV.21
National and international policies for investment in the digital economy



Source: UNCTAD.

Abbreviations: FDI, foreign direct investment; IIA, international investment agreement.

1. Shaping the foundations

a. Digital strategies

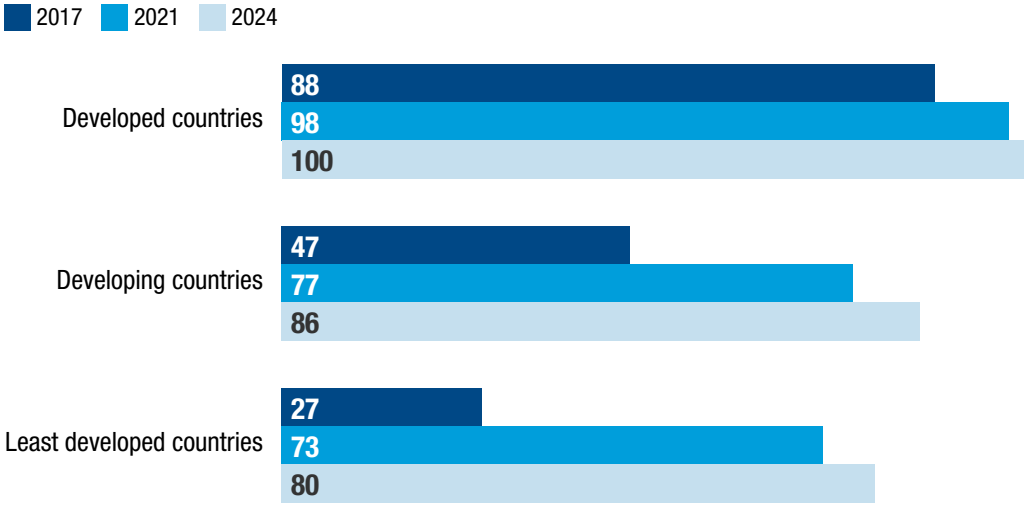
A clear digital strategy enhances transparency, regulatory stability and predictability, all crucial for investors in the digital economy (Stephenson, 2020). It provides a road map for expanding digital infrastructure, enhancing innovation ecosystems and creating an enabling regulatory environment for both domestic and foreign investors.

Significant progress has been made in adopting digital strategies over the past decade. In 2017, almost 90 per cent of developed countries had a national digital strategy, compared with fewer than half of developing countries and about a quarter of LDCs. By 2024, 86 per cent of developing countries and 80 per cent of LDCs had a national digital strategy, while 100 per cent of developed countries had one (figure IV.22).

Several developing countries that have been successful in attracting international investment in the digital economy adopted digital strategies early. Examples include Kenya (2005), Peru (2006), Singapore (2006), Armenia (2008) and Colombia (2010). This suggests that long-term strategic vision and planning are essential for developing the digital economy through FDI.

Analysis of more than 100 national digital strategies and earlier findings from the *World Investment Report 2017* (UNCTAD, 2017) suggest that national digital strategies have improved significantly in quality and sophistication. Earlier strategies were often broad and vague, with considerable variation across countries. Today, they are generally more detailed and aligned with clear objectives. By 2024, most countries – 86 per cent of developed countries and 92 per cent of developing countries – had recognized the need for a robust regulatory framework that keeps pace with digital advancements. Cybersecurity and data privacy now feature prominently.

Figure IV.22
Developing countries closing the gap in national digital strategy adoption
Share of countries that have adopted a digital strategy
(Percentage)



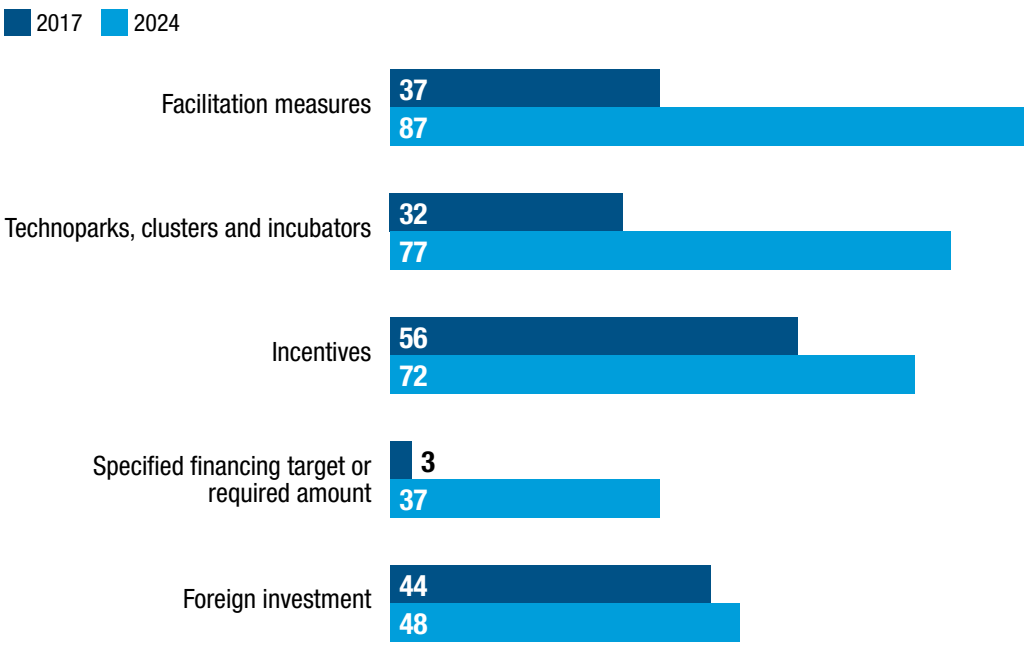
Source: UNCTAD, based on UNCTAD (2017) and ITU G5 Benchmark database.
Abbreviations: G5, fifth generation; ITU, International Telecommunication Union.

Recent digital strategies also provide more detailed plans for promoting the digital economy through investment. In 2017, fewer than 40 per cent of the strategies included investment facilitation measures; by 2024, this figure had risen to almost 90 per cent. These measures include e-government solutions for business registration and licensing, visa facilitation for qualified professionals and implementation of start-up support programmes.

The establishment of technoparks, incubators, SEZs and targeted clusters to foster technological development and enhance innovation ecosystems has become widespread (featured in 77 per cent of strategies). Similarly, incentives for investment in the digital economy now feature in 72 per cent of national strategies, a rise from 56 per cent in 2017 (figure IV.23). While the prevalence of incentives in developing countries has remained relatively stable (62 per cent in 2017 versus 60 per cent in 2024), developed countries have significantly expanded their use, with their inclusion in strategies increasing from 48 per cent to 83 per cent over the same period. This shift reflects the growing emphasis on industrial policies as a strategic tool for fostering digital transformation.

Despite the focus on private investment in strategies, references to FDI have not become more prevalent. IPAs are mentioned in just 20 per cent of digital strategies in developing countries and 11 per cent in developed countries, highlighting an opportunity for a more structured approach to investment promotion. In addition, references to FDI are often general and few strategies include measures to attract investment in sectors such as ICT infrastructure or AI, or types of investment such as venture capital, reflecting low coordination with industrial policies. Notable exceptions exist; for instance, several strategies from countries in Latin American and the Caribbean stress attracting international investment in ICT infrastructure. In Asia, the digital economy blueprint of Malaysia focuses on attracting FDI in catalytic sectors such as cybersecurity, AI and data analytics (box IV.6). Pakistan aims to attract FDI in e-commerce.

Figure IV.23
Greater emphasis on investment promotion in digital strategies, but limited role for foreign direct investment
Investment-related aspects of national digital strategies
(Percentage of strategies)



Source: UNCTAD.

Qatar has an FDI attraction programme for the digital economy, and Singapore promotes FDI in its AI centres of excellence. In Africa, Morocco targets AI actors and venture capital investors.

Sectoral strategies can serve as effective promotion tools by highlighting a country's commitment to development, clarifying regulatory aspects and laying out investment promotion measures. However, only a few strategies include a specific FDI dimension. In Costa Rica, the national digital strategy is complemented by sectoral plans, including a national plan for science, technology and innovation. A dedicated road map for the semiconductor sector aims to position the country as a key player in the United States semiconductor supply chain. The India Semiconductor Mission aims to develop the semiconductor ecosystem in that country and integrate it into the global supply chain through incentives and facilitation measures. Chile has also introduced a National Data Centres Plan to attract foreign investment.

AI strategies have surged in recent years. In 2017, only 2 per cent of countries had adopted an AI strategy. By 2023, the share of countries with an AI strategy had risen to 38 per cent. However, significant regional variations exist: only 17 per cent of countries in Africa, 24 per cent in Latin America and the Caribbean, and 34 per cent in developing Asia and the Pacific had adopted an AI strategy by 2023, compared with 75 per cent of developed countries.

Regional digital strategies have also emerged as important frameworks for guiding national digital policy development, ensuring policy coherence across borders and fostering regional cooperation on digital infrastructure, thereby enhancing the attractiveness of a region to FDI. They facilitate economies of scale, reduce transaction costs and enable the cross-border flow of digital services. By aligning standards, facilitating interoperability and encouraging joint policy action, regional strategies help build a competitive environment for investment in the digital economy.

Box IV.6
Malaysia: Approach to attracting investment in the digital economy

The first digitalization initiative in Malaysia was the Multimedia Super Corridor in 1996, following the establishment of the Malaysia Digital Economy Corporation, a government agency dedicated to digital growth and investment promotion in the digital economy. The country's digital development experience has built on five core pillars that underpin its digital transformation strategy:

A clear national vision, backed by top-level political commitment, guides digital development. The Malaysia Digital Economy Blueprint (MyDIGITAL) and the New Industrial Master Plan 2030 provide strategic and coordinated direction and a clear blueprint for policy action.

Transparent and adaptive regulations support data privacy, cybersecurity, consumer protection, cross-border e-commerce and online dispute resolution mechanisms.

Targeted investment promotion and facilitation through initiatives such as DE Rantau and the Digital Catalytic Programmes helped attract more than RM161.9 billion (approximately $38 billion) in investment in the digital economy between 2021 and 2024, including from Amazon, Microsoft and Nvidia (all United States).

Infrastructure development and digital inclusion are pursued in tandem. The JENDELA (Jalinan Digital Negara, or Digital Country Network) programme has expanded broadband to more than 97 per cent of populated areas. More than 1,000 digital economy centres support access to digital tools, training and e-commerce, particularly for youth and women.

Ecosystem-building focuses on connecting enterprises to platforms, finance, skills and global markets, going beyond fiscal incentives to attract investment and develop local firms.

The national digital strategy also aligns with the regional goals of the ASEAN Digital Economy Framework Agreement, which aims to develop a $2 trillion digital economy by 2030. As ASEAN chair in 2025, Malaysia is leading efforts to conclude the Agreement and advance high-quality investment in the digital economy linked to inclusive and innovation-driven growth.

Source: UNCTAD, based on Malaysia Digital Economy Corporation website (https://mdec.my/) and official intervention at the 15th Session of the Investment, Enterprise and Development Commission, on 5 May 2025.

While these strategies differ across regions in design, institutional mechanisms and legal status, all provide shared objectives and policy guidelines to influence national policymaking (box IV.7).

However, only 38 per cent of developing countries refer to regional strategies in their national digital strategies, suggesting potential for further policy alignment.

Box IV.7
Regional digital strategies in Africa, Asia, Europe and Latin America and the Caribbean

In **Africa** the regional digital agenda is anchored in the African Union Digital Transformation Strategy (2020–2030), which aims to build an inclusive and integrated digital economy. This is complemented by the Smart Africa Alliance, promoting PPPs in digital innovation. The African Continental Free Trade Area (AfCFTA) Protocol on Digital Trade aims to establish a regulatory framework for cross-border e-commerce and digital services. Regional strategies from the East African Community, Economic Community of West African States and the Southern Africa Development Community support policy harmonization and investment in digital infrastructure.

In **ASEAN** the digital strategy began with ICT-focused master plans aimed at expanding infrastructure and digital access and has since evolved into a plan to build a regional digital economy. The ASEAN Digital Masterplan 2025 and the Bandar Seri Begawan Roadmap promote cross-border digital trade, e-commerce, digital payments and cybersecurity. The ASEAN Digital Economy Framework Agreement aims to establish a legally binding framework for a unified digital market. Malaysia and Singapore have aligned their digital economy policies with ASEAN's broader push for cross-border digital trade, digital payments and e-commerce. Indonesia and Viet Nam have incorporated ASEAN's cybersecurity and digital talent development goals into their national digital agendas.

In **Europe**, the Digital Decade Policy Programme 2030 aims to create an environment favourable to investment and innovation by setting measurable digital development targets for member States in key areas such as skills, infrastructure, business digitalization and public services. The programme mandates national digital road maps, joint monitoring and a framework for multi-country projects.

The Digital Agenda for **Latin America and the Caribbean** provides a non-binding regional framework that helps coordinate national digital strategies. It is structured around three main axes: connectivity and infrastructure, digital governance and innovation. Countries such as Brazil, Chile and Colombia have aligned their policies with its goals, particularly in broadband expansion, AI implementation and digital inclusion.

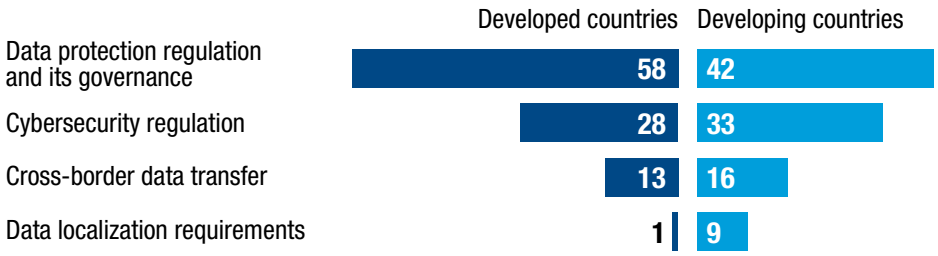
Source: UNCTAD, based on review of the strategies

b. Data governance, intellectual property and competition

Data security and privacy and IP protection are the top regulatory elements that investors in the digital economy care about (Stephenson, 2020). Along with the competition framework, these elements build trust, foster innovation and ensure fair market dynamics. Over the past five years, data governance initiatives represented the largest share of digital policy measures by developed and developing countries (35 per cent and 41 per cent, respectively). These efforts focus on data protection and governance (figure IV.24) at national, regional and international levels (box IV.8). Despite these efforts, many developing countries, particularly LDCs, still lack dedicated data protection and cybersecurity frameworks, unlike developed countries and the top 15 countries (figure IV.25).

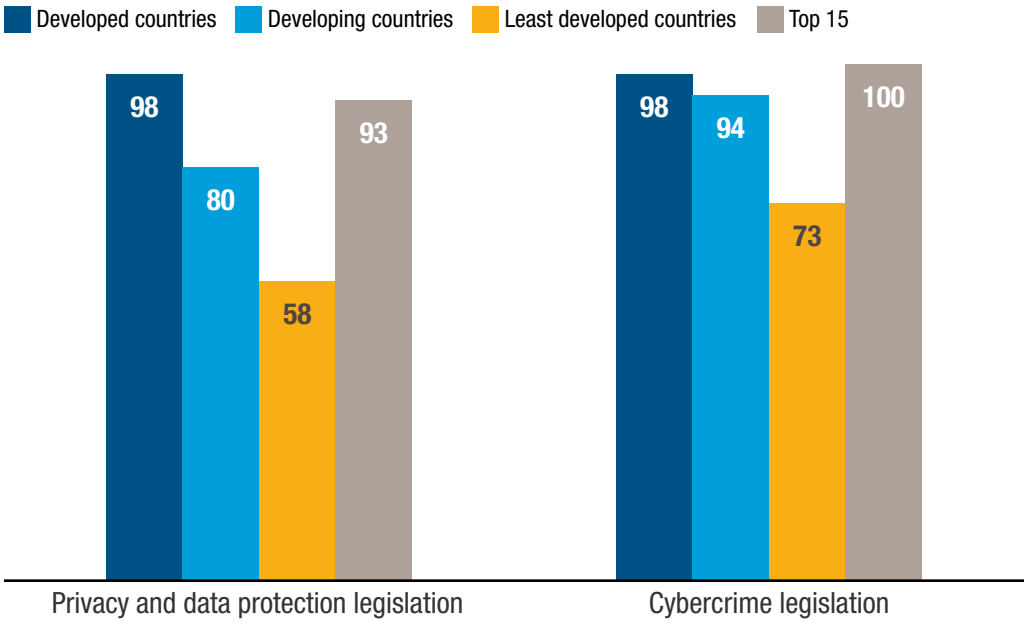
Countries that have a framework focus on the rights of individuals over personal data and the responsibilities of data processors and controllers.

Figure IV.24
Data protection is a key policy concern across all countries
Data governance measures by type and level of development, 2020–2024
(Percentage)



Sources: UNCTAD, Investment Policy Monitor database and Digital Policy Alert initiative of the St. Gallen Endowment for Prosperity through Trade.

Figure IV.25
Many developing countries lack data protection and cybercrime frameworks
Share of countries with legislation on privacy and data protection and cybercrime, by economic grouping, 2024
(Percentage)



Source: UNCTAD, based on the UNCTAD Global Cyberlaw Tracker (https://unctad.org/topic/ecommerce-and-digital-economy/ecommerce-law-reform/summary-adoption-e-commerce-legislation-worldwide).

Box IV.8
Regional and international initiatives for data governance and cybersecurity in the digital economy

The United Nations Global Digital Compact, adopted at the Summit of the Future in September 2024, aims to advance responsible, equitable and interoperable data governance, with commitments on data privacy, security and cross-border data flows. To translate these commitments into practice, the General Assembly mandated that the Commission on Science and Technology for Development establish a Multi-Stakeholder Working Group on Data Governance at All Levels as relevant for development. The Working Group was asked to conduct an inclusive global dialogue and to report back to the General Assembly, no later than its 81st session, with recommendations on foundational principles for equitable data governance; ways to ensure interoperability between national, regional and international data systems; approaches for fair benefit-sharing from data; and options to facilitate safe, secure and trusted cross-border data flows. Comprising 27 State members and 27 non-State members drawn from business, civil society, academia and the technical community, the Working Group serves as the principal multi-stakeholder platform within the United Nations system for advancing data governance.

In cybersecurity, multilateral treaties focus on cybercrime. The Budapest Convention on Cybercrime (2001) was the first multilateral treaty to address cybersecurity issues, criminalizing various forms of cybercrime and outlining measures for data handling and international cooperation in investigations. The United Nations Convention against Cybercrime (2024) prohibits unauthorized access to information systems, establishes frameworks for cross-border cooperation in handling electronic evidence and addresses technology-facilitated sexual violence against children.

Regional instruments include the African Union Convention on Cyber Security and Personal Data Protection (2014), the Arab Convention on Combating Information Technology Offences (2010), the Shanghai Cooperation Organization Agreement on Cooperation in Ensuring International Information Security between the Member States of the SCO (2009) and the Commonwealth of Independent States Agreement on Cooperation in the Fight against Crimes in the Field of Information Technologies (2001).

Source: UNCTAD.

Developing countries focus on establishing or regulating authorities for enforcing data protection laws and reinforcing capacity. On cybersecurity matters, all countries emphasize risk management, consumer data protection, infrastructure resilience and national security. Developed countries address emerging threats such as AI security and post-quantum cryptography, while developing countries prioritize strengthening the legal framework and addressing cybercrime prevention.

Cross-border data flows are crucial for the digital economy, enabling international business operations, innovation and investment. Restrictive or unclear data transfer policies can deter investment and innovation. An effective policy framework must balance personal data protection, national interests and accountability.

Both developed and developing countries have adopted cross-border data transfer regulations, ranging from strict data localization requirements to policies for the free flow of data (box IV.9). National policies depend on technological, economic, social, political, institutional and cultural conditions (UNCTAD, 2021).

Recent years have seen the adoption of data localization requirements, particularly among developing countries. These requirements often focus on specific categories of data, such as government data (e.g. Nigeria and Saudi Arabia), e-payment institutions (e.g. Mexico and Türkiye) and social media (e.g. Pakistan).

Investors in the digital economy seek countries with robust and transparent IP laws aligned with international agreements, such as the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement (under the World Trade

Box IV.9
Cross-border data transfer and localization requirements

Both developed and developing countries use various regulatory models to protect personal data, safeguard national interests and promote accountability in the global data economy. Among the most common mechanisms:

Data localization requirement. Some countries require data to be stored or processed within national borders, particularly for national security. For example, Egypt mandates local hosting for classified government data, and Thailand and Viet Nam impose similar requirements for high-risk data.

Approval or prior notification. Countries may require approval or notification before data can be transferred abroad, especially if the recipient country lacks an adequate legal framework. Algeria and the Russian Federation require notification or approval based on the adequacy of the recipient country's data protection laws.

Adequacy decisions. Countries or regional organizations may determine that a foreign country's data protection regime is adequate, allowing for free data flow. The European Union General Data Protection Regulation, for instance, facilitates the transfer of data to countries that have equivalent protection standards.

Standard contractual clauses or model contractual clauses. These legally binding clauses ensure data protection during international transfers. The European Commission's draft standard contractual clauses are used for transfers to countries where privacy protection is inadequate.

Binding corporate rules. These internal policies are adopted by multinational corporations to enable the lawful transfer of personal data across borders within the same corporate group. These rules are legally enforceable and must be approved by the relevant data protection authority in at least one jurisdiction. For example, in Türkiye the Personal Data Protection Law of 2016 approved binding corporate rules for international transfers.

Other mechanisms include certification or sectoral codes of conduct, which enable organizations to demonstrate compliance with data protection standards as safeguards for transfers to countries without an adequacy decision.

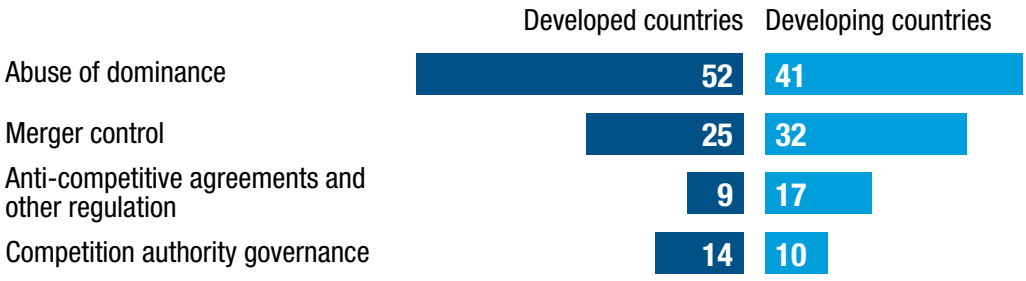
Source: UNCTAD, based on the Digital Policy Alert initiative of the St. Gallen Endowment for Prosperity through Trade.

Organization (WTO)), the World Intellectual Property Organization (WIPO) Internet Treaties, i.e. the WIPO Copyright Treaty and the WIPO Performances and Phonogram Treaty, or with regional regulations. The TRIPS Agreement, adopted in 1994, contains limited references to digital innovations, such as the protection of computer programmes through copyright and layout designs of integrated circuits. Hardware and other components for digital technologies can generally be protected through patents. The WIPO Internet Treaties further define copyrights, protections and exceptions for authors and rights holders regarding computer programmes, digital content and data compilations. As of early 2025, close to 120 countries had ratified these treaties and adapted their national legislation accordingly, including nearly all developed countries, most of the top 15 countries, about 50 per cent of developing countries and 30 per cent of LDCs.[2]

For developing countries, adjusting IP frameworks for the digital economy requires promoting technological innovation, protecting domestic industries, ensuring access to knowledge and complying with international norms. Many countries are adopting a flexible approach to their IP regime to leverage digital transformation while protecting cultural, social and economic interests. Among the top 15 countries, for example, Brazil and Nigeria enhanced copyright laws to address online piracy and digital distribution, Kenya protects traditional knowledge, and Singapore allows copyrighted material for computational data analysis under specific conditions, including lawful access. In view of the widening disparity in IP ownership between developed countries and developing countries – with the former dominating high-value patents in core digital industries – international support for strengthening IP and innovation frameworks in developing countries has become increasingly important.

Foreign investment in the digital economy often raises competition-related concerns beyond traditional market dynamics. Price signals alone are insufficient in defining digital markets because of the markets' multifaceted nature (e.g. data-driven business models, platforms, network effects). Competition is a key concern for both developed and developing countries, with more than a third of digital policy measures adopted in 2020–2024 targeting digital services, e-commerce and platform economies (figure IV.26).

Figure IV.26
Competition measures focus on abuse of dominance in all countries
Digital policy measures on competition, by type and level of development, 2020–2024 (Percentage)



Sources: UNCTAD, Investment Policy Monitor and the Digital Policy Alert initiative of the St. Gallen Endowment for Prosperity through Trade.

[2] Based on WIPO data accessed on 31 March 2025, available at https://www.wipo.int/wipolex/en/treaties/ShowResults?search_what=C&treaty_id=20 and https://www.wipo.int/wipolex/en/treaties/ShowResults?search_what=C&treaty_id=16.

Regulatory efforts by both developed and developing countries focus on preventing data-related abuses by dominant digital platforms (gatekeepers), including self-preferencing and other anti-competitive behaviour. Approaches include adapting traditional competition frameworks, using other legislative frameworks (e.g. privacy and consumer protection laws) or adopting targeted regimes for digital platforms. These include ex ante regulations to capture practices harmful to competition but difficult to establish as infringements under existing frameworks (UNCTAD, 2023a). The most common model for these ex ante regimes is the Digital Markets Act of the European Union.

Merger oversight is a priority, with a focus on revising notification thresholds, preventing "killer" acquisitions by domestic or foreign companies, enhancing enforcement and improving transparency. Several countries have expanded the powers of national regulators and competition authorities through new investigative tools, higher fines and improved assessment of anti-competitive agreements. These developments have important implications for cross-border M&As, as stricter merger controls can increase scrutiny of foreign investors seeking to acquire domestic firms.

While some countries introduce specific regulations for digital platforms, others opt to amend competition laws or use "soft law" approaches. The best option depends on the country's legal tradition, resources, experience, and regulatory culture and objectives.

Data governance, IP and competition are critical for a dynamic digital economy policy framework. Unclear or restrictive frameworks can stifle innovation and favour dominant actors. Countries should adopt data governance and cybersecurity frameworks for secure, lawful and purpose-specific data handling, including in AI systems, and adapt localization approaches to national development goals. A holistic approach is needed for cross-border data transfer regulations, considering domestic and international factors (UNCTAD, 2021).

IP frameworks need strengthening to enhance legal certainty and attract technology-driven investment. LDCs, in particular, need to build capacity not only to design and administer effective IP systems suited to their local needs and circumstances but also to enforce IP protections as part of a credible IP regime (Commonwealth Secretariat and UNCTAD, 2024b). The competition framework could be enhanced by embedding antitrust rules specific to the digital economy, increasing investigative capacity, mandating interoperability standards and instituting mechanisms for continuous market review.

2. Stimulating investment

a. Openness to FDI in the digital economy

The approach to regulating FDI entry in the digital economy varies significantly between developed and developing countries. Developed countries impose fewer foreign equity restrictions but increasingly rely on investment screening mechanisms to address national security concerns, including economic security, technological sovereignty and data protection (UNCTAD, 2023b). As a result, digital economy actors are increasingly subject to investment screening regulations.

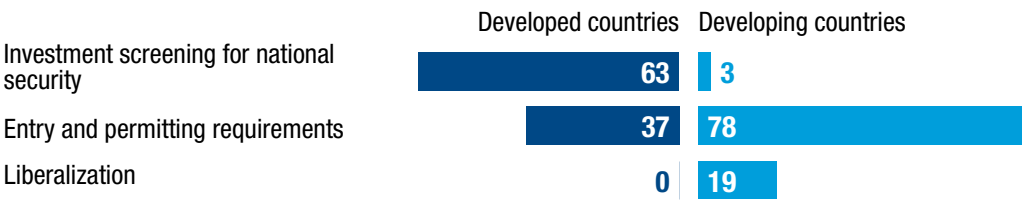
Between 2020 and 2024, investment screening-related measures accounted for more than 60 per cent of digital policy measures governing entry in developed countries (figure IV.27). During the same period, digital sector investments represented 30 to 60 per cent of all investment projects subject to national security screening in countries for which data are available.[3] This trend towards stricter oversight of technology-driven investments is also reflected in the introduction of screening measures targeted to AI and other emerging technologies (see chapter II).

Developing countries tend to regulate FDI entry through foreign equity restrictions, such as bans, joint venture requirements or capital thresholds. Few rely on investment screening for national security purposes; most apply general licensing and permitting requirements that affect all investors.

The OECD FDI Regulatory Restrictiveness Index, which reflects foreign equity limitations, discriminatory screening or approval mechanisms, and operational restrictions, shows that developing countries, including LDCs, maintain a more restrictive approach to FDI across digital sectors, including telecommunications (figure IV.28). The top 15 countries are more open than other developing countries across these digital sectors.

Countries wishing to develop their digital economy through FDI should review foreign equity restrictions, particularly in core sectors, against their strategic objectives and, where appropriate, ease them, while safeguarding national security and public interest. When restrictions to manage the security risks associated with FDI are introduced, it is essential that they are implemented in a clear and transparent manner.

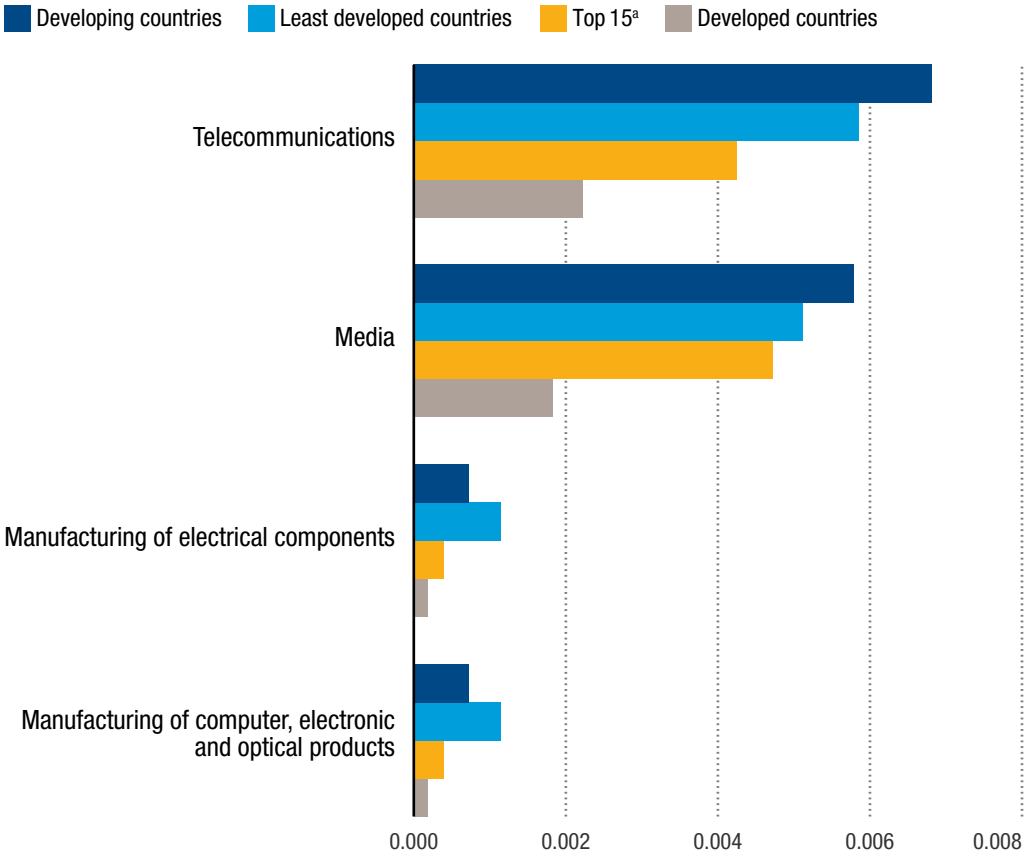
Figure IV.27
Approaches to the entry of foreign investors differ
Entry-related digital policy measures by type and level of development, 2020–2024
(Percentage)



Sources: UNCTAD, Investment Policy Monitor database and the Digital Policy Alert initiative of the St. Gallen Endowment for Prosperity through Trade.

[3] Annual reports on FDI screening by relevant agencies indicate that investment projects in the digital economy represented 60 per cent of all screened projects in Japan in 2020–2023, 45 per cent in Germany in 2020–2024, 44 per cent in the United Kingdom in 2022–2024, 34 per cent in Italy in 2022–2023 and 30 per cent in the United States in 2020–2023.

Figure IV.28
The most restricted digital economy sectors are telecommunications and media
FDI Regulatory Restrictiveness Index in digital sectors, 2023
(Score)



Source: UNCTAD, based on the OECD FDI Regulatory Restrictiveness Index.

Note: Data are available for 104 countries.

[a] Data do not cover Nigeria and Pakistan.

b. Investment facilitation

Facilitation initiatives foster FDI attraction in priority sectors, including the digital economy, by making it easier to establish and operate businesses (UNCTAD, 2024c). For example, the ease of obtaining a license for digital infrastructure is a key factor influencing investor decisions (Stephenson, 2020). Since 2020, several countries have implemented facilitation initiatives targeting the digital economy. These include transparency measures such as guidance documents on screening mechanisms (e.g. India and the Netherlands) and streamlining procedures for start-ups (e.g. Albania and Saudi Arabia) as well as specific sectors such as data centres (e.g. Chile and Malaysia) or semiconductors (e.g. Costa Rica and India). Facilitation services provided by IPAs include customized support for investors, such as visa assistance.

Investment facilitation initiatives also support FDI attraction in the digital economy by leveraging e-government tools to streamline procedures and increase transparency (UNCTAD, 2024c).

Direct facilitation services, such as licensing support and matchmaking with local talent, help investors navigate regulatory and cultural contexts.

Complementary initiatives, including technoparks and regulatory sandboxes, further enhance investment attractiveness. Technoparks foster innovation and attract investment by providing ecosystems for collaboration. Regulatory sandboxes enable enterprises to test new products in a controlled environment, reducing risks and enhancing confidence. Nearly all the top 15 countries have introduced regulatory sandboxes, particularly for fintech and increasingly in sectors such as telecommunications and digital technologies. For instance, Brazil, Colombia, Kenya and Singapore have implemented regulatory sandboxes to promote innovation in AI and other frontier technologies while ensuring responsible development.

c. Investment promotion

By bridging information gaps, promoting comparative advantages, facilitating processes and supporting reinvestment, IPAs are instrumental in attracting FDI in the digital economy. IPAs also promote regulatory improvements and channel investor concerns to line ministries. They should be core players in the government approach to digital transformation, ensuring coherence between national and sectoral strategies and investment promotion efforts. Strengthening their capacity and expertise, especially in emerging technologies, can improve the effectiveness of promotion strategies.

However, as mentioned in section 1, few national digital strategies reflect a role for IPAs. This is confirmed by respondents to the UNCTAD global survey of IPAs conducted for this report, which highlights that only about 20 per cent of developing-country IPAs are involved in the design of digital development strategies. Their role is often limited to advocacy and implementation (more than half of surveyed IPAs). While three quarters of developing-country IPAs in the survey promote investment in core digital infrastructure, half or less promote other digital economy activities. Conversely, a majority in developed countries promote investment in semiconductors and electronic equipment (71 per cent), fintech (64 per cent) or robotics and AI (100 per cent).

In nearly all the top 15 countries, IPAs promote investment in a broad portfolio of digital economy activities, either under general headings such as “ICT and creative industries” or through specific subsectoral approaches, e.g. creative industries in Brazil and Colombia, semiconductors in Costa Rica, electronics in Mexico and Singapore, and data centres and cloud services in Thailand. Their activities include targeting and/or business development (e.g. Armenia, Rwanda, Thailand), image building (e.g. Nigeria, Peru, Türkiye), aftercare (e.g. Armenia, Colombia, Costa Rica), and public-private dialogue and advocacy (e.g. Kenya, Pakistan, South Africa). Other functions include event organization (e.g. Brazil) and presentation of PPP and procurement opportunities (e.g. Nigeria, Peru).

3. Fostering impact

a. Local digital content

Digital content regulations aim to create a safer and more accountable online environment by establishing content moderation frameworks and regulatory authorities and by promoting investment in the localization of content produced by digital economy companies. Since 2020, most measures that regulate digital content have focused on moderating content, including establishing liability for digital platforms, preventing terrorism and cybercrime, regulating digital advertising and enhancing AI transparency.

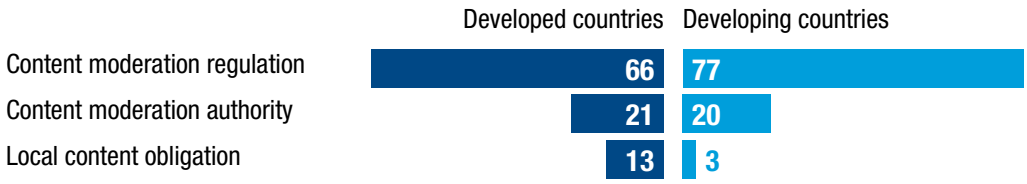
Strengthening oversight through content moderation authorities has also been a policy focus (figure IV.29).

Several developed and some developing countries have introduced local digital content requirements to develop domestic creative industries or ensure that they remain competitive. These include requiring streaming platforms to invest a share of local revenue in national or regional productions (e.g. Italy, the Netherlands and Switzerland), introducing local content quotas (e.g. Ireland, Nigeria and Pakistan) or tying the licensing of broadcasting firms to their local content performance (e.g. Nigeria).

While these measures aim to support local industries by encouraging foreign firms to invest in domestic productions, they can pose challenges if they are too restrictive. Stricter requirements may reduce content availability, increase costs and hinder foreign platforms, affecting competition and innovation. Depending on their formulation, they also risk contradicting international commitments under the WTO agreements.

Developing countries considering such measures should adopt scalable local content requirements tailored to their context, considering their market size, production capacity and international commitments. Larger markets might use quotas and reinvestment obligations (box IV.10), whereas smaller ones could offer incentives such as tax benefits and support for co-production in order to foster linkages. Aligning these requirements with broader digital strategies can enhance their impact. A phased approach with regular stakeholder consultation and impact assessment ensures effectiveness and adaptability.

Figure IV.29
Content moderation is the primary focus of digital content regulations
Digital content regulations by type of moderation, 2020–2024
(Percentage)



Sources: UNCTAD, Investment Policy Monitor and the Digital Policy Alert initiative of the St. Gallen Endowment for Prosperity through Trade.

Box IV.10
Local content requirements and FDI in Nigeria

In Nigeria the media and entertainment sector, known as Nollywood, is the world's second most prolific film industry, producing about 2,500 movies annually and expected to grow by nearly 10 per cent annually through 2028. The National Broadcasting Commission Act and the Nigeria Broadcasting Code mandate that 60 per cent of content for the Nigerian market must be locally produced. The evaluation of licensing extension applications of broadcasters also entails assessment of their local content performance.

MultiChoice, a South African broadcasting company, opened its Nigerian subsidiary in 1993. It has since grown from 30 employees to more than 2,000 and indirectly supports more than 20,000 additional jobs. From 2016 to 2019, the company invested more than $30 million in content and local production facilities alone. In 2022, its streaming service also established local offices in the country, with the objective to further bolster the creation of local content.

Source: UNCTAD, based on World Bank Group (2022), PWC (2024) and company information (https://www.multichoice.com/nigeria.php).

b. Taxation and incentives

The digital economy affects both direct and indirect taxation, requiring a balance between tax collection and a simple, non-discriminatory regime (UNCTAD, 2025). The intangible nature of digital services and the absence of physical presence in a jurisdiction makes the attribution of value creation and oversight of transactions difficult. Without specific rules to govern this type of income, it may also lead to market distortions between digital and non-digital companies and to profit shifting by MNEs.[4] The adoption of taxes specific to the digital economy and the implementation of capacity-building for tax administrations are crucial.

More than 80 per cent of developed countries have taxes specific to the digital economy, compared with 40 per cent of developing countries and less than 25 per cent of LDCs.[5] In addition, the UNCTAD review for this chapter shows that since 2020, nearly two thirds of tax measures for the digital economy in developed countries targeted specific digital activities within the narrow scope definition. In contrast, half of the measures in developing countries targeted core digital economy activities.

Among the top 15 countries, 60 per cent have adopted taxes specific to the digital economy. Examples include provisions to determine whether e-commerce or digital income is sourced locally for corporate income tax purposes (e.g. Rwanda and Singapore) and value added tax registration for non-resident digital providers (e.g. Nigeria). In addition, some have adopted a digital services tax (e.g. Türkiye), while others have introduced a significant economic presence rule (e.g. Colombia, Kenya, Nigeria and Pakistan).[6]

As highlighted in chapter II, incentives to promote investment in the green and digital transformation have proliferated in recent years.

[4] See OECD (n.d.), Cross-border and international tax, https://www.oecd.org/en/topics/cross-border-and-international-tax.html.
[5] Based on data from the ITU ITC Regulatory Tracker 2022, available at ITU | G5 Benchmark.
[6] See International Bureau of Fiscal Documentation, Tax Research Platform. Available at https://research.ibfd.org/#/.

An analysis of global digital policy measures over five years shows that incentives are the main tool to attract investment in the digital economy: 60 per cent of promotional measures in developed countries and 51 per cent in developing countries. This is consistent with the results of the annual UNCTAD global survey of IPAs, which shows that tax incentives are considered the main instrument for attracting investment in the digital economy in developing countries, whereas financial incentives are favoured by developed countries, second only to technoparks and innovation hubs.

Several of the top 15 countries have introduced tax incentives for digital economy investments. They support R&D with deductions and depreciation (e.g. Brazil), tax credits (e.g. Colombia, Mexico, Nigeria) and tax exemptions (e.g. Rwanda, Thailand, Türkiye). Incentives for start-ups are offered by Armenia, Nigeria, Pakistan and Singapore; Thailand supports advanced technology training. Colombia, Mexico and Rwanda also support financing companies, with Rwanda offering targeted incentives for angel investors.

Several developed and developing countries have also adopted financial incentive schemes to promote the development of telecommunications infrastructure in remote areas through universal service funds. However, challenges such as underutilization, inefficiencies and oversight of such funds hinder their potential impact. In this regard, some countries have adopted partnership approaches (see box IV.6) or combined incentives with regulatory measures and development initiatives. In Chile, for instance, direct subsidies are used together with connectivity obligations that are integrated into spectrum allocation processes. They are complemented by a dedicated initiative with the Joint SDG Fund of the United Nations, which focuses on providing rural communities with access to high-quality Internet and digital technologies.

Despite the growing use of investment incentives, the UNCTAD global survey shows that IPAs in developing countries consider the availability of fiscal and financial incentives as the main challenge in attracting FDI in the digital economy, followed by electricity availability and cost. Although incentives remain important for promoting investment, their effectiveness depends on careful design. Incentives that are not well targeted, time-bound or subject to regular impact assessments may result in suboptimal outcomes. Moreover, their relative influence on investor decisions is uncertain, particularly when compared with more fundamental enablers such as the quality of infrastructure, the availability of digital skills, and the maturity and predictability of the regulatory environment.

c. Environment

The digital economy presents multiple environmental challenges. These include resource depletion linked to the material footprint of digital devices and infrastructure; high energy consumption, particularly in computer-intensive processes; and significant water use, including for cooling data centres and electronic manufacturing. Digital devices ultimately become electronic waste, which is a growing global concern (UNCTAD, 2024a).

The environmental impact of international investment in the digital economy depends on host countries' policies and standards. However, many digital strategies, especially in developing countries, overlook this impact. Only about 50 per cent of strategies in developing countries address environmental concerns, compared with 86 per cent in developed countries. These concerns are often broadly framed, without specific metrics.

Even when considering national environmental policy frameworks, regulations specific to digital activities in developing countries remain the exception.

In the case of electronic waste regulations, for instance, while 98 per cent of developed countries have adopted targeted regulations, only 41 per cent of developing countries have done so (33 per cent in the case of LDCs).[7] Among the top 15 countries, few have environmental policies targeting digital sectors and most of these policies operate on a voluntary basis.

Exceptions exist, and several countries that aim to attract investment in data centres are increasingly highlighting energy consumption concerns and setting efficiency targets. For instance, Chile markets its renewable energy as a comparative advantage to attract FDI in data centres but requires the adoption of sustainable practices focusing on water conservation, alternative cooling systems and energy efficiency. In China and Singapore, data centre development plans promote energy-efficient technologies, liquid cooling and renewable energy integration, setting mandatory targets for power usage effectiveness. Denmark and Finland encourage the integration of data centres into district heating systems.

When aligned, investment in the digital and green transitions can reinforce each other, creating synergies for sustainable development. Countries should assess the environmental risks of FDI in digital economy projects, especially in high-impact sectors such as semiconductors and data centres. This assessment includes evaluating energy use, water consumption, emissions and overall environmental footprint. Investment criteria should incorporate sector-specific benchmarks (e.g. power usage effectiveness targets, water limits, emissions thresholds). Countries could also link incentives to the adoption of sustainable practices such as renewable energy use, efficient cooling technologies and circular economy integration.

d. Digital skills and linkages

Digital skills are a key enabler for attracting FDI in the digital economy (Stephenson, 2020). In response, most national digital strategies prioritize the development of digital skills. At the same time, FDI can contribute to local digital capacity through knowledge transfer and linkages with domestic firms. When effectively aligned, digital skills development and FDI attraction can reinforce each other in a virtuous cycle; however, the potential for creating this synergy is often underexploited.

Many countries, including most of the top 15 countries, have adopted schemes to attract foreign digital skills. Digital nomad visas aim to attract remote workers in digital sectors (e.g. in Australia, Bulgaria, China, Costa Rica, Malaysia and Saudi Arabia), while tech visas target skilled professionals and start-up founders (e.g. in Peru, Rwanda, Singapore, Thailand and Türkiye). Some countries offer one-stop shop services (Thailand) or assign visa authority to IPAs (Singapore).

Other initiatives include partnerships with foreign education institutions to establish local branches (e.g. Rwanda), promoting traineeship programmes with private companies (e.g. Armenia, Nigeria) and developing AI training with FDI support (e.g. Costa Rica). Many countries have established diaspora programmes aimed at attracting or leveraging the tech skills of citizens living abroad. For instance, the Start-Up Armenia Foundation connects diaspora Armenians with local entrepreneurs for investment, mentorship and networking opportunities. Rwanda and the International Organization for Migration have partnered to address technical and vocational education and training needs through the engagement of highly skilled diaspora professionals residing in Europe. Nigeria organizes annual Diaspora Investment Summits to promote “brain gain” by connecting diaspora tech professionals with local start-ups, universities and investors.

[7] Based on data from the ITU ITC Regulatory Tracker 2022, available at ITU | G5 Benchmark.

Developing countries take various approaches to linkages support. Some facilitate direct engagement among enterprises through one-stop, online, business-to-business marketplaces and databases (e.g. Kenya, Nigeria, Singapore) (box IV.11). Others adopt case-by-case matchmaking through IPAs (e.g. Costa Rica, South Africa, Türkiye) or leverage technology development zones and SEZs (e.g. China, India, Malaysia, the United Arab Emirates). Several bilateral partnerships promote business linkages in digital sectors (e.g. Nigeria–Japan, Singapore–France and the United States, China–Pakistan). The UNCTAD Business Linkages Programme assists countries in these efforts.

Box IV.11
Driving international cooperation and investment in the digital economy through business linkages – the example of Singapore

Launched in 2017, the Global Innovation Alliance (GIA) is a joint initiative between the Ministry of Education of Singapore, the Singapore Economic Development Board (the country's IPA) and Enterprise Singapore, the government agency for enterprise development. Its goal is to connect Singapore-based start-ups and SMEs with global innovation ecosystems. Under the GIA, Enterprise Singapore supports three initiatives aimed at fostering business linkages with foreign partners, all focused on technology and innovation:

1) Acceleration programmes. Spanning more than 20 cities worldwide, they are designed to accelerate market entry of companies through workshops, mentorships and networking with potential clients and partners. They help Singapore-based companies to expand overseas and international start-ups to establish a presence in the country.

2) Co-innovation programmes. These programmes encourage collaboration between Singapore-based companies and overseas partners across 40 countries, including Australia, China, France, Germany, India, Israel, Japan and the Republic of Korea. The collaborations focus on R&D projects resulting in new products or solutions with strong market potential. Companies can register on a business-to-business platform to find project partners and participate in joint innovation calls. Funding support can be provided by Enterprise Singapore and the counterpart institution in the partner country.

3) GIA+ Initiative. The initiative supports Singapore-based start-ups in joining global accelerator programmes. Start-ups gain access to in-market experts, mentorship, resources and extensive networks to scale internationally. Enterprise Singapore provides financial support to eligible start-ups to help cover the costs of participation in these programmes.

Source: UNCTAD, based on Government of Singapore sources (https://www.openinnovationnetwork.gov.sg/ and https://www.enterprisesg.gov.sg/grow-your-business/innovate-with-us/market-access-and-networks/global-innovation-alliance/overview).

4. Harnessing international agreements

The international legal regime regulating cross-border investment in the digital economy is increasingly complex, presenting both opportunities and challenges. The analysis of existing IIAs shows that treaties can (i) seek to increase flows of investment related to the digital economy, (ii) directly regulate digital economic activity and (iii) be used in Investor–State dispute settlement (ISDS) relating to the digital economy, including digital services and infrastructure investment.

a. The role of IIAs in enhancing investment flows for the digital economy

Old-generation IIAs generally lack provisions directly related to digital investment but also contain an open-ended definition of investment, covering physical assets, such as information and communication technology infrastructure, and non-physical assets, including IP rights. Digital economy investment that relies on some form of physical presence in the territory of the host State, such as a local company or branch, tends to be covered whereas stand-alone digital goods and services, such as apps and websites, may not fall under the treaty definition of investment.

New-generation IIAs more comprehensively address the digital economy with provisions on investment facilitation, promotion, cooperation and liberalization. These treaties could enhance investment in the digital economy to bridge the digital divide, including investment in fundamental infrastructure.

i. Facilitating investment in the digital economy

Modern IIAs aim to enhance investment flows, including in the digital economy, by embracing investment facilitation features. These features tackle ground-level obstacles to investment, for example, by ensuring transparency, streamlining processes and creating stakeholder engagement mechanisms (UNCTAD, 2023c). Increasingly, IIAs incorporate digital investment facilitation tools aligning with the needs of the digital economy, for example, by allowing remote inquiries and permit requests. Between 2021 and 2023, 60 per cent of IIAs included digital facilitation, up from 36 per cent in 2015–2016 (UNCTAD, 2024c). At the multilateral level, the WTO Investment Facilitation for Development Agreement requires parties to make available, by electronic means, information of importance to investors and encourages the acceptance of electronic submissions for investment authorization, where required. Generally, these measures apply to all investors and investments.

Some IIAs specifically include facilitation measures relating to the digital economy. By the end of 2024, more than 100 treaties encouraged the publication of laws relating to e-commerce and digital trade. Similarly, some treaties encourage engagement between government and digital economy stakeholders. Other treaty provisions are specific to particular sectors or economic activities. The African Continental Free Trade Agreement (AfCFTA) Protocol on Digital Trade, for example, obliges its parties to facilitate investment in ICT sectors. In regard to specific digital services, treaty provisions on e-payment services frequently require the timely processing of licenses and the publication of relevant laws and regulations.

ii. Promoting investment in the digital economy

Investment promotion is often tailored to specific sectors or projects. New-generation IIAs frequently include provisions for priority sectors, which may include ICT. There is no standard approach for promoting investment in the digital economy, thus leading to diverse practices. For instance, the AfCFTA Protocol on Digital Trade broadly refers to promoting investment in digital infrastructure and specifically calls for promoting investment in ICT.

Similarly, the Trade and Economic Partnership between the European Free Trade Association and India contains references to increased investment flows and technology collaboration, including cooperation between centres of excellence, dialogue and exchange of information between the parties as well as sharing of best practices.

Technological cooperation chapters in new-generation IIAs often mention digital technology and joint promotion activities (box IV.12). Such general clauses on cooperation and promotion for digital economy investment reflect the parties' intentions and can be detailed in memorandums of understanding. For example, the Australia–United Arab Emirates Comprehensive Economic Partnership Agreement includes a memorandum on "investment cooperation in data centres and AI projects", outlining areas of cooperation to explore digital economy investment opportunities.

Box IV.12
Transfer of digital technology and international investment treaties

Technology transfer involves the cross-border movement of systematic knowledge and technology for producing goods, applying processes or delivering services. Bridging the digital divide inherently involves such transfer to developing countries, particularly LDCs.

Investment approval can be accompanied by the imposition of performance requirements – conditions imposed on investors, such as using domestic goods or transferring technology. A number of IIAs explicitly ban such requirements. In total, at least 333 treaties limit host States in imposing performance requirements.

Some IIAs also restrict digital-specific performance requirements. For instance, 27 agreements ban forced transfer of source code and algorithms, and 37 restrict data localization (TAPED data set, 2024). However, they typically include exceptions, recognizing such measures may serve public goals such as protecting digital infrastructure, data, consumer rights or competition.

New-generation IIAs increasingly promote technology transfer on mutually agreed terms,[a] through clauses on investment cooperation, promotion and obligations to, for example, train local staff or enable knowledge transfer through the temporary movement of personnel.

IIAs can better facilitate digital know-how and technology diffusion by explicitly encouraging transfers on mutually agreed terms – through training, licensing or joint ventures – especially for developing countries. Moreover, prohibitions on performance requirements could be balanced with safeguards to preserve domestic policy space and support long-term development and digital inclusion. Technology transfer is also closely linked to the protection of intellectual property (IP) rights. The TRIPS Agreement and many IIAs set international rules in this area. IP protections that go beyond internationally accepted standards may run counter to the objective of improving technology transfer in developing economies (UNCTAD, 2014). Instead, the use of explicit and implicit flexibilities within existing international IP rules can allow economies to adapt international IP protection rules to their level of development (UNCTAD, 2014; Commonwealth Secretariat and UNCTAD, 2024), allowing for gradual upgrading as economic development and local innovative capacity progress.

Source: UNCTAD.

[a] See, for example, the European Union–Kenya Economic Partnership Agreement (2023) and the India–United Arab Emirates Comprehensive Economic Partnership Agreement (2022).

iii. Development cooperation for the digital economy

Some IIAs include cooperation provisions that may support the integration of developing countries into global digital value chains. They provide, for example, for information exchange, technology transfer, technical assistance and capacity-building – covering skills development, digital literacy and ICT infrastructure. Some IIAs identify ICT as a priority, committing parties to cooperate. The European Union–Kenya Economic Partnership Agreement, for example, aims to enhance connectivity, frameworks, development, capacity-building and ICT-enabled services such as e-commerce, e-government and transactions. The AfCFTA Digital Trade Protocol and the Regional Comprehensive Economic Partnership similarly address the concerns of developing economies, including technical assistance, digital skills development and investment in the digital economy.

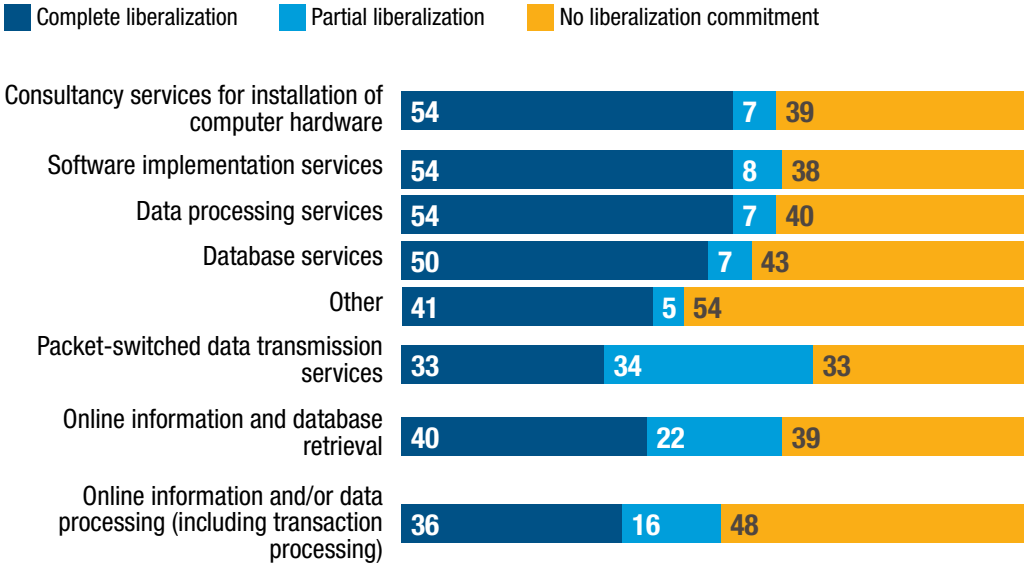
Cooperation provisions can bridge the digital divide, enabling adaptation to the digital economy for SMEs and local workers. Knowledge-sharing and training translate digital economy FDI into development. Facilitation and promotion clauses in IIAs can help attract digital economy investment, including in e-commerce, ICT infrastructure and digital services. In this way, investment facilitation, promotion and cooperation in IIAs can reduce barriers and create a predictable ecosystem for digital investment.

iv. Liberalization commitments relating to the digital economy

IIAs include commitments to open specific economic sectors, beyond post-establishment protections. The WTO's General Agreement on Trade in Services (GATS), particularly Mode 3 (commercial presence), governs services-related FDI, covering a significant share of digital economy investment. Some IIAs have binding liberalization commitments in key digital sectors such as telecommunications, data processing, software services and cloud computing. As services digitalize, previously analogue services such as advertising and payments are also covered. Key sectors already liberalized under WTO rules include computer services and telecommunications. Figure IV.30 shows high liberalization levels for investment in select digital services. Typical restrictions such as local incorporation requirements, licensing obligations and foreign equity limits remain.

Many countries pursue additional liberalization of digital economy sectors through bilateral and regional agreements, often using a negative list approach – sectors are opened up unless specifically excluded – which differs from the WTO GATS. Under the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, digital sectors such as telecommunications and computer services are largely liberalized, with few reservations listed, resulting in substantial market openness beyond GATS commitments. The Regional Comprehensive Economic Partnership allows members to choose between positive and negative listing. It generally mirrors the WTO trend of high liberalization for computer-related services and relatively more restrictions in telecommunications, including foreign equity limits, joint venture requirements and local incorporation obligations. In the Comprehensive Economic and Trade Agreement between Canada and the European Union, there are no major restrictions on investment in computer services, though Canada maintains limits on foreign ownership and control of facilities-based telecommunications services. Other regional agreements show similar trends, with broad liberalization for digital services sectors such as telecommunications infrastructure, cloud computing and data processing. While liberalization offers opportunities, a cautious and phased approach helps countries align commitments with their regulatory capacity and development goals, ensuring policy space to manage emerging technologies and digital sector risks.

Figure IV.30
A significant share of WTO Members liberalize market access for investment in select digital services
Liberalization commitments of WTO Members for market access under mode 3, services supply in the digital economy
(Percentage)



Source: UNCTAD.
Note: Mode 3 refers to commercial presence.
Abbreviation: WTO, World Trade Organization.

b. IIAs regulating new and emerging digital economy issues

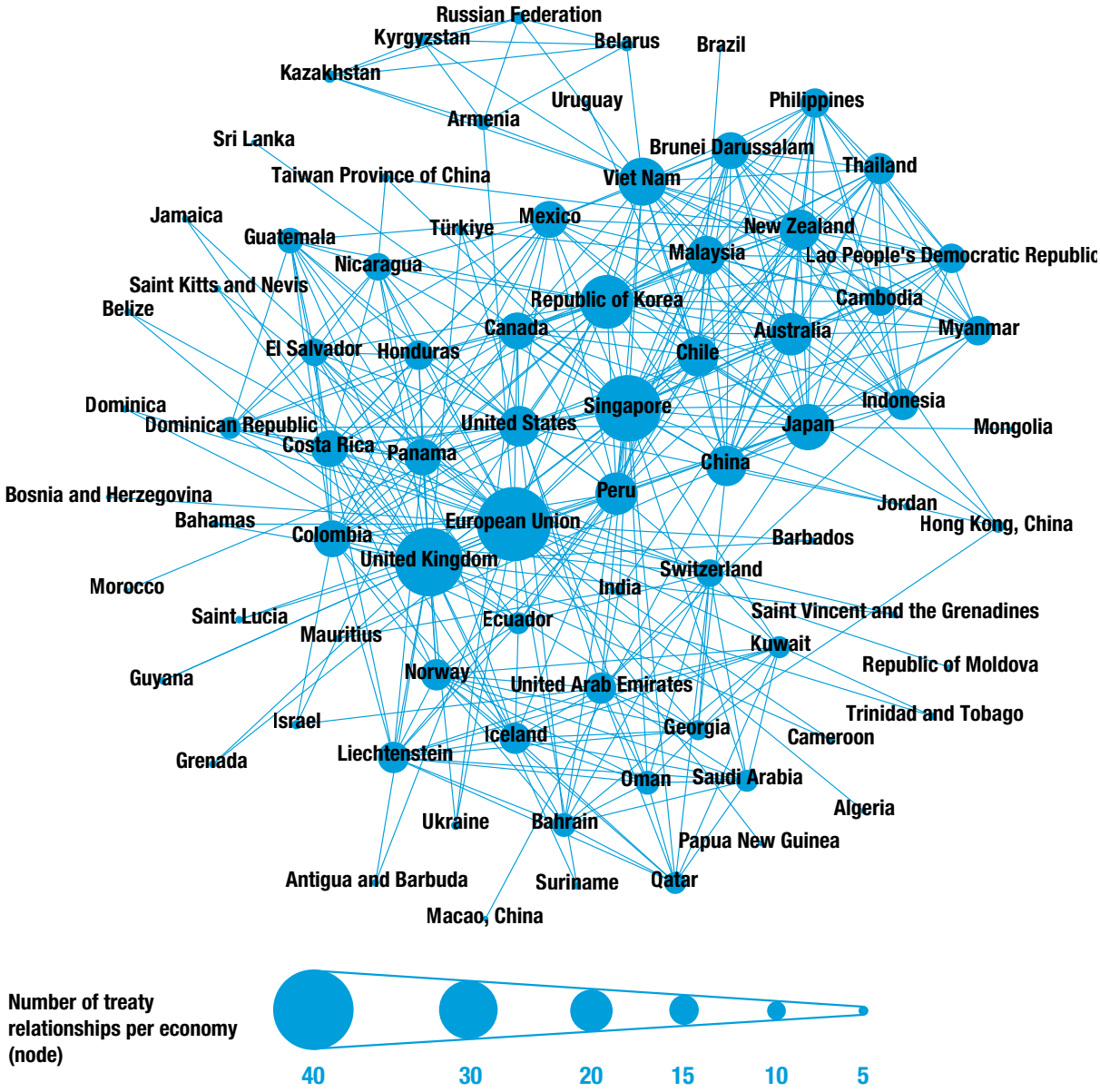
IIA rules relating to the digital economy emerged around the millennium and increased significantly in the last decade. Currently, only 231 international agreements (191 in force) contain provisions on the digital economy. Most of these agreements are broader treaties with investment provisions. However, the rules are rarely found in dedicated investment chapters but instead form part of chapters on electronic commerce, digital trade, services and IP. A small number of bilateral investment treaties explicitly touch on digital economy investment. Since 2019, a few stand-alone digital economy agreements have existed, which often do not directly address investment but are included in the analysis for completeness.

i. International commitments regulating new issues relevant to the digital economy on the rise

Treaty rules on the digital economy govern how goods and services are produced, marketed and distributed electronically. They address issues such as non-discrimination, paperless commerce (e-invoices, e-signatures, e-payments), data flows, data protection, cybersecurity, source code, digital skills, inclusion (especially for SMEs) and consumer protection. These treaties provide a stable framework, overcoming coordination challenges (e.g. prohibiting customs duties on electronic transmissions) and facilitating cooperation, particularly in cybersecurity and data protection. A well-connected cluster of countries at the centre of figure IV.31 lead the adoption of digital economy treaties.

Figure IV.31
Advanced economies dominate the growing network of international treaties with provisions relating to the digital economy

In-force agreements with substantive provisions regulating the digital economy signed 2000–2024 (*n* = 138)



Sources: UNCTAD, based on the TAPED (Trade Agreement Provisions on Electronic Commerce and Data) data set of the University of Lucerne; data visualization through Gephi (https://gephi.org).

Note: The network excludes treaties that contain limited prescriptions such as reiterating rules on intellectual property protection found elsewhere, recognizing the importance to facilitate and promote digital trade, or establishing a commitment to cooperate on information and communication technology.

The network in figure IV.31 focuses on a subset of the 231 treaties, covering only 138 in-force agreements that contain substantive provisions regulating the digital economy and excluding treaties that are not in force or merely contain limited prescriptions on IP or commitments to cooperate. The network covers 106 economies, many of which are advanced economies. Few LDCs are part of the in-force legal framework. For many African countries, the AfCFTA Protocol on Digital Trade – yet to enter into force – represents their first engagement in global digital rulemaking.[8] Treaty-making is still dominated by developed economies. This imbalance may mean that critical issues for LDCs are underrepresented. Inclusive negotiations, capacity-building and technical support are key to ensuring more equitable and inclusive digital rule making.

ii. Zooming in on new areas of investment governance: data, fintech, e-payments and AI

The free flow of data can be important for digital economy investment. Treaties increasingly include binding provisions on data flows and prohibit data localization. Early non-binding approaches have given way to stronger commitments over the past decade (figure IV.32). In addition, free flow of data provisions also appear in financial and telecommunications services chapters.

For financial services, treaties typically require States to allow data transfer and processing abroad. In regard to telecommunications services, provisions often reflect the WTO GATS Annex on Telecommunications, mandating access to public networks for moving information across borders.

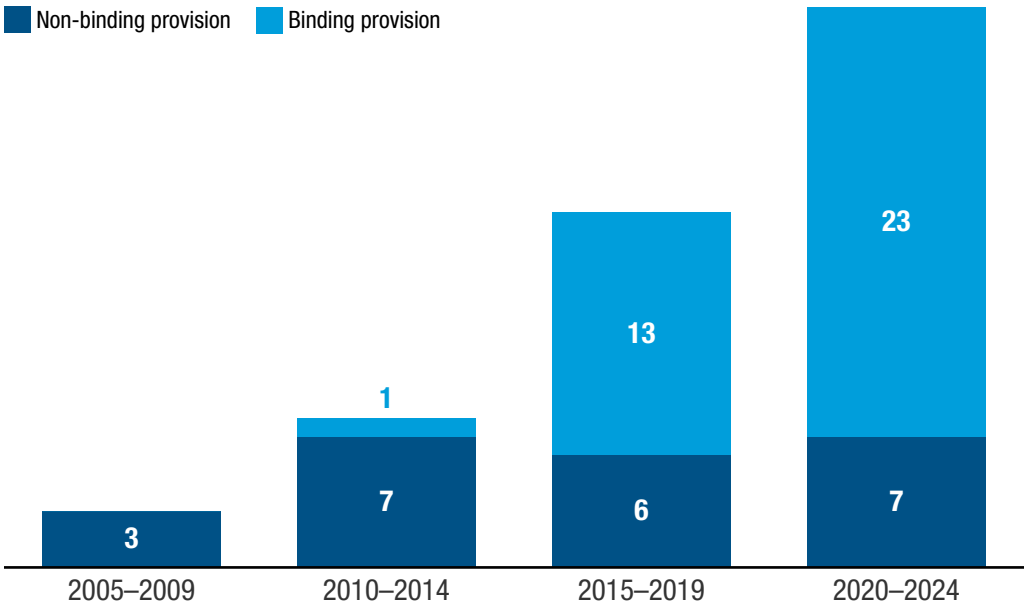
Treaties simultaneously increasingly recognize governments' right to restrict data flows or require local storage for reasons such as privacy, data protection or national security. Although no uniform model exists, treaties at times extend coverage of General Agreement on Tariffs and Trade Article XX and GATS Article XIV-style exceptions to provisions on the free flow of data or refer to "legitimate policy objectives", with safeguards against arbitrary measures.[9]

Other new areas of regulation include fintech, e-payments, AI and competition policy for the digital economy (box IV.13). Many of these clauses are currently non-binding, focusing on cooperation for the development of standards and knowledge-sharing. On e-payments in particular, the few treaties that address the topic aim to promote secure and efficient cross-border transactions and highlight interoperability. Agreements involving developing parties, such as the WTO Joint Statement initiative on E-Commerce and the AfCFTA Digital Trade Protocol, additionally emphasize the affordability and inclusiveness of services.

[8] See for example, IISD Policy Analysis available at https://www.iisd.org/articles/policy-analysis/afcfta-digital-protocol. In addition, negotiations for the WTO Joint Statement Initiative on E-commerce include 41 developing countries and 5 LDCs. Agreement on a stabilized text was reached in July 2024.

[9] For the former approach see, for example, Indonesia–United Arab Emirates Comprehensive Economic Partnership Agreement (2022), Article 17.4(2). For the latter approach see, for example, the 2024 Protocol Amending the European Union–Japan EPA (2018), Article 3(3) and (4).

Figure IV.32
Provisions on the free flow of data are gaining importance
Frequency of provisions mandating the free flow of data
(Number)



Source: UNCTAD, based on the TAPED data set.

Note: Based on the analysis of treaties concluded between 2000 and 2024.

Box IV.13
Competition provisions in IIAs relevant to the digital economy

Competition rules are crucial to the digital economy, as they prevent dominant players from blocking new entrants or stifling innovation. A growing number of IIAs contain dedicated chapters on competition, which require effective competition laws, procedural requirements and cooperation for enforcement action. Some treaties also provide for technical assistance and capacity-building in this area. Telecommunications chapters add dedicated disciplines on network access use, interconnectivity, universal services obligations and the prevention of anticompetitive practices. A small number of agreements explicitly encourage the parties to cooperate in the development and application of competition laws relating to the digital economy.

Source: UNCTAD.

iii. Responsible digital investment

Treaties addressing the digital economy often include provisions that promote responsible digital investment. These provisions cover consumer and data protection, measures against fraud, deceptive practices and curbing spam (figure IV.33). Such provisions can go a long way towards complementing national policies in building trust in the activities of digital investors. Typically, these provisions encourage or require States to adopt regulatory measures, rather than imposing direct obligations on private entities.

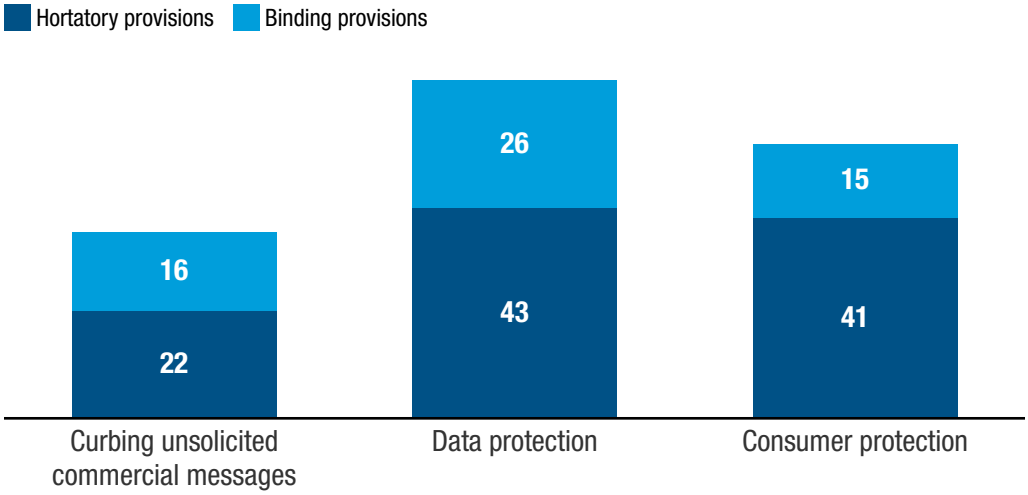
Bolstering responsible investment practices in IIAs, such as discouraging deceptive practices and safeguarding consumer data, ensures responsible business conduct in the digital economy. This builds trust and reduces reputational and regulatory risks for both investors and host States, aiding in further attracting investment.

iv. Development-oriented provisions relating to the digital economy remain underused

Development-focused provisions remain mostly non-binding and scarce. Figure IV.34 contrasts the most frequently used trade and investment-related provisions in treaties that regulate the digital economy with the scarce inclusion of development-focused issues. The limited participation of developing countries, particularly LDCs, in treaty-making appears to drive this trend.

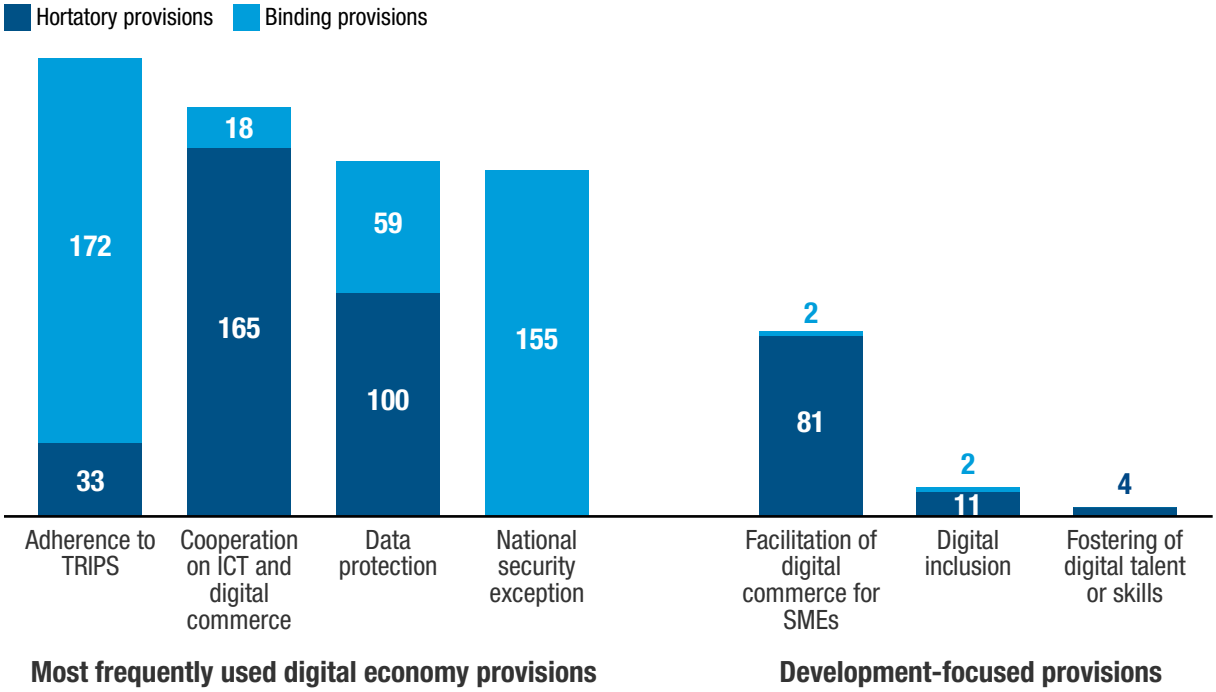
The AfCFTA Digital Trade Protocol, which aims to promote and facilitate investment in the ICT sector in accordance with the Protocol on Investment, is exemplary in its adoption of development-oriented provisions for the digital economy. It includes actions to promote digital inclusion, such as improving digital literacy and supporting marginalized groups.

Figure IV.33
Treaty provisions creating trust in the digital economy
Share of treaties with provisions regulating the digital economy (*n* = 231)
(Percentage)



Sources: UNCTAD, based on the TAPED data set.

Figure IV.34
Development-focused provisions are scarce in treaties regulating the digital economy
Frequency distribution of treaty coverage of select policy areas related to the digital economy
(Number of treaties; *n* = 231)



Source: UNCTAD, based on the TAPED data set.

Abbreviations: ICT, information and communication technology; SMEs, small and medium-size enterprises; TRIPS, Agreement on Trade-Related Aspects of Intellectual Property Rights.

The Protocol also addresses SME support, encourages digital innovation and entrepreneurship, and requires digital skills development. In addition, it acknowledges the need for technical assistance to drive implementation.

Development-oriented commitments on issues such as digital skills training, capacity-building and digital infrastructure expansion remain underused in IIAs but are crucial for inclusive growth. Targeted clauses can guide investment in local capacities, infrastructure, technology spillovers and digital inclusion.

c. Investment dispute settlement and the digital economy

ISDS provisions in IIAs highlight the need to preserve policy space to regulate in the public interest and ensure responsible investment conduct, especially relating to, for example, digital infrastructure, telecommunications services and data. At least 71 ISDS cases have involved telecommunications, with disputes increasingly linked to intangible assets, data and IP rights.

Telecommunications-related cases, mostly involving the provision of internet and mobile network services, often revolve around issues relating to concessions or regulatory changes. For example, in *Neustar v. Colombia*, the dispute concerned a government decision not to renew a domain name concession. Other cases, such as *Telenor v. Hungary* and *Telefonica v. Mexico*, challenged regulatory actions affecting mobile services.[10]

Newer ISDS cases in the digital economy reflect the rising prominence of intangible assets and digital services, relating, for example, to mobile payment systems for transportation, online financial services and digital advertising. *Nexo v. Bulgaria*, for example, concerns lost business opportunities due to crypto-related investigations. These cases expose tensions between, on the one hand, a State's right to regulate emerging tech and, on the other hand, investor protections. Clearer IIA provisions – such as refined standards, well-defined exceptions and carveouts – can help maintain regulatory flexibility, reduce ISDS risks and support sustainable digital investment.

[10] UNCTAD, Investment Dispute Settlement Navigator, available at https://investmentpolicy.unctad.org/investment-dispute-settlement.

D. Policy recommendations and the way forward

The digital economy is transforming global investment, creating opportunities for innovation and growth, but widening the digital divide. Despite increased investment in digital infrastructure, significant disparities persist in access, usage, capacity and regulation, particularly between developed and developing economies, including LDCs. International investors are key to this transformation. While regional players are rising in Africa, Asia and Latin America, a few MNEs dominate global FDI, concentrating investment in select areas and limiting broader developmental impact. Investment in the digital economy is shifting from platforms to services and physical infrastructure such as data centres, fostering long-term development, local content and technology transfer.

Closing gaps in digital infrastructure is vital, especially for LDCs, which face challenges that hinder their participation in the global digital economy. Targeted investment, particularly through PPPs and innovative financing, is essential. IIAs increasingly promote, facilitate and regulate investment in the digital economy. However, they often overlook sustainable development and digital divide challenges and can expose countries to ISDS, requiring careful management for predictable outcomes.

Several challenges hinder international investment in the digital economy, limiting digital development and technology-enabled growth in developing countries while preserving investment concentration in developed countries. These challenges can be grouped into five main categories:

- Lack of a unified, country-specific strategic approach that integrates digital strategies with national development and investment promotion, leading to low investment performance and effectiveness.
- Weak governance and regulatory frameworks that create uncertainty, deterring long-term investment in digital infrastructure and services; insufficient legal protections and a poor investment environment that hinder digital development.
- Limited digital infrastructure, such as broadband networks and data centres, that restricts connectivity and transformation.
- Insufficient energy production, unreliable electricity, water scarcity and lack of critical minerals that limit digital infrastructure and investment.
- Shortages of skilled professionals and digital literacy that impede technological adoption, innovation and digital progress.

Given the overarching importance of strategy and policy in altering context-specific conditions and attracting more international investment while also fostering local business development, this chapter provides the following series of governance-related

recommendations for the consideration of policymakers, partners and stakeholders.

Adopt a long-term vision for investment in the digital economy. National digital strategies in many developing countries lack specific objectives or targets related to investment, including FDI, and to the types of investors and sectors most relevant to advancing digital transformation. This reflects limited alignment with industrial policies and investment promotion plans. Digital strategies should articulate a coherent long-term vision that fully incorporates the role of international investment, including by

- Defining priority sectors for attracting investment in the digital economy that support countries' progression along the digital value chain and contribute to broader strategic industrial development goals.
- Guiding complementary policy efforts in skills development, regulatory reform and infrastructure planning.
- Providing key elements to inform investment planning, such as identification of infrastructure gaps, digital infrastructure demand projections, assessment of connectivity potential, mapping of strategic locations (e.g. for data centres and innovation hubs) and planned regulatory initiatives.
- Integrating environmental and sustainability considerations by embedding sector-specific benchmarks and criteria that address the environmental footprint of investment in the digital economy.
- Informing targeted investment promotion efforts by specifying the type of investments and investors that can advance structural transformation and digital upgrading.
- Aligning with regional digital strategies to leverage economies of scale, facilitate cross-border digital integration and promote consistency in regulatory and investment frameworks across countries.
- Ensuring coordinated implementation, clearly delineating the role of IPAs and establishing mechanisms for their effective coordination with institutions responsible for digital economy development.

Balance openness to FDI with national security and public interest. Many countries with pressing infrastructure needs continue to impose foreign equity restrictions in the telecommunications sector. To attract FDI, it is necessary to review such restrictions against strategic objectives – while maintaining robust safeguards to protect national security and public interest. These safeguards should specifically address control of critical infrastructure, access to sensitive data and management of strategic technologies. Any restrictions introduced should be clearly defined, transparent and proportionate to the identified risks.

Strengthen regulatory frameworks for international investment in the digital economy. Clear, predictable and adaptable regulations for data protection, cross-border data flows, cybersecurity, competition, taxation and IP are essential to attract investment in the digital economy. To support effective policy design and implementation, development partners can provide valuable assistance to governments in aligning regulatory approaches with investment priorities and national development objectives.

Enhance the role of IPAs and adopt more targeted and impact-driven promotion. IPAs should be at the heart of digital transformation by actively contributing to the design and implementation of digital strategies. Their functions should extend beyond traditional promotion to encompass proactive advocacy for regulatory reforms, strategic alignment of investment promotion targets and monitoring of reforms. Promotion and facilitation activities should focus on the type of investment and investors that align with the country's digital development goals and can advance its positioning on the digital value chain.

Develop digital skills, including through FDI. Governments can foster the attraction and development of skills in the digital economy through talent mobility, skills transfer and linkages programmes. Diaspora engagement schemes and partnerships with foreign universities and training institutions can also connect global expertise with local needs. By introducing scalable and phased local content initiatives aligned with national digital strategies and international commitments, governments can also encourage FDI that supports locally relevant digital content and services.

Strengthen IIAs' impact on sustainable investment, including for the digital economy. IIAs should be modernized to reflect the evolving nature of international investment, which increasingly involves asset-light models, services, intangibles and digital assets, where value creation is often driven by factors such as data, platforms and customer bases. This shift requires updated definitions and provisions, particularly in relation to investor protections and dispute resolution. At the same time, IIAs should be made more supportive of sustainable development by promoting and facilitating investment in sectors that are critical to achieving the Sustainable Development Goals – including the digital economy – while ensuring policy space for governments through carefully designed safeguards that account for the unique characteristics of these sectors.

Encourage technology transfer on mutually agreed terms in IIAs. IIAs could include provisions that promote transfer of the technology needed for a number of key policy objectives, including combating climate change and achieving digital transformation. These provisions can be complemented with adequate exceptions in clauses that prohibit performance requirements. The protection of IP rights and technology transfer are closely linked. The TRIPS Agreement and many IIAs set international rules in this area. The use of explicit and implicit flexibilities within international IP commitments can allow economies to adapt international IP protection rules to their level of development.

Strengthen the development-oriented provisions relating to the digital economy in IIAs. Targeted IIA clauses on digital skills training, inclusion, SME support and digital infrastructure development can complement broader enabling frameworks to support investment towards building local capacities and bridging the digital divide.

Facilitate participation by developing countries in international rule making. Developing economies, particularly LDCs, are underrepresented among the parties to agreements that regulate the digital economy. They should receive support in international investment rule making through capacity-building, technical assistance and inclusive negotiation platforms, aligning provisions on digital investment with their needs. In this regard, regional IIAs, with their potential for enhanced cooperation between the parties, have great promise for strengthening development-oriented provisions relating to investment in the digital economy.

To attract FDI in the digital economy, accelerate digital transformation and promote sustainable development, developing countries need to strengthen digital infrastructure, improve connectivity, enhance digital skills and establish a sound policy framework. To shape the foundations of the policy framework, countries should set up data and AI governance, formulate digital development strategies, strengthen IP protection, and improve the business and investment climate for digital industries.

Both FDI policy and related policies need to be improved. To attract more valuable FDI projects, developing countries need to strengthen investment promotion and facilitation for specific digital industries and undertake targeted policy measures to facilitate foreign investment. To better benefit from FDI in the digital economy, countries also need to improve their competition policy, industrial policy, science and technology policy, and SME policy. By doing so, they can enhance the indirect effects of FDI in the digital economy through, for instance, demonstration and spillover effects, thus promoting the development of domestic enterprises and digital ecosystems.

Home and host countries alike need to pay attention to the environmental, social and governance dimensions of the digital economy. Many of the issues, such as energy consumption by data centres, the use of critical minerals and the generation of electronic waste, do not relate directly to international investment, but they need to be taken into account in assessing the impact of FDI in digital economy projects on sustainable development. At the firm and project levels, foreign investors should strengthen their compliance with their environmental, social and governance responsibilities. The joint efforts of governments, enterprises and civil society will make international investment in the digital economy better promote sustainable development.

To support countries at risk of being left behind, UNCTAD proposes a multi-stakeholder action agenda to catalyse international investment in the digital economy. This agenda includes seven key priority areas:

- **Establishing a global framework for measuring and reporting investment in the digital economy.** Reliable data on FDI in digital economy is essential for sound policymaking. A standardized global framework will enable countries to capture, track and report investment flows in the digital economy in an internationally comparable manner. This will support better policy diagnostics, benchmarking and coordination across borders.
- **Developing a policy toolkit for investment in the digital economy in developing countries.** The toolkit will guide policymakers in designing tailored investment policies and strategies for digital industries. It will include policy and regulatory options, as well as diagnostic tools focused on matters such as data localization, IP, tax policy, platform regulation and PPPs, with a strong emphasis on aligning investment policy with the Sustainable Development Goals.
- **Exploring leapfrog opportunities for developing economies, particularly for LDCs.** As part of a forward-looking investment strategy for the digital economy, it is essential to identify and harness leapfrog opportunities for developing economies in the early stage of digitalization. Targeted investment in scalable solutions – such as mobile telecommunications and mobile-based services – can unlock transformative change when paired with enabling policies, capacity development and international cooperation.
- **Launching a global partnership for sustainable investment in the digital infrastructure.** Bridging the digital infrastructure gap – particularly in underserved and remote areas – requires new models of blended finance and international cooperation. This initiative will convene governments, multilateral development banks, development finance institutions, institutional investors and technology providers to mobilize resources for investment in digital technologies suitable for developing countries at different stages along the development and digitalization ladders.
- **Advancing multilateral dialogue on governance for investment in the digital economy.** In the fragmented legal and regulatory context, multilateral dialogue is needed to shape coherent and development-oriented rules on investment in the digital economy. This includes exploring investor obligations, dispute settlement mechanisms suited to digital industries, responsible data governance, and the balance between openness and national regulatory and policy spaces. UNCTAD will support the intergovernmental dialogue and consensus-building process.

- **Enhancing digital skills and innovation ecosystems in developing countries.** Developing countries need to strengthen their capacity to absorb and benefit from investment in the digital economy through education, training and support for domestic entrepreneurship and digital innovation. UNCTAD will work with partners to promote technical training and university–industry collaboration, as well as to foster regional innovation hubs and digital incubators.
- **Promoting responsible investment in the digital economy and mitigating risks.** UNCTAD aims to develop practical guidance for responsible investment, support sustainability standards and equip regulators with tools to address emerging risks while promoting inclusiveness in digital markets.

Collectively, these priorities chart a strategic investment road map for the international community to advance digital transformation, turn the digital divide into a digital dividend, and build a smart, inclusive and sustainable future for all.

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Annex table A.1
Top 100 digital enterprises by sales, 2025

Rank	Company name	Country of headquarters	Industry classification	Sales (Billions of dollars)		Assets (Billions of dollars)	
				Total	Foreign	Total	Foreign
1	Amazon.com	United States	E-commerce	573	155	528	138
2	Apple	United States	Platforms	383	245	353	84
3	Alphabet	United States	Platforms	307	161	402	104
4	Microsoft	United States	Digital solutions	212	105	412	160
5	JD.com	China	E-commerce	153	2	89	0
6	Meta Platforms	United States	Platforms	135	85	230	37
7	Alibaba Group Holding	China	E-commerce	126	13	255	10
8	Bytedance	China	Platforms	120	40	NA	NA
9	Walt Disney	United States	Digital content	89	19	206	23
10	Tencent Holdings	China	Digital content	86	8	222	80
11	International Business Machines	United States	Digital solutions	62	62	135	135
12	Oracle	United States	Digital solutions	50	8	134	16
13	Ingram Micro Holding	United States	Digital solutions	48	31	18	9
14	Meituan	China	E-commerce	39	NA	41	0
15	Uber Technologies	United States	Platforms	37	19	39	4
16	PDD Holdings	China	E-commerce	35	1	49	1
17	SAP	Germany	Digital solutions	34	29	75	62
18	Netflix	United States	Digital content	34	19	49	12
19	Shein Group	China	E-commerce	33	33	NA	NA
20	Salesforce	United States	Digital solutions	31	10	99	14
21	PayPal Holdings	United States	Digital solutions	30	13	82	11
22	Hewlett Packard Enterprise	United States	Digital solutions	29	19	57	48
23	Tata Consultancy Services	India	Digital solutions	27	26	17	5
24	DiDi Global	China	Platforms	27	2	20	14
25	NEC	Japan	Digital solutions	25	7	300	153
26	CDW	United States	Digital solutions	21	3	13	3
27	Booking Holdings	United States	E-commerce	21	19	24	21
28	Adobe	United States	Digital solutions	19	9	30	4
29	Cognizant Technology Solutions	United States	Digital solutions	19	5	18	13
30	Baidu	China	Platforms	19	NA	57	0
31	Automatic Data Processing	United States	Digital solutions	18	2	51	6
32	Ant Group	China	Digital solutions	17	1	39	24
33	Kyndryl Holdings	United States	Digital solutions	17	12	11	8
34	Rakuten Group	Japan	E-commerce	15	2	160	42
35	Spotify Technology	Luxembourg	Digital content	15	15	9	9
36	Mercado Libre	Argentina	E-commerce	14	11	18	15
37	DXC Technology	United States	Digital solutions	14	10	16	10
38	Sea	Singapore	E-commerce	13	4	19	5
39	Expedia Group	United States	E-commerce	13	5	22	1
40	S&P Global	United States	Digital content	12	5	61	55
41	Flutter Entertainment	United States	Digital content	12	7	25	17
42	Zalando	Germany	E-commerce	11	6	9	0
43	Wipro	India	Digital solutions	11	11	14	0
44	Delivery Hero	Germany	E-commerce	11	11	12	12
45	Ebay	United States	Platforms	10	4	22	2
46	Airbnb	United States	Platforms	10	5	21	0
47	Fidelity National Information Services	United States	Digital solutions	10	2	55	5
48	Insight Enterprises	United States	Digital solutions	9	2	6	1
49	ServiceNow	United States	Platforms	9	3	17	6
50	Computacenter	United Kingdom	Digital solutions	9	7	4	3
51	Constellation Software	Canada	Digital solutions	8	8	11	10
52	Equinix	United States	Digital solutions	8	5	33	18
53	Nu Holdings	Brazil	Digital solutions	8	1	43	6
54	Science Applications International	United States	Digital solutions	8	0	6	0
55	Naver	Republic of Korea	Platforms	7	1	28	12
56	Electronic Arts	United States	Digital content	7	4	13	3
57	Beijing United Information Technology	China	E-commerce	7	0	2	0
58	Bechtle	Germany	E-commerce	7	2	4	2
59	Shopify	Canada	E-commerce	7	7	11	2
60	Palo Alto Networks	United States	Digital solutions	7	2	15	5
61	CACI International	United States	Digital solutions	7	0	7	0
62	Dassault Systemes	France	Digital solutions	7	6	16	13
63	Workday	United States	Digital solutions	6	6	13	13
64	Roper Technologies	United States	Digital solutions	6	1	28	2
65	Entain	United Kingdom	Digital content	6	3	14	9
66	Wolters Kluwer	Netherlands	Digital content	6	6	10	9
67	Amadeus IT Group	Spain	E-commerce	6	6	12	10
68	Naspers	South Africa	E-commerce	6	5	65	25

Annex table A.1
Top 100 digital enterprises by sales, 2025
(Concluded)

Rank	Company name	Country of headquarters	Industry classification	Sales (Billions of dollars)		Assets (Billions of dollars)	
				Total	Foreign	Total	Foreign
69	**Kakao**	Republic of Korea	Platforms	6	1	19	3
70	**Just Eat Takeaway.com**	Netherlands	E-commerce	6	5	11	11
71	**SS&C Technologies Holdings**	United States	Digital content	6	2	18	5
72	**Take-Two Interactive Software**	United States	Digital content	5	2	16	7
73	**Fortinet**	United States	Digital solutions	5	4	7	2
74	**Datatec**	South Africa	Digital solutions	5	5	4	3
75	**Autodesk**	United States	Digital solutions	5	3	9	3
76	**Amdocs**	United States	Digital solutions	5	1	6	6
77	**Epam Systems**	United States	Digital solutions	5	2	4	4
78	**Snap**	United States	Platforms	5	1	8	3
79	**IAC**	United States	Platforms	4	1	10	0
80	**International Game Technology**	United Kingdom	Digital content	4	4	10	10
81	**GoDaddy**	United States	Digital solutions	4	1	8	2
82	**NCR Atleos**	United States	Digital solutions	4	2	6	3
83	**Equifax**	United States	Digital content	4	4	12	4
84	**Copart**	United States	E-commerce	4	1	7	1
85	**NCR Voyix**	United States	Digital solutions	4	1	5	1
86	**Conduent**	United States	Digital solutions	4	0	3	1
87	**Atlassian**	Australia	Digital solutions	4	3	4	4
88	**Match Group**	United States	Platforms	3	2	5	1
89	**Tietoevry Oyj**	Finland	Digital solutions	3	2	4	3
90	**Pinterest**	United States	Platforms	3	1	4	2
91	**Rackspace Technology**	United States	Digital solutions	3	1	4	1
92	**F5**	United States	Digital solutions	3	1	5	1
93	**Verisk Analytics**	United States	Digital content	3	0	4	1
94	**THG**	United Kingdom	E-commerce	3	1	4	0
95	**Square Enix Holdings**	Japan	Digital content	3	1	3	0
96	**Deliveroo**	United Kingdom	E-commerce	3	1	1	0
97	**Ubisoft Entertainment**	France	Digital content	3	3	5	1
98	**Konami**	Japan	Digital content	2	1	4	0
99	**CoStar Group**	United States	E-commerce	2	0	9	0
100	**Joyy**	Singapore	Platforms	2	2	8	8
Total				**3 327**	**1 394**	**5 106**	**1 616**

Source: UNCTAD.

Note: Data are for fiscal year 2023.

Annex table A.2
Top 100 ICT enterprises by sales, 2025

Rank	Company name	Country of headquarters	Industry classification	Sales (Billions of dollars)		Assets (Billions of dollars)	
				Total	Foreign	Total	Foreign
1	**Apple Inc**	United States	IT devices	383	245	353	84
2	**Hon Hai Precision Industry**	Taiwan Province of China	Semiconductors	201	197	128	119
3	**Samsung Electronics**	Republic of Korea	IT devices	200	165	352	79
4	**China Mobile**	China	Telecommunications	143	5	281	12
5	**Deutsche Telekom**	Germany	Telecommunications	124	95	320	258
6	**AT&T**	United States	Telecommunications	122	5	407	13
7	**Comcast**	United States	Telecommunications	122	27	265	49
8	**China Communications Construction**	China	Telecommunications	107	16	237	37
9	**Dell Technologies**	United States	IT devices	102	53	90	30
10	**Huawei Investment & Holding**	China	IT devices	99	33	178	98
11	**Nippon Telegraph and Telephone**	Japan	Telecommunications	99	21	191	85
12	**Sony Group**	Japan	IT devices	83	62	235	149
13	**Hitachi**	Japan	IT devices	80	50	94	80
14	**China Telecom**	China	Telecommunications	72	1	118	3
15	**Taiwan Semiconductor Manufacturing**	Taiwan Province of China	Semiconductors	70	66	180	35
16	**LG Electronics**	Republic of Korea	IT devices	65	39	47	15
17	**Panasonic Holdings**	Japan	IT devices	63	38	61	40
18	**Lenovo Group**	China	IT devices	62	45	39	27
19	**International Business Machines**	United States	IT devices	62	30	135	50
20	**TD Synnex**	United States	IT devices	58	27	29	4
21	**Cisco Systems**	United States	IT devices	57	27	102	31
22	**Intel**	United States	IT devices	54	37	192	56
23	**HP**	United States	IT devices	54	31	37	12
24	**China United Network Communications**	China	Telecommunications	52	1	93	3
25	**Oracle**	United States	IT devices	50	8	134	16
26	**Orange**	France	Telecommunications	49	26	121	63
27	**America Movil**	Mexico	Telecommunications	48	28	92	63
28	**Telefonica**	Spain	Telecommunications	45	31	115	82
29	**Pegatron**	Taiwan Province of China	IT devices	41	38	18	15
30	**Vodafone Group**	United Kingdom	Telecommunications	41	34	169	154
31	**Schneider Electric**	France	Semiconductors	39	37	65	60
32	**Xiaomi**	China	IT devices	38	17	46	NA
33	**Qualcomm**	United States	Semiconductors	36	35	51	33
34	**Broadcom**	United States	Semiconductors	36	29	73	26
35	**Quanta Computer**	Taiwan Province of China	IT devices	35	35	22	16
36	**Jabil**	United States	Semiconductors	35	30	19	14
37	**Compal Electronics**	Taiwan Province of China	IT devices	31	26	14	8
38	**ASML Holding**	Netherlands	Semiconductors	30	30	48	19
39	**Hewlett Packard Enterprise**	United States	IT devices	29	19	57	48
40	**Flex**	Singapore	IT devices	29	24	21	18
41	**Wistron**	Taiwan Province of China	Semiconductors	28	25	15	10
42	**Fujitsu**	Japan	IT devices	28	11	25	6
43	**NVIDIA**	United States	Semiconductors	27	19	41	13
44	**Avnet**	United States	Semiconductors	27	20	12	10
45	**Applied Materials**	United States	Semiconductors	27	23	31	2
46	**Telefonaktiebolaget LM Ericsson**	Sweden	IT devices	26	26	30	12
47	**BT Group**	United Kingdom	Telecommunications	25	3	65	2
48	**SK Hynix**	Republic of Korea	Semiconductors	25	24	78	19
49	**NEC**	Japan	IT devices	25	7	30	15
50	**BOE Technology Group**	China	IT devices	25	13	59	6
51	**TCL Technology Group**	China	IT devices	25	10	54	5
52	**Nokia Oyj**	Finland	IT devices	25	23	44	37
53	**Advanced Micro Devices**	United States	Semiconductors	23	15	68	18
54	**WPG Holdings**	Taiwan Province of China	Semiconductors	22	19	10	2
55	**WT Microelectronics**	Taiwan Province of China	Semiconductors	19	17	9	4
56	**Saudi Telecom**	Saudi Arabia	Telecommunications	19	2	43	10
57	**ASE Technology Holding**	Taiwan Province of China	Semiconductors	19	17	22	7
58	**Telecom Italia**	Italy	Telecommunications	18	5	69	11
59	**Texas Instruments**	United States	Semiconductors	18	12	32	4
60	**ZTE**	China	Telecommunications	18	5	28	2
61	**Lam Research**	United States	Semiconductors	17	16	19	7
62	**ST Microelectronics**	Switzerland	Semiconductors	17	12	24	21
63	**Infineon Technologies**	Germany	Semiconductors	17	15	30	24
64	**Bharti Airtel**	India	Telecommunications	17	6	54	12
65	**Inventec**	Taiwan Province of China	IT devices	17	14	8	6
66	**Tokyo Electron**	Japan	Semiconductors	17	15	17	5
67	**Asustek Computer**	Taiwan Province of China	IT devices	16	14	16	4
68	**Micron Technology**	United States	Semiconductors	16	8	64	56

Annex table A.2
Top 100 ICT enterprises by sales, 2025
(Concluded)

Rank	Company name	Country of headquarters	Industry classification	Sales (Billions of dollars)		Assets (Billions of dollars)	
				Total	Foreign	Total	Foreign
69	**Kyocera**	Japan	Semiconductors	15	11	31	18
70	**Telstra Group**	Australia	Telecommunications	15	1	30	4
71	**Emirates Telecommunications Group**	United Arab Emirates	Telecommunications	15	5	40	20
72	**Mediatek**	Taiwan Province of China	Semiconductors	14	13	21	5
73	**NXP Semiconductors**	Netherlands	Semiconductors	13	13	24	22
74	**Swisscom**	Switzerland	Telecommunications	13	3	29	5
75	**Synnex Technology International**	Taiwan Province of China	IT devices	13	11	7	5
76	**Murata Manufacturing**	Japan	Semiconductors	13	12	22	8
77	**Corning**	United States	IT devices	13	8	29	16
78	**Hangzhou Hikvision Digital Technology**	China	IT devices	13	4	20	1
79	**Amphenol**	United States	Semiconductors	13	8	17	12
80	**Western Digital**	United States	IT devices	12	9	25	17
81	**Analog Devices**	United States	Semiconductors	12	8	49	25
82	**MTN Group**	South Africa	Telecommunications	12	9	24	13
83	**Also Holding**	Switzerland	Telecommunications	11	10	4	3
84	**Singapore Telecommunications**	Singapore	Telecommunications	11	6	35	20
85	**KLA**	United States	Semiconductors	10	9	14	5
86	**Renesas Electronics**	Japan	Semiconductors	10	8	22	4
87	**TCL Electronics Holdings**	Hong Kong, China	IT devices	10	6	8	2
88	**Minebea Mitsumi**	Japan	Semiconductors	10	7	10	5
89	**Telkom Indonesia (Persero)**	Indonesia	Telecommunications	10	1	19	0
90	**Kioxia Holdings**	Japan	Semiconductors	10	8	22	0
91	**Sanmina**	United States	Semiconductors	9	8	5	2
92	**Telia Company**	Sweden	Telecommunications	9	4	22	14
93	**Wingtech Technology**	China	IT devices	9	6	11	8
94	**Universal Scientific Industrial Shanghai**	China	Semiconductors	9	8	0	0
95	**Microchip Technology**	United States	Semiconductors	8	6	0	0
96	**ON Semiconductor**	United States	Semiconductors	8	7	0	0
97	**Oman Telecommunications**	Oman	Telecommunications	8	6	20	16
98	**Liberty Global**	United Kingdom	Telecommunications	7	7	42	42
99	**Ooredoo**	Qatar	Telecommunications	6	4	16	12
100	**Cellnex Telecom**	Spain	Telecommunications	4	4	49	45
Total				**4 090**	**2 387**	**6 891**	**2 681**

Source: UNCTAD.

Annex table 1
FDI flows, by region and economy, 2019–2024
(Millions of dollars)

Region/economy	FDI inflows						FDI outflows					
	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
World[a]	1 658 784	868 563	1 676 523	1 389 526	1 454 976	1 508 803	1 329 705	648 576	1 914 411	1 568 613	1 556 106	1 608 874
Developed economies	955 303	227 620	777 037	459 917	589 568	641 642	933 589	268 523	1 410 124	1 020 673	1 038 678	1 117 396
Europe	591 121	45 873	223 370	-61 157	221 481	198 084	535 973	-144 820	775 595	274 560	337 454	487 482
European Union	569 789	36 259	310 004	-49 827	147 526	267 772	550 724	-12 572	694 480	209 132	136 587	446 061
Austria	4 942	-9 679	18 296	16 521	6 785	11 535	11 757	8 109	25 509	16 299	11 669	12 588
Belgium	18 643	7 589	2 933	-8 742	27 914	-26 723	13 802	14 490	26 438	10 228	17 498	2 935
Bulgaria	1 835	3 154	1 698	4 347	5 011	3 090	449	235	383	585	700	639
Croatia	407	176	4 931	3 926	3 152	4 377	-115	37	972	-401	1 180	2 510
Cyprus	120 033	-83 284	13 544	5 558	4 093	7 386	118 185	-105 572	7 754	-980	-2 056	-565
Czechia	10 108	9 411	9 051	9 248	9 416	10 165	4 128	2 990	7 734	5 675	5 970	8 317
Denmark	27 002	3 879	8 361	7 632	11 320	6 898	36 048	12 195	28 239	8 841	17 966	13 266
Estonia	3 095	3 605	111	1 203	4 617	783	1 882	305	-1 013	996	1 460	741
Finland	13 456	-1 579	13 290	5 795	6 489	1 848[b]	4 865	5 856	9 156	13 275	826	5 415[b]
France	21 367	11 359	32 663	76 520	42 284	33 736	52 400	21 862	53 641	53 310	72 608	40 950
Germany	57 168	64 391	74 162	53 356	52 039	5 716	150 084	38 434	160 831	117 532	78 158	38 525
Greece	5 019	3 213	6 328	8 451	5 163	7 304	642	549	1 109	3 198	4 512	2 618
Hungary	3 972	6 778	8 717	9 695	6 718	5 737	3 194	4 435	4 674	4 564	5 256	4 826
Ireland	163 805	109 561	-11 598	-55 847	-2 677	-38 891	34 256	-10 534	37 494	-29 558	11 290	24 932
Italy	20 315	-20 947	-1 591	31 364	32 635	24 726	24 362	2 929	29 554	17 049	21 149	37 040
Latvia	926	994	3 335	1 468	1 373	1 211	-104	255	2 324	107	706	145
Lithuania	1 441	488	2 659	3 775	2 534	3 271	382	-13	1 341	545	819	-4
Luxembourg	163 718	-3 358	24 809	-316 383	-9 279	105 987	176 767	103 046	104 481	-192 435	-21 134	108 598
Malta	-1 971	1 908	1 922	2 415	1 840	5 371[c]	1 222	142	3 449	857	692	-101[c]
Netherlands	-130 008	-131 780	-27 618	-80 272	-184 352	9 275	-133 449	-175 362	126 013	44 882	-195 862	54 730
Poland	15 343	15 779	30 661	35 144	28 362	12 740	1 899	881	3 235	6 615	8 523	2 166
Portugal	12 759	7 814	10 463	12 204	11 513	14 059	4 014	2 166	1 746	4 158	5 882	7 821
Romania	5 791	3 432	10 606	11 149	7 296	6 201	363	53	141	1 297	414	39
Slovakia	2 511	-2 404	1 821	3 460	180	1 843	43	348	297	682	89	576
Slovenia	1 463	220	1 846	2 180	1 474	1 296	610	519	1 356	689	855	752
Spain	18 349	14 917	43 722	53 583	46 656	30 543	27 565	36 023	27 697	54 410	40 278	49 235
Sweden	8 300	20 622	24 881	52 424	24 972	18 288	15 475	23 053	29 924	66 713	47 138	27 369
Other Europe	21 332	9 614	-86 634	-11 331	73 955	-69 688	-14 751	-132 247	81 115	65 428	200 868	41 420
Albania	1 288	1 108	1 234	1 434	1 622	1 716	128	88	63	181	265	261
Belarus	1 293	1 398	1 238	1 597	1 982	1 711	16	88	-71	171	55	133
Bosnia and Herzegovina	458	480	716	816	1 048	1 113	35	73	52	48	114	66
Iceland	-225	-928	518	1 061	1 464	189	479	-427	3	-46	205	121
Montenegro	416	532	699	877	526	598	75	-5	11	53	57	68
North Macedonia	446	230	556	785	625	1 358	40	53	98	96	97	181
Norway	5 003	-5 620	3 106	17 042	16 230	10 757	-503	-10 368	10 685	28 532	13 628	2 514
Republic of Moldova	523	150	404	591	357	344	43	-2	33	50	15	100
Russian Federation	32 076	10 410	38 639	-15 205	8 998	3 346	22 024	6 778	64 072	11 510	29 748	11 691
Serbia	4 270	3 469	4 590	4 598	4 916	5 635	294	112	264	41	308	656
Switzerland	-84 436	-46 371	-74 074	-41 141	-21 394	-60 708	-50 016	-32 849	-78 658	-71 086	88 958	251
Ukraine	6 017	-36	7 320	531	4 485	3 329	842	22	-198	344	42	-162
United Kingdom	53 918	44 397	-72 077	14 912	52 188	-40 003	11 717	-95 877	84 644	95 352	67 170	25 297
North America	280 474	118 967	447 547	362 722	279 631	342 944	112 548	268 132	347 857	386 972	453 762	352 411
Canada	50 544	25 594	61 450	45 827	46 525	64 096	77 492	43 667	105 975	83 996	93 348	86 044
United States	229 930	93 373	386 097	316 895	233 106	278 848	35 056	224 465	241 882	302 976	360 414	266 367
Other developed economies	83 709	62 781	106 120	158 352	88 457	100 614	285 068	145 211	286 672	359 142	247 463	277 503
Australia	38 536	16 420	27 021	65 943	30 577	53 454	8 719	5 444	2 795	119 495	11 413	14 069
Israel	17 363	20 969	18 950	22 883	16 135	16 808	8 690	4 579	10 369	10 955	7 911	10 478
Japan	13 755	11 768	34 294	34 194	20 841	13 357	232 627	99 708	208 985	162 126	196 742	204 380
Republic of Korea	4 415	4 747	3 793	10 276	1 708	1 651	-169	658	-1 451	746	-813	-45
New Zealand	9 634	8 765	22 060	25 045	19 042	15 226	35 239	34 832	66 001	65 799	32 172	48 589
Bermuda	5	112	2	10	153	118	-38	-11	-27	21	37	34
Developing economies[a]	703 481	640 943	899 486	929 609	865 408	867 162	396 117	380 053	504 286	547 939	517 428	491 478
Africa	46 663	40 944	82 201	54 567	55 414	97 032	5 173	2 459	5 098	3 959	196	2 447
North Africa	13 550	9 797	9 509	15 323	13 425	50 675	1 727	356	994	1 171	1 577	1 244
Algeria	1 382	1 140	870	255	1 216	1 439	31	15	-52	85	84	53
Egypt	9 010	5 852	5 122	11 400	9 841	46 578	405	327	367	342	390	508
Libya	..	..	..	..	..	..	377	-487	-55	50[c]	-164[c]	-57[c]
Morocco	1 720	1 419	2 266	2 260	1 055	1 639	893	458	644	641	1 228	694
South Sudan	-232	18	68	122	-6[c]	83[c]	..	..	..	..	..	..
Sudan	825	717	523	574	548[c]	..	..	..	54	..	..	..
Tunisia	845	652	660	714	772	936	22	43	35	53	40	46

Annex table 1
FDI flows, by region and economy, 2019–2024
(Continued)

Region/economy	FDI inflows						FDI outflows					
	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
Other Africa	33 113	31 147	72 693	39 244	41 989	46 357	3 445	2 104	4 104	2 788	-1 381	1 203
West Africa	11 645	9 885	13 629	13 029	16 330	15 214	1 300	2 123	2 467	-2 352	444	451
Benin	218	174	346	376	443	543	27	22	43	47	13	60
Burkina Faso	163	-102	-80	670	507	83	16	-7	-43	24	45	3
Cabo Verde	100	51	77	107	131	64	15	3	-1	18	7	20
Côte d'Ivoire	849	713	1 392	1 599	2 485	3 802	120	1	285	168	482	563
Gambia	71	190	249	236	208	232	-2	-3	-3	2	-1[c]	-1[c]
Ghana	3 880	1 876	2 613	1 511	1 308	1 669	588	542	199	38	56	98
Guinea	43	174	201	650	893	1 828[c]	1	2	-3	0.1	0.1[c]	-1[c]
Guinea-Bissau	72	21	19	33	20	27	0.4	0.3	1	1	0.3	0.4
Liberia	87	738	536	960	745[c]	747[c]	102[c]	80[c]	91[c]	91[c]	87[c]	90[c]
Mali	721	537	640	716	703	709	1	1	56	44	30	35
Mauritania	887	931	1 064	1 410	878[c]	1 531[c]	-	6	5[c]	3[c]	0.1[c]	4[c]
Niger	717	361	595	966	1 026	526	32	15	39	9	8	12
Nigeria	2 305	2 385	3 313	895	1 873	1 080	285	1 473	1 818	-2 811	-256	-408
Senegal	1 065	1 846	2 588	2 929	4 790	2 016	71	99	52	70	71	48
Sierra Leone	122	51	214	145	241[c]	274[c]	..	..	..	..	..	..
Togo	346	-59	-136	-173	80	84	43	-112	-71	-54	-99	-73
Central Africa	9 267	8 913	6 602	7 078	7 017	7 907	422	278	498	490	128	403
Burundi	44	16	17	20	30	32	1	1	1	2	1	9
Cameroon	1 025	675	964	926	799[c]	925[c]	126	84	55	27	-109[c]	6[c]
Central African Republic	26[c]	2[c]	5[c]	24[c]	39[c]	40[c]	..	..	..	..	..	..
Chad	567[c]	558[c]	705[c]	614[c]	913[c]	1 019[c]	..	..	..	..	..	..
Congo	3 366	4 016[c]	532[c]	532	626	604	23[c]	27[c]	25[c]	25[c]	26[c]	25[c]
Democratic Republic of the Congo	1 488	1 647	1 870	1 846	2 576	3 113	134	149	192	436	201	198
Equatorial Guinea	821	-9	562	1 388	142	188	166	17	225	-1	-	154[c]
Gabon	1 553[c]	1 717[c]	1 529[c]	1 105[c]	1 151[c]	1 145[c]	-34[c]	..	..	..	..	..
Rwanda	354	260	399	496	716	819	5	-	-	-	12	10
Sao Tome and Principe	23	33	19	127	24	22[c]	1	1	-	0.2	-4	2[c]
East Africa	7 688	7 477	10 090	11 682	11 338	12 715	194	1 496	2 065	1 801	759	1 520
Comoros	4	4	4	4	5[c]	7[c]	..	..	..	..	..	..
Djibouti	175	158	168	191	137	68	..	..	..	..	..	..
Eritrea	-61[c]	-30[c]	-31[c]	-32[c]	2[c]	-28[c]	..	..	..	..	..	..
Ethiopia	2 549	2 381	4 260	3 670	3 269	3 984	..	..	..	..	..	..
Kenya	1 098	1 510	1 406	1 597	1 504	1 503[c]	11	1 297	1 840	1 502	588	1 310[c]
Madagascar	474	358	358	468	415[c]	413[c]	102	119	114	142	119[c]	125[c]
Mauritius	444	225	261	546	760	681	58	16	68	129	16	38
Seychelles	37	203	225	212	237	299	24	63	42	28	36	46
Somalia	447	534	601	636	677	765[c]	..	..	..	..	..	..
Uganda	1 303	1 191	1 648	2 953	2 994	3 305	0.3	0.3	0.3	0.4	0.4	0.4
United Republic of Tanzania	1 217	944	1 190	1 438	1 339	1 718[c]	..	..	..	..	..	..
Southern Africa	4 514	4 871	42 373	7 455	7 305	10 521	1 529	-1 793	-926	2 850	-2 712	-1 170
Angola	-4 098	-1 866	-4 355	-6 599	-2 120	-136	-2 349	91	-1 057	41	33	33
Botswana	94	32	-319	708	198	467	-20	-68	-33	10	-38	3
Eswatini	130	36	117	15	29	93	22	-13	60	-17	-22	62
Lesotho	35	28	-12	-8	-26	-42[c]	..	..	..	..	..	..
Malawi	55	252	129	199	214	220	23	-154	1	59	72	48
Mozambique	2 212	3 035	5 102	2 458	2 509	3 553	-31	153	194	564	174	-44
Namibia	-179	-146	851	1 072	2 303	2 063	9	52	18	12	-310	41
South Africa	5 125[b]	3 062[b]	40 215[b]	9 280[b]	3 475[b]	2 469[b]	3 147[b]	-1 951[b]	139[b]	2 376[b]	-2 812[b]	-1 275[b]
Zambia	860	245	394	-65	86	1 238	696	64	-280	-253	160	-170
Zimbabwe	280	194	250	395	635	597	32	33	32	58	31	131
Asia	494 634	505 590	672 890	676 707	622 329	604 517	343 758	379 078	456 151	471 405	467 020	454 306
East and South-East Asia	395 078	398 610	545 138	541 439	501 811	484 939	290 072	331 713	379 441	370 577	391 397	367 078
East Asia	232 316	285 522	333 938	316 475	296 502	259 676	203 040	267 307	289 967	285 994	299 311	283 491
China	141 225	149 342	180 957	189 132	163 253	116 238	136 908	153 710	178 819	163 120	177 289	162 780
Hong Kong, China	73 714	134 710	140 186	109 685	122 947	126 181	53 202	100 715	96 428	106 226	97 152	87 247
Macao, China	6 664	-6 308	5 187	3 784	1 621	3 531[c]	1 041	1 355	3 265	983	42	1 430[c]
Taiwan Province of China	8 240[b]	6 053[b]	5 416[b]	11 360[b]	6 419[b]	10 926[b]	11 763[b]	11 500[b]	11 341[b]	15 589[b]	24 752[b]	31 979[b]
Democratic People's Republic of Korea	30[c]	6[c]	18[c]	10[c]	13[c]	19[c]	..	..	..	..	..	..
Mongolia	2 443	1 719	2 173	2 504	2 248	2 782	127	26	113	76	76	55
South-East Asia	162 762	113 088	211 201	224 963	205 309	225 263	87 032	64 406	89 475	84 582	92 086	83 587
Brunei Darussalam	375	577	205	-292	-51	26	..	..	..	..	..	..

Annex table 1
FDI flows, by region and economy, 2019–2024
(Continued)

Region/economy	FDI inflows						FDI outflows					
	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
Cambodia	3 663	3 625	3 483	3 579	3 959	4 395	102	127	92	150	151	172
Indonesia	23 883	18 591	21 131	25 390	21 497	24 212	3 352	4 448	3 845	7 323	7 080	9 703
Lao People's Democratic Republic	756	968	1 072	636	1 668	988	..	-	-	-	..	..
Malaysia	7 813	3 160	12 173	17 136	8 468	11 259	6 231	2 419	4 676	14 275	6 610	7 399
Myanmar	2 509	1 907	2 067	1 239	1 520	1 095	..	..	..	..	..	..
Philippines	6 020[b]	3 254[b]	10 225[b]	5 939[b]	6 452[d]	8 938[d]	700[b]	-6[b]	493[b]	308[b]	1 052[d]	2 880[d]
Singapore	98 083	71 550	130 955	142 128	135 104	143 352	67 776[b]	39 793[b]	61 368[b]	52 230[b]	62 997[b]	55 257[b]
Thailand	3 781	-5 630	14 648	11 705	8 053	10 580	8 410	17 270	18 668	7 656	15 213	8 151
Timor-Leste	-239	-713	-419	-395	138	247	-3	-26[c]	-26	-34	-68	5
Viet Nam	16 120	15 800	15 660[b]	17 900[b]	18 500[b]	20 170[b]	465	380	358[b]	2 674[b]	-950[b]	20[b]
South Asia	58 073	69 951	51 360	55 556	34 578	34 569	13 269	11 204	17 704	15 923	14 068	24 142
Afghanistan	23[b]	13[b]	21[b]	..	..	..	26[b]	37[b]	31	..	..	..
Bangladesh	1 857	1 465	1 572	1 518	1 464	1 270	21	10	80	33	6	7
Bhutan	3	1	1	15	14	100	..	..	..	..	..	..
India	50 558	64 072	44 763	49 380	28 076	27 556	13 144	11 109	17 253	14 618	13 893	23 782
Iran (Islamic Republic of)	1 508	1 342	1 425	1 500	1 422[c]	1 449[c]	85	78[c]	82[c]	100[c]	87[c]	89[c]
Maldives	961[b]	441[b]	643[b]	732[b]	767[b]	806[b]	..	..	..	..	..	..
Nepal	185	126	196	65	74	57	..	..	..	..	..	..
Pakistan	2 234	2 057	2 147	1 462	2 048	2 568	-85	-45	242	1 157	32	153
Sri Lanka	743[b]	434[b]	592[b]	884[b]	713[b]	761[b]	77[b]	15[b]	17[b]	15[b]	51[b]	110[b]
West Asia	33 260	30 490	69 166	69 507	78 392	82 082	42 944	38 283	57 502	86 736	60 565	66 688
Armenia	100	59	366	976	580	139	-133	-27	25	50	54	63
Azerbaijan	1 504	507	-1 708	-4 474	253	231	2 432	825	77	172	1 875	742
Bahrain	1 501	1 021	1 779	1 951	7 226	2 478	-197	-205	64	1 948	1 113	275
Georgia	1 368	583	1 246	2 253	1 902	1 334	282	23	322	332	289	428
Iraq	-3 508	-2 859	-2 637	-2 088	-5 364	-7 458	194	147	135	238	286	439
Jordan	730	760	622	963	2 006	1 635	43	26	16	122	149	54
Kuwait	351	240	567	758	2 113	614	-2 696	7 932	4 666	24 613	11 189	10 317
Lebanon	1 905	1 607	600	561	1 067	1 843	345	29	-1 339	34	121	391
Oman	1 938	1 914	8 793	5 480	4 745	8 685[c]	-588	-840	1 178	944	165	1 044[c]
Qatar	-2 813	-2 434	-1 093	76	-474	460	4 450	2 730	160	2 384	-191	1 563
Saudi Arabia	3 079	1 621	28 350	26 710	22 803	15 737	14 553	5 411	24 674	26 531	17 345	22 046
Syrian Arab Republic	..	..	..	..	..	..	..	..	..	..	..	..
Türkiye	9 469	7 507	11 260	13 372	10 547	10 591	2 973	3 236	5 036	4 522	5 853	5 939
United Arab Emirates	17 875	19 884	20 667	22 737	30 688	45 632	21 226	18 937	22 546	24 833	22 328	23 399
Yemen	-371[c]	..	..	..	..	..	3[c]	..	..	..	..	..
State of Palestine	132	80	353	233	299	162	56	59	-58	13	-11	-11
Central Asia	8 223	6 539	7 226	10 205	7 548	2 927	-2 526	-2 122	1 504	-1 831	990	-3 603
Kazakhstan	3 284	3 670	3 353	6 542	3 714	-2 550	-2 620	-2 206	1 452	-1 393	930	-3 760
Kyrgyzstan	404	-402	226	55	159	705[c]	67	2	2	-455	8	20[c]
Tajikistan	364[b]	107[b]	84[b]	174[b]	141[b]	291[b]	23[b]	70[b]	48[b]	12[b]	40[b]	101[b]
Turkmenistan	1 854[c]	1 436[c]	1 287[c]	936[c]	1 378[c]	1 645[c]	..	..	..	..	..	..
Uzbekistan	2 316[b]	1 728[b]	2 275[b]	2 498[b]	2 156[b]	2 836[b]	3[b]	11[b]	3[b]	4[b]	12[b]	37[b]
Latin America and the Caribbean[a]	160 657	93 391	143 136	196 216	186 744	164 265	48 326	-568	41 457	70 032	49 766	33 341
South America	112 182	55 896	95 854	146 917	136 538	111 471	36 399	-2 666	41 508	53 042	40 495	25 960
Argentina	6 649	4 884	6 658	15 201	23 866	11 431	1 523	1 177	1 544	2 090	2 961	2 690
Bolivia (Plurinational State of)	-217	-1 129	584	6	240	247	48	-111	91	-81	257	233
Brazil	65 386	28 322	50 651	73 352	64 040	59 178	19 031	-13 415	20 450	32 100	26 746	12 427
Chile	14 403	11 292	12 627	17 514	17 758	11 360	11 169	6 242	12 024	12 796	8 145	2 431
Colombia	13 989	7 459	9 561	17 182	16 794	14 234	3 153	1 733	3 181	3 384	1 269	4 611
Ecuador	980	1 106	649	882	475	232	..	..	..	..	..	..
Guyana	1 695	2 074	4 468	4 393	7 246	8 630	17	14	15	5	7	6
Paraguay	358	323	268	803	324	400	-125	40	217	-53	-86	65
Peru	6 388	-769	6 321	11 845	3 562	5 887	1 113	448	1 148	56	699	263
Suriname	-8	0,3	-124	3	-63	-27	-	-	-9	-13	10	-11
Uruguay	1 994	831	2 977	3 386	2 284	-1 735	631	-263	431	508	-548	643
Venezuela (Bolivarian Republic of)	564	1 504	1 213	2 349	13	1 633[c]	-163	1 469	2 416	2 250	1 034	2 603[c]
Central America	44 530	33 589	44 648	45 756	46 962	48 873	11 558	2 092	-1 177	15 625	8 384	7 385
Belize	94	76	125	141	16	166	2	4	2	1	2	3
Costa Rica	2 812	1 763	3 231	3 164	3 788	4 322	117	118	85	104	88	47
El Salvador	636	24	386	172	718	640	0,4	22	12	29	30	4
Guatemala	976	935	3 462	1 442	1 586	1 694	180	149	476	722	615	691
Honduras	498	419	739	920	1 076	994	3	46	226	183	220	374

Annex table 1
FDI flows, by region and economy, 2019–2024
(Continued)

Region/economy	FDI inflows						FDI outflows					
	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
Mexico	34 618	28 225	33 528	36 316	36 466	36 872	10 755	1 720	-2 125	14 532	6 577	5 736
Nicaragua	503	747	1 047	1 287	1 114	1 352	59	40	15	19	42	74
Panama	4 392	1 401	2 130	2 313	2 197	2 833	442	-7	132	34	811	457
Caribbean[a]	3 945	3 906	2 634	3 543	3 243	3 921	368	6	1 126	1 366	887	-4
Antigua and Barbuda	118[b]	45[b]	299[b]	341[b]	340[b]	289[b]	-15[b]	-36[b]	-24[b]	19[b]	31[b]	30[b]
Barbados	215	262	239	200[c]	225[c]	303[c]	28	8	18	15[c]	8[c]	19[c]
Dominica	76[b]	5[b]	28[b]	10[b]	44[b]	33[b]	0.1[b]	-0.4[b]	2[b]	-1[b]	1[b]	1[b]
Dominican Republic	3 021	2 560	3 197	4 099	4 390	4 523	-192	-99	153	-49	360	-47
Grenada	263[b]	160[b]	189[b]	202[b]	260[b]	267[b]	49[b]	-45[b]	-19[b]	15[b]	0.3[b]	5[b]
Haiti	75	25	51	39	32[c]	41[c]	..	..	..	..	..	..
Jamaica	665	265	321	319	377	156[c]	446	7	56	60	-4	-[c]
Saint Kitts and Nevis	44[b]	-0.5[b]	16[b]	58[b]	35[b]	26[b]	23[b]	8[b]	-30[b]	4[b]	-2[b]	5[b]
Saint Lucia	94[b]	97[b]	105[b]	102[b]	149[b]	217[b]	64[b]	-35[b]	-34[b]	-28[b]	-55[b]	-23[b]
Saint Vincent and the Grenadines	58[b]	57[b]	174[b]	70[b]	63[b]	68[b]	10[b]	3[b]	-1[b]	-3[b]	-1[b]	-1[b]
Trinidad and Tobago	184	1 056	-935	-914	-1 555	-799[c]	114	98	917	1 354	531	43[c]
Anguilla	163[b]	69[b]	84[b]	38[b]	37[b]	23[b]	14[b]	2[b]	-74[b]	4[b]	13[b]	11[b]
Aruba	-136	137	143	261	-178	103[c]	-1	1	4	97	91	88[c]
Bahamas (the)	611	897	1 185	1 255	1 535	1 449	148	157	66	226	475	813
British Virgin Islands	39 103[c]	39 620[c]	39 361[c]	38 119[c]	39 889[c]	53 599[c]	44 154[c]	42 280[c]	43 217[c]	42 809[c]	44 158[c]	59 451[c]
Cayman Islands	28 165[c]	23 621[c]	25 893[c]	24 590[c]	28 134[c]	35 902[c]	31 630[c]	10 835[c]	21 232[c]	17 990[c]	20 422[c]	27 237[c]
Curaçao	203	156	146	164	155	155[c]	-11	7	3	11	10	8[c]
Montserrat	1[b]	3[b]	2[b]	5[b]	4[b]	4[b]	..	..	..	..	..	..
Sint Maarten	74	22	27	17	37	37[c]	1	1	6	2	2	5[c]
Oceania	1 527	1 018	1 259	2 119	921	1 348	-1 140	-916	1 580	2 543	446	1 385
Cook Islands (the)	9[b]	5[b]	-2[b]	4[b]	6[c]	2[c]	0.3[b]	0.3[b]	0.3[b]	0.3[b]	0.3[c]	0.3[c]
Fiji	321	241	407	104	91	204	-36	14	32	16	29	26
Kiribati	-1	3	1[c]	3[c]	2[c]	2[c]	0.3	0.3	0.3[c]	0.3[c]	0.3[c]	0.3[c]
Marshall Islands (the)	4	3	0.5	3	2	2	..	..	..	..	..	..
Palau	45	43	31[c]	72[c]	48[c]	69[c]	..	..	..	..	..	..
Papua New Guinea	335[b]	112[b]	-34[b]	1 193[b]	48[b]	303[c]	-1 211[b]	-990[b]	1 487[b]	2 457[b]	333[b]	1 236[c]
Samoa	-4	4	9	5	2	4	4	2	1	0.3	0.3	2
Solomon Islands	33	9	28	44	25	33	4	3	5	2	8	53
Tonga	-6	4	0.3	3	5	-12	1	1	0.3	0.3	1	1
Tuvalu	0.3[c]	0.1[c]	0.2[c]	0.2[c]	0.2[c]	0.3[c]	..	..	..	..	..	..
Vanuatu	53	41	43	11	9	29[c]	1	1	0.3	1	4	3[c]
French Polynesia	13	-16	-26	-9[c]	-6[c]	-14[c]	21	-3	13	6[c]	15[c]	11[c]
New Caledonia	723	572	794	696[c]	687[c]	726[c]	76	55	30	57[c]	51[c]	46[c]
Memorandum												
Least developed countries (LDCs)[e]	21 246	22 738	27 348	24 651	33 733	36 900	-973	678	-432	1 378	1 025	623
Landlocked developing countries (LLDCs)[f]	22 013	15 512	19 976	23 606	25 257	22 748	742	-1 409	2 022	-1 586	3 577	-2 019
Small island developing States (SIDS)[g]	7 127	5 992	6 152	7 309	8 111	8 990	745	144	1 237	1 778	1 379	1 046

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

[a] Excluding the financial centres in the Caribbean and special-purpose entities in reported countries.

[b] Asset/liability basis.

[c] Estimates.

[d] Directional basis calculated from asset/liability basis.

[e] Least developed countries include Afghanistan, Angola, Bangladesh, Benin, 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, Malawi, Mali, Mongolia, Nepal, the Niger, North Macedonia, Paraguay, the Republic of Moldova, Rwanda, South Sudan, Tajikistan, Turkmenistan, Uganda, Uzbekistan, Zambia and Zimbabwe.

[g] Small island developing States include Antigua and Barbuda, Barbados, the Bahamas, Cabo Verde, the Comoros, Dominica, the Dominican Republic, Fiji, Grenada, Jamaica, Kiribati, Maldives, the Marshall Islands, Mauritius, the Federated States of Micronesia, Nauru, Palau, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Príncipe, Seychelles, Solomon Islands, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu.

Annex table 2
FDI stock, by region and economy, 2000, 2010, 2023 and 2024
(Millions of dollars)

Region/economy	FDI inward stock				FDI outward stock			
	2000	2010	2023	2024	2000	2010	2023	2024
World[a]	7 377 201	20 843 962	48 097 605	50 907 355	7 408 290	21 515 780	42 596 581	43 594 995
Developed economies	5 860 038	14 978 676	32 772 342	35 094 469	6 740 421	18 747 714	33 309 128	33 716 813
Europe	2 491 244	9 571 724	16 532 663	16 047 186	3 193 644	11 429 278	17 865 867	17 375 971
European Union	1 882 785	7 121 174	11 856 690	11 460 635	1 967 112	8 185 561	13 673 967	13 357 433
Austria	31 165	160 615	218 708	220 146	24 821	181 638	281 888	290 523
Belgium	..	473 358	589 028	461 716	..	431 613	699 860	603 060
Bulgaria	2 704	44 970	61 282	59 924	67	2 583	4 689	4 924
Croatia	2 785	34 967	53 529	58 806	952	4 969	9 678	11 703
Cyprus	2 846	260 132	95 750	75 126	557	242 556	50 895	25 013
Czechia	2 644	128 504	222 168	215 889	738	14 923	70 736	73 964
Denmark	73 574	81 408	125 051	173 734[c]	73 100	144 399	236 967	22 271[c]
Estonia	2 645	15 551	39 397	35 190	259	5 545	13 601	13 517
Finland	24 273	86 698	90 200	92 048[b]	52 109	137 663	153 798	159 214[b]
France	184 215	630 710	1 015 478	1 049 213[c]	365 871	1 172 994	1 638 445	1 679 395[c]
Germany	470 938	955 881	1 203 769	1 209 485[c]	483 946	1 364 565	2 213 939	2 252 464[c]
Greece	14 113	35 026	65 603	68 249	6 094	42 623	21 241	22 553
Hungary	22 870	91 723	118 777	117 177	1 280	23 612	48 238	49 470
Ireland	127 089	285 575	1 436 431	1 170 383	27 925	340 114	1 379 391	1 378 060
Italy	122 533	328 058	499 224	493 539	169 957	491 208	610 522	608 501
Latvia	1 691	10 869	27 013	27 299	19	931	6 396	6 704
Lithuania	2 334	15 455	34 219	35 035	29	2 647	7 966	7 812
Luxembourg	..	172 257	1 096 851	1 143 108	..	187 027	1 574 939	1 652 302
Malta	2 263	12 770	17 991	22 070	193	60 596	11 442	10 660
Netherlands	243 733	1 790 605	2 777 149	2 699 359	305 461	2 192 009	3 333 987	3 182 667
Poland	33 477	215 615	347 561	345 236	268	44 444	40 191	39 743
Portugal	34 224	90 912	205 812	203 795	19 417	52 479	74 129	76 689
Romania	6 953	68 699	130 645	131 074	136	2 327	7 287	6 897
Slovakia	6 970	50 328	62 161	60 743	555	3 457	5 475	5 296
Slovenia	2 389	10 667	24 416	24 053	772	8 147	10 386	10 564
Spain	156 348	628 341	864 805	867 636	129 194	653 236	616 815	632 170
Sweden	93 791	324 478	433 672	400 603	123 618	377 258	551 067	531 299
Other Europe	608 459	2 450 550	4 675 972	4 586 552	1 226 532	3 243 717	4 191 900	4 018 538
Albania	247	3 255	13 934	15 339	..	154	1 390	1 634
Belarus	1 306	9 904	15 536	16 655	24	205	1 512	1 495
Bosnia and Herzegovina	450	6 709	10 970	11 428	..	211	877	892
Iceland	497	11 784	10 266	10 415	663	11 466	5 359	5 550
Montenegro	..	4 231	6 314	6 331	..	-	285	318
North Macedonia	540	4 351	8 323	8 951	16	100	324	358
Norway	30 265	149 108	175 818	149 771	34 026	157 041	251 039	200 844
Republic of Moldova	449	2 897	5 455	5 389	23	90	395	494
Russian Federation	29 738	464 228	279 303	216 039	19 211	336 355	259 850	230 024
Serbia	..	22 299	60 570	62 461	..	1 960	4 985	5 320
Switzerland	101 635	648 092	1 022 566	767 035	232 202	1 043 199	1 443 617	1 286 559
Ukraine	3 875	52 872	54 951	54 573	170	6 548	-885	-1 216
United Kingdom	439 458	1 068 187	3 005 071	3 254 442[c]	940 197	1 686 260	2 222 107	2 285 029[c]
North America	3 108 255	4 406 182	14 554 696	17 385 846	3 136 637	5 808 053	11 833 705	12 550 577
Canada	325 020	983 889	1 768 022	1 818 788	442 623	998 466	2 640 976	2 792 899
United States	2 783 235	3 422 293	12 786 674	15 567 058	2 694 014	4 809 587	9 192 729	9 757 678
Other developed economies	260 539	1 000 769	1 684 983	1 661 437	410 140	1 510 383	3 609 556	3 790 264
Australia	121 686	527 728	808 744	796 031	92 508	449 740	712 878	745 503
Israel	20 426	60 086	242 274	265 155	9 091	67 893	105 966	114 825
Japan	50 323	214 880	223 499	219 802[c]	278 445	831 076	2 035 736	2 151 099[c]
New Zealand	24 101	59 738	99 321	90 464	8 491	16 717	17 460	15 954
Republic of Korea	43 738	135 500	308 086	286 988	21 497	144 032	737 345	762 647
Bermuda	265[c]	2 837	3 059	2 998	108[c]	925	171	237
Developing economies[a]	1 517 163	5 865 286	15 325 263	15 812 885	667 869	2 768 065	9 287 453	9 878 183
Africa	153 062	623 424	1 022 141	1 073 851	39 815	137 363	243 679	275 454
North Africa	45 590	201 109	346 959	364 429	3 199	25 770	44 624	76 085
Algeria	3 379[c]	19 545	36 860	38 299[c]	205[c]	1 505	2 894	2 947[c]
Egypt	19 955	73 095	158 689	205 243	655	5 448	9 580	10 089
Libya	471[c]	16 334	18 462[c]	18 462[c]	1 903[c]	16 615	20 286[c]	20 229[c]
Morocco	8 842[c]	45 082	59 541	61 493	402[c]	1 914	11 153	11 328
Sudan	1 398	15 690	30 849[c]	..	..	..	..	..
Tunisia	11 545	31 364	42 559	40 932	33	287	711	643
Other Africa	107 472	422 314	675 182	709 422	36 616	111 594	199 055	199 369
West Africa	33 010	109 968	215 676	219 704	6 381	18 090	30 659	31 795

Annex table 2
FDI stock, by region and economy, 2000, 2010, 2023 and 2024
(Continued)

Region/economy	FDI inward stock				FDI outward stock			
	2000	2010	2023	2024	2000	2010	2023	2024
Benin	213	604	3 720	4 019	11	21	403	437
Burkina Faso	28	354	3 623	3 486	0.4	8	437	414
Cabo Verde	192[c]	4 745	2 584	2 559	..	2	105	120
Côte d'Ivoire	2 483	6 978	16 723	19 374	9	94	1 947	2 371
Gambia	216	323	1 384[c]	1 617[c]	..	..	..	..
Ghana	1 554[c]	10 080	47 360	49 029[c]	..	83	1 886	1 984[c]
Guinea	263[c]	486	6 145[c]	7 973[c]	12[c]	144	97[c]	96[c]
Guinea-Bissau	38	63	358	362	..	5	12	12
Liberia	3 247[c]	10 206	11 633[c]	12 380[c]	2 188	4 714	5 097[c]	5 187[c]
Mali	132	1 964	7 702	7 922	1	18	359	371
Mauritania	146[c]	2 372[c]	6 237[c]	7 767[c]	4[c]	28[c]	6[c]	10[c]
Niger	45	2 251	9 987	9 895	1	9	414	401
Nigeria	23 786	66 797	75 198	69 210	4 144	12 576	16 862	17 565
Senegal	295	1 699	18 553	19 380	22	263	1 099	1 079
Sierra Leone	284[c]	482	2 951[c]	3 225[c]	..	..	..	..
Togo	87	565	1 517	1 506	-10	126	1 936	1 750
Central Africa	5 053	39 227	126 988	134 649	1 651	2 217	4 861	5 110
Burundi	47[c]	13	283[c]	315[c]	2[c]	2	9[c]	18[c]
Cameroon	917[c]	3 099[c]	7 283	8 208[c]	1 252[c]	971[c]	625	630[c]
Central African Republic	104	511	754[c]	794[c]	43	..	..	..
Chad	576[c]	3 594[c]	9 285[c]	10 305[c]	..	..	..	..
Congo	1 893[c]	9 261[c]	34 653[c]	35 256[c]	40[c]	34[c]	183[c]	208[c]
Democratic Republic of the Congo	617	9 368	33 571	36 684	34	229	3 878	4 076
Equatorial Guinea	1 060[c]	9 413[c]	19 211[c]	19 399[c]	..	..	..	..
Gabon	-227[c]	3 287[c]	17 742[c]	18 886[c]	280[c]	946[c]	79[c]	79[c]
Rwanda	55	422	3 696	4 270	..	13	86	96
Sao Tome and Principe	11[c]	260[c]	511[c]	533[c]	..	21[c]	1[c]	3[c]
East Africa	7 202	37 754	111 978	124 292	387	1 474	4 259	5 739
Comoros	21[c]	60[c]	150[c]	158[c]	..	..	..	..
Djibouti	40	..	..	..	..	..	..	..
Eritrea	337[c]	666[c]	1 031[c]	1 003[c]	..	..	..	..
Ethiopia	941[c]	4 206	38 544	42 528[c]	..	..	..	..
Kenya	932[c]	4 967	11 196	12 699[c]	115[c]	62	3 256	4 565[c]
Madagascar	141	4 383	4 535[c]	4 948[c]	9[c]	193	957	1 082[c]
Mauritius	683	4 658	7 777	8 154	132	864	1 201	1 183
Seychelles	515	2 960	3 547	3 775[c]	130	290	- 1 330	- 1 267[c]
Somalia	4[c]	566[c]	5 600[c]	6 408[c]	..	..	..	..
Uganda	807	5 575	19 625	22 930	..	66	175	175
United Republic of Tanzania	2 781	9 712	19 973[c]	21 691[c]	..	..	..	..
Southern Africa	62 208	235 365	220 541	230 776	28 198	89 813	159 276	156 724
Angola	7 977	32 458	12 143	12 139[c]	-8	1 870	5 292	5 322[c]
Botswana	1 827	3 351	5 410	6 550	517	1 007	916	1 018
Eswatini	536	927	896	1 002	87	91	133	224
Lesotho	330	929	851	809[c]	..	..	..	..
Malawi	358	963	1 028	1 248[c]	-5	45	225	273[c]
Mozambique	1 249	4 331	57 281	60 789	1	3	7	11
Namibia	1 276	3 595	9 200	10 995	45	722	768	854
South Africa	43 451	179 565[b]	111 358[b]	113 033[b]	27 328	83 249[b]	150 667[b]	147 795[b]
Zambia	3 966[c]	7 433	15 492	16 729[c]	..	2 531	471	300[c]
Zimbabwe	1 238	1 815	6 883	7 480	234	297	796	927
Asia	1 023 690	3 676 151	11 176 326	11 784 268	574 828	2 212 729	8 166 120	8 668 698
East and South-East Asia	908 302	2 772 092	9 293 054	9 821 225	557 345	1 923 922	7 181 918	7 594 677
East Asia	650 7	1 738 193	5 874 262	6 234 106	473 708	1 455 117	5 508 599	5 882 483
China	193 348[c]	586 882[c]	3 534 030	3 650 268[c]	27 768[c]	317 211	2 955 400	3 118 180[c]
Hong Kong, China	435 417	1 067 520	2 124 395	2 350 740	379 285	943 938	2 038 211	2 215 802
Macao, China	2 801[c]	13 603	47 592	51 122[c]	..	550	13 830	15 260[c]
Taiwan Province of China	18 875	6 508[b]	136 586[b]	147 512[c]	66 655	190 803[b]	500 135[b]	532 114[c]
Democratic People's Republic of Korea	77[c]	236[c]	963[c]	981[c]	..	..	..	..
Mongolia	182	8 445	30 697	33 482	..	2 616	1 024	1 127
South-East Asia	257 603	1 033 898	3 418 792	3 587 119	83 637	468 806	1 673 318	1 712 194
Brunei Darussalam	3 868[c]	4 140	6 753	6 326	..	..	..	..
Cambodia	1 580	9 026	48 439	52 667	193	331	1 570	1 742
Indonesia	25 060	160 735	289 808	305 666	6 940	6 672	115 104	124 611
Lao People's Democratic Republic	588[c]	1 888[c]	14 404[c]	15 393[c]	26[c]	68[c]	95[c]	95[c]
Malaysia	52 747	101 620	201 236	222 706	15 878	96 964	139 137	139 169
Myanmar	3 752[c]	14 507	39 948	41 043	..	..	..	..

Annex table 2
FDI stock, by region and economy, 2000, 2010, 2023 and 2024
(Continued)

Region/economy	FDI inward stock				FDI outward stock			
	2000	2010	2023	2024	2000	2010	2023	2024
Philippines	13 762[c]	25 896[b]	118 856[d]	125 533[c]	1 032[c]	6 710[b]	67 877[d]	70 738[c]
Singapore	110 570	516 593[b]	2 156 155[b]	2 230 874[b]	56 336	331 315[b]	1 155 257[b]	1 174 122[b]
Thailand	30 944	142 334	313 219	336 521	3 232	24 418	180 677	188 092
Timor-Leste	..	155	1 002	1 249	..	94	7	11
Viet Nam	14 730[c]	57 004[c]	228 971[c]	249 141[c]	..	2 234[c]	13 595[c]	13 615[c]
South Asia	30 743	269 143	671 355	687 594	2 761	100 441	245 526	269 409
Afghanistan	17[c]	963	1 613[c]	..	..	16	165[c]	..
Bangladesh	2 162	6 072	17 831	18 294	68	98	351	322
Bhutan	4[c]	204	438[c]	538[c]	..	..	..	..
India	16 339	205 580	536 935	547 588	1 733	96 901	236 506	260 275
Iran (Islamic Republic of)	2 597[c]	28 953	63 058[c]	64 507[c]	411[c]	1 713[c]	4 325[c]	4 415[c]
Maldives	128[c]	1 114[c]	7 479[c]	8 286[c]	..	..	..	..
Nepal	72[c]	239	2 260	2 284	..	..	..	..
Pakistan	6 919	19 828	26 908	29 541[c]	489	1 362	2 591	2 698[c]
Sri Lanka	2 505	6 190	14 833	16 556	60	351	1 589	1 699
West Asia	72 352	533 339	989 771	1 054 917	14 672	172 001	720 677	788 728
Armenia	513	4 405	7 639	7 754	..	150	618	663
Azerbaijan	1 791	14 253	27 919	27 503	1	5 790	28 644	29 876
Bahrain	5 906	15 154	43 470	45 948	1 752	7 883	22 068	22 343
Georgia	762	8 518	24 571	24 703	118	848	3 529	3 866
Iraq	-48	7 965	..	..	..	632	3 675	4 114[c]
Jordan	3 135	21 899	42 574	44 043	44	473	9 943	9 997
Kuwait	608	11 884	16 648	16 693	1 428	28 189	50 246	56 270
Lebanon	14 233	44 285	71 706	73 548	352	6 831	14 818	15 208
Oman	2 577[c]	14 987	56 069[c]	64 754[c]	..	2 796	6 222[c]	7 267[c]
Qatar	1 912	30 549	27 136	27 596[c]	74	12 995	49 862	51 425[c]
Saudi Arabia	17 577	90 291	239 293	255 030	5 285[c]	26 528	205 033	229 018
Syrian Arab Republic	1 244	9 939[c]	10 743[c]	10 743[c]	..	5	5[c]	5[c]
Türkiye	18 812	188 308	191 740	180 025	3 668	22 509	62 831	69 435
United Arab Emirates	1 069[c]	63 869	224 987	270 619	1 938[c]	55 560	262 208	285 607
Yemen	843[c]	4 858[c]	1 942[c]	2 661[c]	13[c]	571[c]	672[c]	3 333[c]
State of Palestine	1 418[c]	2 176	3 335	3 297	..	241	303	303[c]
Central Asia	12 293	101 577	222 146	220 532	49	16 365	17 999	15 884
Kazakhstan	10 078	82 648	157 562	151 307	16	16 212	17 434	14 950
Kyrgyzstan	432	1 698	3 469	3 961[c]	33	2	33	48[c]
Tajikistan	136	1 226	3 333	3 976	..	..	323	642
Turkmenistan	949[c]	13 442[c]	42 915[c]	44 560[c]	..	..	..	..
Uzbekistan	698[c]	2 564	14 867	16 728	..	152	210	244
Latin America and the Caribbean[a]	338 557	1 551 018	3 094 976	2 921 767	53 170	417 359	872 756	927 752
South America	186 425	1 085 464	2 019 637	1 909 221	43 634	288 295	632 593	690 620
Argentina	67 601	85 591	130 302	175 538	21 141	30 328	49 539	52 497
Bolivia (Plurinational State of)	5 188	6 890	9 377	9 566	29	8	1 167	969
Brazil	..	640 330	1 103 233	914 328	..	149 333	314 120	359 678
Chile	45 753	160 904	265 694	266 950	11 154	61 126	143 077	142 992
Colombia	11 157	82 991	253 672	267 442	2 989	23 717	73 353	77 964
Ecuador	6 337	11 858	22 799	23 032	..	..	..	..
Guyana	756	1 784	24 328	34 729	1	2	83	86
Paraguay	1 003	3 555	8 531	10 229	..	..	1 985	3 390
Peru	11 062	42 976	132 966	138 837	505	4 265	10 885	10 997
Suriname	..	..	1 854	1 827	..	..	213	212[c]
Uruguay	2 088	12 479	38 053	36 283	138	345	6 167	7 228
Venezuela (Bolivarian Republic of)	35 480	36 107	28 827[c]	30 460[c]	7 676	19 171	32 004[c]	34 607[c]
Central America	139 768	417 113	988 863	923 040	8 534	126 025	232 147	229 119
Belize	294	1 454	2 636	2 764	42	49	78	81
Costa Rica	2 809	15 936	56 262	60 584	22	1 135	3 846	3 892
El Salvador	1 973	7 284	10 788	11 390	104	1	1 730	1 732
Guatemala	3 420	4 554	24 153	26 417	93	452	3 567	4 323
Honduras	1 392	6 951	18 853	19 252	..	867	3 160	3 534
Mexico	121 691	355 512	797 967	720 245	8 273	119 967	212 206	207 467
Nicaragua	1 414	4 681	13 434	14 787	..	181	876	950
Panama	6 775	20 742	64 769	67 602	..	3 374	6 684	7 141
Caribbean[a]	12 365	48 441	86 476	89 507	1 002	3 039	8 016	8 013
Antigua and Barbuda	..	..	2 417[b]	2 688[b]	..	..	116[b]	134[b]
Barbados	308	4 970	8 769[c]	9 072[c]	41	4 058	3 866[c]	3 885[c]
Dominica	..	..	564[b]	601[b]	..	..	3[b]	4[b]

Annex table 2
FDI stock, by region and economy, 2000, 2010, 2023 and 2024
(Concluded)

Region/economy	FDI inward stock				FDI outward stock			
	2000	2010	2023	2024	2000	2010	2023	2024
Dominican Republic	1 673	19 537[b]	57 624[b]	60 870[b]	..	743[b]	1 277[b]	1 230[b]
Grenada	..	..	2 211[b]	2 437[b]	..	..	96[b]	99[b]
Haiti	95	625	2 063[c]	2 104[c]	..	..	..	..
Jamaica	3 317	10 855	18 709	18 864[c]	709	176	1 133	1 133[c]
Saint Kitts and Nevis	..	..	1 707[b]	1 729[b]	..	..	90[b]	93[b]
Saint Lucia	..	..	2 002[b]	2 181[b]	..	..	605[b]	597[b]
Saint Vincent and the Grenadines	..	..	1 674[b]	1 748[b]	..	..	93[b]	92[b]
Trinidad and Tobago	7 280[c]	17 424	8 080	7 669[c]	293[c]	2 119	5 605	5 650[c]
Anguilla	..	..	1 354[b]	1 367[b]	..	..	107[b]	116[b]
Aruba	1 161	4 567	4 508	4 612[c]	675	682	852	939[c]
Bahamas (the)	3 865[c]	13 160	29 904	30 584[c]	547[c]	2 538	7 991	8 363[c]
British Virgin Islands	30 289[c]	265 783[c]	1 068 246[c]	1 121 844[c]	69 041[c]	376 866[c]	172 465[c]	231 916[c]
Cayman Islands	27 316[c]	161 916[c]	601 061[c]	636 963[c]	21 643[c]	89 316[c]	382 857[c]	410 094[c]
Curaçao	..	527	1 236[c]	1 390[c]	..	32	1 012[c]	1 020[c]
Montserrat	..	..	46[b]	50[b]	..	..	..	..
Sint Maarten	..	256	224[c]	261[c]	..	10	111[c]	116[c]
Oceania	1 854	14 694	31 819	32 999	56	614	4 897	6 278
Cook Islands (the)	..	..	187[c]	189[c]	..	..	14[c]	15[c]
Fiji	356	2 963	5 855	5 718	39	47	163	193
Kiribati	..	5	13	15[c]	..	2	1	1[c]
Marshall Islands (the)	20	120	164[c]	165[c]	..	..	..	..
Palau	173	232	905[c]	1 164[c]	..	..	..	..
Papua New Guinea	935	3 748	4 208	4 511[c]	1[c]	-5[c]	2 908	4 144[c]
Samoa	77	220	320	308	..	14	51	50
Solomon Islands	106[c]	552	681	714[c]	..	27	77	130[c]
Tonga	19[c]	220[c]	132[c]	120[c]	14[c]	58[c]	50[c]	51[c]
Tuvalu	..	5	9[c]	9[c]	..	..	..	..
Vanuatu	61[c]	454	647	676[c]	..	23	28	30[c]
French Polynesia	146[c]	442[c]	1 104[c]	1 090[c]	..	144[c]	368[c]	380[c]
New Caledonia	-41[c]	5 726[c]	17 595[c]	18 321[c]	2[c]	304[c]	1 237[c]	1 283[c]
Memorandum								
Least developed countries (LDCs)[d]	35 958	161 143	458 704	459 711	2 604	11 494	23 897	57 592
Landlocked developing countries (LLDCs)[f]	33 630	183 972	462 860	477 885	1 025	29 288	56 435	57 073
Small island developing States (SIDS)[g]	18 806	84 676	165 438	172 043	1 906	11 076	21 231	21 786

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

[a] Excluding the financial centres in the Caribbean and special-purpose entities in reporting countries.

[b] Asset/liability basis.

[c] Estimates.

[d] Directional basis calculated from asset/liability basis.

[e] Least developed countries are Afghanistan, Angola, Bangladesh, Benin, 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 are Afghanistan, Armenia, Azerbaijan, Bhutan, the Plurinational State of Bolivia, Botswana, Burkina Faso, Burundi, the Central African Republic, Chad, Eswatini, Ethiopia, Kazakhstan, Kyrgyzstan, the Lao People's Democratic Republic, Lesotho, Malawi, Mali, Mongolia, Nepal, the Niger, North Macedonia, Paraguay, the Republic of Moldova, Rwanda, South Sudan, Tajikistan, Turkmenistan, Uganda, Uzbekistan, Zambia and Zimbabwe.

[g] Small island developing States are Antigua and Barbuda, Barbados, Cabo Verde, the Comoros, Dominica, Fiji, Grenada, Jamaica, Kiribati, Maldives, the Marshall Islands, Mauritius, the Federated States of Micronesia, Nauru, Palau, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Sao Tome and Príncipe, Seychelles, Solomon Islands, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu and Vanuatu, and the Bahamas.

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