Financing for Sustainable Development Report 2021

Inter-agency Task Force on Financing for Development

United Nations

Report of the Inter-agency Task Force
on Financing for Development

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This report is a joint product of the members of the Inter-agency Task Force on Financing for Development. The Financing for Sustainable Development Office of the United Nations Department of Economic and Social Affairs serves as the coordinator and substantive editor of the Financing for Sustainable Development Report.

The online annex of the Task Force (http://developmentfinance.un.org) provides additional data and analysis on progress in implementation of the Financing for Development outcomes, including the Addis Ababa Action Agenda and relevant means of implementation targets of the Sustainable Development Goals.

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Foreword

Financing for sustainable development is at a crossroads. Either we close the yawning gap between political ambition and development financing, or we will fail to deliver the Sustainable Development Goals (SDGs) by the deadline of 2030. The Financing for Sustainable Development Report 2021 sets out ways in which we can bridge this gap and provide resources at scale to developing countries.

The COVID-19 pandemic has dramatically set back progress on sustainable development, exposing and exacerbating inequalities among peoples and countries. Women have been particularly affected by job losses and extra burdens of care. Extreme poverty is on the rise. And we are failing to come to grips with the existential threats posed by the climate and biodiversity crises. These intergenerational impacts are not due to the COVID-19 pandemic alone, but are the result of well-known fragilities, inequalities and injustices that we have failed to address. The risks of inaction have now been laid bare by the pandemic.

Gross World Product contracted by 4.3 per cent in 2020, marking the sharpest decline in global output since the Great Depression. Unprecedented interventions by central banks and governments, and the expansion of budget deficits to near-wartime levels, prevented an even deeper economic catastrophe. But as we embark on the recovery, vast gaps are opening up between countries. Financing constraints are a critical factor: 80 per cent of fiscal support measures took place in the developed world, while many developing countries are on the brink of a debt crisis. This threatens to create a sharply diverging post-pandemic world.

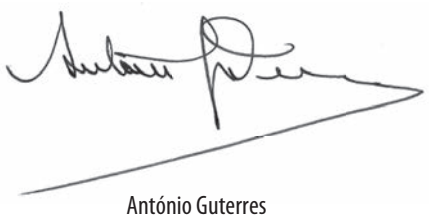
Our global recovery efforts must prioritize preventing this scenario, which could result in a lost decade for development. We have a shared obligation to provide access to vaccines, diagnostics and therapeutics for all, and emergency financing to fight the ongoing pandemic. The International Monetary Fund must issue a new allocation of Special Drawing Rights (SDRs), and those countries in a position to do so should use their SDRs to help countries that are most in need.

Going forward, we need to invest in a sustainable, resilient and equitable recovery. Financing and stimulus packages must be aligned with the SDGs and climate targets. Rather than trying to restore yesterday's economy, governments must invest in measures to protect their citizens from poverty, hunger and existential threats, while sharing the fruits of globalization more equally. New forms of financing, including longer-term instruments spanning 40–50 years, may be needed for these investments.

Investment alone, however, is not enough. To address the systemic nature of global risks including climate change and pandemics, we must reform our institutional and policy architecture, strengthen multilateralism, and create new platforms and networks for global cooperation.

The United Nations has a critical role in supporting the mobilization of resources for sustainable development, set out in my 2018 strategy for financing the 2030 Agenda. We will continue to use our convening power to urge collective action to provide resources at scale to developing economies.

This report sets out further recommendations and analysis, drawing on policy options developed in 2020 through the high-level events on Financing for Development in the era of COVID-19 and beyond. It will inform discussions within the United Nations and with our partners in 2021. I urge all governments and other stakeholders to meet the expectations of those we serve with unity, solidarity and coordinated multilateral action.



António Guterres

Preface

Just as we have entered the Decade of Action to deliver the Sustainable Development Goals (SDGs), the COVID-19 crisis has triggered the largest recession in 90 years and has set back hard earned development progress. Unless we mobilize and equitably allocate resources for a large-scale, sustainable and sustained crisis response, the SDGs may well be beyond reach.

The pandemic and economic crisis has aggravated debt and other vulnerabilities, and disproportionately impacted women, youth, the poor, and those informally employed. Renewed waves and new variants of the virus pose concerns for protracted growth across the world, impeding tax revenues, direct investment, trade and remittances, as well as access to international financial markets. These financing constraints in turn inhibit pandemic response in developing countries, creating a bifurcated global recovery and exacerbating existing inequalities.

The 2021 Financing for Sustainable Development Report responds to the request made by Member States to review the impact of the COVID-19 pandemic on financing for sustainable development, and to propose recommendations to rebuild better. The report underlines the need for policy actions to ensure effective support until the recovery is firmly underway. Its thematic chapter discusses the systemic and interlinked nature of risk in a tightly intertwined world, and the importance of providing financing for risk reduction and resilience and financing that is risk-informed and resilient.

With the collaboration of more than 60 agencies of the United Nations system and partner international organizations, the report provides much needed guidance to Member States to take action towards a more resilient future. Several key messages emerge from this year's analysis:

- ***Immediate action*** is needed ***to avoid another lost decade:*** ODA commitments musst be met, liquidity and concessional financing facilities replenished, and debt service suspension extended.
- The crisis response creates an unprecedented opportunity to ***invest long-term to rebuild better:*** Governments must invest in human capital, social protection systems, and in sustainable resilient infrastructure and technology; the international community must support countries in such efforts, including those with already high debt burdens, e.g. through ultra-long term (e.g. 50 year) fixed-rate financing, debt swaps and buybacks, and by strengthening the system of public development banks; and policy makers can help facilitate a new business model that works for everyone, including by pricing externalities such as carbon emissions, and reorienting capital markets toward sustainability.
- The crisis also opens space to reform and ***"future-proof" the policy and institutional architecture, at all levels:*** the international community must ensure that proposals in relation to taxation in the context of a digitalising economy, the multilateral trading system, international debt architecture and the global financial safety net are fully aligned with the 2030 Agenda and meet the needs of developing countries. The United Nations can serve as a unique platform to galvanize collective action.

The report begins with an assessment of the impact of the pandemic on the global macroeconomic context (chapter I), including a discussion of the interlinkages between economic, social, and environmental risks, and the implications for economic policymaking. The thematic chapter (chapter II) explores the impact of global systemic risk on the Financing for Development agenda, with a view to identify and ensure that policy options for financing are sustainable and resilient. The remainder of the report (Chapters III.A to III.G and IV) discusses progress in the seven action areas of the Addis Agenda.

Additional analysis and data are presented in the comprehensive online annex of the Task Force (http://developmentfinance.un.org).

Liu Zhenmin
Under-Secretary-General for Economic and Social Affairs
United Nations
Chair of the Inter-agency Task Force

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Inter-agency Task Force members

Task Force coordinator and substantive editor

United Nations Department of Economic and Social Affairs (UN/DESA)

Financing for development major institutional stakeholders

World Bank Group

International Monetary Fund (IMF)

World Trade Organization (WTO)

United Nations Conference on Trade and Development (UNCTAD)

United Nations Development Programme (UNDP)

Regional economic commissions

Economic and Social Commission for Asia and the Pacific (ESCAP)

Economic and Social Commission for Western Asia (ESCWA)

Economic Commission for Africa (ECA)

Economic Commission for Europe (UNECE)

Economic Commission for Latin America and the Caribbean (ECLAC)

United Nations system and other agencies and offices

Basel Committee on Banking Supervision (BCBS)

Committee on Payments and Market Infrastructure (CPMI)

Financial Stability Board (FSB)

Food and Agriculture Organization of the United Nations (FAO)

Global Environment Facility (GEF)

Green Climate Fund (GCF)

International Association of Insurance Supervisors (IAIS)

International Atomic Energy Agency (IAEA)

International Civil Aviation Organization (ICAO)

- International Development Finance Club (IDFC)
- International Fund for Agricultural Development (IFAD)
- International Labour Organization (ILO)
- International Organization for Migration (IOM)
- International Telecommunication Union (ITU)
- International Trade Centre (ITC)
- Joint United Nations Programme on HIV/AIDS (UNAIDS)
- Office of the High Commissioner for Human Rights (OHCHR)
- Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (OHRLLS)
- Office of the Secretary-General's Envoy on Youth
- Office of the Special Adviser on Africa (OSAA)
- Organisation for Economic Co-operation and Development (OECD)
- Principles for Responsible Investment (PRI)
- Secretariat of the Convention on Biological Diversity (CBD)
- South Centre
- Sustainable Energy for All (SE4All)
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- The Global Alliance for Vaccines and Immunizations (GAVI)
- UN Capital Development Fund (UNCDF)
- United Nations Children's Fund (UNICEF)
- United Nations Commission on International Trade Law (UNCITRAL)
- United Nations Convention to Combat Desertification (UNCCD)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)
- United Nations Environment Programme (UNEP)
- United Nations Forum on Forests (UNFFS)
- United Nations Framework Convention on Climate Change (UNFCCC)
- United Nations Global Compact (UNGC)
- United Nations High Commissioner for Refugees (UNHCR)
- United Nations Human Settlements Programme (UN-HABITAT)
- United Nations Industrial Development Organization (UNIDO)
- United Nations Office for Disaster Risk Reduction (UNISDR)
- United Nations Office for Project Services (UNOPS)


United Nations Office for South-South Cooperation (UNOSSC)


United Nations Office for the Coordination of Humanitarian Affairs (OCHA)


United Nations Office on Drugs and Crime (UNODC)

United Nations Population Fund (UNFPA)


United Nations Research Institute for Social Development (UNRISD)


United Nations University (UNU)


United Nations World Food Programme (WFP)


World Health Organisation (WHO)


World Intellectual Property Organization (WIPO)

Overview and key messages



Overview and key messages

This is the second report of the Inter-agency Task Force written amidst the COVID-19 pandemic. In the spring of 2020, in the early phases of the pandemic—just as the world embarked on the Decade of Action to deliver the SDGs—the Task Force warned of the threats COVID-19 posed to realization of the 2030 and Addis Agendas. A year later, these threats have materialized. At the same time, unprecedented crisis response measures provide a unique opportunity to change course and put the world on a more sustainable, inclusive and risk-informed development trajectory.

COVID-19 has dramatically set back SDG progress, and affected all aspects of financing for development: the global economy has experienced the worst recession in 90 years, with the most vulnerable segments of societies disproportionately affected; around 120 million people have fallen back into extreme poverty; 114 million jobs have been lost; tax revenues, foreign direct investment, trade and remittances have decreased; and debt vulnerabilities increased along with the rise in debt levels.

This is despite a large-scale, if highly uneven, policy response. Unprecedented fiscal and monetary measures—USD 16 trillion in fiscal stimulus, and emergency measures by central banks—have cushioned the socio-economic impact of the pandemic in developed countries in particular, even when they could not prevent a heavy death toll. A systemic financial crisis has been averted, with some market indices reaching new highs. The tech sector has done particularly well, driven by accelerated digitalization in response to social distancing and other measures during the pandemic. But for many, the pandemic's impact has been devastating. Many developing countries in particular face tight fiscal constraints, creating a bifurcated global response. Widespread access to vaccines is imminent in rich countries but in the majority of countries it remains many months (and for some of the most vulnerable countries years) away. The fight against the pandemic is far from over.

Immediate action to avoid a lost decade for many

The world is thus still in firefighting mode. The focus must remain on containing the pandemic and addressing its socio-economic fallout for all. ***There is a grave danger of a sharply diverging world***—with one group of countries recovering on the back of strong stimulus measures and digital acceleration, and many others sinking deeper into a cycle of poverty, hunger, unsustainable debt and austerity—***potentially facing another lost decade of sustainable development*** and failing to achieve the SDGs. Preventing this scenario must be a foremost priority in global recovery efforts. The 2021 Financing for Sustainable Development Report of the Inter-agency Task Force focuses on this urgency and calls for:

- ***Meeting ODA commitments*** and providing ***fresh concessional financing*** for developing countries, especially LDCs, along with replenishing the capital of MDBs as needed; sustaining a high level of positive net flows at highly concessional terms to IDA-eligible countries through a successful replenishment of IDA20; ***Fully funding the Access to COVID-19 Tools (ACT) Accelerator,*** to ensure rapid and equitable access to vaccines, diagnostics and therapeutics;
- Provision of a new allocation of ***Special Drawing Rights*** (along with voluntary use of SDRs of countries in strong external positions to help countries most in need) in support of liquidity for developing countries to fight COVID-19 and its economic/social fallout; an ***extension of the G20 Debt Service Suspension Initiative*** as circumstances demand; and debt treatments from official bilateral and commercial creditors for countries with unsustainable debt levels or protracted financing gaps.

Rebuilding better: investing in a sustainable recovery and fixing the system

The COVID-19 crisis has also exposed vulnerabilities and inequalities in the financial system and the global economy, which necessitate urgent reform. First, it has underlined the systemic and interlinked nature of risk in a tightly intertwined world—where a health crisis disrupts global trade and financial flows, and where climate-related risks loom increasingly large. Second, it has highlighted underlying vulnerabilities that have accumulated in the global economy over decades: financial markets remain short-term oriented, highly leveraged, and often disconnected from the real economy; and many countries are overindebted—around half of least developed and other low-income countries were at high risk of or in debt distress even prior to the COVID-19 shock. Third, it has further accelerated digitalization of economies and societies—allowing for business continuity, but also further underlining inequalities in access to and use of digital technologies. Fourth, it has revealed the lack of resilience in many parts of our economies and societies, including through insufficient investment in health and social protection systems to protect households in the event of crises. Climate change is compounding threats across all these dimensions and will create catastrophic damages if current policies and growth paths continue. In short, the pandemic has reminded us that to achieve the SDGs, we need financing for investments in sustainability, risk reduction and resilience, along with sustainable, risk-informed and resilient financing.

The 2021 Financing for Sustainable Development Report puts forward proposals to ***change this trajectory,*** with concrete ideas to (i) ***invest*** in people and a sustainable and risk-informed recovery; and (ii) ***reform the global financial and policy architecture,*** to ensure that it is supportive of a recovery and aligned with the 2030 Agenda.

As first steps all governments should:

- align their recovery packages with the SDGs and climate targets, including through integrated financing approaches; and refrain from lifting support measures prematurely to safeguard the recovery and protect the most vulnerable; and
- pursue progressive fiscal systems to address rising inequalities and use taxes to better align behaviour with sustainable development, such as through carbon taxes.

Investing in people

The crisis response creates an unprecedented opportunity to redesign the social contract. Household vulnerability is closely linked to lack of SDG progress: poverty, inequality, education, health and at times social or ethnic status, gender, disability and environmental concerns all determine household vulnerability. Crisis response packages that focus on prevention, risk reduction and protection of the most vulnerable can stimulate economic growth, while strengthening resilience to future shocks and helping achieve the SDGs.

Governments should prioritize:

- spending on social protection and health, with international support to help the poorest countries, including to build social protection infrastructure (which can be scaled up in times of crises); in the medium term financing social protection floors can also be supported by scaling up counter-cyclical financing;
- investments in human capital, including digital skills, to help develop a workforce for the 21st century; and
- modernizing labour market policies, social protection systems, and fiscal policies to reflect the realities of an increasingly digitalized world and changing global economy.

Investing in sustainable and resilient infrastructure and innovation: enabling ultra-long-term financing and investment strategies

Investment in people must be complemented by investment in sustainable and resilient infrastructure, along with increased investment in innovation. Such investments can combat climate change, create employment, stimulate growth, reduce risks and build resilience to future crises. Productive investments in the capital stock should also improve debt sustainability in the long-run, even while raising debt levels in the near term.

A sustainable and resilient infrastructure push, along with investment in human capital, is entirely feasible in most developed countries, in part due to extraordinarily low interest rates that enable access to cheap finance. But many developing countries do not have fiscal space for such investments. Without additional support, they will be left behind. Providing access to relatively short-term market finance alone is not the answer—as in some countries this will exacerbate risk of debt distress; nor is relying on private finance to fill all the gaps, which is suitable in some but not all SDG contexts. Solutions rely on developing strategies with very long-term lending and investment horizons.

- First, official lenders should make ***very long-term sustainable*** finance available to countries, by:
  - extending maturities of lending and exploring options to ***provide grants or ultra-long term (e.g. 50 years) financing*** to developing countries for investment in long-term growth and sustainable development; and offering more ***fixed-interest lending*** so countries can take advantage of ultra-low global interest rates;
  - ***Debt swap initiatives*** have been, or are being launched in several regions, and could be further expanded;
  - including ***state-contingent elements in public debt*** to 'automatize' moratoria in times of crisis, and to set a precedent for private markets; and
  - In this context, longer-term balance sheet analysis could help countries design instruments that can reduce debt vulnerability risks while facilitating long-term investments. This would also allow them to more consistently take long-term risks such as climate change into account, as well as to incorporate the positive feedback effects of long-term investments on economic growth.
- Second, the international community needs to better leverage public development banks (PDBs) as a tool for sustainable development investment. In many countries, PDBs were instrumental in supporting the COVID-19 crisis response, including those newly established by countries of the South. Well-managed PDBs can allow for a more transparent accounting of both public liabilities and associated assets—in essence they can ringfence assets and borrow against them.

- The international community can help ***strengthen the system of development banks;*** for example, cooperation between national and multilateral banks can help banks build capacities while also leveraging local knowledge; continued research on appropriate ***capital, risk management and SDG reporting frameworks*** can support PDB governance and risk-informed lending for SDG investments.

- Third—blended finance can play a role, but needs to focus on where it can add the most value. Support from the official sector can often ***include non-concessional official lending*** in support of commercial finance, rather than relying mostly on concessional finance. For example, loans that include equity-like elements could support investment in digital technologies in developing countries, including LDCs. This would allow public actors to share in the possible financial upside, and not divert concessional resources from the social sector. To increase efficiencies and better leverage risk capital, bilateral and/or MDB official resources could be ***pooled into a blended finance fund or build on existing funds.***

- Fourth—the private sector has a critical role to play in financing sustainable investments, including in developing countries. However, the current business model - focused on short term financial returns for shareholders—is not conducive to support business' contributions to the SDGs. ***Policy makers can help facilitate a new business model that works for everyone,*** not only for shareholders, by:

  - accounting for the effects of private activity on environmental and social impacts, including by pricing externalities such as carbon emissions; requesting transparency on businesses' plans to align their activities with sustainable development; and making corporate governance more long-term oriented;

  - reorienting capital markets toward investing in sustainable development-aligned priorities, by encouraging the removal of short-term incentives along the investment chain, as called for in the Addis Ababa Action Agenda, and mitigating the risk of SDG-washing in investment practices.

- Fifth, by ***improving enabling environments,*** Governments can also further mitigate investment risks (e.g. in the context of an integrated national financing framework, INFF); such measures should be complemented by international support to help developing countries in addressing the challenges of financing the 2030 Agenda.

Future-proofing the system

Investment alone will not suffice. Often it is gaps in the international financial architecture, or policy incoherence at national and international levels that undermine financing for sustainable development. To achieve the SDGs, we must "future-proof" the policy and institutional architecture, at national and global levels. This entails updating tax policies, capital market rules, development cooperation, trade, debt, financial sector regulations, and competition policies to ensure that these are in line with the new realities, including an increasingly digitalized economy and systemic nature of risk. Indeed, it requires actions across the chapters of this report, including:

- ensuring that a final agreement on proposals in relation to taxation in the context of a digitalising economy address the concerns of and meets the needs of developing countries, and effectively reduce harmful tax competition; and better using technologies to combat illicit financial flows (chapter III.A);

- further consolidating existing sustainability reporting frameworks to ensure global coherence, mandating a minimum level of corporate disclosure, using the strong momentum in this area to realize ambitious changes; and developing coherent taxonomies and setting appropriate incentives to encourage investors to help spearhead transformation of the companies in which they invest (chapter III.B);

- developing strategies for better international crisis coordination and risk reduction in development cooperation. Country-owned Integrated national financing frameworks (INFFs) can provide a basis to translate country priorities into concrete asks for development partners (chapter III.C);

- revamping the multilateral trading system to make it fully effective and responsive to sustainable development priorities (chapter III.D);

- continuing efforts towards greater debt transparency, responsible lending and borrowing, and building on the recently adopted G20 Common Framework for debt treatments beyond DSSI to improve the international debt architecture, toward a more efficient framework for sovereign debt resolution (chapter III.E);

- further strengthening the global financial safety net, and closing gaps that were highlighted in the last 12 months; incorporating climate risk considerations into policy frameworks and financial regulation, e.g. by setting mandatory reporting standards and integrating climate risk scenarios in financial stress tests (chapter III.F);

- building an inclusive digital economy, including by ensuring affordable internet access and digital literacy for all*;* strengthening global norm-setting and national regulatory frameworks to address risks from the digital economy, including an increase in market concentration (chapter III.G).

Strengthened multilateralism and new forms of global cooperation—that bring different policy communities together and give voice to those most vulnerable to shocks and crises—are needed to address the systemic nature of climate, pandemic and other global risks, address inequalities and achieve the SDGs. The current crisis is an opportunity for the international community to build consensus around necessary reforms to align financial, investment, trade, development, environmental and social policies and institutions to avoid a global climate catastrophe, build resilience, and achieve the SDGs.

The United Nations can serve as a unique platform to bring together health, climate, economic, social and other policy domains at a global level, including through discussions at the UN General Assembly, the *ECOSOC Forum on Financing for Development Follow-up,* the 15th UNCTAD Conference on Trade and Development, and the Secretary-General's joint initiative, with Canada and Jamaica, on *Financing for Development in the Era of COVID-19 and Beyond* (see box 1).

Box 1: High-level events on Financing for Development in the Era of COVID-19 and Beyond

To address the socio-economic fall-out from the COVID-19 pandemic and its potential to derail progress towards the Sustainable Development Goals, the Secretary-General together with Canada and Jamaica convened a series of high-level events on Financing for Development in the Era of COVID-19 and Beyond. Discussions kicked off during a high-level event on 28 May 2020 that brought together UN member states, international organizations and other key partners. The meeting led to the formation of six working groups on: (i) external finance and remittances, jobs and inclusive growth; (ii) recovering better for sustainability; (iii) global liquidity and financial stability; (v) debt vulnerability; (vi) private sector creditors engagement; and (vi) illicit financial flows. A high-level meeting of Ministers of Finance on 8 September 2020 provided further inputs before the final meeting of Heads of State and Government on 29 September 2020. World leaders agreed that the international community must support efforts to build back better by fostering more inclusive, resilient and sustainable economies and societies.

The working groups brought together Member States, supported by the broader UN-system, and came up with a menu of policy options across all action areas of the Addis Ababa Action Agenda. These options do not represent a negotiated outcome among countries but provide guidance on concrete actions that individual countries, international financial institutions, regional organizations, and the global community at large could undertake to overcome the crisis and steer the recovery towards the attainment of the 2030 Agenda for Sustainable Development.[a]

These options reflect a wide array of perspectives and priorities that can inform the future work of the Inter-agency Task Force on Financing for Development. To prepare the 2021 FSDR, the Task Force has reviewed these policy options and discusses key recommendations in each of the chapters. A range of networks could also take the options up in their work streams, including the Economic and Social Council, the members of the Group of Friends on SDG Financing and entities within the UN Development System. The United Nations Deputy-Secretary General has designated six UN-entity led clusters to provide continued technical and policy advisory support, focusing on sustainability and climate action; socio-economic response; finance and technology; liquidity and debt vulnerability; illicit financial flows; and addressing special country needs.

This report builds on the recommendations from the Discussion Groups that the Task Force chose to highlight as options for implementation. The recommendations from this report will in turn inform the six cluster groups.

Source: UN DESA.

a United Nations. 2020. *Financing for Development in the Era of COVID-19 and Beyond: Menu of Options for the Considerations of Heads of State and Government. Part I.* New York: United Nations; United Nations. 2020.

About this report

The themes covered in the report respond to the request made by Member States in the 2020 ECOSOC Forum on Financing for Development Follow-up. Member States asked the Task Force to review the impact of the COVID-19 pandemic on Financing for Sustainable Development, and to assess and propose options for sustainable financing going forward. To this end, the thematic chapter of the report is adopting a risk lens to assess the impact of the COVID-19 pandemic, climate change and other risks to sustainable finance. Together with the seven chapters of the report, which follow up on the chapters of the Addis Ababa Action Agenda, it provides guidance to Member States to 'rebuilding better' toward a more resilient future.

The 2021 *Financing for Sustainable Development Report* of the Inter-agency Task Force begins with an assessment of the impact of the pandemic on the global macroeconomic context (chapter I), including a discussion of the interlinkages between economic, social (e.g. health, inequality), and environmental (e.g. climate) risks, and the implications for economic policymaking. The thematic chapter (chapter II) explores the impact of global systemic risk on the Financing for Development agenda, with a view to identify policy options for financing that is sustainable and resilient, and that ensure that sustainability and resilience are financed. The remainder of the report (Chapters III.A to III.G and IV) discusses progress in the seven action areas of the Addis Agenda. Each chapter gives updates on implementation and lays out challenges and policy options at both the national and international levels—including in response to the current crisis and pandemic and climate risks.

In chapter III.A on domestic public resources, main issues include: using COVID-19 fiscal stimulus packages to support sustainable development, including through building social protection floors; raising resources and using fiscal systems to combat inequality; strengthening international tax cooperation and fighting illicit financial flows; and aligning fiscal systems with sustainable development. In chapter III.B on private business and finance, main issues include: scaling up private investment in recovery; improving financial inclusion and reducing remittance transaction costs; mobilizing capital markets; and making the private sector and financial markets more sustainable. In chapter III.C on international development cooperation, main issues include: ODA, along with other forms of development cooperation; lessons from the crisis for development effectiveness; and international public finance for climate change and disaster risk reduction. In chapter III.D on international trade as an engine for development, main issues include: the role of trade in supporting public health, reforms of the multilateral trading system; trade policies consistent with the SDGs, including investment treaties; as well as e-commerce and trade financing gaps. In chapter III.E on debt and debt sustainability, main issues include: debt trends and debt crises risks in the context of COVID-19; the immediate policy response to prevent liquidity crises and create fiscal space for investments in recovery and the SDGs, and improvements to the debt architecture. In chapter III.F on addressing systemic issues, main issues include: the international crisis response and the role of the global financial safety net; policy options for managing capital flow volatility; financial regulatory reforms and the role of climate risks; the growing role of digital finance; and how to strengthen global governance and coherence. In chapter III.G, on science, technology and innovation (STI), main issues include: the role of digital technologies in the COVID-19 response; the broader contribution of STI to addressing complex risks and building resilience; and the contribution of the United Nations system towards

progress of STI for the SDGs. Finally, in chapter IV on data and monitoring, main issues include: development cooperation in support of statistical systems and the role of big data for the 2030 Agenda.

This Task Force is made up of more than 60 United Nations agencies, programmes and offices, the regional economic commissions and other relevant international institutions. The report and its online annex draw on their combined expertise, analysis and data. The major institutional stakeholders of the financing for development process—the World Bank Group, the International Monetary Fund, the World Trade Organization, the United Nations Conference on Trade and Development, and the United Nations Development Programme—take a central role, jointly with the Financing for Sustainable Development Office of the United Nations Department of Economic and Social Affairs, which also serves as the coordinator of the Task Force and substantive editor of the report.

The global economic context and its implications for sustainable development



Chapter I

The global economic context and its implications for sustainable development[1]

1. Introduction

As the COVID-19 pandemic continues to spread and mutate across countries, the global economic outlook remains bleak. The United Nations projects a modest recovery of 4.7 per cent for the global economy in 2021, which will barely offset the contraction of -4.3 per cent in 2020. The baseline outlook is also highly susceptible to downside risks amidst a high degree of uncertainty – including on access to vaccines, the spread of the virus and its more infectious variants, the impact of policy support measures, and debt sustainability. Against this backdrop, the global recovery is expected to be fragile and uneven.

The deep economic downturn caused by the pandemic has exacerbated existing inequalities and is threatening the achievement of the Sustainable Development Goals. The pandemic and economic crisis have aggravated debt and other vulnerabilities, and disproportionately affected those at the lower end of the skills and income distribution, causing sharp increases in unemployment, poverty, hunger and inequality, disproportionately affecting women, the young, and marginalized segments of society. It has also accelerated the pace of automation and digitalization, meaning that many jobs lost during the economic downturn may not come back. These challenges are posing a significant threat to achieving the Sustainable Development Goals (SDGs) by 2030.

Unprecedented policy action avoided worse outcomes, but there is still a risk of a "lost decade" for many developing countries. Large fiscal and monetary stimuli were critical to addressing the immediate health crisis, support economies and jobs, and avert a financial crisis. Yet, 114 million full-time jobs were lost in 2020[2] and the crisis risks leaving long-term economic scars and reducing potential output of the global economy. The magnitude of these effects across economies depends on several factors – including the extent of corporate bankruptcies and permanent business closures, number of discouraged workers, and permanent changes in consumer behaviour – but the impact is likely to be greatest in developing countries which lack the resources to effectively combat the crisis. Indeed, without international support, they risk a "lost decade" for sustainable development.

Macroeconomic policies require careful balancing to ensure an equitable and sustainable recovery. The global economic and financial crisis and its aftermath provide valuable lessons for macro-policy makers. Premature withdrawal of monetary and fiscal stimuli can derail a fragile economic recovery. And while unprecedented monetary easing by central banks – together with large-scale fiscal interventions – was crucial in averting a financial meltdown in early 2020, prolonged easy liquidity conditions can raise concerns about financial market stability, debt vulnerability, and inflation. Already high and growing public and private debt levels in many economies can become unsustainable once interest rates pick up again. Even where public debt levels may be considered "sustainable", high debt service payments will constrain fiscal policy space to respond to future shocks. Policymakers will have to manage these risks carefully to support a sustained recovery. And they will also need to manage the impact of climate risks, inequality, and other risks on economic outcomes, and consider the impacts of policies on these factors. For example, ad-hoc emergency measures can reinforce unsustainable economic models characterized by high emissions and inequality.[3]

Policies that address the economic fallout from the pandemic provide a historic opportunity to lay the ground for a sustainable, equitable and resilient economic model. The massive fiscal interventions currently underway are an unprecedented opportunity to put the world on track to meet

climate targets and the SDGs, including through tackling long-standing gender inequalities.

Investments in low-carbon technologies and sustainable and resilient infrastructure can spur growth and economic recovery, address inequalities, and at the same time accelerate the transformation towards climate-resilient economies. Yet, such investment alone will not suffice and successful climate mitigation and adaptation require a combination of policies: carbon pricing, elimination of fossil fuel subsidies, a sustainable investment push, and support for green energy research and innovation. National and international policy environments must be strengthened to maximise the synergies of economic, environmental and social policies. And international support for countries in need will be necessary to ensure an equitable and just transition for all and avoid a "lost decade".

2. Outlook and risks for the global economy

2.1 Global and regional growth trends

World gross product contracted by 4.3 per cent in 2020, marking the sharpest decline in global output since the Great Depression. Social distancing and lockdown measures across many countries brought economic activities to a halt, particularly in the second quarter of the year. This depressed demand, particularly in contact-intensive sectors, and caused disruptions to supply chains that weakened international trade (chapter III.D). With the easing of mobility restrictions in most countries, the release of pent-up demand and inventory restocking led to a rebound of economic activity. Financial market volatility, which had spiked during the early stages of the pandemic, stabilized on the back of massive policy support, as did global commodity prices. Aggregate international capital flows to developing economies also recovered (see box I.1). However, not all countries have been able to access international capital markets and take advantage of ultra-low interest rates. While recent estimates point to stronger-than-expected economic activity in the second half of 2020[4], the recovery is still tenuous. Second and third waves of infections have led to renewed lockdowns and a slowdown in reopening in many countries.

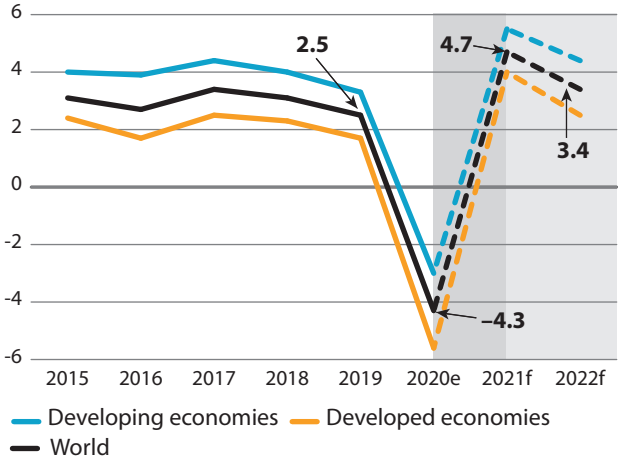
Global output is expected to recover from a low base in 2021, but will remain well below pre-pandemic trends. The *United Nations World Economic Situation and Prospects 2021* projects that the global economy will expand by 4.7 per cent in 2021 and 3.4 per cent in 2022 (see figure I.1). In developed economies, average growth is projected to recover to 4.0 per cent in 2021, following a sharp contraction of 5.6 per cent in 2020. In developing economies, growth is expected to reach 5.6 per cent in 2021, following a contraction of 2.5 per cent in 2020. If these projections hold, the economic loss induced by the pandemic would be equivalent to roughly 36 per cent of the world's 2019 output.[5]

Aggregate growth figures mask stark differences in prospects across regions and countries. Economies in the Eastern Asia and South-Eastern Asia regions have fared relatively well compared to other developing regions, on the back of a quick and robust recovery in China. Many economies in both these regions have been relatively successful in containing the spread of the virus, flattening the curve quickly and enduring shorter lockdowns. In contrast, the pandemic has exacted a heavy human toll and inflicted significant economic damage on many countries in the Southern Asia as well as the Latin America and the Caribbean regions. South Asian economies faced the worst economic declines, with GDP per capita growth contracting by nearly 10 per cent in 2020. Small Island Developing States (SIDS), including Pacific Island countries that have largely been spared by the spread of the virus, face particularly bleak recovery prospects due to their reliance on global tourism and travel.[6] While at the time of writing Africa continues to be the continent least affected by the virus, it experienced its first contraction in 27 years.[7]

Output and per capita income losses have reversed many years of income gains in developing countries. Per capita GDP growth has declined across all regions; almost a third of developing countries have experienced per capita income losses that reverse a decade or more of gains. Income losses have been highest in Africa and in Latin America and the Caribbean (figure I.2). The most vulnerable segments of societies have been disproportionately affected, with the total number of people living in extreme poverty expected to increase by 80-90 million people, particularly affecting women and girls[8]. In the baseline scenario, almost 800 million people may still be living in extreme poverty in 2030, posing a significant threat to the achievement of Sustainable Development Goal (SDG) 1.

The pandemic has disrupted labour markets around the world on a historically unprecedented scale. This has disproportionately harmed labour-intensive service sectors that typically employ large shares of low-skilled workers, disproportionately affecting women. Labour markets around the world were disrupted on a historically unprecedented scale. 114 million jobs were lost relative to 2019 – approximately four times more than during the global financial crisis in 2009. This translates into an estimated decline of global labour income by US$3.7 trillion, or 4.4 per cent of global GDP, with women and young workers disproportionally affected. Evidence from Eastern Europe and Central Asia shows that more women

Figure I.1
Growth of world gross product
(Percentage)



Source: UN DESA
Note: e = estimate, f = forecast.

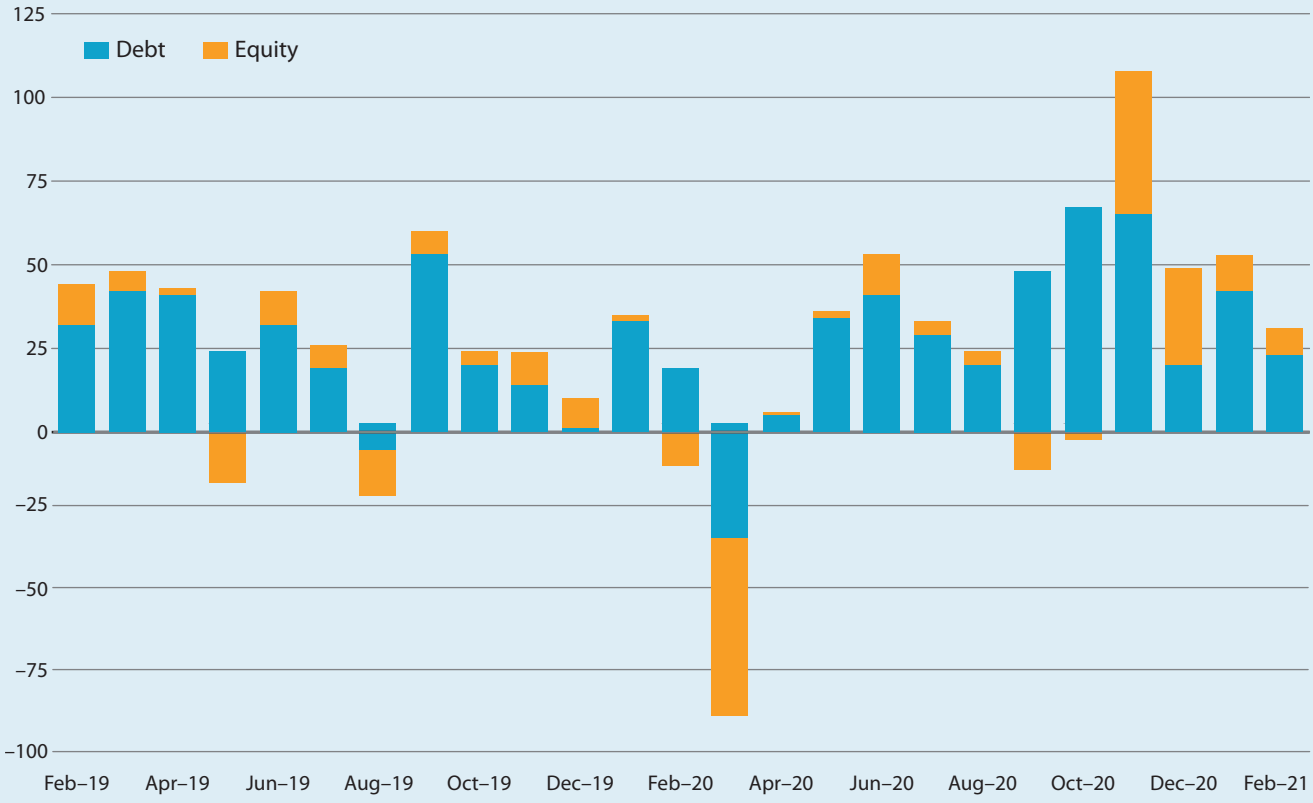
Box I.1
International capital flows

Record capital outflows from developing countries in the first quarter of 2020 shone a spotlight on vulnerabilities in the international monetary system. The onset of the COVID-19 pandemic triggered non-resident portfolio outflows of almost $100 billion between late January and the end of March, with credit spreads (i.e. the interest cost borrowers pay above a benchmark, such as US Treasuries) on emerging market sovereign bonds widening significantly, and exchange rates plummeting. Since then, international financial markets have stabilized and portfolio flows have returned to more advanced developing economies, thanks mainly to unprecedented stimulus by the US Federal Reserve and other major central banks. Nonetheless, recovery was uneven, and many countries still face severe liquidity shortages.

Portfolio flows to developing countries as a group have picked up since April 2020. Between April 2020 and February 2021, non-resident portfolio inflows to 63 emerging economies tracked by the Institute of International Finance reached over $485 billion (see figure 1). This was initially driven by bond issuances in major international reserve currencies, with equity flows picking up only in late 2020. While net flows turned positive in the third quarter of 2020, the recovery in portfolio flows has been uneven across countries. Some countries, such as Chile, Colombia and Thailand, have also been able to issue sovereign bonds in local currency to cover large parts of their projected funding needs for 2020-21. But overall, local currency funding has lagged behind financing in major international reserve currencies, as portfolio flows into local currency bond funds have remained weak,[a] and many developing countries' external funding needs will continue to exceed their access to market finance. Furthermore, heightened uncertainty about the pace of the global recovery elevates the risks of capital flight, as indicated by the most recent episode of portfolio outflows from emerging economies in late January and February 2021.

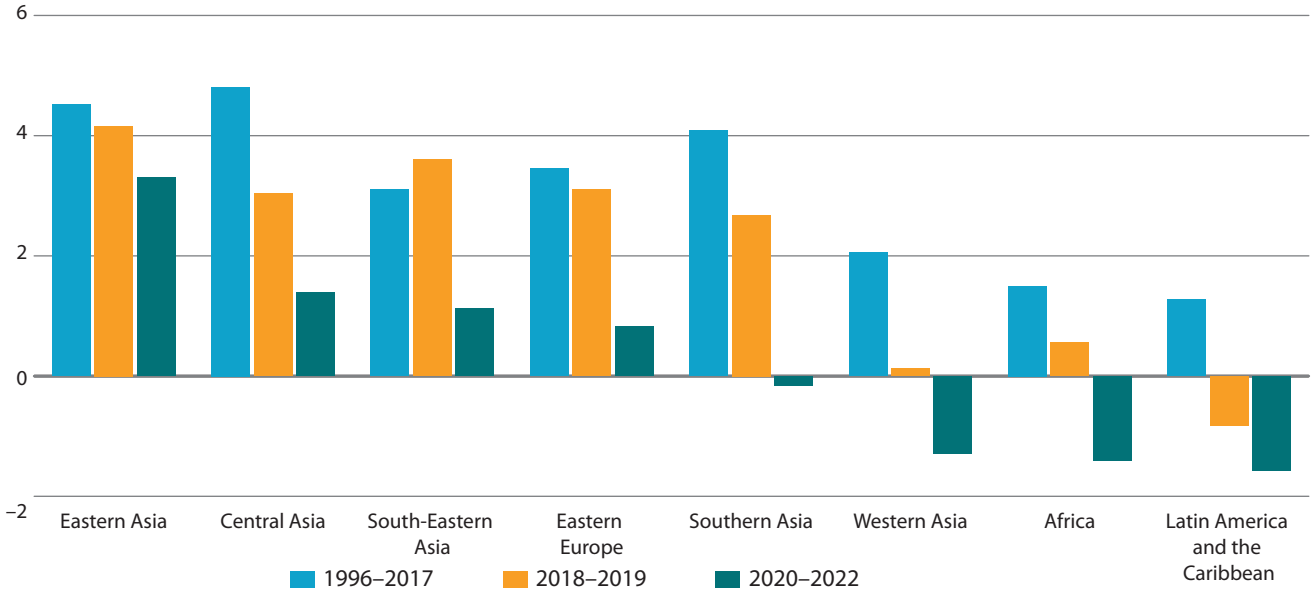
a IMF. 2020. Global Financial Stability Report: Bridge to Recovery. Washington, D.C.: IMF.

Figure I.1.1
Non-resident portfolio flows to selected emerging markets, 2019–2021
(Billions of United States dollars)



Source: UN DESA based on data from the Capital Flows Tracker - February 2021 of the Institute of International Finance, Inc.

Figure I.2
Average annual GDP per capita growth by region
(Percentage)



Source: UN DESA

have lost their jobs or businesses as a result of COVID-19 (25 per cent of women vs. 21 per cent of men).[9] Furthermore, lockdown measures to prevent the further spread of COVID-19 have taken a disproportionate toll on sectors with high rates of female employment, with school closures further magnifying the outsized impact of the pandemic on working mothers.[10] Employment in contact intensive sectors, such as accommodation and food service activities, experienced a year-on-year decline of 20.3 per cent.[11] Women are over-represented in these sectors in most countries.[12] In other sectors, such as manufacturing or wholesale and retail trade, accelerating automation and digitalization – coupled with a protracted decline in investment in manufacturing – threaten to make many job losses permanent. Lower productivity growth as a result of low investment could also translate into lower wage growth, further exacerbating inequalities.

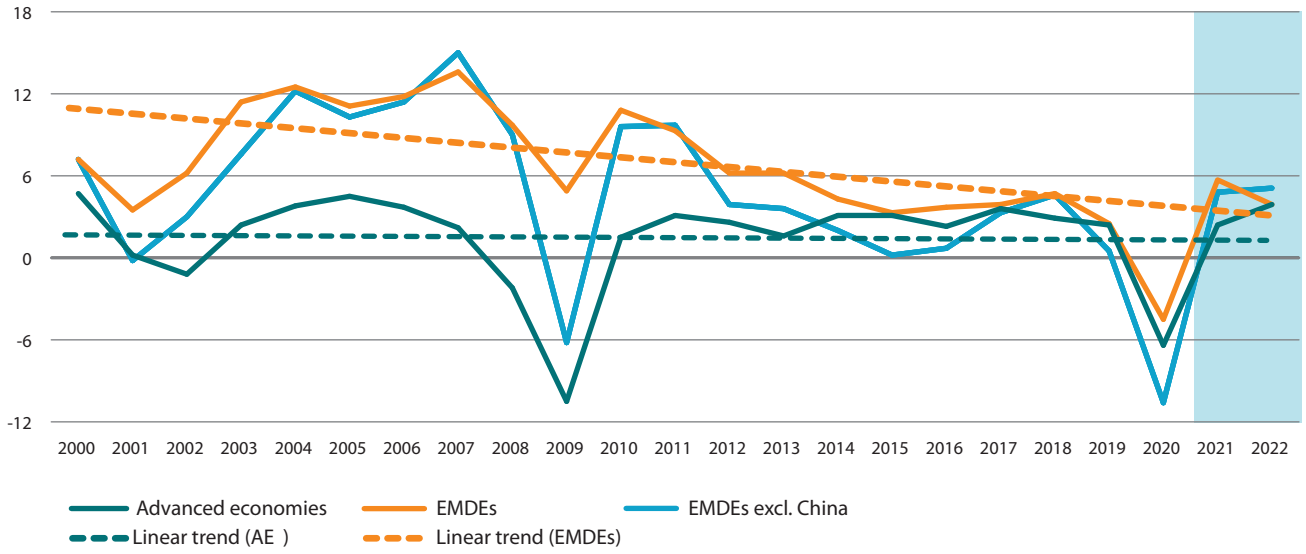
2.2. Weak investment growth

The pandemic dealt a massive blow to global investment in 2020, exacerbating the slowdown in overall productivity growth and raising the spectre of a "lost decade" for some. In 2020, gross fixed capital formation declined by 6.4 per cent of GDP in advanced economies, and 4.5 per cent in developing economies (see figure I.2), with declines experienced across all regions – though to varying degrees (see figure 1.4). Excluding China, the investment contraction in developing countries reached a record 10.6 per cent, much larger than during the global financial crisis.[13] This decline follows a decade of historically weak global investment and slow productivity growth, as private investment in fixed capital never fully recovered from the global financial crisis (see figure I.2).[14] After the pandemic recedes, history suggests that investment losses related to epidemics may be longlasting, as heightened risk aversion and uncertainty about the future prospects constrain private risk taking, even after the pandemic recedes. (see figure I.3). While a rebound in investment is expected in 2021, the collapse in 2020 bodes particularly ill for developing countries that saw the largest declines in investment. Furthermore, foreign direct investment (FDI) to developing economies fell by 16 per cent, exerting additional drag on investment growth. Flows were 28 per cent lower in Africa, 25 per cent in Latin America and the Caribbean, and 12 per cent lower in Asia, mainly due to resilient investment in China.[15]

The fall in investment was broad-based across sectors, with the exception of investments in intellectual property products. In developed countries, the decline in overall gross fixed capital formation was broad-based across sectors (figure I.4). Intellectual property products, which include investmentsin research and development, was the only sector that outperformed – even recording growth in the United States, though down from earlier years. This is likely since many US based digital companies that have defied the economic downturn are among the biggest R&D spenders globally. At the same time, the weakness in international trade activity weighed on export-oriented capital expenditure. The initial decline in global commodity prices dampened commodity-related investment and had a visible impact on many countries in Africa, Western Asia and Latin America. In several developing countries, a rise in political uncertainty and social unrest also negatively affected investment activity.

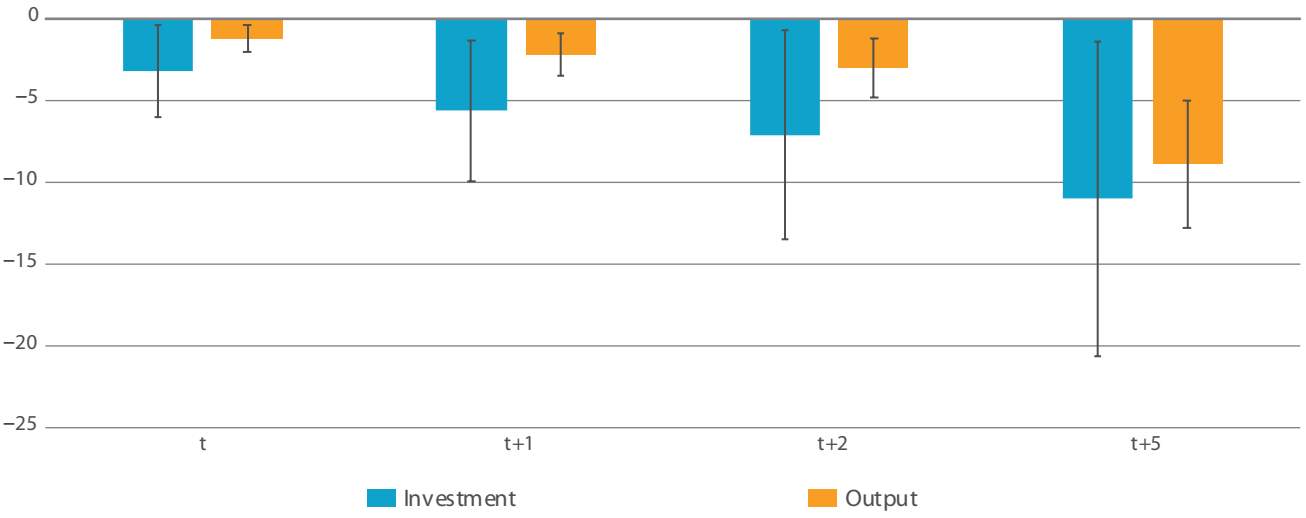
The pandemic may also accelerate structural shifts in global supply chains. While it is unclear how COVID-19 will change global value chains, anecdotal evidence suggests that the pandemic might reinforce and accelerate relocation and reshoring trends, particularly in strategic sectors such as medical equipment and drugs, or the production of technologically advanced inputs.[16] A reconfiguration of global value chains could potentially undermine foreign investment in developing countries, thus weakening an important driver of economic transformation and the achievement of the SDGs.

Figure I.3
Global Investment trends
(Percentage)



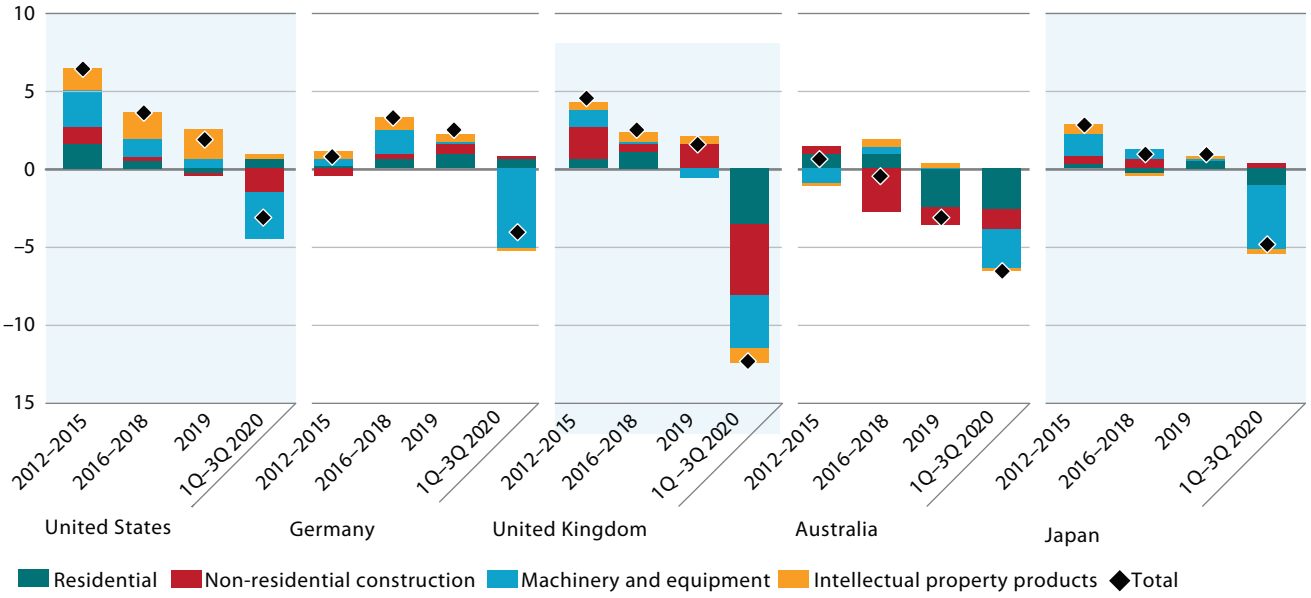
Source: Haver Analytics; World Bank.
Note: EMDEs = emerging market and developing economies. Data for 2020 are estimates and for 2021-22 are forecasts (shaded area).
Investment refers to gross fixed capital formation. Aggregate growth is calculated with investment at 2010 prices and market exchange rates as weights.
Sample includes 97 countries, consisting of 34 advanced economies and 63 EMDEs.

Figure I.4
Decline in investment and GDP after pandemics
(Percentage)



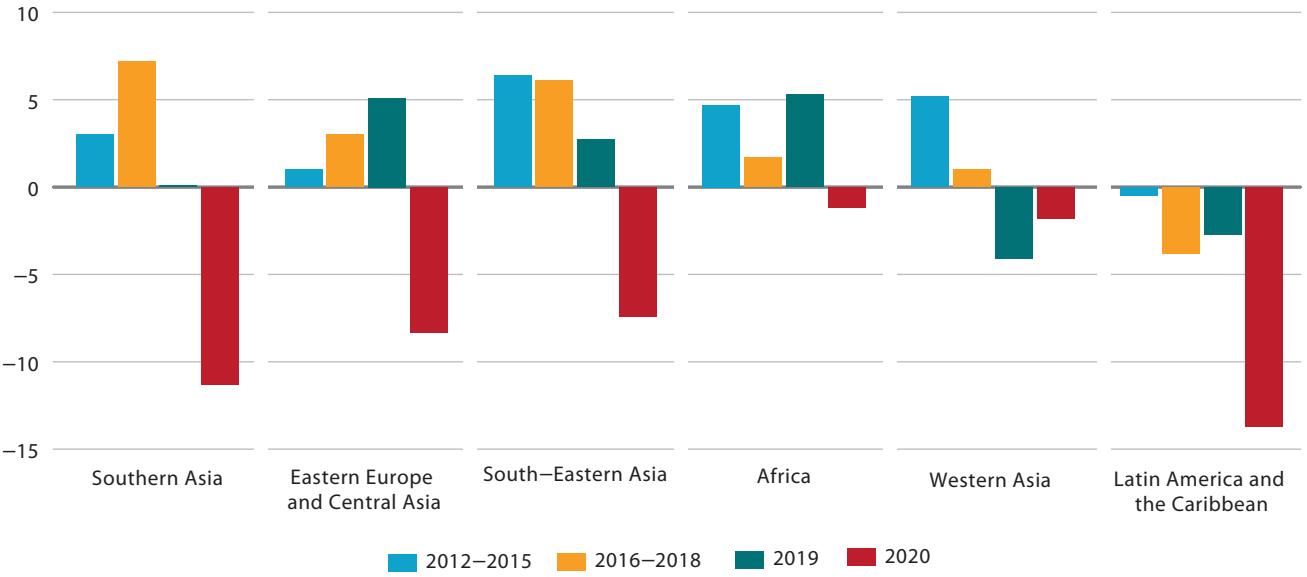
Source: World Bank.
Note: Bars show the cumulative estimated impacts of the four most severe biological epidemics on investment and output levels relative to non-affected EMDEs. Orange lines display the range of the estimates with 90th percentile significance. The four epidemics considered are SARS (2002-03), MERS (2012), Ebola (2014-15), and Zika (2015-16). Swine flu (2009), which coincided with the 2008-09 global financial crisis, is excluded to limit possible confounding effects. Sample includes 116 economies, including 30 advanced economies and 86 EMDEs.

Figure I.5
Investment growth in developed economies



Source: UN DESA, based on data from national authorities.
Note: Data for Germany, Japan and the United Kingdom are total investment, data for Australia and the United States are private investment.

Figure I.6
Growth of gross fixed capital formation in developing regions
(Percentage)



Source: UN DESA
Note: 2020 figures are estimates.

2.3 Fiscal pressures and policy responses

Governments responded to the crisis with historic stimulus packages. Fiscal stimulus measures have been vital in addressing the immediate health crisis and enhancing the and capacity of public health systems, supporting workers and businesses, and preventing deeper economic downturns.

However, faced with historic drops in revenues and high pre-existing debt burdens, many developing countries lacked the fiscal space to implement large recovery packages.[17] As a result, the size and composition of the global fiscal response has been highly uneven. Developed country measures accounted for nearly 80 per cent of the global fiscal stimulus, while developing country measures in general have been modest. Least developed countries (LDCs) as a group have collectively increased direct and indirect fiscal support by only 2.6 per cent of GDP, compared to 15.8 per cent of GDP for developed countries.

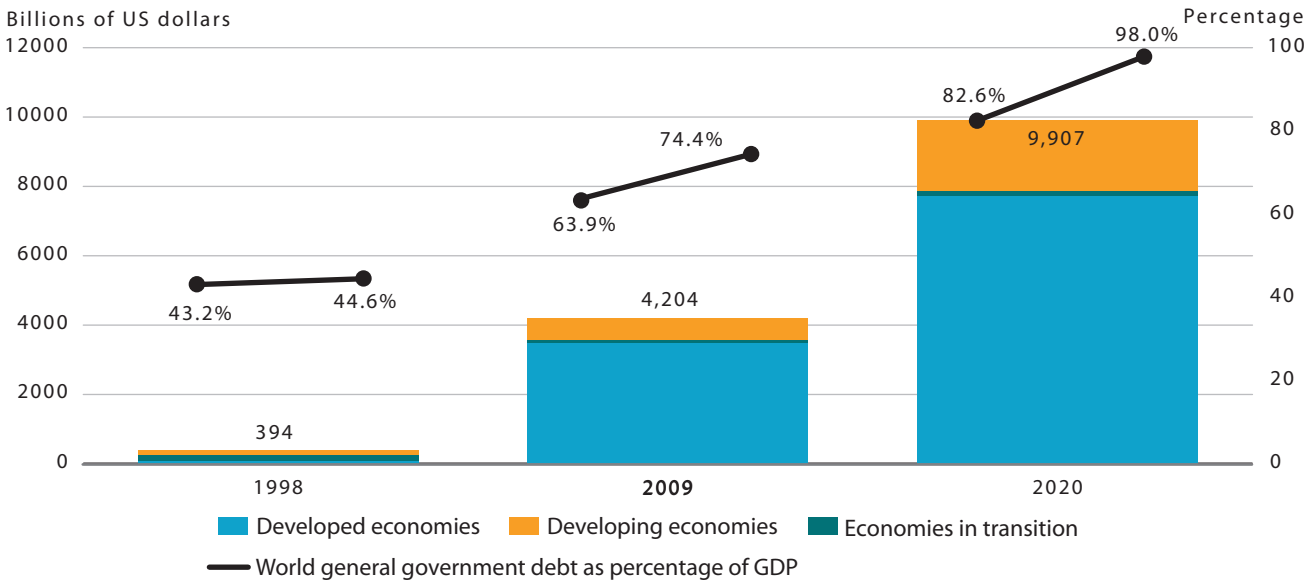
Fiscal measures, along with falling revenues, have had a dramatic impact on debt levels, exacerbating debt risks. On a GDP-weighted basis, the global public debt-to-GDP ratio increased 15 percentage points, to 98 per cent, and is now much higher than after the Global Financial Crisis of 2009 (figure I.6). While the rise in debt levels has impacted both developed and developing countries, vulnerabilities in developing countries, some of whom were already facing debt sustainability risks issues prior to the pandemic, risk limiting their ability to sustain the crisis response, and have also raised concerns over more widespread sovereign debt distress (see chapter III.E).

Fiscal support will need to be maintained to achieve a more self-sustained economic recovery. As the experience of the 2009 global financial crisis has shown, premature fiscal consolidation will inevitably weaken the speed and quality of the recovery. Premature withdrawal of policy support in the current environment could lead to widespread bankruptcies of viable but illiquid firms and further exacerbate employment and income losses.[18] Furthermore, austerity measures often entail significant cuts to social sector spending, such as spending on health, education and public services, and disproportionately hurt segments of the society that have been most hit by the economic fallout from the pandemic. Developing countries that are fiscally constrained can only avoid this scenario with additional international support, through fresh financing and debt relief and a redirection of spending to productivity-enhancing areas. The IMF and MDBs have provided additional resources, and the Debt Service Suspension Initiative (DSSI) has provided breathing space to the poorest countries. But the DSSI alone is insufficient to deal with the scale of the challenge, and excludes most middle-income countries. Moreover, the Common Framework for Debt Treatments beyond the DSSI agreed by the G20 will require deeper cooperation and collaboration among all creditors to provide meaningful relief to the poorest debt-stricken countries (see chapter III.E).

2.4 Monetary policy and financial stability risks

Alongside fiscal packages, emergency measures by central banks helped avoid widespread financial contagion and averted a global financial crisis. In response to the turbulence in financial markets in March 2020, central banks across the world introduced monetary easing

Figure I.7
Increase in general government debt during past crisis
(Billions of US dollars and Percentage)



Source: UN DESA, based on IMF World Economic Outlook, October 2020.

measures on an unprecedented scale. By the end of 2020, 94 central banks reduced policy rates by a total of 256 times, often at emergency meetings. With interest rates near the zero bound, central banks of major developed economies, including the United States Federal Reserve (Fed), the European Central Bank (ECB), and the Bank of Japan introduced or expanded quantitative easing measures. As a result of these measures, central bank balance sheets have grown significantly (figure I.8).

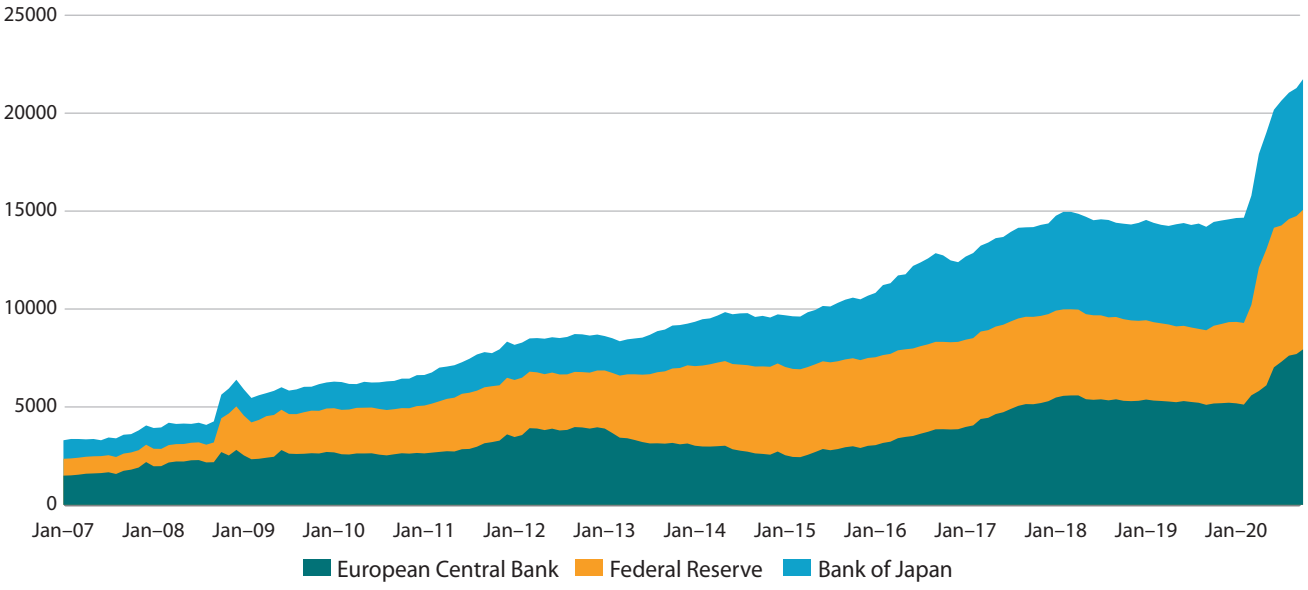
For the first time, some developing economies also launched quantitative easing programmes, to ease financial market strains and preserve financial stability. In a bid to stabilize local currency markets at the onset of the crisis (when non-resident portfolio outflows from emerging market countries reached almost $100 billion), several developing country central banks assumed the role of buyer of last resort and launched local currency bond purchase programmes. In some countries, market interventions seemed to have helped stabilize currencies and bond yields, cushion the impact of the crisis, and support recovery.[19] Unconventional monetary policies also carry risks that need to be considered – they could undermine central bank credibility, and raise risk premiums and depreciation pressures.[20]

Central banks across the world are facing a difficult balancing act of stabilizing financial conditions and preventing future fragility, while also supporting economic activity. Given the unprecedented scale of monetary easing, most central banks have entered uncharted territory. Quantitative easing measures included asset purchases, longer-term refinancing operations to support bank lending to businesses and households, and targeted credit programs. Furthermore, central bank swap lines and repo facilities by the Fed helped support international dollar liquidity and address dollar shortages in some countries. While these interventions have stabilized financial markets and triggered a market rally[21], evidence over their effectiveness in boosting economic activity and bringing inflation closer to target is mixed. .

Central banks need to continue to monitor risks to medium-term financial stability. While aggressive monetary policy easing by major developed economies' central banks was effective in addressing the turmoil in bond and equity markets, it has also increased systemwide leverage with possible implications for future financial stability. The significant decline in borrowing costs has contributed to the rise of financial asset prices to record levels.[22] Indeed, while real economic activity plummeted, major equity indices registered record increases between March and December 2020, reflecting the rising disconnect between financial markets and the real economy. The increase in global liquidity also facilitated a return of capital flows to some (though not all) developing economies (see box I.1); yet a tightening in financial conditions could trigger renewed volatility in capital flows and disorderly financial market corrections (see chapter III.F). With emerging economies' corporate debt-to-GDP ratio at historical highs (see figure I.9), tightening financial conditions could lead to unnecessary and preventable bankruptcies, as viable but illiquid firms struggle to roll over their debt.[23]

Central banks also need to monitor the interaction between monetary policy, climate risks and inequality. On the one hand, rising climate and other systemic risks threaten financial stability (see chapter II). At the same time, quantitative easing measures, even where considered "market neutral", may reflect market bias towards heavy carbon emitters, given that sectors like oil and gas companies, utilities and airlines issue more bonds than others (see chapter III.F). Rising asset prices as a consequence of loose monetary policy may also exacerbate inequalities since stock ownership is typically concentrated in wealthier households.

Figure I.8
Total assets of major central banks
(Billion dollars)



Source: UN DESA, based on IMF World Economic Outlook, October 2020.

3. Non-economic risks take centre stage

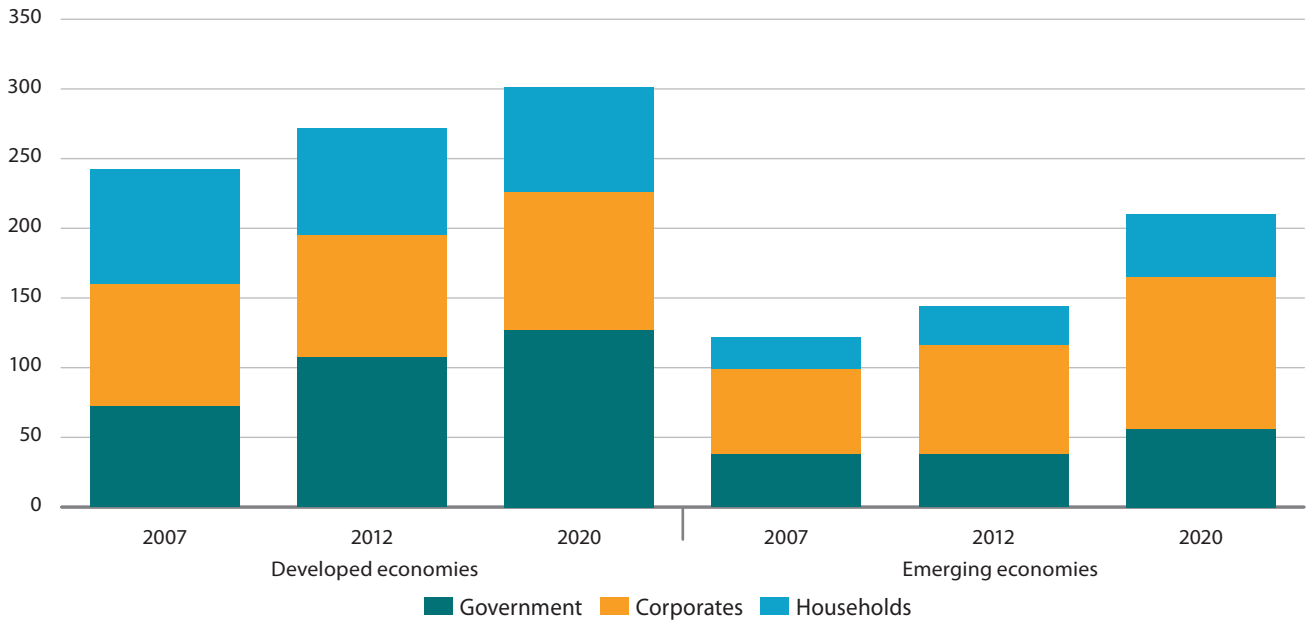
The COVID-19 pandemic has highlighted the widespread and cascading effects of non-economic risks on economies and societies. These risks present fundamental and unpredictable challenges to the prevailing economic model. The pandemic creates an opportunity for policy makers to tackle these interdependencies and align emergency response measures and fiscal policies with a structural transformation that enables sustainable and equitable economic development. Indeed, investments in the SDGs can reduce vulnerabilities and are a major driver of resilience (see chapter II).

Pre-existing inequalities have worsened the impact of the pandemic. Societies with greater pre-existing inequalities are more vulnerable to crises, creating a vicious circle. Exposure to health risks is higher for low-income households in urban areas.[24] Many low-skilled workers, with no benefits or social security coverage, such as the approximately two billion informal workers in the world (many of whom are from marginalized groups), were unable to work from home and were thus more exposed to contraction of the virus. Many of these workers come from marginalized segments of society. Additionally, digital divides are likely to perpetuate existing inequalities into the future (see chapter III.G), as are growing climate risks. To break this vicious circle, crisis responses, including macroeconomic policies, should take such equity implications into account more explicitly, not least because of the impact rising inequalities may have on future economic growth and development. Indeed, there is empirical evidence that income inequality has a negative effect on medium-term growth prospects.[25]

Unmitigated climate change will further decrease economic growth and increase global inequality, with disastrous consequences for the SDGs. Despite a decline in carbon dioxide emissions, 2020 ranks as the hottest year in recorded history. Scientists warn that under unchanged policies, global temperatures could increase by an additional 2-5°C by the end of the century, with possibly catastrophic economic damages across countries. Unmitigated warming could lead to average global income losses of over 20 per cent of GDP by 2100. Regions in the Southern Hemisphere and poorer countries are projected to experience the most significant impacts on economic growth (see figure I.10).[26] Already today, the gap between the economic output per capita of the world's richest and poorest countries is estimated to be 25 per cent larger than it would have been without climate change.[27] Within-country inequality will also increase, due to the disproportionate impact of climate change on the lives and livelihoods of disadvantaged groups.[28] To avoid substantial income losses and make progress in achieving equitable economic development, sizeable and drastic reductions in carbon emissions are needed.

The COVID-19 pandemic, emergency response measures and investments in recovery create an opportunity to accelerate the transition towards carbon neutral and more equitable economies – while stimulating long-term economic growth and development. The window to keep temperature increases below catastrophic levels is closing rapidly. Stopping climate change requires significant and near-term reductions in carbon emissions that create challenges and opportunities for sustainable development.

Figure I.9
Breakdown of non-financial sector debt of developed and emerging economies
(Percentage of GDP)



Source: Bank for International Settlements, Total Credit Statistics.
Note: 2020 refers to outstanding debt data as of 2Q 2020. Developed economies comprise Australia, Canada, Denmark, the euro area, Japan, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States. Emerging market economies comprise Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Hong Kong SAR, Hungary, India, Indonesia, Israel, Korea, Malaysia, Mexico, Poland, Russia, Saudi Arabia, Singapore, South Africa, Thailand and Turkey.

Climate mitigation and adaption requires a combination of policies: carbon pricing, a green investment push, and support for green energy research and innovation. Pricing climate risks and ending fossil fuel subsidies is a first step. To date, such subsidies remain large and contribute to the massive under-pricing of the true production and environmental costs of fossil fuels – leading to higher global carbon emissions, more fossil fuel air pollution deaths and decreased government revenues. Estimates suggest that the true cost of energy subsidies could amount to about USD 4.7 trillion, or 6.5 per cent of global GDP.[29] Environmental policies can help redirect energy subsidies to low-carbon energy production and raise the relative price of carbon, for example through carbon taxes and improved carbon emission trading programs. Where higher prices are politically untenable, implementing stricter regulations on emissions can be an alternative. Historical evidence shows that a combination of such policies can help to reallocate economic activity and employment towards low-carbon activities and increase the supply of low-carbon alternatives (see chapter III.A).[30]

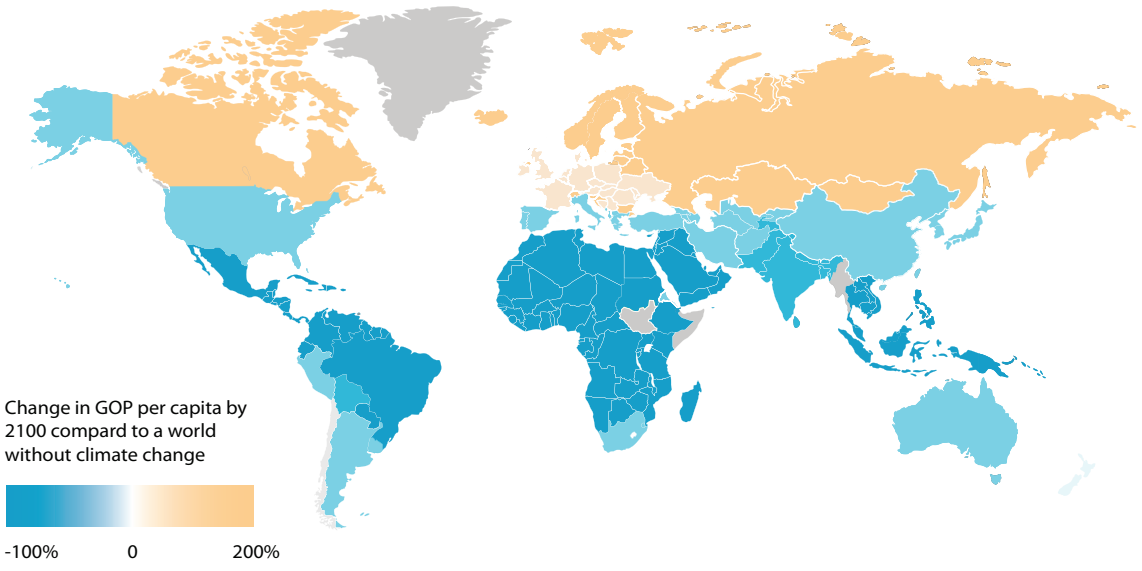
Green investments lay the ground for a structural transformation towards a carbon neutral and resilient economic model, and can also support the economic recovery from the COVID-19 pandemic. A well-targeted public investment initiative could spur the economic recovery from COVID-19, while also incentivizing sizeable private investments. The IMF estimates that increasing public investments by 1 per cent of GDP in the current environment could boost GDP by 2.7 per cent, private investment by 10 per cent, and employment by 1.2 per cent. If targeted strategically in areas such as low-carbon technologies and sustainable infrastructure, education and training, and R&D, these measures will not only increase the supply of low-carbon energy and accelerate the transition towards carbon neutral and resilient economic development – they will have multiple economic, social, and environmental co-benefits that are often outsize initial investment amounts (see chapter II).

4. Risk-informed financing policies in times of COVID-19

Support measures can trigger a swift economic recovery while also building back better. Given that interest rates are likely to stay low for a long time in many countries, the next decade provides a window for Governments to borrow and invest in the transition towards climate-neutral economies. Updated risk frameworks can help Governments navigate the wide landscape of risk management issues and identify policies best suited to respond to the challenges posed by growing systemic risks and uncertainties, including from climate change (see chapter II). Financing policies can help to reallocate spending and enhance domestic revenue mobilization to reduce the impact of the COVID-19 pandemic and make progress towards achieving the SDGs. At the same time, strengthened international cooperation will be necessary to support some developing countries, particularly those that are highly indebted and lack access to capital markets (see chapters III.C/D/E).

The Addis Ababa Action Agenda—which provides a comprehensive framework to promote investments that are long-term oriented, and growth that is inclusive and sustainable—speaks to the challenges described in this chapter. The remainder of this report (chapters III and IV) will highlight progress and implementation gaps in each of the Addis Agenda's action areas, and put forward risk-informed policy recommendations for addressing the immediate crisis and setting the post-COVID-19 economy on a more sustained, sustainable and inclusive growth path to achieving the SDGs.

Figure I.10
The projected impact of climate change on GDP



Source: Burke and others (2015).

Endnotes

1 This chapter is based on the following reports: World Economic Situation and Prospects 2021; World Economic Outlook, October 2020: A Long and Difficult Ascent; Global Financial Stability Report, October 2020: Bridge to Recovery; Trade and Development Report 2020: From global pandemic to prosperity for all: avoiding another lost decade; and Global Economic Prospects, January 2021.

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Risk-informed sustainable finance and development



Chapter II

Risk-informed sustainable finance and development

1. Introduction and key messages

With more than 2 million lives lost at the time of writing, the spread of COVID-19 and its economic fallout are an urgent call for the global community to better prepare for and reduce the risk of catastrophic events. COVID-19 is the latest example of the dramatic financial and sustainable development impacts of risks that materialize in an increasingly complex and interrelated risk landscape. It has shown how the effects of shocks in one area can be transmitted throughout value chains, across geographies and communities, and throughout the wider macroeconomy.

A key lesson from the current crisis is that development that is not risk-informed is neither inclusive nor sustainable. Disasters are often the result of decades of accumulation of risk within social, economic, financial, environmental and political systems. Risk drivers that have not been sufficiently addressed, such as high debt and excess leverage, poverty and inequality, infrastructure that is not resilient, and climate change, will continue to derail the financing and progress of sustainable development goals (SDGs). Reducing and better managing these risks is indispensable to achieving the SDGs.

At the same time, investment in the SDGs reduces exposure and vulnerability and is a major driver of resilience. Complex, systemic and interrelated risks can be difficult to manage directly, leaving the world ill prepared for crises like the one it is experiencing right now. Traditional risk management tools need to be complemented by investment in prevention, risk reduction and resilience. The 2030 Agenda for Sustainable Development, the Addis Agenda and the Sendai Framework for Disaster Risk Reduction provide a risk reduction strategy and road map to building resilience. For example, investments in social protection systems, which can be ramped up in time of need, can help vulnerable groups, households and societies manage risk and volatility, and protect them from poverty in the event of a crisis.

The case for investing in prevention, risk reduction and resilience is clear, but significant barriers, such as short-termism, inequities, and lack of inclusion in policy making stand in the way. Short-term costs of investments may loom larger than uncertain long-term benefits, for both public and private sectors. Investments in prevention and resilience have a public good character, and like many public goods, they are underfunded. While private investors evaluate risks as a routine part of investment decision-making, they are often not sufficiently long-term oriented to internalize significant SDG-relevant risks. This leads to inefficient asset allocations that overlook SDG-related investment opportunities and, at worst, create new risks. Moreover, those most exposed and vulnerable to shocks and disasters often lack the capacity and resources to invest in risk reduction, and voice in relevant policy decisions.

While all actors must understand, manage and ultimately reduce risks, Governments must lead in taking a risk-informed perspective. First, Governments are the "risk-bearer of last resort". When a crisis occurs, private risks often become public liabilities—such as during a financial crisis, when the public sector bails out the banking sector to limit contagion to the broader economy, or covering the cost of reconstruction following a natural hazard. Second, public policy also shapes the risk landscape for investors and other stakeholders, and it is up to policymakers to ensure that incentives are well aligned with SDG-relevant risks (e.g., through carbon pricing and disaster risk disclosure). Third, in some cases it can be advantageous for the public sector to actively seek risks associated with transformative investments, precisely because these investments may lower risks in the future. For example, investments in innovation are associated with high levels of uncertainty and risk—sometimes too large for private investors to take on—but can have extremely high social returns. Governments can also share investment risks with private investors.

Policymakers need to mainstream risk considerations in all policies, processes and decisions. This chapter develops a risk framework to help Governments navigate the wide landscape of risk management issues and identify policies best suited to respond to different risk challenges. Such a framework consists of (i) understanding the systemic nature of risk and its implications for the SDGs, including through income, sex, age and disability disaggregated analysis; (ii) reducing the likelihood of shocks when possible (e.g., strengthening the enabling environment for investment, or climate mitigation); (iii) reducing the impact or cost of shocks and hazards and building resilience; (iv) sharing or transferring residual risks (e.g., through insurance or blended finance); and (v) continuous adaptation to and learning from shocks and risks to be prepared to "rebuild better". This framework must be underpinned by inclusive governance mechanisms at all levels that elicit and address the concerns and interests of all stakeholders, particularly the most vulnerable that often have the least voice and agency.

Managing risk requires not only that *financing is sustainable, risk-informed and resilient,* but also that *sustainability, risk reduction and resilience are financed*. To this end, both national and global action is needed. To enhance sustainability and resilience of finance:

- Governments need to mainstream risk analysis in public planning processes, for example in the context of an integrated financing framework; overcome short-term and ex post biases in budgeting processes, e.g., by earmarking resources for risk reduction; and adopt a multi-instrument approach to manage multiple risks to public balance sheets;
- The private sector needs to overcome short-termism in investment decision-making and incorporate all material SDG risks in investment decisions.

Financing for sustainability and risk reduction additionally requires:

- Greater public investment in prevention and risk reduction (e.g., in climate mitigation and risk-informed and resilient infrastructure, and economic diversification);
- Strengthening social protection systems;
- Policies and regulations that incentivize investors to internalize those SDG risks that do not materially impact their financial returns.

International cooperation must also be strengthened, in order to:

- Tackle global systemic risks that cannot be addressed by any one country—such as risks arising from the international financial system, climate change and pandemics—which includes strengthening the voice and participation of the most vulnerable countries in relevant decision-making;
- Enhance support to vulnerable and exposed countries, by strengthening their national capacities and systems for understanding and reducing risk, and by putting in place effective ex ante financing mechanisms for risk reduction and prevention, effective disbursement mechanisms, and clear and objective decision-making systems to reduce the need for ex post support in times of crises.

2. The cost of doing nothing

The COVID-19 pandemic and climate change are both manifestations of growing systemic risks—risks that have widespread, cascading effects across geographies and economies. Technological change, urbanization and globalization have been drivers of economic development across the globe. They have created a world in which economic, technological, political and societal and environmental systems are more connected than ever before. This has led to tremendous opportunity, but has also increased the risk of contagion, including of financial crises, infectious diseases and pandemics, and the economic impacts of disasters. Formerly isolated events can develop into large-scale, far-reaching catastrophes that are hard to anticipate and manage; they can become systemic risks.[1] Impacts of such systemic risks straddle policy domains and can persist over time, as was the case in the global and long-lasting fallout from the crisis in the US sub-prime mortgage market in 2007 and 2008.

2.1 The COVID-19 shock

The spread of the coronavirus has led to a historic decline in economic activity and living standards across the globe, further exacerbating inequalities and disproportionally affecting the most vulnerable. The pandemic and the ensuing economic crisis have significantly set back implementation of the 2030 Agenda and have reversed progress made in reducing global poverty since 1990.[2] The related economic losses are dramatic, with the global economy contracting by 4.3 per cent in 2020, a decline of global labour income of about $3.7 trillion, and prospects for recovery uncertain and uneven (see chapter I). The crisis disproportionately affected the most vulnerable people and countries, with socioeconomic conditions, ethnicity, gender and geography shaping its impact. Women have been disproportionately impacted by the COVID-19 crisis, are more likely to lose their source of income, and are less likely to be covered by social protection measures,[3] and women-led firms are disproportionately affected by the pandemic.[4] Insufficient progress on the SDGs was thus a driver of further vulnerability.

The economic and social costs of the pandemic could have been dramatically reduced with comparatively small investment in prevention and preparedness. A global pandemic was repeatedly forecast, and yet the world was not ready.[5] The lack of preparedness, and insufficient scale and speed of crisis response—"too little, too late"—now threatens to turn temporary setbacks into permanent losses, further increasing both the societal and fiscal costs of the crisis. Costs of such interventions are extremely small in comparison to the pandemic impact: some estimates suggest that spending $70 billion to $120 billion over the next two years and $20 billion to $40 billion annually thereafter would significantly reduce the likelihood of another pandemic;[6] limiting vaccine distribution to advanced economies could cause output losses in advanced economies of up to $2 trillion, and have dramatic adverse impacts in developing countries.[7]

2.2 Climate change

Climate costs will increase even under optimistic scenarios, and could reach catastrophic dimensions if greenhouse gas emissions continue to grow at current trajectories. Despite a brief decline in

carbon dioxide emissions due to the economic slowdown related to the pandemic, 2020 ranks as the hottest year in recorded history as global temperatures continued to rise.[8] Climate change creates economic costs through physical risks, such as climate-related disasters, and transition risks, as low-carbon strategies lead to stranded assets. Such economic damages are already substantial: with the Earth's temperature 1°C hotter than pre-industrial levels, climate-related damages due to disasters and worldwide economic stress were estimated to be $165 billion in 2018 (a very conservative estimate).[9] Estimates of future damages are subject to high uncertainty, but there is consensus that they will be substantial: unmitigated warming could lead to average global income losses of over 20 per cent of gross domestic product (GDP) by 2100 (see also chapter I).[10] Regions in the southern hemisphere and poorer countries are projected to experience the most significant impacts on economic growth, further increasing inequality between countries.[11]

In human development terms, the cost of inaction on climate change is prohibitive. The poorest people are the most exposed to climate impacts and the least prepared to adapt to the challenges they pose. Climate change will likely push more people into poverty.[12] On the current climate trajectory, reductions in global agricultural yields are expected to reach 30 per cent of today's crop by mid-century, increasing food insecurity and hunger risk in many regions of the world,[13] with disproportionate impacts on the most vulnerable groups. Lack of fresh and sufficient water will increase from afflicting 3.6 billion people today to 5.0 billion over the same period. Climate change also poses risks to international peace and security.[14]

The cost of timely investments in mitigation and adaptation are modest in comparison to the prohibitive human, environmental, and economic costs arising from inaction. The Intergovernmental Panel on Climate Change estimates that annual average energy-related investments of $2.4 trillion (or 2.5 per cent of world GDP) would be needed between now and 2035 to limit global warming to 1.5°C[15]—modest in comparison to the prohibitive cost of unmitigated warming.[16] A recent analysis of the European Union's proposed pathways to achieving its objective of net-zero carbon emissions by 2050 found that this can be achieved at net-zero costs, with cost savings balancing out investment requirements.[17] With regard to climate adaptation, returns on investment in adaptation and resilience have estimated benefit-cost ratios ranging from 2:1 to up to 10:1 for investments in early warning systems.[18] Benefits of investing in disaster risk reduction outweigh costs four-fold.[19]

2.3 The opportunity: multiple dividends of investing in mitigation, risk reduction and resilience

Investments in prevention, risk reduction and resilience are an economic imperative and have significant social and environmental co-benefits. The economic case for investing in risk reduction and resilience is clear. Such investments also have significant co-benefits. By focusing on risk and risk reduction, Governments, businesses and households lengthen their decision and planning horizons, thus helping to address some short-term biases in decision-making. For example, rural households that lack effective risk management tools avoid specializing in a specific occupation and forego necessary investments to reap productivity gains that come with specialization.[20] Without multi-hazard risk assessments, businesses may choose to invest in locations that offer short-term profit opportunities but expose them to medium- or long-term disaster risks. Investment in resilience often provides basic infrastructure needed for development, while fueling growth and creating jobs. Risk reduction lowers the cost of borrowing (such as the cost of sovereign debt), thus stimulating further investment and creating a virtuous cycle.

Yet, short-term incentives, knowledge gaps, externalities and significant disparities in power and resources stand in the way of risk-informed policy and investment decision. Investments in prevention, risk reduction and resilience have a public good character, calling for public action. Like many public goods, however, they are underfunded and undersupplied. With economic, social and environmental benefits clearly exceeding costs, the question remains as to why economies underinvest in this area. Planning horizons play a role; short-term costs may loom larger than uncertain long-term benefits, creating a bias against investing in risk reduction.[21] This "tragedy of the horizon" is exacerbated by knowledge gaps, which are ever more relevant in a complex and interconnected world where risks are not well understood. There are also free-rider problems when risks primarily affect others, including when addressing global risks and risk drivers that cannot be meaningfully tackled by individual countries. In addition, significant imbalances in power and interest complicate policy action: those most affected by shocks and crises tend to have the least influence over public policy, while more affluent and powerful actors are better able to protect themselves.[22]

Investments in prevention, risk reduction and resilience are a prerequisite for sustainable development. Decision-making at all levels must become risk-informed. To this end, we must first better understand risk—a prerequisite for developing effective risk strategies. Such strategies should aim to lengthen decision-making and investment time-horizons, break down silos in policymaking, strengthen global cooperation and solidarity to address global risk drivers, and strengthen the voice of the most vulnerable in decision-making processes. The next section lays out a risk and resilience framework geared towards achieving these objectives.

3. Towards a risk and resilience framework for sustainable finance for the SDGs

A global pandemic is among several events that had been identified in global risk assessments as one of the greatest threats to sustainable development progress. Other major threats identified include global economic and financial instability; organized crime and terrorism; climate and oceanic change and natural hazards; cyber fragility and technological disruption; geopolitical volatility and other threats to peace and stability; and growing antimicrobial resistance.[23] Because of the systemic nature of many risks (see box II.1 for a definition of risk in this context), risk-informed policies will need to take a multi-hazard approach and focus on reducing existing risk, avoiding the creation of new risk and enhancing resilience.

Because they reduce vulnerabilities, investment in the SDGs themselves will reduce risk and can be a major driver of resilience. Resilient systems or communities have the ability to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and

restoration of their essential basic structures and functions through risk management.[24] Common characteristics of such resilient systems include high levels of diversity, which decreases vulnerability to extreme events (e.g., more diversified economies that are less dependent on a narrow export base); high degrees of equity (e.g., more equitable distribution of assets); or high levels of community involvement and inclusion.[25] Investments in the SDGs themselves and efforts to leave no one behind are thus a major driver of more resilient economies and societies. This relationship is not automatic; investments in sustainable development can also create new risks. However, if risks and possible trade-offs are better understood and made explicit, then investments can be risk-informed and create opportunities for sustainable development.[26]

Governments play a unique and important role in managing risks: their policies shape the risk landscapes for other stakeholders, including investors; but Governments are also the ultimate bearer of risk. This is true on the domestic level, but also applies to global governance of the international system. Governments have three distinct but overlapping roles in terms of risk management:

(i) ***Public policymakers are the ultimate bearer of risk to SDG progress.*** Governments and the people they represent, as the custodians of the 2030 Agenda and the SDGs, are directly concerned with, and ultimately responsible for, risks to their implementation. Governments will by default have to address the fallout from shocks and crises, including tail risks (such as COVID-19), even when the shock is due to poor risk management by private entities, such as during the global financial crisis. There are powerful incentives that underplay such risks, with "wilful blindness" as an excuse for inappropriate risk management, leaving the public sector to address the fallout.[27] While this includes national action, many risks cannot be addressed by a national Government alone; strengthened multilateralism and international cooperation is needed to address global risks that threaten sustainable development. And, in some cases, the international community becomes the ultimate bearer of risk, such as when disasters lead to humanitarian crises, underscoring the importance of risk-informed international cooperation.

(ii) ***As the shapers of the risk landscape, policymakers can reduce risks for individuals, investors, and other stakeholders, and set incentives to better align private risk-taking with the SDGs.*** A longstanding objective of public policy, particularly in a development context, is risk reduction to incentivize investments—by improving the economic enabling environment, for example. Public policy can also be used to regulate and incentivize private stakeholders to reduce risk-creating behaviour, such as through carbon taxes to

Box II.1
Understanding risk: definitions and delineations
Risk in different communities

Risk is defined differently by different communities. The International Risk Governance Council, for example, defines risk as the unexpected, or as uncertainty about and possible severity of the consequences of an activity or event with respect to something that humans value.[a] In the context of disaster risk in particular, this is spelled out as the potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.[b] In an investment and finance context on the other hand, risk is understood as the probability of actual results (or returns) differing from expected results, including positive or negative deviations. Investors will demand higher expected returns for riskier assets in order to be compensated for this volatility.

Most fundamentally, then, risk refers to the unexpected, or the ***likelihood of deviations in ultimate outcomes of activities,*** investments or events from expected outcomes. For the purposes of the thematic chapter in the ***2021 Financing for Sustainable Development Report,*** which touches on all of the above dimensions and understandings of risk, it is this broad understanding that is applied.

Risk and uncertainty, risk management and resilience

Risks can be quantified. For risks such as financial market and credit risks, most disasters, health risks or traffic accidents, the probability of the event occurring and the severity of loss can be estimated. ***Risk management*** tries to mitigate (prevent, reduce or transfer) these "knowable" risks.

Only a subset of unexpected events can be assessed quantitatively. Many events and their consequences can be assessed only with qualitative methods, if at all. Such non-quantifiable events are often termed "uncertainty," following the classic terminology by Knight.[c] This is particularly the case in a complex and interconnected world, where small events can have large knock-on effects—in other words, where risks tend to be systemic. Multi-hazard probabilistic risk assessments can help estimate economic and human impacts of a disaster and invest in risk reduction accordingly in such contexts.

Nonetheless, it is not possible to identify, let alone quantify, all events. Enhancing a system's ability to maintain capacities for action under stressed circumstances, or increasing ***resilience,*** is thus an important complement and enhances risk management efforts.

Source: UN DESA.

a International Risk Governance Council. 2017. *Introduction to the IRGC Risk Governance Framework,* revised version. Lausanne: EPFL International Risk Governance Center.

b United Nations. 2016. Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction. Note by the Secretary-General. A/71/644. Available at https://documents-dds-ny.un.org/doc/UNDOC/GEN/N16/410/23/pdf/N1641023.pdf?OpenElement. In addition to risk, the working group also defined other relevant terms: ***Exposure*** is the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard prone areas. ***Vulnerability*** refers to the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of shocks and hazards. ***Resilience*** is the ability of a system, community or society exposed to shocks and hazards to resist, absorb, accommodate, adapt to, transform and recover from their effects in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.

c Knight, Frank. 1921. *Risk, uncertainty and profit.* Cambridge: Riverside Press.

reduce greenhouse emissions, or standards, effective land use or planning, codes and regulations to ensure resilient infrastructure and buildings (see chapter III.A).

(iii) ***Governments can also take risk directly on their balance sheets and/or share risks with private investors.*** While Governments are the risk bearer of last resort, such risks are often hidden and not visible on balance sheets, and hence are often insufficiently understood or managed. At the same time, some investments are associated with levels of uncertainty and risk too large for private investors to take on alone. While not necessarily commercially viable, they are socially desirable as they have the potential to generate high social returns and SDG impact—impact that will also strengthen resilience and reduce broader risks to society. In such cases, it may be advantageous for the Government to actively take on and manage such risks directly on public balance sheets. If well managed, public development banks and development finance institutions, or risk-sharing instruments such as blended finance, can help to close large investment gaps in many SDG-related areas (see chapter III.A).

How financing policies best incorporate risk management will depend on the type and nature of risk that is being addressed. While a full mapping of the SDG risk landscape is beyond the scope of this report, the identification of origins and impacts of key risks (and opportunities) can help determine appropriate financing policy responses, including who is best placed to take action. Box II.2 lays out such a categorization, focusing on whether risks are (i) exogenous or endogenous, and (ii) systemic or conventional. Box II.3 provides an illustration for the case of infrastructure from the perspective of investors. For example, the first-best policy response to endogenous risks (risks that are created or shaped by actions of stakeholders) is to reduce them whenever possible: Governments can reduce certain investment risks through policies that improve the enabling environment. Conventional risks can also be reduced, and managed through traditional risk sharing techniques, in particular through diversification, including insurance. Systemic risks on the other hand are difficult or impossible to diversify or insure. To prepare for these risks, Governments can invest in resilience, which strengthens the overall ability of the economy and society to withstand shocks and recover.

Implications for SDG risk and resilience policies

A risk and resilience framework for the SDGs needs to account for the increasingly systemic nature of risk; traditional risk management frameworks thus need to be complemented with a risk reduction and resilience focus. Risk can never be completely eliminated, particularly in a complex and interconnected world. Nor is

Box II.2
Towards an SDG risk landscape: risk origin and impact

Origin of hazards and shocks

Understanding the origin of hazards and shocks can help policymakers identify ways to best manage risk, as well as to identify who is best placed to do so. The STEEP risk classification commonly used by risk managers closely mirrors the SDGs, including ***Societal*** (e.g., inequality or health risks), ***Technological, Economic*** (e.g., uneven growth or financialization), ***Environmental*** (e.g., climate change or environmental degradation), and (geo)***Political*** (e.g., conflict) risk. "Communities of practice" in each of these domains have expertise in assessing respective risks, and will likely play an important role in addressing them. Within Governments, such communities of practice may be mirrored by different ministries. Coordination efforts, such as those made through an integrated national financing framework, can help policymakers examine linkages across areas, and how systemic risks might spread and be prevented.

Risk management responses will differ depending on whether shocks have external origins (are exogenous), or are driven by behaviour and policies of stakeholders (are endogenous). ***Exogenous shocks*** originate outside the control of a national Government or entity; it is thus usually not possible to prevent these, or even reduce their likelihood. In contrast, ***endogenous shocks*** are impacted by behaviour.

Whether risks are exogenous or endogenous depends on perspective: for an investor, project-specific risks will be endogenous, but government policy risk will be exogenous; in contrast, from the Government's perspective, policy risks are endogenous, as they reflect risks that can be prevented or reduced (i.e., mitigated) through policy reform. On the other hand, no single Government can mitigate climate change on its own, and small island developing States most affected by climate disasters have the least agency. For them, these risks are exogenous. The ***national*** policy response to such exogenous shocks will generally focus on reducing the impact of hazards, investing in resilience and insuring against risk. To address the root causes of these shocks—through ***global*** climate mitigation efforts, for instance—international cooperation is needed.

Risk impact

How the impact of risks materializes further determines the range of actions. For risk managers, risks can be categorized as systemic or conventional, each of which entails different responses.

Systemic risks are characterized by cross-domain impacts (e.g., a health crisis permeating into an economic and fiscal crisis). They affect whole economies, can cross borders, or at least are correlated across a wide range of projects or investments. Because they cross domain boundaries, they often do not neatly fall within the responsibility of a single organization or Ministry, increasing coordination burdens. Systemic risks often share characteristics of so-called tail risks—low probability events with a very high impact. Such tail risks are often ignored by both investors and policymakers because they are either poorly understood, are considered too unlikely, or because time horizons are too short. Yet the impact can be extremely costly, as evidenced by the COVID-19 pandemic.

Conventional risks have a more limited scope of adverse effects, and are better understood than systemic risks. Conventional risk can be ***idiosyncratic*** or specific to a project or investment, without wider knock-on effects or contagion (e.g., technological or operational risks for an infrastructure investment). Because such risks are not highly correlated with other risk factors, they can be managed as part of a diversified portfolio, or through insurance.

Source: UN DESA.

risk elimination desirable in all cases, since risks are often associated with opportunity and innovation, with positive impacts on sustainable development. For investors, risk management is thus about understanding, weighing and managing cost and benefit associated with activities or investments and their related opportunities and risks.

A traditional risk management cycle consists of two phases:

(i) ***Risk assessment***—risk identification/early warning, modelling/evaluation/assessment;

(ii) ***Risk treatment/management***—including reducing the probability of a shock (or avoiding risk-incurring activities altogether when possible); reducing the cost or impact of shocks; and/or sharing or transferring risk.

In a complex risk landscape, risk managers and policymakers have increasingly complemented this approach with a focus on risk reduction and resilience. For example, the Sendai Framework stresses the limitations of a hazard-by-hazard view of risk management, with a view to strengthening our ability to understand and reduce systemic risk.[28] It expands the prevailing focus on natural hazards to include human-made, technological, environmental and biological hazards, and moves the focus from managing disaster events to managing disaster risk systemically by reducing existing risk, preventing the creation of new risk and managing residual risk.[29] Resilience strategies, which complement traditional risk management practices, consider how to

- Strengthen systems ability to ***maintain basic functionality*** through crises and ***to recover*** quickly from shocks; and
- ***Learn from crises and shocks, adapt to new conditions and rebuild better.***

A risk/resilience framework would thus include efforts to both reduce and manage risks, including to (i) better understand risks; (ii) prevent or reduce the likelihood of risks materializing; (iii) reduce the impact of hazards, decrease vulnerability and exposure and enhance resilience capacities; (iv) share and/or transfer risk, and (v); rebuild better in recovery (see also figure II.3). These efforts must be underpinned by inclusive risk governance that engages a diverse set of stakeholders in the process.

Inclusive risk governance

Efforts to understand and manage risks must be informed by the concerns, interests and perceptions of all stakeholders. Stakeholder involvement improves both the quality and the legitimacy of policy action: it helps to enhance risk awareness; elicit stakeholder risk perceptions, know-how and preferences that can all inform policy action; and creates confidence in such policy action.[30] Inclusive approaches are particularly important for complex risks, where expertise of multiple communities is required.

There are significant governance gaps at global, regional, and country levels that act as a barrier to inclusive risk governance. Women and other marginalized groups (e.g., people living with disabilities) are underrepresented in decision-making processes at all levels. Yet, accommodating their specific needs and capacities is critical to reducing vulnerabilities and building resilience. These groups also have unique knowledge on the specific needs and risks faced by their communities, and communities in general. Addressing these governance gaps and building the enabling environment for women's leadership and capacities across the SDG risk landscape will ensure the effectiveness and sustainability of disaster risk reduction and resilience action. Establishing or strengthening multi-stakeholder national disaster risk reduction platforms can significantly strengthen participatory and inclusive risk governance. At the global level, countries most vulnerable to disasters have the least agency to address risk drivers, calling for more inclusive global governance mechanisms that enhance their voice and representation.

Understanding risk

Understanding risk is the basis for risk-informed decision-making. Understanding risk includes assessing the sources of risk (e.g., hazard identification across the STEEP (societal, technological, economic, environmental, (geo)political), exposure and vulnerability and capacity assessments), and their potential impacts or costs. Assessments should also consider the state

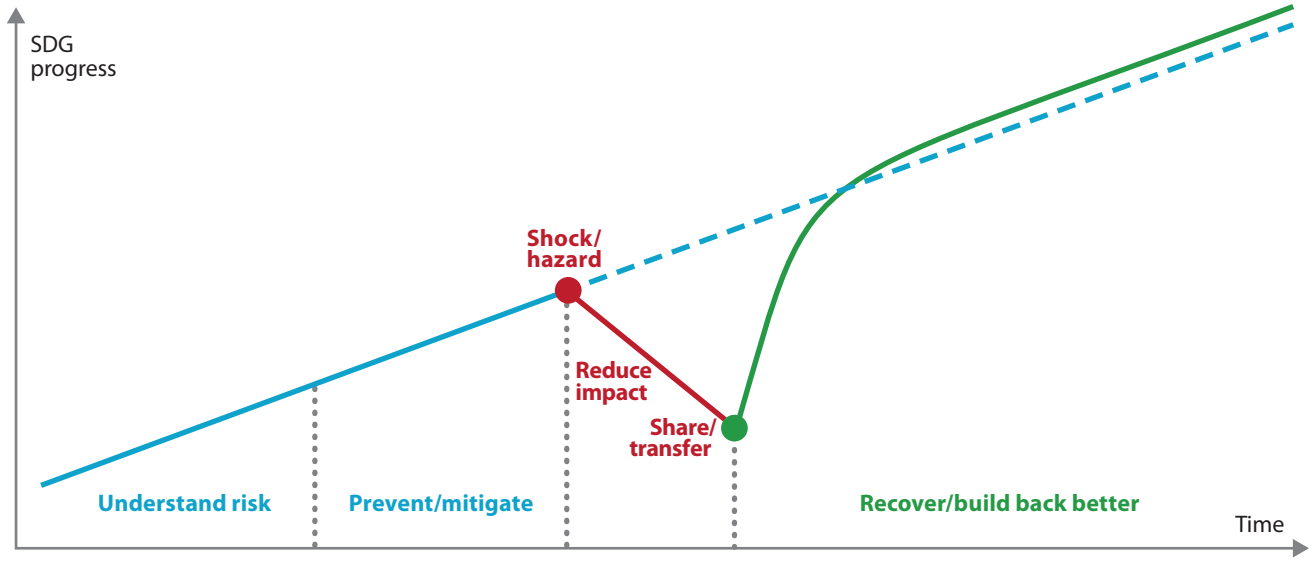
Box II.3
Types of risk and infrastructure finance

By understanding the risks investors face in an infrastructure project, policymakers can help improve risk-return profiles of investments, and thus help close infrastructure financing gaps:

- Infrastructure project selection, development and construction phases entail many endogenous risks that are directly impacted by the developer's behaviour, such as quality of construction or cost overruns. They are difficult to monitor and control by outsiders (be they financial investors or policymakers), and should thus be borne by the operating firms directly involved (e.g., by including penalty clauses in contracts, or other governance arrangements);
- Risks that are exogenous to the project but idiosyncratic (such as demand risks) can be diversified in a portfolio of investments, and could thus be borne by an investor. In a global portfolio, even nationally systemic risks (such as currency risks) may be diversifiable, meaning that international investors or regional and multilateral development banks (MDBs) that have exposure across countries should be in a position to help hedge these risks;
- The most challenging category for the infrastructure investor is one with endogenous risks that are also systemic—for example, government counterparty risks, where a Government reneges on contractual obligations. From an investor's perspective, such risks cannot be diversified, at least not at the national level. MDBs may be able to take on such risks, as they also have some leverage over the Government in question, and can support efforts to reduce risks. In addition, as MDBs have exposure across countries, they may be able to manage this risk within a diversified portfolio—across several countries or currencies, for example—as any one loss would be compensated by returns on other investments (see also *Financing for Sustainable Development Report 2020).* At the same time, Governments can take actions to reduce policy risks, thus lowering the cost of capital, and encouraging greater investment.

Source: UN DESA, based on Juan Ketterer and Andrew Powell. (2018). Financing Infrastructure: On the Quest for an Asset Class. IADB Discussion Paper 622.

Figure II.1
A risk and resilience framework
(SDG progress over time)



Source: UN DESA

of knowledge about risks—that is, whether risks are well understood or complex, with difficult-to-identify causes and consequences such as systemic risks. All these elements inform risk evaluation.[31]

Complex and systemic risks require new conceptual and analytical approaches. Technical communities in the areas of disaster risk and finance, among others, use models to better "see" risk in the present or near future. Most of these models are based on historical data and observations, assuming that the past is a reasonable guide to the present and the future. In a complex world, where small changes can have large and unanticipated effects, this critical assumption no longer holds. In addition, different communities' risk assessment methodologies and tools vary and are not easily integrated, leading to mispricing of risks, hidden risks, and risk creation. For example, many investment models do not fully integrate disaster and social risks into economic and financial risk assessment tools, while disaster risk assessments may not fully articulate the complex economic and financial impacts.

Critical gaps in the availability, quality, comparability, and dissemination of sex, age and disability disaggregated data also act as a barrier to understanding the differential impacts of hazards. Most vulnerable and marginalized groups are not visible in mainstream data; limiting gender- and age-responsive analysis of risks, decision-making, policy formulation and practice.[32]

Few countries identify and assess risks in a systematic fashion and, similarly, investors often ignore sustainability risks. But tools and approaches are available to strengthen SDG risk assessments. Risk knowledge and processes are surprisingly scarce in Governments. With some exceptions, most Governments do not have formal risk management functions responsible for understanding, modelling, mitigating and reporting on risks in a comprehensive way. When they are in place, they are usually confined to specific threats, such as climate risks or disasters. At the same time, there is a wide range of frameworks and risk assessment tools from different communities that decision makers can use.[33] The Inter-agency Task Force on Financing for Development put together a selection of such tools in its guidance material on the implementation of integrated national financing frameworks (INFFs), focusing on risks relevant to sustainable financing.[34] Public policy can also play a role in enhancing sustainability risk assessments by the private sector. For example, metrics for sustainability risk reporting and disclosure by companies, which increase transparency and better align risk perceptions with sustainable development risks, are currently incoherent and contradictory (see chapter III.B).

Prevention and reduction

Investments in prevention aim to address the underlying drivers of risk, reduce the probability of shocks from occurring in the first place (when that is a possibility), reduce existing risk, and avoid the creation of new risk. Such preventative measures can be applied across economic, social and environmental domains. Prevention is most relevant to risks over which agents have some influence (e.g., endogenous risks, as described in box II.2). Prevention is the first-best policy intervention, and highly cost effective. But it is not always possible. In the context of investment decisions, because of the dual nature of risk and opportunity, risk taking can be a driver of innovation. Weighing risks and opportunities is also at the heart of investment decisions (see box II.4).

Good governance and creation of enabling environments for sustainable development is an important aspect of prevention and risk reduction. Some shocks and hazards are endogenous to a country or organization—that is, they arise from its own actions and can thus be prevented. Poor governance, policy uncertainty or political instability are such

endogenous risk factors that policymakers can aim to reduce or prevent.

Because of the prominent role of global systemic risks in the SDG risk landscape, many such preventative actions require global cooperation. For example, investments in climate change mitigation (renewable energy investments and investments in energy efficiency, removal of fossil fuel subsidies, adequate pricing of carbon emissions) will reduce greenhouse gas emissions and the frequency and intensity of extreme weather.[35] As noted above, climate mitigation requires global cooperation, as is the case for many global risk drivers that are largely exogenous at the national level, such as global financial instability, antibiotic resistance, or geopolitical volatility. Poverty and inequality within different dimensions (income, wealth, gender, and access to technology and resources) are other important risk drivers that operate at global, national and subnational scales, and highlight the need for risk-informed development cooperation that tackles underlying risk drivers (see section 4.3).

Reducing the cost (or impact) of risk

Investing in the SDGs can enhance resilience. Vulnerability[36] is closely linked to sustainable development and the SDGs: poverty, inequality, gender, education and health status, disability and environmental concerns are identified as determinants of household vulnerability in assessments of an extremely diverse set of risks.[37] Investments in health systems or strong social protection systems (which can be ramped up in times of crises) can protect households from poverty in the event of materializing risks. Investments in resilient infrastructure (including retrofitting) can reduce losses and disruptions from natural hazards.

Improved macroeconomic management can also reduce vulnerabilities. Macroeconomic imbalances (such as current account deficits, credit-driven asset bubbles, or rapidly rising credit growth and debt levels) and financial sector fragility expose populations to risk due to external shocks.[38] Increasing trade and financial integration of the global economy has increased contagion of shocks, and increased exposure of the real economy to financial shocks. For example, volatile international capital flows often translate into volatility in the real economy in developing countries. A lack of economic diversification (dependence on commodity exports, for instance) is another source of macroeconomic vulnerability, with resource revenues dependent on volatile global commodity prices.[39]

Managing residual risk through risk sharing

Risk that can be neither prevented nor reduced may sometimes be shared or transferred, through insurance and different types of risk-sharing mechanisms. That includes unemployment insurance, risk-informed social safety nets, and other types of social protection at the national level, which can support anticipatory action as well as quick recoveries from crises, preventing scarring effects and long-term consequences. It also includes private insurance. The insurance industry has always had an important role in the transfer of risk and is a centre of expertise regarding risk management in general. A right degree of insurance coverage can mitigate negative economic impacts of disasters and increase overall resilience.

However, insurance is not a silver bullet. Insurance can be a powerful tool for risk management, but it is also an expensive one for Governments that otherwise have access to sufficient sovereign financing. Insurance can also enable public and private actors to engage in risk creating behaviour, including investing in risk-prone areas, without consideration of the human costs and wider socioeconomic impacts should a disaster hit. Depending on the frequency and severity of risks to be managed, Governments can combine (or layer) financing instruments that address different needs and have different cost implications: risk-transfer and insurance-type mechanisms for low frequency but high-severity events; contingent financing for intermediate cases; and budgetary instruments (such as reserve funds, or general contingency budgets) for high-frequency but low-severity events.[40] Such an approach prioritizes cheaper sources of funding, ensuring that the most expensive instruments like insurance are used only in exceptional circumstances. Insurance-type instruments have been used to provide rapid and predictable funding to countries in the event of disasters, with mixed experiences: in the case of the response to COVID-19, pandemic bonds did not succeed in releasing sufficient funding in a speedy manner. To be effective, disaster risk insurance must incentivize disaster-risk-reducing behaviour and include provisions to ensure companies build better from the start and rebuild better after a disaster. Moreover, disaster risk insurance must be part of a larger disaster risk reduction financing strategy focused on prevention.

Risk sharing is also used to stimulate investment and share macroeconomic risks. Risk-sharing instruments (e.g., guarantees, political risk insurance, and other forms of blended finance) can improve the risk/reward equation in investment decision-making (see chapter III.C). Risks can also be shared or transferred at the international level through arrangements, such as the international financial safety net anchored by the International Monetary Fund (IMF), quick-disbursing financial mechanisms in response to disasters, or financial instruments such as state-contingent debt (see chapters III.E and III.F).

Box II.4
Risk, opportunity and prevention

Investment decisions (public or private) are about whether to take on risk to pursue an opportunity. For private investors that means weighing potential risks versus expected financial rewards, compared to other investment opportunities. For the public sector, the decision is more complicated; it includes weighing financial risks against the public benefit (both positive impacts and unintended negative consequences of the Sustainable Development Goals) and then comparing the risk/reward of acting today against the cost of doing nothing (see section 2 of the *Financing for Sustainable Development Report 2021*) or taking other actions. Either way, the decision to invest and to seek an opportunity implies a degree of risk-taking. The question then is about how risks that cannot be reduced can be managed.

There are in fact suggestions that rather than taking on too much risk, public actors, such as multilateral development banks, do not take enough risk—that there is underinvestment in areas with high risks and high potential social returns.[a] This may reflect risk aversion on the part of these institutions and their shareholders. Yet, the public sector is already implicitly taking significant risks, even when they are not visible on current public balance sheets. The cost of taking explicit risk may be well compensated if those investments reduce risks in the future.

Source: UN DESA.

a See for example: Lee, Nancy. 2018. More Mobilizing, Less Lending. A Pragmatic Proposal for MDBs. CGD Brief, April 2018.

Recovery and rebuilding better

Resilient systems are able to recover more quickly from crises, and rebuild better by adapting to new realities. Highly effective systems are characterized by a process of continuous learning: losses incurred during a crisis are evaluated, and lessons are considered in recovery and rebuilding efforts to improve future capabilities. For example, strengthening social protection systems or using stimulus packages to rebuild resilient infrastructure can help address the immediate crisis while building resilience to future shocks. Learning processes must be inclusive, to ensure that recovery interventions overcome rather than reinforce existing inequalities, including gender inequality.

Large economic stimulus packages during the COVID-19 crisis and investments in recovery provide an unprecedented opportunity to transition towards risk-informed and sustainable growth and development paths. The immediate crisis response has understandably focused on providing relief to those most affected. Stimulus spending to date has had a limited share of "green" investments, focusing instead on income support. Yet some measures to stimulate the economy (e.g., relaxing environmental regulations) may raise the risks of future disasters. A subsequent phase of recovery investments provides an unprecedented opportunity, with vast stimulus of about $12 trillion, or 15 per cent of global GDP, planned (see chapter I). A recent study suggests that investing only a tenth of this recovery investment into climate mitigation and low-carbon investments would suffice to meet carbon energy investment needs compatible with the Paris Agreement.[41]

4. Risk-informed financing for sustainable development

The goal of risk-informed financing policies is to ensure not only that *financing is sustainable, risk-informed and resilient,* but also that *sustainability, risk reduction and resilience is financed.* Based on the framework laid out above, this final section discusses risk-informed financing policies across the action areas of the Addis Ababa Action Agenda, with more detailed discussions in the respective chapters of the report. It addresses the following:

- *Sustainable, risk-informed and resilient finance*—ensuring that public budgets and (public and private) investments are *financially* sustainable and able to withstand shocks and do not create new risks;
- *Financing for sustainability, risk reduction and resilience—mobilizing* financing and investment for risk reduction and resilience;
- *International cooperation*—enhancing *international support* in meeting these objectives; and
- *Development-specific financing instruments*—determining their most *appropriate use to support risk reduction and resilience building.*

4.1 Sustainable and resilient finance

Public and private actors must manage risks to their balance sheets, a task that is becoming more difficult in an increasingly complex risk landscape. The COVID-19 pandemic has revealed and highlighted weaknesses and blind spots in both public and private investment and financial management. They relate to growing systemic risks, including environmental, social and other SDG-related risks that are increasingly impacting financial outcomes, but remain underappreciated, in part due to short time horizons.

Managing shocks to public balance sheets

Risk management is a central aspect of traditional public financial management. It aims to ensure the sustainability of public balance sheets and macrofiscal frameworks in light of multiple fiscal risks.[42] The primary objective is to stabilize economic activity and public service delivery in the short run, and to promote economic growth and sustainable development over the longer term. Nonetheless, the capacity to manage fiscal risks is limited in many countries.

COVID-19 has exposed vulnerabilities of fiscal accounts and public financial management systems the world over, which has been especially challenging for developing countries. COVID-19 has starkly illustrated the vulnerability of public finances and debt sustainability in many countries (see chapter III.E). Developing countries in particular are exposed to a range of risks that can have significant macroeconomic and fiscal impacts, including disaster risks, commodity price volatility, and other external economic shocks. Addressing these risks more thoroughly and effectively requires (i) better understanding and planning for such risks, including through medium-term revenue strategies; (ii) adoption of a multi-instrument approach for fiscal risk management; and (iii) risk-informed debt management, at both the national and international levels.

To build resilience into public budgets, Governments should incorporate risk analysis into planning processes and overcome ex post biases. Countries tend to allocate significantly more funding for crisis response than to ex ante risk reduction. This is mainly due to limited understanding of risks and options for risk reduction measures, as well as high political visibility for ex post, i.e. assistance. A risk-oriented public finance system needs to overcome this ex post bias in policy. This first requires having a good understanding of the risk landscape and its potential impacts on public finances by, for example, conducting multi-hazard risk assessments in the context of an INFF, thus providing the basis for a realistic assessment of costs and benefits of different financing and policy options. Many developing countries that are faced with multiple unfunded or underfunded urgent sustainable development needs will require additional international support. To overcome poor incentive structures, some countries provide targeted grants to agencies and line ministries or build in relevant budget lines in all agency budgets. Both national finance ministries and donors can use these tools or identify alternative ways to reserve resources for investment in risk reduction.[43]

A wide range of risks to fiscal sustainability calls for a multi-instrument approach. Risks range from disasters, financial crises and other macroeconomic shocks to contingent liabilities associated with guarantees, public-private partnerships and state-owned enterprises. A range of instruments and approaches is therefore necessary to respond to the various characteristics of these risks:

- *Prevention:* a "balance sheet approach" to fiscal policy can help policymakers limit endogenous risks on fiscal accounts (e.g., contingent liabilities) and thus reduce the probability of fiscal shocks from materializing (see chapter III.A). State-owned enterprises and development banks

need to be transparent, with assets and liabilities that are accounted for, and to adopt effective risk management. Controls or ceilings on exposures (e.g., through limits on issuances of guarantees or liabilities, or fiscal rules for subnational governments) can also help reduce fiscal risks;

- *Reducing risk impact:* fiscal policy can also be a tool to reduce the impact of exogenous risks outside the direct control of Governments on public balance sheets; for example, by diversifying the tax base and reducing dependence on taxing commodities, Governments can reduce the cost of commodity price volatility.
- *Risk transfer and risk-sharing mechanisms:* they include insurance (e.g., sovereign parametric disaster risk insurance, insuring public assets against disasters, reinsuring guarantees), hedging (e.g., of commodity price risk), pre-arranged credit lines with international institutions (such as the World Bank's Catastrophe Deferred Drawdown Option), or issuance of state-contingent debt instruments (see below). The international community provides support for many of these mechanisms (see below).
- *Provisions for risks* that cannot be reduced or transferred allow policymakers to manage these risks without threatening stability. For example, countries can provision for disaster risk by setting aside funds (e.g., disaster funds or budget lines) and establishing budget contingencies—a form of self-insurance. Automatic stabilizers (spending increases or tax decreases in recessions that occur without discrete policy interventions) not only smoothen the business cycle, but can also support fiscal sustainability. Such measures are most appropriate for moderate but frequent shocks. For large-scale shocks, dedicated financial assets (e.g., a stabilization fund) are more appropriate,[44] but in exceptional circumstances, such as major disasters, international support will often be indispensable.

Fiscal risk is intrinsically linked to sovereign debt management and debt sustainability. Countries borrow to mobilize resources for public spending. When borrowing is well managed, they do so at the lowest possible cost and with prudent levels of risk. There is a cost-risk trade-off: short-term debt and floating-rate debt is cheaper, but usually more risky than longer-term and fixed-interest debt, due to higher refinancing and interest risk. Similarly, debt issued in foreign currency may have a lower coupon or interest cost, but adds volatility to debt-servicing costs due to exchange rate movements. Short-term incentives may contribute to countries issuing floating-rate and/or foreign debt, which may be cheaper within the time frame most relevant for decision makers, but which creates longer-term debt sustainability challenges. In addition, many developing countries are unable to issue long-term local currency debt at reasonable cost because domestic financial markets are insufficiently deep, setting up challenging trade-offs, particularly in light of large unmet financing needs. Such trade-offs should be explicitly considered in a country's debt management strategy.

State-contingent debt instruments could increase the resilience of sovereign balance sheets. Such instruments are structured to link a country's debt obligation to its ability to pay. They can provide insurance against risks such as commodity shocks, disasters or deep recessions by building standstills into debt contracts. As such, they also reduce the need for complicated negotiations on debt standstills, as was the case for the Debt Service Suspension Initiative in response to COVID-19. While not widely used, state-contingent clauses have been introduced in debt contracts of some countries vulnerable to disasters (e.g., hurricane clauses), where occurrence of a disaster automatically triggers a moratorium on debt repayments. There is a strong case for more widespread use of this mechanism. While markets have been slow to incorporate stage-contingent elements into debt issuance, due in part to high-risk premiums that the market attaches to such events, the public sector could take a lead by including state-contingent elements in public sector lending (see chapter III.E). Insurance-type mechanisms, where countries insure a predetermined amount of debt, and related debt servicing that will be paid by the insurer in case of a disaster, have also been proposed.[45] Relying on clearly specified triggers, contractual approaches do not cover all contingencies, and are thus not a panacea.

Resilient private business, finance and investment

Managing risk is at the heart of investment. Private businesses and investors routinely assess risks relative to financial returns. Because risk is linked intrinsically to opportunity, the objective of their risk management is not to entirely eliminate risk, but rather to incur the "right amount" of well-compensated risk, which maximizes value but remains in line with a company's overall risk appetite. The financial sector and the insurance industry in particular are a center of expertise regarding risk-return management, due to their role in transferring risk.

The COVID-19 pandemic has revealed underlying corporate vulnerabilities to systemic risks and underlined the importance of considering non-financial risks. Companies in sectors such as tourism and energy have been hardest hit, but the lack of corporate resilience is more widespread (see chapter I). Major drivers of this vulnerability include high leverage—which amplifies the impact of shocks on corporate balance sheets—and complex, just-in-time supply chains with no redundancies built in to accommodate shocks. In both cases, an excessive focus on short-term results that unduly discounts risks and uncertainties that lie further in the future plays a role. At the same time, investor surveys indicate that COVID-19 has been perceived as a sustainability crisis, with parallels to other global systemic risks such as climate change. It may thus further increase investor focus on the material impact of climate and other environmental, social and governance (ESG) risks on financial returns.[46]

Financial markets are increasingly recognizing climate-related risk, but continue to underestimate other material SDG risks. Climate risks affect the vast majority of financial assets—93 per cent of equities by market capitalization in the United States of America alone, according to some estimates.[47] Such risks include physical risks, such as climate-related disasters, and transition risks related to impacts of climate policies, such as carbon pricing, leading to stranded assets. For major institutional investors, such risks are now too large to be diversified. To manage these risks, large institutional investors have started to work with the companies in which they invest (e.g., through active ownership) to reduce carbon intensity, as a way to increase the resilience of their investment portfolios (see chapter III.B). Yet, while climate risks directly impact the risk-return calculus of investors with sufficiently long time horizons, this is not the case for all investors, nor for other SDG-related risks. Full disclosure of material SDG risks is a precondition for risk-informed behaviour. While some progress has been made with regard to the disclosure of material financial risks arising from climate change, such disclosure often remains partial, and SDG risk disclosures overall remain insufficient, as discussed below.

Policymakers can reduce risks relevant to investors, or share them, to improve risk/return profiles of investments. Actions to reduce risks include efforts to improve the enabling environment, such as

reducing administrative hurdles and burdens for businesses, and reducing policy uncertainty and other policy risks for investment—for example, by providing a stable macroeconomic environment. Public actors may also decide to share risks for specific investments, through financial instruments usually provided by development and climate finance institutions. They should, however, only take such risks on their balance sheets when investments support public policy objectives (and thus provide ***financing for sustainability and resilience,*** as discussed in the next section).

4.2 Financing for sustainability and resilience

While management of material risks is a routine, if challenging, part of financing, financing *for* sustainability and resilience is not. Most private investors aim to maximize financial returns, and do not consider SDG factors unless the risks directly and materially impact profitability. They thus do not consider many investments in prevention or resilience, which may not be attractive from a financial risk/return perspective, nor do they consider the social and environmental risks created by their investments. Public actors also underfund investments in prevention and resilience—partly due to lack of knowledge, partly due to poor incentives. This leaves economies and societies vulnerable to systemic risk, and opportunities for sustainable investment overlooked.

Public finance to enhance risk reduction and resilience

As the risk bearer of last resort, the public sector has to consider and address the whole range of SDG investment opportunities, not only those that directly impact public budgets. Beyond the basic approach to fiscal risk management, public finance in its entirety—budgeting, tax policy, debt management and other functions—needs to be geared towards achieving the SDGs. This implies investing in risk prevention, risk reduction and resilience for all stakeholders, not only because of the public sector's duty of care in its role as the custodian of the sustainable development agenda, but also because building resilience can lower a country's cost of borrowing, which can further stimulate investment, creating a virtuous cycle. For example, higher vulnerability to climate risk already significantly impacts borrowing costs of sovereigns, with recent studies finding premiums of 275 percentage points on sovereign bond yields of countries highly exposed to climate risk.[48]

Public finance can be used to enhance prevention. This includes incentivizing climate mitigation, particularly for major emitters—for example, through regulation, carbon taxes or by phasing out fossil fuel subsidies, which, at $4.7 trillion, or about 6.3 per cent of global GDP,[49] act as negative carbon price signals (see chapter III.A). Other relevant examples include investing in economic diversification, which reduces economic volatility.

Public finance can be a major driver in increasing economies' and societies' resilience through investments in structural resilience, social protection and more equitable societies. This includes investments in structural resilience such as resilient infrastructure (see box II.5), early warning systems that lead to early action and are locally designed, inclusive, and gender responsive, and other forms of climate adaptation. Allocation of funding for such investments suffers from the above-mentioned short-term and ex post biases in policymaking, which disincentivize such measures, particularly under tight fiscal constraints.

Box II.5
Investing in sustainable and resilient infrastructure

Infrastructure investment locks in risk and development patterns for decades. To meet climate targets and the SDGs, such investments must be fully aligned with these objectives. Estimates suggest that even if all new infrastructure had zero emissions, emissions from the existing capital stock would need to be cut in half by 2030 to limit global warming to 1.5 ℃—a daunting challenge.[a] Climate change is also increasingly affecting the financial and economic performance of infrastructure assets, through direct damage and rising operating and financing costs. Lack of resilience could increasingly threaten infrastructure financing at a systemic level, due to rising borrowing costs linked to country risk premiums, and reduced availability of insurance.[b]

Large-scale stimulus programmes in response to COVID-19 provide an unprecedented opportunity to transform infrastructure planning, design, financing and delivery, and lay the groundwork for a new development trajectory. To take advantage of this opportunity, a comprehensive approach to sustainable and resilient infrastructure is needed, building on a shared understanding of sustainable infrastructure that is economically, socially and environmentally resilient and sustainable. Such an approach would include:

- Supportive upstream policy frameworks (including mainstreaming disaster risk and climate change considerations in all planning processes and frameworks and infrastructure plans, and policy measures such as carbon pricing) and analytical tools (such as valuation methodologies that balance off the higher upfront costs of climate resilient infrastructure and higher perceived technology risks with their lower operating costs and lower climate physical and transition risks);[c]
- Platforms for project preparation, such as SOURCE,[d] to scale up investment-ready sustainable infrastructure projects;
- Enhanced quality control of projects, including standards and regulations for infrastructure resilience, and enhanced asset management to introduce climate adaptation and mitigation strategies for assets;[e]
- Mobilization and alignment of finance, including additional funding from multilateral development banks, use of blended instruments to attract investors when appropriate, and efforts on the supply side, such as enhanced climate risk disclosure and sustainable investing taxonomies, as well as technical support and capacity building to develop risk-informed and resilient infrastructure projects.[f]

Source: UN DESA.

a Amar Bhattacharya, et al. 2019. Aligning G20 Infrastructure Investment with Climate Goals & the 2030 Agenda. Foundations 20 Platform. A report to the G20.
b Global Center on Adaptation and Asian Development Bank. 2021. A system-wide approach for infrastructure resilience. A technical note. January 2021.
c Green Climate Fund. 2020. Tipping or turning point: Scaling up climate finance in the era of COVID-19. GCF Working paper No. 3. October 2020.
d See https://public.sif-source.org.
e United Nations. 2021. Managing Infrastructure for Sustainable Development-A Handbook for Local and National Governments, ch.6.
f See, for example, the Coalition for Disaster Resilient Infrastructure (CDRI): https://cdri.world/.

Progressive tax systems and other measures that enhance equity and support the most vulnerable are further drivers of resilience. Social protection systems in particular have been a critical source of resilience and facilitated rapid and effective responses to the COVID-19 shock in many countries (see box II.6).

Risk-informed public finance sometimes calls for taking more risk explicitly on public balance sheets, for SDG investments that will enhance resilience and reduce risks in the long run. As noted above, commercial investors are poorly suited to finance certain investments with high social returns, both because investors may find risks too large, and because they cannot appropriate sufficient returns. Public development banks and other development finance institutions have a long history of taking on such investment projects, as they can manage risks on their balance sheets and can accept lower returns due to their development mandate. As a result, they not only play a countercyclical role, but also invest in areas where private actors remain reluctant because of elevated risk perceptions (see box II.7). However, because these institutions are usually backstopped by the Government, the risks they accept on their balance sheets ultimately are risks for the public sector at large. They thus need to not only pursue public policy objectives, but also be prudently managed (see *Financing for Sustainable Development Report (FSDR) 2020* for a detailed discussion on development bank governance and risk management).

Private investment in sustainability and resilience

The growing recognition of sustainability risks to material outcomes of corporates does not automatically translate into investment and corporate behaviour that is fully aligned with the SDGs. As discussed in section 4.1, investors increasingly recognize and address SDG risks that materially impact profitability. But many SDG risks do not impact financial returns, either because they are too far off to be considered by investors (who may have short time horizons), or because they do not impact business performance (e.g., externalities, such as the impact of plastic on the environment). Risk-informed financing policies must thus go beyond efforts to evaluate material risks—to also understand, disclose and ultimately price or otherwise account for all other SDG risks. Only then will commercial investments internalize the impact of their activities on

Box II.6
Social protection and household resilience

Social protection systems have been the first line of defence against the negative impacts of COVID-19 on people's health, livelihoods and incomes. With nearly 1,600 measures reported in 209 countries between February and November of 2020, social protection was one of the priority responses to cushion the most adverse socioeconomic effects.[a] Investing in social protection infrastructure during good times can support country responses during crisis. Countries that had strong social protection systems in place could more rapidly use and adapt existing schemes and delivery mechanisms to facilitate access to health care, ensure income security and protect jobs.

The crisis has also laid bare major coverage gaps—especially for workers in the informal economy and their families and migrant workers—and in the comprehensiveness of protection, including health protection, unemployment protection or sickness benefits.[b] In contrast to safety nets that often provide only patchy and limited protection, countries with universal social protection systems were able to readily use existing national administrative capacities and delivery mechanisms, and allowed for expediting of emergency cash disbursement while minimizing exclusion risks.[c]

From emergency response to long-term solutions

Temporary support measures introduced in the context of this crisis can be utilized as building blocks for protecting individuals beyond the current crisis and ensure preparedness for future crises. To this end, relevant national actors should be involved in the design and implementation of emergency responses and longer-term solutions. Where necessary, international financial and technical support can strengthen national capacities to provide social protection. Moving from emergency responses to long-term solutions will also require coherence with social, economic and employment policies. Extending social protection to workers in the informal economy, for example, can reap a triple dividend: it can provide workers with economic security and facilitate transitions to the formal economy, which would contribute to productivity gains and broaden the tax base. Coordinating employment and social protection policies can support and sustain economic recovery, for instance, by providing workers who are temporarily out of work with not only income security but also training opportunities to enhance existing skills or reskill.[c]

Financing social protection floors

The latest International Labour Organization (ILO) estimates suggest that additional resources needed to close the global financing gap in achieving social protection floors (SPFs) have increased by approximately 30 per cent since the onset of the COVID-19 crisis. To close coverage gaps, developing countries would need to invest about 3.8 per cent of their GDP on average.[d] Diverse financing mechanisms will be needed, based on the principle of solidarity at both national and international levels. This includes strengthening domestic resource mobilization (see chapter III.A) and also improving efficiencies. Administrative costs are an important consideration in SPF design. For example, one African country shifted social transfer distribution from a cash system to a mobile-money-based system, which resulted in a 20 per cent drop in the variable administrative costs. However, such shifts need to address unequal access to technology and, specifically, the access of key marginalized groups, including women (see chapter III.G). The ILO Social Protection Floors Recommendation, 2012 (No. 202), provides guidance on objectives to which efforts to build social protection should be oriented.[c]

Source: ILO.

a ILO. 2020a. Social Protection Monitor: Social Protection Responses to the COVID-19 Crisis around the World. Available at https://www.social-protection.org/gimi/RessourcePDF.action?id=56047.

b ILO. 2020b. Social Protection Spotlight. Various issues. Available from https://www.ilo.org/secsoc/information-resources/publications-and-tools/Brochures/lang--en/index.htm.

c ILO. 2021. Towards Solid Social Protection Floors? The Role of Non-Contributory Provision during the COVID-19 Crisis and Beyond. Social Protection Spotlight.

d Durán Valverde, Fabio, José Pacheco-Jiménez, Taneem Muzaffar, and Hazel Elizondo-Barboza. 2020. Financing Gaps in Social Protection: Global Estimates and Strategies for Developing Countries in Light of COVID-19 and Beyond. Working paper. Geneva: International Labour Office.

the SDGs; and only then will public policy incentivize investments fully aligned with the SDGs (see chapter III.B).

For SDG risks to be addressed, they first need to be disclosed. Countries are increasingly embedding previously voluntary sustainability-related disclosures (particularly for climate risks) in legislation and regulations for large corporations. Large corporations have made progress on disclosures, particularly on climate-related disclosures. Nonetheless, reporting remains fragmented, with companies reporting varying levels of data using different standards and indicators, often on a voluntary basis, which undermines both the quantity and quality of information. Corporate reporting needs to be further enhanced through norm-setting and standardization, mandatory reporting measures, going beyond financial material risks, consistently addressing all SDG impacts (see chapter III.B).

Additional proactive measures can further facilitate the low-carbon and sustainability transition in financial markets. Beyond SDG and ESG risk disclosure, minimum standards or taxonomies for sustainable financial products can provide more clarity and certainty on sustainable investment opportunities to investors with sustainability preferences. Investment advisers could be mandated to ask clients about sustainability preferences; crisis support can be linked to ESG reporting requirements; and some central banks are considering integration of environmental, social and governance criteria into their portfolios to address the "tragedy of the horizon"— for instance, by considering carbon intensity in bond purchasing programmes (see also chapters II.B and II.F).[50]

All public policy efforts to reduce and share investment risk must take into account economic, social and environmental risks. This is primarily a challenge of policy coherence. Efforts to improve the enabling environment must not come at the expense of social and environmental objectives. Instead, taxes, regulations and other pricing mechanisms (e.g., carbon pricing, bans of single-use products, or requirements to conduct supplier due diligence on forced labour and related social risks) should serve to internalize environmental and social risks.

Risk-sharing instruments should only be used when investments contribute to public policy objectives and SDG progress. As noted, risk-sharing instruments raise resources for investment that would not be

Box II.7
Public development banks and risk

There are more than 450 Public Development Banks (PDBs) in the world, distributed across every region, operating at local, national, regional, international or multilateral levels. They are significant players, providing funding of about $2.3 trillion annually, or 8 to 10 per cent of global public and private investments.[a] Successful public development banks combine three attributes: (i) they are owned, controlled or supported by Governments; (ii) they execute a public, development-oriented mandate, addressing market inconsistencies; (iii) they enjoy independent legal status and financial autonomy, and maintain financial sustainability.

Public development banks and SDG risks: three roles

Their development mandates and backing by the public sector allow development banks to take on ***macro-relevant risks.*** By providing ***countercyclical responses*** during times of crisis, public development banks can reduce countries' exposure and vulnerability to financial crises and, ultimately, the impact crises have on development. This countercyclical role contributed to restoring financial and economic stability during the 2008/2009 global financial and economic crisis. During the COVID-19 crisis, large development banks in particular were able to provide urgent support to health systems and economic activity more generally, with some doubling their funding volumes to support the most affected sectors and businesses and maintain employment. Development banks can play this role because of their longer time horizons and more stable funding sources.

Public development banks can play a ***compensating and catalytic role in countries with underdeveloped financial markets.*** Perceived risk remains high in a number of countries, making the private sector reluctant to invest. This perception is fueled by the general lack of knowledge about these markets, and by the difficulty of pricing risks accurately in the absence of sufficient market references, reporting systems on credit defaults, or independent assessments of credit risks. Development banks can fill these gaps. Multilateral development banks and climate funds can provide targeted support to public development banks operating in such countries, and in supporting the emergence of new national PDBs. More broadly, collaboration of national and multilateral banks, through capacity development, co-financing and/or on-lending arrangements, can enhance SDG-related finance through the complementarity of international resources and local market knowledge.

By providing longer-term funding than commercial banks, PDBs can better ***align their risk considerations with social and environmental sustainability.*** Governments have long used PDBs as important financing tools to implement their national economic and social policies—especially to directly finance large infrastructures, to foster economic growth, and reduce poverty. More recently, many development banks also strive to crowd in private investment (domestic and international), to increase the scale and development impacts of private financial flows, and to foster capital market development, through blended finance and other forms of alternative finance. In this latter role, they also aim to align markets with the SDGs and the Paris Agreement and to increase societal resilience, through enhanced levels of standards for all investors. They can do so through direct funding and by leading financial markets with more environmentally and socially stringent and demanding investment criteria. By aligning their operations and activities to the Sendai Framework for Disaster Risk Reduction, development banks can also ensure that their lending supports risk reduction. During the Finance in Common Summit, held in Paris in November 2020, regional association of public development banks agreed on key principles for aligning their strategies with the 2030 Agenda for Sustainable Development, including in areas such as energy transitions and existing coal financing, strengthening "cause no harm" policies on biodiversity, and on increasing access to affordable and accessible essential services such as education, housing or health.

Source: IDFC.

a A comprehensive database developed by the Institute of Structural Economics (INSE – University of Peking) and the French Development Agency (AFD) is available at https://afdshiny.shinyapps.io/developmentbanksdatabase/.

Box II.8
The market for political risk insurance

Political risk has long been an important consideration for private sector investors operating in developing countries. The ability to protect against (i) expropriation, (ii) breach of contract by a sovereign, (iii) currency inconvertibility, and (iv) war and civil disturbance are important factors for investors with significant debt and equity positions. With 10–30 year investment horizons for large infrastructure, energy and financial service projects, most are unable to effectively manage political risk using their own balance sheet. In response, political risk insurance offers a capital-efficient method to transfer these risks to organizations that can pool exposures from across a portfolio of countries and regions.

The political risk insurance market is made up of three types of insurance providers: private insurers (commercial markets), export credit agencies (ECAs), and multilateral development institutions. Private insurers are profit-oriented and typically offer coverage with maximum tenors of 10–15 years and limits of $50 million to $100 million per insured risk. Tenors and coverages for ECAs can vary significantly. Most ECAs operate under an explicit mandate to primarily cover investors from their country of origin. Depending on their specific mandate, ECAs are required to be financially self-sustainable. Multilateral insurers, most notably the Multilateral Investment Guarantee Agency (MIGA), have an explicit development mandate and, in the case of MIGA, cover investments in both middle-income and especially lower-income countries and fragile and conflict-affected States. By doing so, MIGA acts as an ***insurer of last resort*** covering risks that in complexity, risk profile, tenor and size are outside of the appetite of private markets. As a benefit of being part of the World Bank Group, MIGA is well positioned to pre-emptively address emerging political risks through direct engagement with its sovereign or subsovereign counterparties. This form of ***pre-claims management*** avoids lengthy arbitration and allows projects to continue to perform without disruption. Since its creation, MIGA has been able to resolve the overwhelming majority of potential political risk situations without arbitration or a claim, thereby ensuring the continuation of critical development projects and strengthening investor confidence in emerging markets.

Over the last decade, the market for political risk insurance has seen steady growth. MIGA, for instance, has increased its capacity from $2.5 billion in annual issuances to an average of $5 billion to $6 billion. Reinsurance is an important enabler of that capacity growth, allowing carriers like MIGA to scale its impact across a broader set of projects and geographies. Innovation in products such as expansion into credit enhancement has further broadened access to coverages that protect investors against losses resulting from a failure of a sovereign or subsovereign to meet financial obligations. Continued innovation and capacity growth have significantly expanded the role and relevance of political risk insurance in de-risking investment into emerging markets. As a capital effective instrument to enable private capital flows, a wider use of political risk insurance has the potential to unlock material incremental investments and accelerate progress towards achieving the Sustainable Development Goals.

Source: Multilateral Investment Guarantee Agency (MIGA).

sufficiently attractive for commercial investors without support. As they use public resources, they must be aligned with public policy goals, such as climate action and the SDGs. Instruments include junior equity, subordinated debt and guarantees to enhance risk-return profiles for commercial investors (e.g., the Global Subnational Climate Fund, where a first loss equity investment by the Green Climate Fund leverages investment for climate action at the subnational level); credit guarantees to local financial institutions, to cover them against losses in underserved markets; or insurance or hedging instruments to hold risks that they are better placed to manage than commercial investors, such as political risk insurance (see box II.8 on the role of Multilateral Investment Guarantee Agency (MIGA), and chapter III.B. of the *FSDR 2020* for a detailed discussion of such instruments). Blending structures have also been used to subsidize insurance schemes to enhance resilience of smallholder farmers and households—for example, through the Africa and Asian Resilience Disaster Insurance Scheme, which is co-funded by the InsuResilience Investment Fund. Depending on the type of risk, national or international institutions may be better placed to take on risks; risks that are systemic at the national level, such as currency risk or political risk, are better managed by international institutions that can diversify them.

4.3 International support and action

Risk prevention, reduction and investments in resilience have a public good character, calling for global cooperation and international support for developing countries. Systemic risks in particular have cross-border effects, and isolated national efforts to address them will not suffice. Both climate mitigation and the COVID-19 pandemic provide stark illustrations for the need for international cooperation, and for provision of support to developing countries with limited resources, not only in the spirit of global solidarity, but also in the self-interest of advanced countries. Such international support can both directly support sustainability and resilience of public finances and financial systems, and also contribute to financing for risk reduction, resilience and sustainability.

Supporting sustainable and resilient public finances and financial systems

International public finance can provide fiscal support in times of macroeconomic shocks, crises and disasters, and thus play a countercyclical role in enhancing resilient public financing. Multilateral development banks in particular have historically been able to provide countercyclical financing, significantly extending their operations in developing countries in response to the global economic and financial crisis in 2008 and 2009 (see *FSDR 2019* and chapters III.C and III.E of *FSDR 2021*). They have also provided concessional financing to developing countries in need after the COVID-19 shock, frontloading disbursements. In contrast, some bilateral official development assistance providers have acted procyclically by reducing aid allocations, due to fiscal pressures at home (see chapter III.C). The international community has also set up or supports a range of quick-disbursing financing instruments that can provide rapid fiscal support in the event of a disaster or pandemic (see box II.9).

Financial systems have proven more resilient to the COVID-19 shock than to the global crisis in 2008 and 2009, and international financial markets have recovered quickly from the March turmoil, while many developing countries face significant liquidity

pressures. Major banks had better capital and liquidity positions, allowing them to absorb the macroeconomic shock rather than to amplify it. Nonetheless, other fault lines have emerged, particularly in the non-bank financial sector, which has become a major source of systemic risks, and warrants continued attention by regulatory policymakers (see chapter III.F). At the same time, many developing countries have faced liquidity pressures due to the current crisis, as they remain vulnerable to the fluctuations of cross-border financial flows. Strengthening the global financial safety net, and increasing IMF capacity for concessional lending and provision of liquidity support (e.g., through a substantive issuance of special drawing rights) remain a priority (see chapter III.F).

International cooperation and support for sustainability and resilience

Strengthened international cooperation is also required for investments in risk reduction and resilience, which remain severely underfunded. It is a shared interest of all countries to spend more and to spend better on global risk prevention and preparedness, and to address the increasingly systemic nature and unequal distribution of risk, while also supporting national efforts for risk reduction in developing countries. But such investments are often crowded out by more immediate short-term or domestic concerns, because of their global public good character.[51] Pandemic preparedness and climate change mitigation are two examples of such global public goods: they affect all or most countries and people, and cannot be provided by any one country alone, but rather require global cooperation. This entails not just additional financing, but also strengthened and more inclusive global governance.

More public investment is needed. Investment in pandemic preparedness and response has been insufficient, despite increased mobilization after the 2014–2016 Ebola crisis.[52] Despite efforts by entities such as the Coalition for Epidemic Preparedness Innovations, Gavi, the Vaccine Alliance, the World Health Organization (WHO) and others, investments in research and development for vaccines and other preventative interventions remain a small share of overall health spending globally, and continue to be characterized by a cycle of panic and neglect.[53] Markets dramatically underinvest in this area. The COVID-19 crisis highlights the enormous output losses associated with slow global vaccination progress and makes a clear case for greater public investment, including in COVAX, the vaccines pillar of the ACT-Accelerator. And while total public climate finance provided by developed countries has increased in recent years to reach $63 billion in 2018 (see chapter III.C), it pales in comparison to the vast investment needs for transitioning the global economy onto a low-carbon path. Developed countries' commitments made under the Paris agreement to transfer resources to finance objectives beyond mitigation, including adaptation, regulations, information-sharing and technology transfer, must also be met. Such transfers are critical to accelerate policies supporting decarbonization in developing countries.

Beyond additional funding, the international architecture should be revisited. Systemic risks are characterized by cross-domain effects. As a result, they do not fall within the responsibility of a single organization, neither nationally, nor at the global level. Increasing the voice of the most vulnerable groups and countries—those with the least agency to reduce global risks but most vulnerable to shocks and disasters—is a second imperative. International cooperation must be further strengthened in these two dimensions; but both are challenging to address, as they require bringing together different communities of expertise and practice, and overcoming significant power imbalances. They require a "reinvigorated multilateralism," as recognized by States Members of the United Nations in the Declaration on the commemoration of the seventy-fifth anniversary of the United Nations,[54] with a strengthened United Nations at its centre, due to its convening power and capacity to address sustainable development, climate, peace and security, and humanitarian considerations in a coherent, complementary and collaborative manner.

Development cooperation can also support developing countries in addressing risk and building resilience, including by strengthening national capacities and country systems that are able to respond to shocks and crises. Government capacity has been a key determining factor of the effectiveness of countries' response to the COVID-19 pandemic.[55] Development cooperation has a key role to play in building such capacities—in national health systems, social protection systems, or crisis response systems, for example. INFFs could serve as a tool to align such support with national priorities and needs.

Support for national pandemic preparedness increased after 2015, but remains insufficient. The Joint External Evaluation (JEE) mechanism, set up by WHO in 2016, allowed for identification of critical gaps in preparedness. Yet, despite the low cost of enhancing pandemic preparedness (estimated at less than 2 dollars per person per year to reach acceptable levels), recipient-country expectations for additional support after JEE gap assessments have not been fully met.[56] Resilient national health systems are a second line of defence. Development cooperation continues to play an important role in this area, responsible for almost a third of health spending in low-income countries; but specific support for health system strengthening, which is the basis for crisis preparedness and response, remains limited, at about 15 per cent of overall support for health.[57]

Climate adaptation and disaster risk reduction remain severely underfunded. Annual adaptation financing needs are estimated to range between $140 billion to $300 billion by 2030.[58] Yet, such investments in the adaptive capacity of vulnerable populations, including women, girls and people living with disabilities, are even more underfunded than other global priorities, such as climate mitigation. Reporting on official international support for disaster risk reduction also remains inconsistent, despite the introduction of the Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) disaster risk reduction marker. Climate adaption and disaster risk reduction activities face a dual challenge: they rely more on global solidarity than mitigation finance, which is in the direct interest of all countries, and they tend to rely more on public finance, as they are often not associated with revenue streams. Participatory and tailored approaches are particularly important in climate adaption and disaster risk reduction projects, so that they can respond to the specific needs of vulnerable local populations.[59]

Financing mechanisms can be designed to further support rapid and effective national crisis response. The Ebola crisis has spurred development of pandemic emergency financing facilities, building on

experiences from the climate and disaster world. Such quick-disbursing mechanisms can provide rapid and predictable financing, and are thus a useful complement to domestic funding and other forms of international support. However, not all mechanisms have stood the test of COVID-19, providing important lessons for their effective design (see box II.9).

Building on these lessons, a new Early Response Financing (ERF) modality was introduced in IDA (starting on July 1, 2020 at the onset of IDA19) to provide early support for slow-onset shocks, and to enable early response to disease outbreaks and food insecurity events that are at an early stage of progression but have the potential to escalate into major crises.

Box II.9
Quick-disbursing financing mechanisms and risk-transferring instruments

The international community has developed a range of mechanisms—quick-disbursing grant or debt financing, contingent instruments, and insurance mechanisms—to support countries in their response to economic and non-economic shocks and disasters. This includes the set of bilateral and multilateral arrangements and institutions that comprise the global financial safety net (see section 4.3 of chapter II and chapter III.F of this report, as well as disaster financing mechanisms for humanitarian emergencies and for disasters that are growing in frequency and intensity due to climate change. In response to the 2014–2016 Ebola outbreak, the latter were expanded and complemented to also cover pandemics.[a]

Instruments include:

- Grant or loan financing provided in the immediate aftermath of disasters, for example, pooled funds such as the United Nations Central Emergency Response Fund (CERF), which includes rapid response grants; the International Development Association's Contingency Emergency Response Components and Crisis Response Windows, or contingent credit lines such as the World Bank's Catastrophe Deferred Drawdown Option (CAT-DDO); the World Health Organization Contingency Fund for Emergencies; or the International Monetary Fund Catastrophe Containment and Relief Trust;
- Risk financing and risk transfer instruments, which include regional risk sharing or risk pooling mechanisms such as the Caribbean Catastrophe Risk Insurance Facility (CCRIF) and the African Risk Capacity, and instruments to transfer risk, such as the insurance window of the World Banks' Pandemics Emergency Financing Facility, also known as pandemic bonds.

Their primary purpose is to provide rapid and predictable financing that reaches countries and populations in need early enough to avoid or minimize long-term consequences and scarring. They can provide Governments with needed liquidity for immediate response and recovery. In comparison to costly self-insurance, these international efforts aim to provide support to resource-constrained developing countries that is rapid, predictable and less fragmented than traditional support, and also allow for risk pooling and hence taking advantage of diversification of risk across geographies.[b]

Several lessons have emerged from their use over recent years. First, insurance schemes and associated premiums raise equity concerns; the most vulnerable—both households and countries—will not be able to afford them. Existing parametric insurance schemes and catastrophe bonds are expensive, with annual premiums estimated at 1.5–3.2 times of expected annual payouts for small island developing States, due to geographical risk correlations and thin insurance markets.[c] Concerns over premium costs have halted countries from joining regional risk sharing mechanisms. In some cases, donors have covered these premiums, and initiatives such as the Global Risk Financing Facility provide technical and financial support for risk financing and insurance mechanisms.

Second, parametric instruments and their triggers in particular can be challenging to structure, and private sector involvement overly costly. In the case of pandemic bonds, due to the design of the triggers, payouts were possible only more than three months into the pandemic, and thus came after the World Bank had committed IDA and IBRD funding to fight COVID-19—a slower response than traditional support and at a higher cost.[d] Parametric triggers have worked better when risks are well understood (as is the case for hurricanes covered by CRIFF), and parametric triggers are immediate.

Third, financing instruments should include both incentives and capacity-building efforts for investments in planning, improving data and tracking systems, preparedness and prevention.

Source: UN DESA.

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Domestic public resources



Chapter III.A

Domestic public resources

1. Key messages and recommendations

Governments responded to the COVID-19 crisis with historic fiscal support packages, although the response and reach were uneven, as many developing countries, particularly least developed countries (LDCs), lacked the resources to respond adequately. At the same time, government revenues fell significantly, further reducing countries' fiscal space.

Unprecedented fiscal response to the crisis presents an opportunity to revamp the social contract and to align fiscal policy with sustainable development. But the poorest countries will need international support. In the Addis Ababa Action Agenda, Member States of the United Nations committed "to a new social compact. . .[including] social protection systems and measures for all, [and to] make every effort to meet the needs of all communities through delivering high-quality services that make effective use of resources".[1] Despite some progress in raising domestic resources since 2015, the COVID-19 crisis laid bare the gaps and lack of progress, including in investments in health and strong social protection systems, which need to be updated to reflect changing realities, such as technological shifts in labour markets.

Governments should

- *Prioritize spending on essential health functions and social protection floors. International support will be needed to help the poorest and most vulnerable countries to redesign and build social protection infrastructure. In the medium term, financing social protection floors can also be supported by scaling up countercyclical financing;*
- *Align fiscal support with sustainable development, including public investment in resilient infrastructure, which can strengthen resilience and stimulate a sustainable recovery; and not withdraw stimulus measures prematurely, as fiscal austerity can be counterproductive, and it risks increasing inequality beyond the immediate COVID-19 impact;*
- *Pursue progressive fiscal systems, and use taxes to better align behaviour and decisions with the 2030 Agenda for Sustainable Development, such as introducing or strengthening carbon pricing and reducing fossil fuel subsidies;*
- *Strengthen public financial management as part of the post-COVID-19 recovery; capacity-building efforts should also be scaled up.*

Fiscal policy choices have become increasingly complex due to the strain of the crisis on public finances, growing debt sustainability, and systemic risks that could potentially trigger future crises.

- *Governments can use integrated national financing frameworks (INFFs) to navigate complex fiscal policy choices, trade-offs and risk management. This process should incorporate fiscal policy tools, such as medium-term revenue strategies (MTRS) and gender-responsive budgeting.*

Strengthening international tax cooperation is essential to supporting domestic efforts. While significant progress has been made in increasing international cooperation and transparency in taxation, as well as addressing cross-border taxation challenges, more remains to be done, especially to ensure all developing countries, including LDCs, benefit from this progress. COVID-19 has accelerated the digital transformation of economies and societies, raising the stakes in discussions over taxation of the digital economy.

- *There is widespread agreement that a consensus-based global solution is the best approach for enabling effective taxation of the digitalizing economy, and avoiding the risks of tax uncertainty, double taxation and retaliatory measures that accompany uncoordinated unilateral measures, if implemented by a critical mass of countries. Developing-country interests and perspectives should be integral to global discussions. Any solution must be simple enough to administer and consistent with the international tax norms, rules and principles observed, such as neutrality and efficiency.*

It is also critical to address illicit financial flows, which drain resources from sustainable development. The High-level Panel on International Financial Accountability, Transparency and Integrity for Achieving the 2030 Agenda (FACTI Panel) has made recommendations for addressing illicit financial flows for Governments to consider, including a Global Pact for Financial Integrity for Sustainable Development that aims to reinforce values for integrity and legitimacy, strengthen policy frameworks, and redesign institutions to foster and strengthen financial integrity for sustainable development.

This chapter begins by outlining the response to COVID-19, with a focus on public expenditures, including social protection. It then provides lessons for public finance risk management. Next, it examines the impact of the pandemic on domestic resource mobilization and lays out issues related to tax policies for sustainable development, including on equality and climate change. It concludes with discussions on international tax cooperation in the context of a digitalizing economy, and on combatting illicit financial flows. The chapter also builds on the work of the discussion group on recovering better for sustainability established after the initial High-Level Event on Financing for Development in the Era of COVID-19 and Beyond (see chapter II).

2. Public expenditure in response to Covid-19

2.1 COVID-19 response, challenges and opportunities

Governments responded to the crisis with historic fiscal support packages, although the size of packages has varied greatly by country. By the end of 2020, announced fiscal measures are estimated at about $16 trillion, approximately 15 per cent of global gross domestic product (GDP).[2] Such measures include both additional spending or foregone revenue (e.g., temporary tax cuts), and liquidity support (e.g., loans and guarantees) (table III.A.1). However, while most developed economies were able to inject substantial support, developing countries were more constrained due to limited fiscal space. LDCs in particular found it difficult to finance emergency spending, with average fiscal support at about 2 per cent of GDP, compared to roughly 10 per cent in developed countries (figure III.A.1 and figure III.A.2).

The uneven size and composition of the fiscal response reflects the greater fiscal space of developed economies, as well as the timing and severity of the pandemic. Developed economies responded to the outbreak of the pandemic and the related economic slowdown with huge monetary and fiscal support, including record off-budget assistance in the form of liquidity support and guarantees. In contrast, COVID-19 spread later in many developing countries, including Africa and LDCs, and responses were limited given tighter financing constraints. The relatively higher median fiscal response of small island developing States (SIDS) reflects better financing conditions pre-crisis, particularly for the Asia-Pacific region where a few countries benefited from pre-pandemic fiscal surpluses and large sovereign wealth funds from fishing licenses and oil revenues. [3]

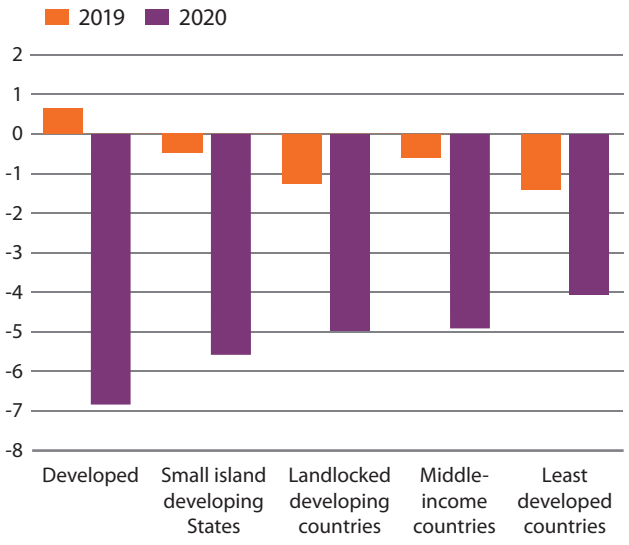
A range of fiscal support measures helped cushion the socioeconomic impacts of the pandemic. Cash and in-kind transfers appear to have been most effective in protecting the poor, while unemployment benefits, wage subsidies and job retention schemes helped support incomes of workers in the formal sector and maintained employment rates (see section 2.2 on social protection). Payment forbearance on mortgages, situations, albeit with limited reach to informal sectors. Quasi-fiscal activities, including support by national development banks as part of stimulus

Table III.A.1
Examples of COVID-19 fiscal support measures

Fiscal support measure	*Category*	*Examples*
Additional spending or foregone revenue	Health spending/ revenue	▪ Expenditure for public health measures to contain the spread of the virus ▪ Tariff waivers on medical supplies
	Non-health spending/ revenue	▪ Household income support: cash or in-kind transfers, unemployment benefits ▪ Employment measures to preserve jobs: wage subsidies for furloughed workers or businesses with revenue losses, short-term job-retention schemes ▪ Tax measures: temporary deferral of taxes and social security payments, general income tax cuts, accelerated depreciation, progressive taxes
Liquidity support	Equity and loans	▪ Equity injections or loans for continuity of operations
	Guarantees	▪ Government loan guarantees for banks, firms, or households
	Quasi-fiscal activities	▪ Subsidies or loans to targeted sectors undertaken by public corporations or national development banks

Source: UN DESA, adapted from IMF, "Fiscal Monitor: Policies for the Recovery," October 2020.

Figure III.A.1
Median fiscal balance, 2019–2020
(Percentage of GDP)



Source: UN DESA calculations, based on IMF WEO.

Box III.A.1
Transparency and accountability measures in the COVID-19 fiscal response

In normal circumstances, ensuring that Governments are held accountable for their fiscal measures is made harder by lack of transparency and accountability measures. For example, the 2019 Open Budget Survey reported that three quarters of 117 countries surveyed had insufficient levels of budget transparency.[a] This is compounded during COVID-19, given the scale and speed of the emergency response. Experience from previous pandemics and disasters indicates that emergency situations have often led to the suspension or circumvention of standard controls, as well as weakening of accountability and oversight systems,[b] such as the mismanagement of Ebola relief funds and the misuse of funds in the wake of Hurricane Katrina and Hurricane Maria.[c] The scale and depth of the COVID-19 emergency response thus provides heightened risk of fiscal mismanagement, corruption and fraud. Assessments by the United Nations Office on Drugs and Crime (UNODC) in May 2020 in West and Central Africa and Southeast Asia highlighted fraud and corruption complaints, and heightened risks ranging from embezzlement and misappropriation of funds and conflicts of interest to nepotism.[d] These risks affect women disproportionately as they are more likely to be victims of corruption and bribery, which also exacerbates gender-based violence.[e]

Fiscal responses should be accompanied by transparency measures, including the cost and funding sources of the measures that will be implemented; changes in the originally approved allocations, as well as the possible impacts on the delivery of other services; additional allocations in payroll (e.g., to increase the availability of health services); modifications in public investments, as well as possible delays on planned projects; and tax deferrals and exemptions. Additionally, the impacts on the domestic revenue and macroeconomic framework changes should be made publicly available.[f]

Standard transparency and accountability measures can also be used to mitigate risks in the implementation of COVID-19 procurement. Public procurement is one of the government activities most vulnerable to corruption,[g] causing losses of over $500 billion every year in the health sector,[h] with 25 per cent of all health procurement spending lost to corruption.[i] Several reports of corruption in COVID-19 response procurement across countries relate to the purchases of defective material (personal protective equipment, COVID-19 tests, etc.), price gouging and cronyism.[j] There are also similar risks related to the manufacture, allocation and distribution of COVID-19 vaccines.[k] Measures include (i) managing procurement processes, even those catalogued as emergency procurement, through the existing e-procurement systems and publishing all public contracts and their related data; (ii) using open and competitive bidding, and using emergency non-competitive processes only when followed by adequate forms of control, auditing and reporting—emergency procurement should be the exception, not the rule; (iii) gathering and publishing beneficial ownership information of companies that are awarded contracts; (iv) empowering existing anti-monopoly agencies to monitor market conditions in critical sectors; and (v) fostering cooperation among various authorities and civil society.[c,l,m] International recognized tools such as the MAPS[n] are useful to diagnose and craft reforms to make this possible.

Role of supreme audit institutions

A key lesson from the Ebola funds scandal is that Governments and donors should have a clear understanding of the role of supreme audit institutions (SAIs) in auditing emergency funds.[b] SAIs provide a lead role in overseeing budget management discipline and ensuring transparency and accountability, both during an emergency response and in recovery efforts.[b,o] With increased inflow of aid, including debt relief initiatives, SAIs can also guard against inefficient or inappropriate use of external resources. Although most countries have weak or inadequate SAIs, as well as low public engagement in audit and oversight processes,[p] the pandemic provides an opportunity to enhance SAI capacities as much as possible. SAIs should be supported by an ecosystem of interconnected actors and conditions, including legislative oversight, public engagement and independence.[p]

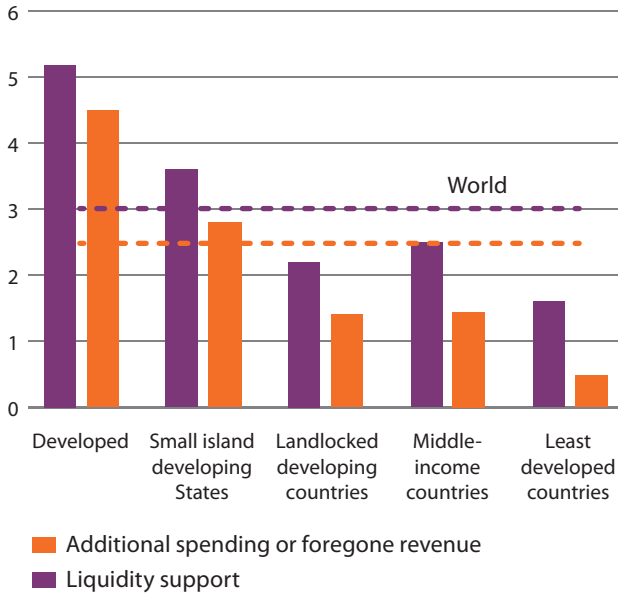
Source: UN DESA.

a International Budget Partnership, "Open Budget Survey 2019," April 2020.
b International Organisation of Supreme Audit Institutions (INTOSAI) Development Initiative and others, "Accountability in a Time of Crisis: How Supreme Audit Institutions and Development Partners Can Learn from Previous Crises and Ensure Effective Responses to COVID-19 in Developing Countries," April 2020.
c Claude Wendling and others, "Keeping the Receipts: Transparency, Accountability, and Legitimacy in Emergency Responses," Fiscal Affairs Special Series on Fiscal Policies to Respond to COVID-19 (IMF, 2020); Kubai Khasiani and others, "Budget Execution Controls to Mitigate Corruption Risk in Pandemic Spending", Fiscal Affairs Special Series on Fiscal Policies to Respond to COVID-19 (IMF, 2020).
d UNODC, "Covid-19 Emergency Support Packages in West and Central Africa—An Overview and Analysis of Fraud and Corruption Risks," 2020; UNODC, "Covid-19 Emergency Packages in Southeast Asia: An Overview and Analysis of Fraud and Corruption Risks," 2020.
e Transparency International, "COVID-19 Makes Women More Vulnerable to Corruption," September 21, 2020.
f Global Initiative for Fiscal Transparency, "Fiscal Data for Emergency Response: Guide for COVID-19, Version 1.1," August 2020.
g OECD, "Preventing Corruption in Public Procurement," 2016.
h Transparency International, "The Ignored Pandemic: How Corruption in Healthcare Service Delivery Threatens Universal Health Coverage," 2019.
i Natalie Rhodes, "First, Do No Harm: Spending the Global Coronavirus Response Pledges Properly," Transparency International, May 14, 2020.
j Theo Nyreröd and Giancarlo Spagnolo, "Combating Misuse of Public Funds in COVID-19 Emergency Procurement," FREE Network, September 27, 2020.
k UNODC, "COVID-19 Vaccines & Corruption Risks: Preventing Corruption in the Manufacture, Allocation and Distribution of Vaccines," COVID-19 Policy Paper, December 9, 2020.
l Rachel Hanna, "Transparency in Emergency Procurement - Ten Recommendations for Policymakers," *Center for the Study of Corruption University of Sussex Working Paper*, no. 8 (November 2020).
m Sally Torbert, "A Call to Action on Open Budgets during the COVID-19 Response," International Budget Partnership Open Budgets Blog, May 7, 2020.
n Methodology for Assessing Procurement Systems.
o World Bank Group, "COVID-19, Role of Supreme Audit Institutions (SAIs) in Governments' Response to COVID-19: Emergency and Post Emergency Phases," Governance & Institutions, Response to the COVID-19 Pandemic, June 2020.
p International Budget Partnership and INTOSAI Development Initiative, "All Hands on Deck: Harnessing Accountability through External Public Audits, An Assessment of National Oversight Systems," Paper, November 2020.

packages, provided support to struggling businesses, particularly small and medium-sized enterprises (SMEs) (see chapter II), and equity injections helped bail out hard-hit firms in strategic sectors, such as national airlines.[4] However, there are risks of transparency and accountability issues (box III.A.1).

Fiscal measures should not be prematurely lifted. Fiscal support will remain important beyond the immediate response to the pandemic. Lessons from past crises indicate that fiscal austerity in the wake of crises can be counterproductive as it typically reduces output, and raises unemployment in the short-term.[5] Evidence also shows that fiscal austerity can intensify inequality and that women often shoulder more of the negative impacts of spending cuts, including those that affect the availability of essential public services.[6] Public health and emergency lifeline measures may need to be extended even as economies gradually reopen. For example, SMEs may require longer-term support for access to finance, through extension of grants, loans or guarantees (see chapter III.B).[7] Vulnerable countries, such as LDCs, will likely continue to be fiscally constrained, requiring international support to recover from the pandemic (see chapter III.C). When Governments are in a position to address fiscal deficits, tax administrations could focus on the largest taxpayers and those least affected by the crisis in a phased approach.

Figure III.A.2
Median COVID-19 fiscal support as of September 2020
(Percentage of GDP)



Source: UN DESA calculations based on IMF, "Fiscal Monitor: Policies for the Recovery," October 2020.

The unprecedented fiscal packages and low global interest rates present an opportunity for Governments to invest in resilience, reduce inequalities, and stimulate economic growth. COVID-19 has highlighted the need for reducing risk and building resilience, including through investing in resilient infrastructure; addressing inequalities, including gender inequalities; and pursuing a low-carbon and sustainable recovery. Increasing public investment by 1 per cent of GDP in advanced and emerging economies could create 7 million jobs directly, and more than 20 million jobs indirectly. For example, investments in sustainable and resilient infrastructure would create jobs and stimulate sustainable economic growth and development, with positive knock-on effects across the Sustainable Development Goals (SDGs). Public development banks can play an important role in supporting such investment (see chapter II).[8] However, good governance is critical to effective public investment, including in ensuring that the right projects are selected, delivered in a way that is environmentally and fiscally sustainable, cost-efficient, affordable, transparent, and, most importantly, that they effectively deliver value for money to the public sector and end users.

Fiscal responses can also support climate and biodiversity goals. Several countries have included green fiscal measures in their stimulus packages, such as the green recovery package of the European Union (EU) that includes targeted measures to reduce dependence on fossil fuels, investments in preserving and restoring natural capital, and green conditional recovery loans and grants. However, immediate fiscal responses have so far largely failed to support climate and biodiversity goals. Of the national support packages of the Group of Twenty (G20) countries, 16 have been shown to have a net negative environmental impact, given inclusion of measures that support fossil fuel industries or suspension of environmental regulations.[9] About 30 per cent of total announced packages is expected to flow into environmentally relevant sectors that impact climate, biodiversity or local air quality.[10]

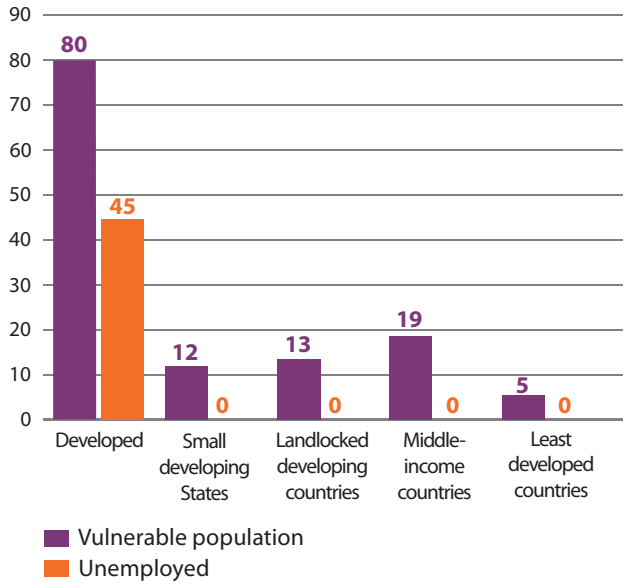
Well-designed fiscal policies can help mitigate the negative and disproportionate impacts of the crisis on women and girls, and prevent even more detrimental setbacks. Public investments in social infrastructure (including education[11]), social protection, and care services can also drive economic recovery and resilience.[12] Gender-responsive budgeting (GRB) integrates gender analysis and gender data into fiscal policy.[13] GRB can support stronger fiscal transparency, enabling scrutiny of the extent to which socioeconomic response measures promote gender equality. In the pandemic context, GRB can support Governments in identifying gender gaps and allocating resources to actions such as (a) protection of women's employment, in formal and informal sectors; (b) elimination of gender-based violence; and (c) expansion of care services and social protection.[14]

2.2 Social protection

COVID-19 highlighted gaps in social protection systems in both developed and developing countries. The crisis has illustrated the shortcomings of relying on "patchy" safety nets that provide limited protection, as opposed to a more comprehensive social protection floor (SPF)[15] that is guaranteed for all. Prior to the outbreak of the pandemic, 55 per cent of the world's population had no access to any form of social protection.[16] Even in developed countries, only 80 per cent of vulnerable populations were covered. This coverage fell to 19 per cent in middle-income countries, and only 5 per in LDCs (figure III.A.3). Countries had to introduce new measures to address vulnerabilities in response to COVID-19. Developed countries focused their support on income/job protection and unemployment measures, whereas middle-income countries concentrated on a range of special allowances/grants and health

measures, and LDCs prioritized food security and adequate nutrition (possibly reflecting both the higher incidence of poverty and larger informal sector) (figure III.A.4).

Figure III.A.3
Median proportion of vulnerable population receiving social assistance cash benefits, and unemployed persons receiving unemployment cash benefits, 2019
(Percentage)



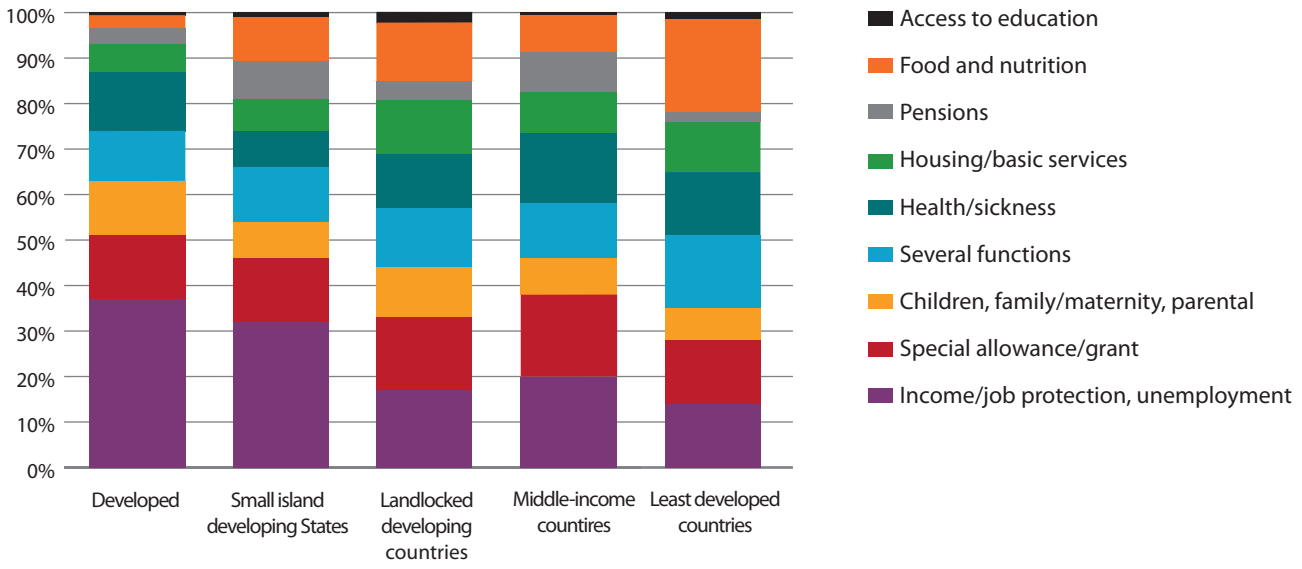
Source: UN DESA calculations based on ILOSTAT.
Note: 0 = no programme or severance payment.

Despite the large number of emergency social protection measures put in place, vulnerable groups, such as women, have not been adequately reached. Unlike the 2008 world financial and economic crisis, where job losses for men were much higher than women, COVID-19 is estimated to have a disproportionate impact on women due to their higher representation in service occupations and the informal sector, and to the increased demand for unpaid care work.[17] More women than men are therefore expected to be pushed into extreme poverty.[18] However, only one in eight countries have specific measures in place targeted to women.[19]

In the post-pandemic period, investments in social protection floors can help build resilience. Social protection systems can be ramped up in times of crisis, to provide quick support to those in need. Once implemented, they not only protect the vulnerable against downside risks, but also increase human capital, contribute to aggregate demand and growth, and promote stability and social cohesion. Some components of SPFs act as "automatic stabilizers" that lessen the contraction phase of macroeconomic cycles.

Financing for social protection generally comes from the budget; nonetheless, it also has some unique features. Because social protection expenditures tend to rise during economic slowdowns, financing needs to be countercyclical. Some countries have earmarked revenues from a particular source, such as commodity-related revenue, or experimented with the reallocation of pre-tax fossil fuel subsidies towards social protection systems. Creating dedicated fiscal reserve funds has been a successful strategy of some countries to create countercyclical financing. This has been a particularly popular choice for commodity-exporting countries, although building a reserve fund during periods of low commodity prices could be difficult. Another possibility for countercyclical financing—which applies to the entire budget, not just SPF finance—is

Figure III.A.4
COVID-19 social protection measures, by country group, 1 February–30 November 2020
(Pertentage)



Source: UN DESA calculations, based on ILO, "Social Protection Monitor," ILO Brief, November 30, 2020.

the use of state-contingent debt instruments (see chapter III.E). Employer and worker contributions to social insurance systems have played an important role in financing social protection in many countries—but these can be procyclical, in that an economic shock that leads to a loss of formal sector jobs will have negative consequences for coverage.

Official development assistance and transfers can help countries such as LDCs that do not have sufficient domestic capacity in the set-up and design of social protection systems. The design and implementation of SPFs requires initial start-up investments for (i) formulating policies and strategies; (ii) developing legal frameworks; (iii) identifying sustainable financing mechanisms; and (iv) building technological, administrative, actuarial and statistical capacities, including training of government officials. The recurrent costs of SPFs are affordable in the majority of developing countries (the International Labour Organization estimates that, in 90 developing countries, recurrent resources needed to operate cash transfers and administrative costs amount to 2.2 per cent of GDP, on average),[20] but some countries may also need external financial support, especially during crisis periods such as the COVID-19 pandemic. Official international financing remains crucial for addressing such temporary financing needs (see chapter III.C/III.E).

Social protection systems need to be viewed within the larger fiscal framework; indeed, the design and financing of social protection floors affects the progressivity of the fiscal system. Increasing domestic resources is critical to the financing of social protection. One good practice that is relevant to all countries is to link social protection contributions and payments to tax compliance and enforcement. Building synergies between the social protection and tax systems can strengthen the social contract between citizen and state, as expansion of the tax base coincides with provision of benefits. Efficient operation of a social protection system also helps maintain public confidence in its effectiveness.

3. Lessons for public finance risk management and sustainability

Public financial management systems are central to ensuring the efficacy of the fiscal response and in mitigating fiscal risks. Public financial management (PFM) refers to the set of laws, rules, systems and processes used to mobilize revenue, allocate funds, undertake spending, account for funds and audit results. Many actors (political parties, civil society, legislature, etc.) engage in this "PFM cycle" (figure III.A.5) to ensure it operates effectively and transparently, while preserving accountability. Thus, strengthened PFM institutional capacities and accountability mechanisms can help monitor and respond to fiscal risks.[21] While PFM processes need to be flexible, they also must ensure resources are spent effectively, which can be difficult to achieve in an evolving situation. An average country loses about 30 per cent of the returns on its investment to inefficiencies;[22] therefore, strengthening effective management of public investments is imperative to maximizing the potential impact of domestic public resources. Policymakers need to ensure fiscal transparency, safeguard public accountability and maintain institutional legitimacy.[23] PFM measures are also key to evaluating and managing fiscal risks associated with policy choices. For example, while on-budget measures have a predictable impact on fiscal deficits and debt, off-budget measures, such as contingent liabilities, can intensify fiscal risks.

Figure III.A.5
Public financial management cycle

Source: UN DESA.

Transparency, accountability and legitimacy standards should be included in the design, implementation and oversight of COVID-19 fiscal response packages.[24] Fiscal packages should include clearly defined ex ante measures (e.g., transparent criteria to access social protection or to award contracts or for off-budget measures) and outline distinct goals and indicators to facilitate ex post assessment and oversight. Fiscal transparency and accountability measures can also be an effective tool to mitigate mismanagement, corruption and fraud, particularly in procurement. The 2019 Open Budget Survey also reported modest improvements in global average budget transparency scores, but scores remain insufficient, with gaps in oversight by the legislature and SAI (see box III.A.1).[25] Legal authorization and public scrutiny, as well as oversight by relevant institutions such as SAIs, are critical for institutional legitimacy (see box III.A.1).

Many developing countries, particularly LDCs, have weaker PFM architecture to disburse, track, report and account for COVID-19 funds. Lessons from assessments of PFM reforms highlight the importance of political will, institutional capacity, coordinating mechanisms, country context and policy space, stakeholder engagement, as well as the need for adaptive, iterative and inclusive processes.[26] Prior to the crisis, Public Expenditure and Financial Accountability (PEFA) scores trended upwards, albeit at a relatively slow pace, with differences across income groups and regions.[27] Low-income countries and almost all LDCs scored much lower than other income groups, with sub-Saharan Africa onsistently the lowest-performing region.[28]

Box III.A.2
Using public sector balance sheets to manage fiscal risks

Public sector balance sheets (PSBSs) provide a comprehensive picture of public wealth, bringing together all the assets and liabilities that government controls, including public corporations, natural resources and pension liabilities.[a] It is an accrual-based assessment of a government's total assets and liabilities, modelled on the reporting requirements common for private-sector companies, that can bring out risks and opportunities that might otherwise go undetected.[b] Only a few Governments currently compile PSBSs: Australia, New Zealand and the United Kingdom of Great Britain and Northern Ireland use PSBSs to manage public wealth, while Uruguay uses a PSBS approach to manage its debt.[a] However, the PSBS approach has also been tried in some emerging countries—such as Georgia, Indonesia and Malawi—with support from the International Monetary Fund.

The PSBS approach supports fiscal policy analysis in three ways. First, it outlines the full scale and nature of public assets and non-debt liabilities to help uncover areas for boosting returns (e.g., assets under governmental control that are producing returns below reasonable benchmarks). Improved management of non-financial public corporations and government financial assets could amount to 3 per cent of gross domestic product a year, equivalent to annual corporate tax collections across advanced countries. Second, it improves identification and management of risk by taking a long-term view through an intertemporal balance sheet, which allows a comparison of current wealth against future fiscal pressures. For example, a PSBS can bring attention to accruing governmental liabilities in a failing, government-owned business venture, as well as future positive returns from an investment. This approach would be helpful both to manage contingent liabilities in the post-COVID-19 recovery and to better allocate investments. Third, it improves fiscal policy, allowing for a systematic evaluation of the impact of policies on public finance by recognizing their short- and long-term effects.[a,c]

However, the analysis of PSBSs has several limitations, including data quality; difficulties in valuations (particularly for non-financial assets); complexity of public sector entities that may require separate analysis; and sensitivity of the PSBS approach to assumptions over the long term.[a] There may also be areas where the PSBS approach—based on government financial statistics, according to the System of National Accounts, which is a statistical measure—needs to be reconciled with international accounting standards, primarily International Public Sector Accounting Standards (IPSAS),[d] as many Governments are adopting IPSAS in their move to accrual-based fiscal reporting.[e] Finally, the PSBS approach should be in line with the 2030 Agenda for Sustainable Development and climate goals in considering the management of non-financial assets, much of which represent oil reserves.

Nevertheless, the PSBS approach can be an important supplement to other traditional budgetary and fiscal risk analyses, improving overall risk assessment and fiscal transparency.

Source: UN DESA.

a IMF, "Fiscal Monitor: Managing Public Wealth" (Washington, D.C., October 2018).
b James C. Carpretta, "The Promise and Challenges of Public Sector Balance Sheets," American Enterprise Institute - AEI, 24 January 2019.
c See also Alex Metcalfe and Michael Taylor, "Sustainable Public Finances through COVID-19" (Association of Chartered Certified Accountants, July 2020).
d Manj Kalar, "The Public Sector Balance Sheet Is on the Rise," Public Finance Focus, October 25, 2018.
e International Federation of Accountants and The Chartered Institute of Public Finance & Accountability, "International Public Sector Financial Accountability Index: 2018 Status Report," 2018.

Accrual-based reporting can be used to compile public sector balance sheets to better manage fiscal risks. Most Governmentsrecord fiscal activities using cash-based accounting, although 98 of 150 jurisdictions are expected to move to accrual-based fiscal reporting by 2023. While cash-based accounting (recording transactions when they occur) is simpler, accrual-based reporting (i.e., recording transactions when they are due) provides more complete financial information that can better support risk analysis and decision-making.[29] Using accrual-based reporting, a public balance sheet approach can help Governments analyse the positive benefits—as well as overall risks—presented by assets and liabilities to better determine fiscal space (see the *Financing for Sustainable Development Report (FSDR) 2020* for a discussion of the balance sheet approach in the context of debt sustainability) and better align investments with sustainable development (box III.A.2).

Integrated national financing frameworks can help post-COVID-19 PFM reform processes. As a planning and delivery tool to help countries strengthen processes and overcome impediments to financing, INFFs can support PFM reforms, as well as bring together other tools, such as gender-responsive budgeting (see *FSDR 2019*) and greater use of digital technology (see *FSDR 2020*), as well as accrual-based fiscal reporting.

4. Domestic resource mobilization in the COVID-19 era

COVID-19 provides an opportunity for taxation reform. As called for in the Addis Agenda, domestic resource mobilization reform efforts should aim to enhance "revenue administration through modernized, progressive tax systems… [with improved] fairness, transparency, efficiency and effectiveness," [30] and support achievement of the SDGs. This includes (i) continuing efforts to strengthen tax administrative capacity and transparency; (ii) implementing more progressive taxes and reducing gender bias in taxation (box III.A.3); and (iii) better aligning incentives with sustainable development, such as achieving climate, biodiversity, or health goals.

4.1 Impact of COVID-19 on revenues

COVID-19 is eroding pre-pandemic gains in tax revenues, although the extent is unclear. Median tax revenues (measured as the median tax revenue-to-GDP ratio) for developing countries, which had been rising

prior to the pandemic (figure III.A.6), are projected to have fallen in 2020 (figure III.A.7). Early indications are that median general government revenue (includes non-tax revenue) as a percentage of GDP fell from 41 to 39 per cent for all developed countries, and 26 to 24 per cent for middle-income countries (figure III.A.7). The fall in revenue (at about 0.3 basis points) is expected to be less severe for LDCs, in part due to the delayed spread and shock from COVID-19 (figure III.A.7).

A rebound is expected in most country groups in 2021 and 2022, but the trajectory should remain below pre-crisis trends (figure III.A.7). The evolving situation makes it difficult to predict future revenues with any certainty and, as tax burdens and elasticities vary by sector, the impact of COVID-19 is not expected to be uniform.[31] For example, tax receipts from hospitality and transportation sectors are expected to have plummeted, while revenue from the telecommunications sector is anticipated to have risen. Large businesses with diversified portfolios are also expected to have been less impacted than small businesses. Consumption tax revenues are expected to have fallen along with corporate income tax revenues, due to the adverse effect of social distancing measures and lockdowns. The collapse in employment and wages in some countries is expected to have led to lower personal income tax revenues, while customs revenue will be affected by the decline in trade.[32] The impact on tax revenues across country groups will also vary according to tax structures (figure III.A.8). SIDS and LDCs, who are heavily dependent on trade-related revenue, are more vulnerable to a fall in trade tax revenues. SIDS, heavily dependent on tourism, have seen sharp contractions in growth and a broad-based decline in revenues.

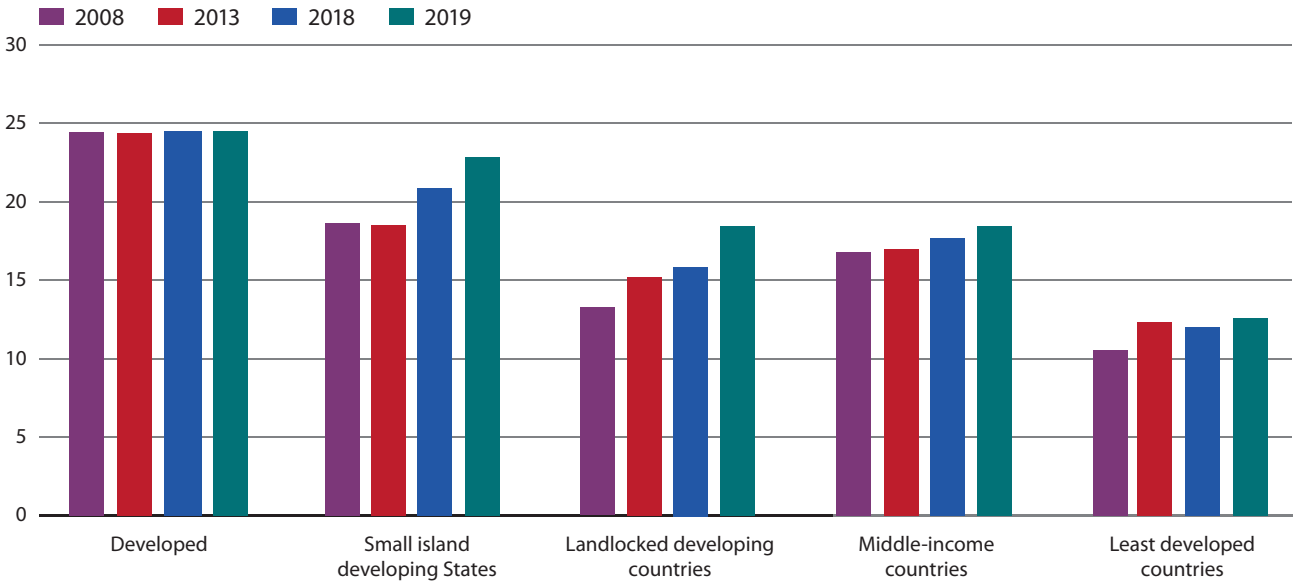
Box III.A.3
Gender bias in taxation during COVID-19

While tax provisions that explicitly disadvantage women are rare, tax systems can, in practice, have hidden, implicit bias that may worsen gender inequalities, particularly during COVID-19. For example, in Organization for Economic Cooperation and Development (OECD) countries, women make up a large majority of secondary earners. Faced with working from home, remote schooling and unpaid care and domestic work (much of which falls on women), there is a higher risk of women leaving the workforce in dual-earner households. Consumption taxes on services such as cleaning and childcare make it cheaper to produce these services at home, especially for low-income households, thus pressuring second-earner women to leave their jobs. These situations also reinforce women's role in providing unpaid care work. In developing countries, the challenge on women is amplified as the majority are in informal employment. COVID-19 fiscal responses that focus on officially labelled taxes miss the disproportionate impact that user fees and informal taxes (e.g., payments to doctors and teachers) have on female-headed households, which may discourage access to health care.

To avoid inadvertently reinforcing gender biases through the tax system, a key policy dimension in tax policy responses to COVID-19 is the assessment of the impact of taxes on gender equality. In this regard, this could be a good time to redesign taxes that may further exacerbate existing gender inequalities (for example, removing tax provisions that discriminate against the secondary earner).

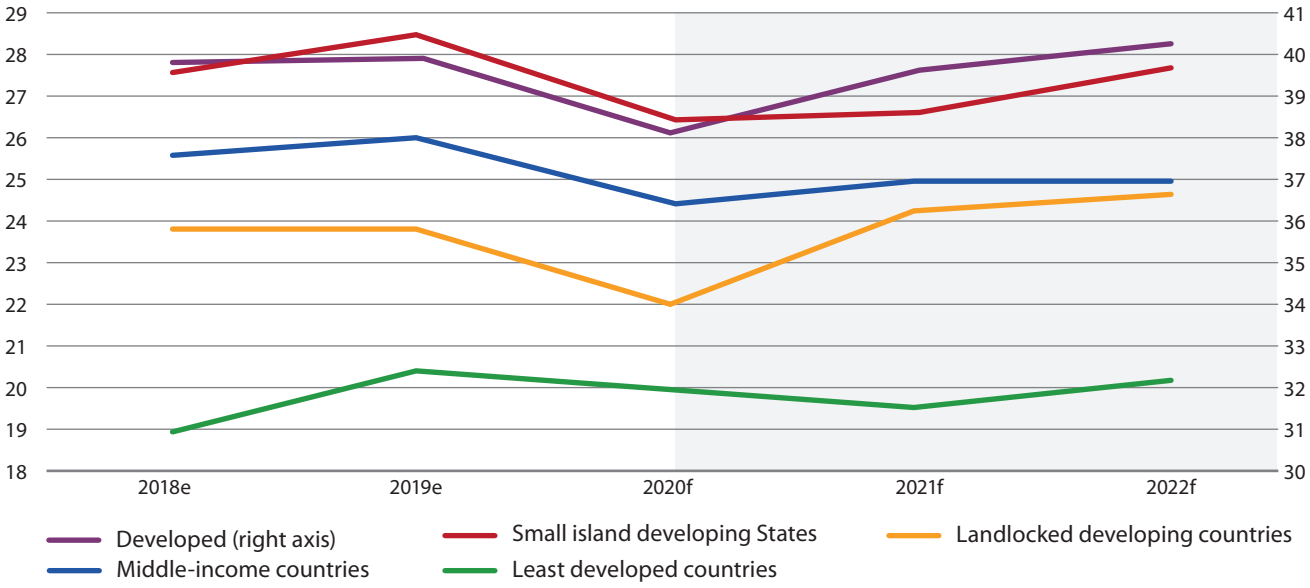
Source: Michelle Harding, Grace Perez-Navarro, and Hannah Simon, "In Tax, Gender Blind Is Not Gender Neutral: Why Tax Policy Responses to COVID-19 Must Consider Women," ECOSCOPE - An Economic Lens on Policies for Growth and Wellbeing, June 1, 2020.

Figure III.A.6
Median tax revenue by country group, 2008–2019
(Percentage of GDP)



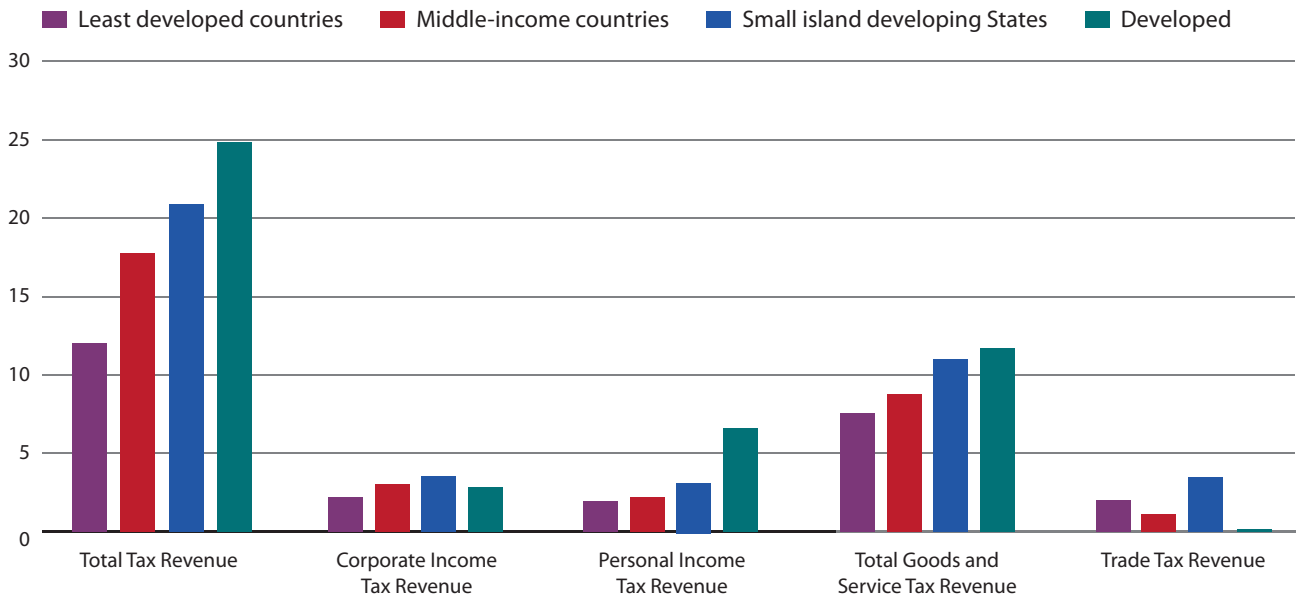
Source: IMF.

Figure III.A.7
Median general government revenue, 2018–2022
(Percentage of GDP)



Source: UN DESA calculations, based on IMF, *World Economic Outlook,* October 2020.
Note: e = estimate; f = forecast.

Figure III.A.8
Median tax revenue by type of tax, 2018
(Percentage of GDP)



Source: IMF.

4.2 Tax policy, administration and compliance and the opportunity for reform

Tax policy measures are playing an important role in COVID-19 stimulus support packages. Fiscal response packages (see section 2.1) include tax filing extensions, tax deferrals, suspension of penalties and interest, tax debt relief options, quicker tax refunds (e.g., for value added tax), possibilities of tax loss carrybacks and suspension of tax audits.[33] Among these measures, temporary tax deferrals are the main tool used to provide liquidity support.[34] Tax administrations have also shifted operations and processes quickly to deliver services digitally, including contact-free administration and electronic filing.[35] This may have long-lasting effects on accelerating the shift to digitalization, which can improve the efficiency of tax administration and tax transparency. Administrations in developed countries had a better base to work from, given their higher use of digital technology pre-COVID-19, compared to countries with less capacity, such as LDCs (see *FSDR 2020*).

Country-led and country-owned medium-term revenue strategies, including in the context of integrated national financing frameworks, can be the foundation for effective and inclusive tax reform. A medium-term revenue strategy (MTRS) is a comprehensive approach to tax reform, based on revenue goals that are aligned with development needs and country priorities. An MTRS can be integrated into a broader INFF, which allows policymakers to exploit synergies and manage possible trade-offs across different policies (see *FSDR 2019)*. While disruptions caused by the COVID-19 pandemic slowed down their progress, as of 2020, 23 countries are in the process of developing or implementing an MTRS. Early experiences with MTRSs and INFFs indicate the importance of strong leadership and political will in implementation, as well as good oversight and coordination arrangements, emphasizing the importance of a country-led and country-owned process.[36]

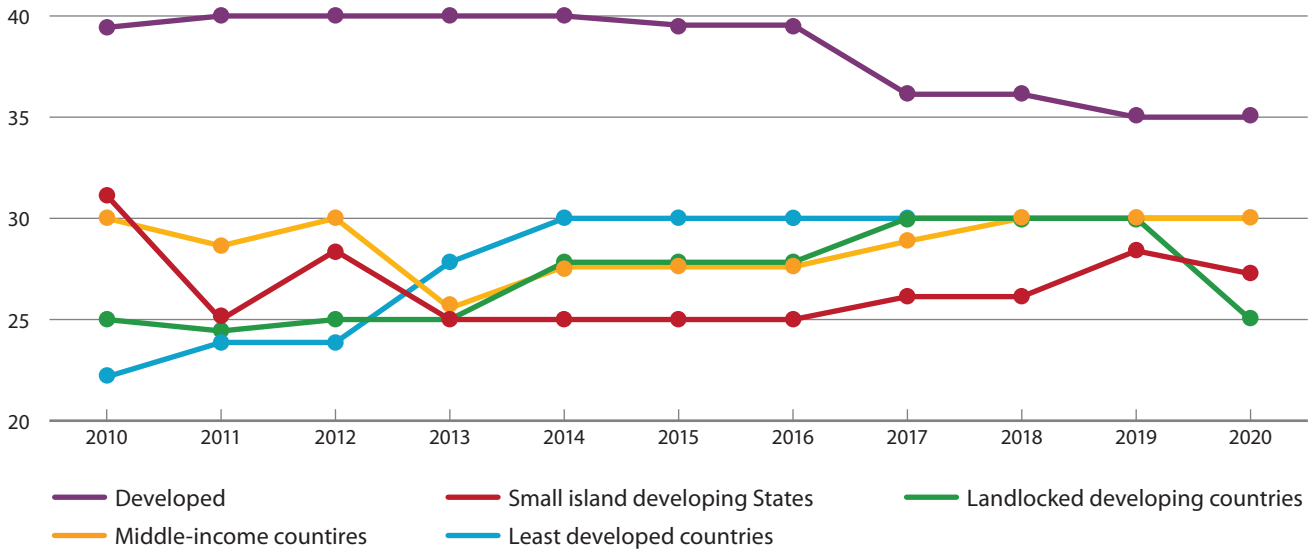
Lessons from countries that have successfully increased tax collection indicate the importance of both tax policy and tax administration reforms.[37] Countries can build on their experience with technological tools during COVID-19 to further strengthen tax administration capacity.[38] Implementing relief packages transparently, efficiently, and equitably can strengthen the social contract by building trust with taxpayers during the crisis.[39] Countries with large informal sectors can pursue efforts to formalize business in ways that do not harm the poor. Policymakers can use relatively high tax-exempt thresholds to incentivize formalization, encourage greater levels of compliance, and ensure that the poor are not burdened by the tax system (see *FSDR 2019*).

4.3 Progressive tax systems

Prioritizing effective and progressive tax systems will be an important step in combatting inequality, which has widened ever further during COVID-19. Tax progressivity[40] has declined since the 1980s. Personal income tax progressivity fell sharply in the 1980s and 1990s across all countries,[41] and continued to fall over the last 10 years. This is evident in the decline in median top personal income tax rates, particularly for developed countries (figure III.A.9). However, in LDCs the median top personal income tax rate increased in the first half of the 2010s, while the rate for middle-income countries initially fell before increasing.

The COVID-19 crisis provides a good opportunity for progressive tax reform. Indeed, several countries have introduced or are contemplating net wealth taxes, which strengthen progressivity, in the context of their COVID-19 revenue recovery plans. In the *FSDR 2019,* the Inter-Agency Task Force on Financing for Development (Task Force) provided analysis on how fiscal systems can address inequality through the progressivity of taxes, including using net wealth taxes and property taxes.[42]

Figure III.A.9
Median top personal income tax rates, 2000–2020
(Percentage)



Source: UN DESA calculations, based on KPMG Global, "Individual Income Tax Rates Table," KPMG, November 11, 2020.

4.4 Tax policy for sustainable development, including carbon pricing

Excise taxes,[43] including environmental taxes, not only raise resources, they also provide incentives to better align behaviour with sustainable development. The revenue yield of excise taxes (e.g., between 1.5 and 2.5 per cent of GDP), has trended upwards between 2008 and 2018, particularly in LDCs.[44] Environment-related taxes, such as fuel excises, can incentivize a reduction in carbon emissions and emissions of other pollutants, as well as raise revenue. Many countries also have financial transaction taxes (e.g., the stamp tax in the United Kingdom). These taxes tend to be progressive, and, depending on the structure and margin, may also help reduce high-frequency trading and volatility. Countries are also considering, or have implemented, excise on telecommunications services. However, the size and structure of these types of taxes need to be explored carefully, as their incidence may create market distortions [45] (see discussion on taxation of the digitalized economy in section 5.3).

Effective excise taxes on tobacco, alcohol and sugary beverages can raise resources, while reducing unhealthy behaviour. Tobacco and alcohol excise taxes are in place in 170 and 155 countries, respectively. However, in 2018, only 38 (mostly high-income) countries levied total taxes as high as the World Health Organization recommends, at 75 per cent or more of the retail price of a pack of cigarettes.[46] Excises on unhealthy foods are more recent, with 74 countries levying some form of sugar-sweetened beverage tax.[47] Earmarking revenue can improve the political economy of such tax increases and may increase spending for underresourced priority health programmes, such as the prevention and treatment of non-communicable diseases. Due to budget fungibility,[48] the potential for earmarks to result in additional spending on health is context specific and depends on a country's political priorities and budget process.[49] There have been some notable successes in earmarking—for example, in Thailand, where earmarking helped launch a health promotion programme, and in the Philippines, where earmarking supported the expansion of a national health insurance programme.[50]

The deployment of carbon taxes and emissions trading systems has grown significantly in the last ten years, covering a larger share of greenhouse gas emissions and almost tripling revenues for G20 countries, from $17 billion to $48 billion.[51] Fuel excise taxes, which also discourage the use of fuels and the associated emissions, are increasingly scrutinized to improve their alignment with carbon content.

Policymakers can use several mechanisms to raise the relative price of carbon-intensive activities and lower the relative price of sustainable technologies, each with advantages and disadvantages (table III.A.2). The two main explicit carbon pricing mechanisms are a carbon tax and an emissions trading scheme (ETS). A carbon tax is arguably the more powerful measure for mitigating climate change.[52] Fuel taxes also effectively result in a carbon price. Regulations, such as emission rates or energy efficiency standards, are based on quantitative targets (i.e., limits). These typically leave less flexibility to households and businesses and therefore can be less efficient, but are sometimes more politically palatable. Related mechanisms include abatement payments that reward less carbon-intensive products (e.g., home solar panels or electric cars) while penalizing more intensive ones (feebates); subsidies and price guarantees (e.g., feed-in tariffs); direct public investment; and research and development.[53] The United Nations Tax Committee's Handbook on Carbon Taxation for Developing Countries provides guidance on different options for the design and administration of a carbon tax, taking into account the existing policy and legal framework of a country. The Handbook also provides an overview of how to address the issue of public acceptability, including how to allocate revenues generated from the tax.[54]The Tax Committee is also updating its Handbook on Taxation of the Extractive Industries by Developing Countries, to support decarbonization efforts.

Table III.A.2
Advantages and disadvantages of carbon tax and other instruments

	Definition	*Advantages*	*Disadvantages*
Carbon tax	Tax on carbon-based (equivalent) emissions	▪ Generation of revenues ▪ Certainty in costs for economic actors ▪ Depending on the format, can require more or less administration ▪ Cost-effective	▪ A-priori uncertainty in quantity of emission reduction (though the tax rate can be adjusted over time to meet emission reduction goals) ▪ Can be politically challenging to implement
Regulation	Introduction of standards in the quality of the environment (e.g., regulations/quantity targets, reporting requirements, emission licensing, etc.)	▪ Often requires less administration ▪ Easier to enforce ▪ Sometimes less political resistance	▪ Generally less efficient than price mechanisms ▪ May be insufficient to achieve carbon reduction goals, depending on the design ▪ Does not generate revenues
Emissions trading scheme	Market-based approach to controlling pollution that includes a limit (or cap) on pollution, and tradeable allowances	▪ Generation of revenues (although generally less public revenues than with a carbon tax, in case permits are not auctioned) ▪ Provides certainty in emission reduction goals ▪ Cost-effective	▪ Uncertainty in costs does not necessarily incentivize investment in low-carbon technology ▪ Can be administratively complicated due to the need to set up a carbon market, auctions, etc.

Source: Adapted from Committee of Experts on International Cooperation in Tax Matters, "Environmental Tax Issues, Chapter 2: An Introduction for Policymakers; and Annex 1: Carbon Taxation in the Context of the United Nations, Carbon Taxation Handbook, Note by the Secretariat," October 8, 2020.

As noted, COVID-19 provides an opportunity to introduce or strengthen carbon pricing. Lessons from the 2008 world financial and economic crisis, where there was also a push for green recovery packages, was that support for low-carbon investments fizzled out without clear commitments to long-term carbon pricing.[55]

Nonetheless, carbon pricing has grown significantly over the last decade, despite some slowdown due to COVID-19. As of 2020, there were 61 carbon pricing initiatives in place or scheduled for implementation, consisting of 31 ETSs and 30 carbon taxes, covering 22 per cent of global greenhouse gas emissions (see box III.A.4 for developments in the Asia-Pacific region).[56] This compares with only 19 initiatives in 2010, which covered about 5 per cent of emissions. Carbon taxes account for 53 per cent of revenues from carbon pricing, of which two thirds were from EU member countries, with revenues mostly dedicated to the general budget or reserved for specific environmental or broader development projects. However, when taking a broader approach that considers the carbon price signal from excise taxes together with carbon taxes and ETS, progress is real but slower, with 90 per cent of emissions not priced at €30 per tonne of CO2, a modest target given the Paris Agreement carbon abatement goals.[57]

Although carbon prices are increasing, they remain significantly lower than what is required to achieve climate goals. It is estimated that a carbon price of at least $40-$80 per ton is required to incentivize a reduction in emissions that would limit global warming to the temperature goal of the Paris Agreement,[58] with some experts estimating that an even higher price is needed.[59] Yet, currently, almost half of the covered emissions are priced at less than $10 per ton,[60] with the global average carbon price estimated at $2 per ton—significantly below estimated thresholds. In 2020, eight initiatives increased their carbon taxes, but only one was higher than $50 per ton, and other jurisdictions deferred plans. COVID-19 further reduced demand and lowered prices, with some additional jurisdictions deferring plans to increase carbon taxes.[61]

International cooperation on a global carbon price floor between high-emitting countries can help scale up mitigation efforts, as well as prevent carbon tax competition.[62] High-emitting countries could agree to set a minimum carbon price on their domestic emissions, which would be sufficiently high to bring about emission reductions across participating countries to meet climate goals. To address equity issues across countries, the minimum price could be applied only to developed countries; or there could be more countries involved, but with differentiated floors based on the size of emissions. These arrangements could also allay concerns of taking unilateral action to raise carbon prices that could adversely affect international competitiveness from higher domestic energy costs.

Reforms to fossil fuel subsidies, which have been rising, must also be considered. Revenue gains for removing subsidies are estimated at about 4 per cent of global GDP. [63] Yet, fossil fuel support in 44 Organization for Economic Cooperation and Development (OECD) and G20 economies rose by 10 per cent to $178 billion in 2019, ending a five-year downward trend.[64] Coupled with other indirect support—such as corporate debt relief, infrastructure investments and tax provisions—overall support for fossil fuels rose by 38 per cent. As part of the COVID-19 support packages, almost half of G20 relief funds committed to energy-intensive sectors were dedicated to fossil fuels.[65]

Yet, implementing carbon pricing reforms can be politically challenging. Prior to COVID-19, opposition to higher energy prices hampered efforts in implementing carbon taxes, and even led to social unrest. Addressing the political implications is thus necessary for a successful carbon pricing programme. The supply and demand shocks brought on by COVID-19 and an increasing focus on disaster risks could make carbon pricing reform less disruptive in the current environment; however, the fall in incomes, job losses and growing inequality could mean low appetite for higher prices, even if commodity prices are now lower than pre-COVID-19 levels. In some cases, regulations, which limit quantities rather than prices, may be more politically palatable alternatives. Indeed, they have been highly successful in reducing pollution and emissions, for example, through building codes and auto emission and fuel economy standards around the world.

Compensatory measures as part of a green fiscal package can help build support and mitigate the regressive effects of higher carbon prices. Carbon taxes can be—but are not always—regressive, as they raise the prices of gasoline, electricity and related goods for all consumers, irrespective of their incomes, which can disproportionately impact the poorest households. Rising income inequality can also make the distributional effects of carbon taxes more regressive.[66] As part of the overall green fiscal strategy to support carbon pricing reform, carbon revenues can be used for lump-sum payments to households (e.g., to compensate them for higher energy prices), labour income tax cuts, or for investments (e.g., in low-carbon or climate-resilient infrastructure) that will create jobs and offset employment losses in carbon-intensive sectors. [67]

The Task Force reiterates support for a just transition to a low-carbon economy, as a core part of achieving the SDGs. In assessing the interaction of the environment, climate change and fiscal policy in

Box III.A.4
Carbon pricing and environmental taxes in the Asia-Pacific region

A growing number of national and subnational governments are implementing or planning to implement a carbon tax or an emissions trading system (ETS). In Asia and the Pacific, this includes initiatives in Australia, China, Japan, Kazakhstan, New Zealand, Republic of Korea and Singapore. China is transitioning to a national ETS for the electricity sector from eight pilot subnational systems. Although the national system will only start with the electric power sector, other sectors considered in earlier proposals will eventually be included. Singapore introduced a carbon tax, but based on a "fixed-priced, credit-based" approach, which offers the flexibility to align it with an ETS of other jurisdictions at a later stage. Among countries currently at pilot or preparation stage, Thailand has developed a framework for monitoring, reporting and verification, and is piloting a voluntary ETS with companies from sectors ranging from petrochemicals and cement to food and feed. In Indonesia, a 2017 government decree mandates the establishment of an ETS before 2025.

Source: Daniel Jeong-Dae Lee, "Raising the Level of Ambition on Carbon Pricing in Asia and Pacific," *UNESCAP Macroeconomic Policy and Financing for Development Division Policy Briefs*, April 2020.

its 2019 report,[68] the Task Force highlighted the importance of coherent plans that cover reform timetables, administration mechanisms, mitigation measures for the poor, and strategies for consultation and communication. These remain valid to ensure that the transition to a low-carbon economy safeguards disproportionately affected workers and communities.

5. International tax cooperation

Crisis-induced pressure on public finance is expected to increase focus on international tax cooperation to clamp down on corporate tax avoidance and evasion; address taxation of the digital economy as urgently as possible; and reduce illicit financial flows (see section 6). International tax cooperation, including through tax transparency and exchange of information initiatives, will be key to recouping revenues lost through tax planning by multinational entities (MNEs) and offshore tax evasion. Developing countries will require enhanced support to better recover revenues.

5.1 Progress on tax transparency and exchange of information for tax purposes

International cooperation to combat tax evasion and avoidance has continued, despite the added pressures on the international community due to COVID-19.[69] In 2020, several additional countries committed to improving transparency and disclosure practices through instruments and frameworks that allow tax authorities to better enforce tax rules and tackle cross-border tax evasion and avoidance (table III.A.3).

Tax transparency and exchange of information generates additional revenues.[70] Revenue administrations in low-capacity countries should focus on the development of their data management—that is, devise a data strategy and reliable methods to access, integrate, cleanse, govern, store and prepare data for analytics and risks mitigation. This approach will improve domestic revenue collection and lay the groundwork for international exchange of information. Voluntary disclosure programmes and offshore tax investigations helped identify €107 billion in additional revenue (tax, revenue, penalties), of which developing countries identified €29 billion. Exchange of information on request (EOIR) alone aided tax administrations in collecting an additional €10 billion. Revenue gains could be larger, as only 30 per cent of Global Forum members are able to track additional revenues collected through EOIR and only 15 per cent monitor revenues generated by automatic exchange of information (AEOI).

LDCs and African countries are underrepresented in international cooperation on tax transparency and exchange of information. Only eight of 46 LDCs and 20 of 60 African countries have joined the Multilateral Convention on Mutual Administrative Assistance, with even fewer countries having become part of the Multilateral Competent Authority Agreement Common Reporting Standard and commencing AEOI (see table III.A.3). Financial, human resource and institutional constraints are the main challenges, particularly for AEOI.[71] According to non-member responses to a survey by the Global Forum's Africa Initiative, exchange of information (EOI) was not a priority or even a low priority, the level of knowledge was low, the network of EOI partners was limited, basic infrastructure non-existent, and EOI was not generally used in enforcing tax legislation.[72] However, the potential of additional revenue from EOI is high: eight African countries identified $189 million in extra tax proceeds from EOIR between 2014 and 2019 and two African countries collected $378 million through voluntary disclosure programmes prior to their first AEOI exchanges.[73] Support from multilateral and bilateral donors should help increase countries' engagement in the tax transparency agenda and implementation of EOI.

Steady progress was made in country-by-country reporting of multinational entities.[74] Country-by-country reporting and the compulsory spontaneous exchange of information in respect of certain tax rulings are two minimum standards of the Base Erosion and Profit Shifting (BEPS) Package that relate to tax transparency and complement the EOIR and AEOI standards monitored by the Global Forum. By the end of 2020, more than 90 countries (28 middle-income countries and 1 LDC) had introduced a country-by-country reporting obligation, establishing more than 2,700 EOI bilateral relationships.[75] Consequently, there are only a few remaining MNEs above the consolidated group revenue threshold of €750 million that are left to be captured by country-by-country reporting, although information may be available in the jurisdictions where the MNE subsidiaries operate. In February 2020, the OECD launched a public consultation process for the review of country-by-country reporting (BEPS Action 13), with outcomes expected in 2021. To ensure that developing countries profit from country-by-country reporting, it will be essential to ensure that (i) the necessary information reaches them and (ii) capacity development initiatives aid countries in developing analytical and interpretative skills and in using country-by-country reporting as a risk assessment tool and as the basis for enquiries during audits.

5.2 Corporate tax avoidance

International tax cooperation in combating corporate tax avoidance is central to recovering potential revenues, particularly for LDCs and African countries. A major barrier to domestic resource mobilization is the high and persistent level of corporate tax avoidance and evasion, particularly the ability of MNEs to avoid taxes through BEPS.

Publication of aggregated MNE country-by-country reporting provides fresh insight on corporate tax planning strategies. In July 2020, for the first time, the OECD made public the aggregated country-by-country reporting statistics for 26 countries for 2016, covering nearly 4,000 MNE groups—information on their locations and amounts of profits, employees, assets and other financial variables.[76] Preliminary analysis indicates that there is a misalignment between the location where MNE profits are reported and the location where certain economic activities occur.[77] For example, high- and middle-income jurisdictions account for a higher share of employees (32 and 37 per cent of total employees, respectively) and tangible assets (35 and 23 per cent of total tangible assets, respectively) than of profits (28 and 18 per cent, respectively). Revenues per employee tend to be higher where statutory corporate income tax rates are zero. In investment hubs,[78] MNEs reported a relatively high share of profits (25 per cent) compared to their share of employees (4 per cent) and tangible assets (11 per cent). MNEs also reported that their predominant activity in investment hubs is "holding shares and other equity instruments." A concentration of holding companies can be related to genuine commercial arrangements but is a risk factor and could be evidence of certain tax planning structures.[79]

Table III.A.3
Participation in international tax cooperation instruments, 2020
(Number of jurisdictions)

Legal instrument/ intergovernmental body	*Background*	*Purpose*	*Total membership/ signatories*	*Middle-income countries*	*Least developed countries*	*Small island developing States*	*Africa*
Multilateral Convention on Mutual Administrative Assistance in Tax Matters (MAC)—multilateral instrument available for all forms of tax cooperation	Developed jointly by OECD and Council of Europe in 1988 and amended in 2010	Administrative cooperation	141 (+6)	59 (+3)	8 (+1)	27	21 (+1)
MCAA Common Reporting Standard—specifies the details of what financial account information will be exchanged and when	Requested by G20 and approved by OECD in 2014		110 (+3)	31 (-2)	2	25 (+1)	7 (5)
Global Forum on Transparency and Exchange of Information for Tax Purposes (Global Forum)—OECD-housed body for review of implementation of transparency and exchange of information standards, both on request and automatic	Intergovernmental body restructured by G20 in 2009	Tackle offshore tax evasion and end bank secrecy	162 (+5)	71 (+1)	19 (+1)	33 (+1)	32
Automatic Exchange of Information Standard—exchanges financial account information for tax purposes	Standard developed in 2014 under Global Forum		115 (+6)	37 (+2)	2 (+1)	26 (+1)	8 (+3)
Inclusive Framework on BEPS—OECD-housed body for the implementation of the 2015 BEPS package and the follow-up work	Intergovernmental body originating from the 2013 OECD/G20 BEPS Project		139 (+4)	61 (+4)	10	26 (+1)	25
Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS (MLI)—implements the minimum standards of Action 6 on tax treaty abuse and Action 14 on dispute resolution, and other tax treaty related BEPS measures (Action 2 on hybrid mismatch arrangements and Action 7 on permanent establishment status avoidance)	Negotiated within the framework of the OECD/G20 BEPS Project, adopted in 2016	Combat tax avoidance by MNEs	95 (+3)	36	2	9	14(+2)
MCAA on the exchange of country-by-country (CbC) reports—sets out the specific terms for the exchange of CbC Reports prepared by MNEs with jurisdictions in which the MNE operates to facilitate transfer pricing risk assessments and audits	BEPS Action 13 on CbC reporting, first exchanges began in 2018		89 (+6)	23(-1)	1	10(+1)	8

Source: OECD.
Note: Figures as of 31 December 2020. Figures in parentheses denote change in number of countries in 2020. Negative numbers reflect the graduation of countries from middle-income status. MCAA stands for Multilateral Competent Authority Agreement. MNE stands for multinational enterprises.

COVID-19 put the spotlight back on low-tax or no-tax jurisdictions. In January 2021, the European Parliament called for the reform of the EU list of non-cooperative tax jurisdictions, including refining and fully disclosing country screening and assessment methodology; automatic listing of jurisdictions with zero corporate tax rates; and accounting for the resource constraints of LDCs and other developing countries in implementing tax standards.[80] The EU list, in place since 2017, is based on non-compliance with transparency standards (AEOI and EOI standards, ratification of the multilateral Convention), fair tax competition (principles of the EU Code of Conduct or the OECD Forum on Harmful Tax Practices) andBEPS implementation.[81] It has previously drawn criticism for being arbitrary, and limited in scope, particularly within European territories.[82] These criticisms have resurfaced in response to the use of this list to limit COVID-19 bailout programmes, which may affect SIDS on the list, who are struggling to combat the pandemic. Several EU countries also excluded corporate groups from support if they had presence in a jurisdiction on the list.[83]

5.3 Taxation of the digitalized economy

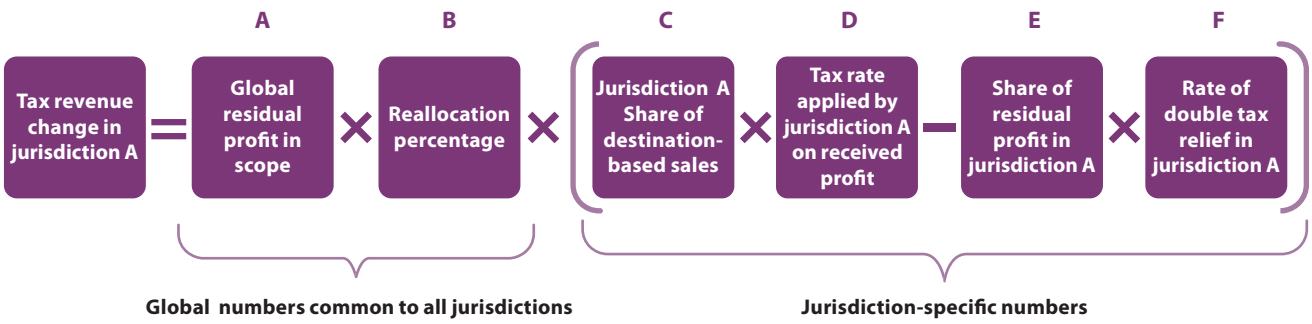
COVID-19 has accelerated the digital transformation of economies and societies, raising the stakes in the discussions over taxation of the digitalized economy. Digitalization has exacerbated underlying longstanding concerns about the allocation of taxing rights under the current international tax framework, being skewed in favour of large, industrialized countries.[84] Both developed and developing countries recognize that, without a consensus-based global solution, proliferation of unilateral tax measures is expected. Countries need to judge the likelihood of a genuine consensus being carried through to domestic implementation by a sufficient number of States of an international law instrument. They also need to consider whether there are alternatives (even transitionally) that might allow efficient and effective taxation of the digitalized economy while also minimizing tax and trade disputes that could undermine investment and economic growth, at a time when the global economy is at its most fragile due to COVID-19.[85]

Multilateral discussions on taxation of the digital economy continue at the OECD-housed Inclusive Framework on BEPS and the United Nations Committee of Experts on International Cooperation in Tax Matters (Tax Committee).[86] The Inclusive Framework (table III.A.3) is seeking to build consensus on taxation of the digital economy through a two-pillar approach. The key elements of the Inclusive Framework's pillar one is grouped in three components: (i) allocation of a treaty taxing right for market jurisdictions over a share of MNE residual profit allocated by formula (Amount A) (figure III.A.10); (ii) a fixed return for certain baseline marketing and distribution activities conducted physically in a market jurisdiction, in line with arm's length pricing (Amount B); and (iii) processes to increase "tax certainty" through dispute prevention and resolution mechanisms. Pillar two aims to ensure that all MNEs pay a global minimum level of tax regardless of where they are headquartered or the jurisdictions in which they operate, known as the "global anti-base erosion (GloBE) proposal" (see box III.A.5). Economic assessments that accompanied the blueprints indicated that amount A of pillar one and pillar two could increase global corporate income tax revenues by $50 billion to $80 billion.[87]

Public submissions on the blueprints also highlight ongoing concerns over complexity, fairness and inclusivity. The *FSDR 2020* outlined the debate and disagreements that the initial proposals on pillars one and two generated, particularly the complexity of the proposals, their scope, concerns over a possible safe harbour mechanism and opposition to mandatory binding arbitration or panel decisions on tax disputes, particularly in relation to disputes relating to long-standing profit allocation rules. Although the safe harbour mechanism has been withdrawn,[88] the elaboration of the two-pillar proposal through the blueprints has not dispelled these concerns.[89] There are also added concerns, such as design features of the proposed GloBE rules that place small developing countries at a disadvantage, including the rule order and revenue thresholds; and allowances for carve-outs that open opportunities for tax avoidance (see box III.A.5).[90] Negotiations on these and related issues are ongoing and expected to conclude in mid-2021.[91]

Recognizing the challenges of the two-pillar approach for developing countries, the United Nations Tax Committee is pursuing a simplified treaty-based approach to taxing the digitalized economy.[92] In May 2020, the Tax Committee set up a drafting group to develop a bilateral tax-treaty provision in the United Nations Model Tax Convention[93] to allow source States to tax income from payments for automated digital services—either on a gross basis at a bilaterally negotiated rate or on a net basis. In both cases, the residence country would be obliged to provide relief from potential double taxation.[94] This work has been led by developing countries. The drafting group proposed the addition of Article 12B to the United Nations Model Convention in 2021, expanding the taxing rights for States from which payments for automated digital services are made; and the Committee decided for such an inclusion in the 2021 Model. The proposed provision will enable jurisdictions to apply their domestic legislation levying taxes on income derived from digital business models, as the provision has no carve-outs, and thus has the potential to increase source-state taxation in a manner that is moderate and easy to administer. The Committee's approach has been to find a solution that is relatively simple for businesses to comply with, as well as tax administrations, especially through a withholding tax approach, and at the same time, results in a definite share for market jurisdictions. One of the benefits of a Model provision and commentary is that both views on the provision will be fairly expressed. The Model will recognize that many Committee Members do not agree with the policy behind the developing country led proposal, and/or have

Figure III.A.10
Simplified formula summarizing the approach on pillar one



Source: OECD, *Tax Challenges Arising from Digitalisation – Economic Impact Assessment: Inclusive Framework on BEPS*, OECD/G20 Base Erosion and Profit Shifting Project (OECD, 2020).

Box III.A.5
Global anti-base erosion proposal: key rules and factors

The GloBE proposal seeks to (i) ensure minimum taxation while avoiding double taxation or taxation where there is no economic profit; (ii) cope with different tax system designs by jurisdictions, as well as different operating models by businesses; (iii) ensure transparency and a level playing field; and (iv) minimize administrative and compliance costs. To ensure a minimum level of effective taxation, jurisdictions would have the right to "tax back" when other jurisdictions have not exercised their primary taxing rights, or when the payment is otherwise subject to low levels of effective taxation. These rules are designed to prevent multinational entities (MNEs) from diverting taxable income to low-tax jurisdictions by imposing minimum tax levels on their global income.

The suggested GloBE effective tax rate calculations are based on a jurisdictional blending approach, requiring assignment of the income and taxes among the different jurisdictions. A GloBE tax liability would arise when the effective tax rate of the jurisdiction in which the MNE operates is below the agreed minimum rate.

The proposed rules also allow for carve-outs or adjustments to be made to top-up tax calculations, permitting (i) MNEs to carry losses or excess taxes paid in prior periods forward into subsequent periods, with the aim of smoothing volatility arising from the mix of taxes imposed under local law or resulting from timing differences; and (ii) formulaic carve-outs to exclude a fixed return for substantive activities within a jurisdiction from the scope of GloBE rules.

Source: OECD, *Tax Challenges Arising from Digitalisation – Report on Pillar Two Blueprint: Inclusive Framework on BEPS,* OECD/G20 Base Erosion and Profit Shifting Project (OECD, 2020).

concerns about its administrability. Often such Members have expressed views, for example, that a more comprehensive approach is preferable. A more comprehensive approach (such as a multilateral treaty) that achieves consensus and participation would inevitably "switch off" otherwise conflicting treaty provisions for parties to it, so that there is no ultimate conflict with the Article 12B approach, but it would remain an option where one or more bilateral treaty partners has not joined the multilateral treaty. The Committee also acknowledges the challenge emanating from the fact that many developing countries do not have extensive treaty networks. While negotiation of treaties with such a clause will take time and will often be resisted, this provision would also (more immediately) act as guidance for countries in drafting provisions to tax automated digital services in their domestic law.

The Task Force reiterates that international tax cooperation efforts must accord greater priority and attention to the interests and voices of developing economies. The Addis Agenda underscores the importance of inclusive cooperation and dialogue among national authorities on international tax cooperation. Countries without access to information, and without sufficient domestic capacity to enforce increasingly complex international tax norms, will be unable to boost revenue mobilization related to cross-border activity. This is increasingly important as countries tackle emerging issues on taxation of the digital economy, such as taxing virtual currencies and ensuring tax transparency for crypto assets.[95] The global community should ensure effective inclusion in tax norm-setting processes; adaptation of tax norms and practices to the realities and needs of developing countries; and greater investment in capacity-building from development partners.

5.4 Capacity-building

Capacity building efforts continued despite the COVID-19 crisis. The Addis Agenda calls for international support for capacity-building in developing countries, including in the areas of domestic revenue mobilization, public finance, gender-responsive budgeting and debt management. Prior to COVID-19, official development assistance (ODA) for capacity-building (for areas that can be tracked) almost doubled between 2015 and 2019 (see figure III.A.11). The multilateral partners of the Addis Tax Initiative (ATI) were on track to double ODA for capacity-building on domestic resource mobilization by 2020, albeit with the support of loans. The ATI has since committed to maintain or surpass the level achieved in 2020.[96] In addition, many capacity-building programmes adjusted to remote delivery, including the United Nations and the Platform for Collaboration on Tax (box III.A.6) workshops. The OECD-United Nations Development Programme Tax Inspectors Without Borders initiative was able to adjust to a virtual model in 2020, enabling most programmes to continue despite COVID-19 restrictions. The Global Forum continued its capacity-building programme to support developing countries in improving tax transparency.

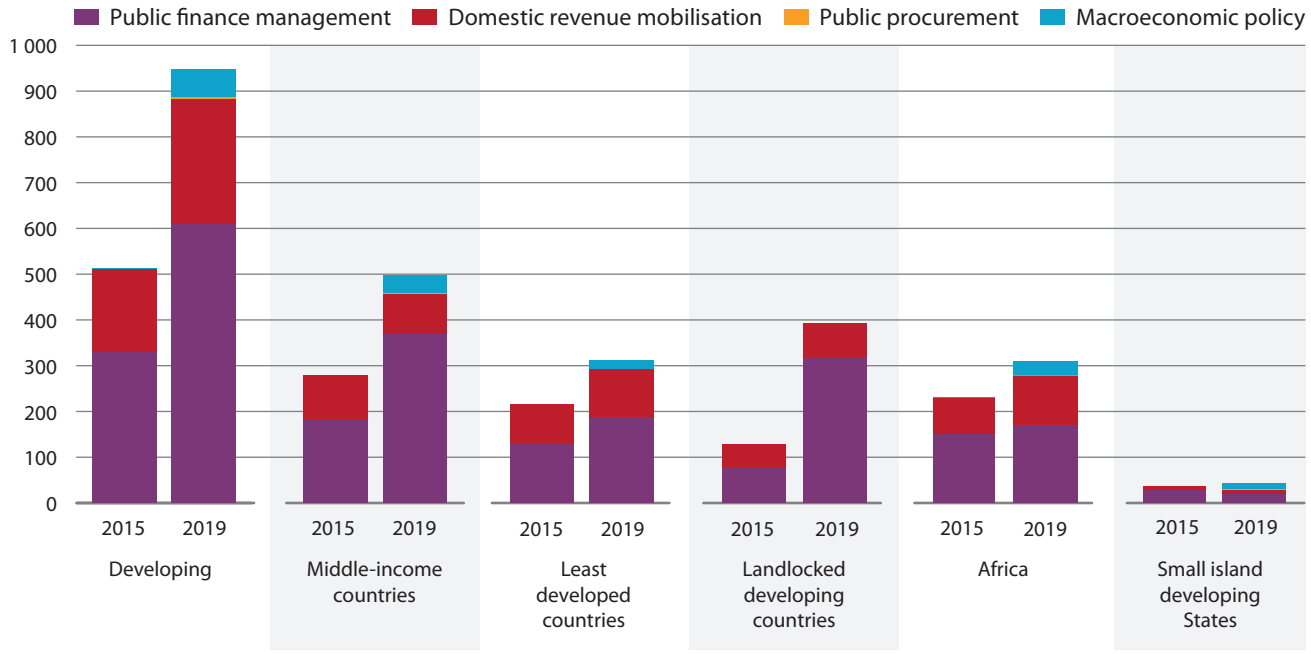
6. Illicit financial flows

Combating illicit financial flows takes centre stage in global discussions on financing for sustainable development amid the COVID-19 outbreak. While there is no agreed definition on what constitutes illicit financial flows (IFFs), the Task Force agreed in 2017 that there are generally three types of IFFs (although not mutually exclusive or comprehensive): (i) IFFs originating from transnational criminal activity; (ii) corruption-related IFFs; and (iii) tax-related IFFs. Member States recognized the importance of addressing these flows to protect vital resources for the COVID-19 response and recovery in high-level discussions held over the course of 2020 (box III.A.7).

The presidents of two of the main organs of the United Nations launched a high-level panel to assess shortcomings in current international legal and institutional frameworks that cover illicit financial flows. In early March 2020, the seventy-fourth President of the General Assembly and the seventy-fifth President of the Economic and Social Council jointly launched a High-level Panel on International Financial Accountability, Transparency and Integrity forAchieving the 2030 Agenda (FACTI Panel). The FACTI Panel reviewed existing international institutional and legal frameworks related to financial accountability, transparency and integrity, with a view to identifying gaps, impediments and vulnerabilities in their design and/or implementation.

The FACTI Panel made far-reaching recommendations for addressing systemic shortcomings and promoting financial integrity for sustainable development. The FACTI Panel proposals related to international tax

Figure III.A.11
Gross ODA disbursements for capacity building, 2015–2019
(Millions of United States dollars)



Source: OECD Creditor Reporting System database.

Box III.A.6
Platform for Collaboration on Tax: adjusting support in the context of COVID-19

The Platform for Collaboration on Tax (PCT) was launched in April 2016 by the United Nations, World Bank Group, International Monetary Fund, and the Organization for Economic Cooperation and Development. PCT partners have worked together to cooperate and coordinate their support for developing countries on domestic resource mobilization. Their three workstreams were adapted to support countries dealing with the COVID-19 crisis:

i **Cooperation on capacity development activities.** PCT members hadregular exchanges on the impact of COVID-19 on partners' delivery of capacity support; The PCT launched an online integrated platform that provides information on partner activities, including advice on tax policy and administration resources for the COVID-19 crisis;

ii **Analytical activities.** The PCT published a Toolkit on the taxation of offshore direct transfers, with several other toolkits in preparation, including one on tax treaty negotiations. Partners were also involved on the discussions on the tax treatment of official development assistance government-to-government aid at the United Nations Committee on Tax;

iii **Outreach activities.** Several training workshops were held virtually.

The PCT also continues to support the formulation and implementation of the medium-term revenue strategies, including in the context of integrated national financing frameworks.

Source: PCT Secretariat, "PCT Progress Report 2020," 2020.

cooperation, financial and beneficial ownership transparency, bribery and corruption, money-laundering, and asset recovery and return (see box III.A.8). Many items, such as improving capacity-building, are already under way, and the Panel calls for strengthening these further. Other items include broad institutional changes which the Panel suggests will improve the legitimacy of institutional arrangements, enhance coordination, and build trust in international systems among Member States and citizens. The FACTIPanel's recommendations relate to both United Nations and non-United-Nations bodies.

6.1 Volume estimates

Efforts to better measure illicit financial flows are under way. In October 2020, the United Nations Office on Drugs and Crime (UNODC) and the United Nations Conference on Trade and Development (UNCTAD) published a Conceptual Framework, including a statistical definition and approach to measuring IFFs.[97] The Framework defines IFFs as "financial flows that are illicit in origin, transfer or use, that reflect an exchange of value, and that cross country borders." It defines IFFs as arising from four

main activities: (i) tax and commercial IFFs; [98] (ii) illegal markets;[99] (iii) corruption; and; (iv) exploitation-type activities[100] and financing of crime and terrorism. The statistical definition also captures flows that may not be strictly illegal, such as cross-border tax avoidance. The Framework proposes to measure IFFs "by analysing the functioning of relevant illicit activities, identifying the set of flows that can be identified as IFFs, and producing estimates for each." UNODC and UNCTAD are conducting a series of pilot studies to refine the framework and develop methodological guidance to measure IFFs.

6.2 Financial and beneficial ownership transparency

Beneficial ownership information is an important tool in combating illicit financial flows. Perpetrators of illicit financial flows rely most commonly on secrecy in some form, including secretive assets (i.e., assets where ownership is not recorded), secretive legal vehicles, and the use of complex chains of ownership across jurisdictions to disguise activity.[101] In many cases, only the legal owners of an asset or legal vehicle are known to authorities. In contrast, the beneficial owner is the person who ultimately owns, controls or benefits from legal vehicles. It is essential that country authorities know the beneficial owner of financial assets and of legal vehicles operating in their jurisdictions, regardless of where they are legally constituted, to properly investigate and eventually prosecute tax evasion and financial crimes. This information is also crucial in asset recovery, highlighting the importance of exchange of beneficial ownership information across borders.

The Financial Action Task Force (FATF) requires countries to implement measures to ensure the availability of beneficial ownership information to country authorities. The FATF is an inter-governmental body that develops policies to combat money-laundering, terrorist financing and the financing of proliferation of weapons of mass destruction. The FATF standards require that competent authorities have timely access to accurate and up-to-date beneficial ownership information.[102] Countries can use three different mechanisms to meet beneficial ownership information requirements: (i) the company approach (the entity collects information on itself and authorities can access it upon request); (ii) the registry approach (usually accomplished by establishing a centralized database/register to hold beneficial ownership information); (iii) or the existing information

Box III.A.7
Combating illicit financial flows: discussions in the context of COVID-19 financing

The discussion group on illicit financial flows (IFFs) set up through the High-level Event on Financing for Development in the Era of COVID-19 and Beyond sought to identify measures to expand fiscal space and foster domestic resource mobilization by preventing IFFs and base erosion and profit shifting, and facilitating contributions of the digital economy. States Members of the United Nations, international institutions and civil society were part of the high-level policy discussions.

The discussion group made several recommendations, including prioritizing fiscal transparency and national measures to address tax avoidance. The group suggested establishing anti-corruption, anti-money-laundering and anti-tax evasion solutions to protect COVID-19 emergency funds, including aid and stimulus measures. Other priorities included improving tax administration through more effective use of digital technologies; strengthening implementation of the United Nations Convention Against Corruption and other international frameworks, such as AML/CFT[a] frameworks; fully integrating financial integrity into all sustainable development policies and plans; taking national actions to intensify cooperation on recovery and return of assets; and strengthening beneficial ownership information collection and transparency at the national level in line with Financial Action Task Force standards (see section 6.2).

In the medium and long term, the discussion group proposed fighting IFFs through

- Developing whole-of-government approaches to tackling IFFs;
- Striving to eliminate safe havens that create incentives for the transfer abroad of stolen assets and illicit financial flows;
- Strengthening anti-money-laundering/combating the financing of terrorism frameworks while better understanding de-risking, and helping affected countries re-establish correspondent banking relationships;
- Working to eliminate base erosion and profit shifting and to ensure that all companies, including multinationals, pay taxes to the Governments of countries where economic activity occurs, and value is created;
- Cooperating, in accordance with applicable bilateral or multilateral agreements, in the areas of mutual legal assistance, administrative assistance, and information exchange in tax matters;
- Encouraging the next membership of the United Nations Committee of Experts on International Cooperation in Tax Matters to provide advice, by the end of its first year of work, on tax policies that can best contribute to post-COVID-19 recovery; and
- Continuing dialogue, including within the United Nations Committee of Experts on International Cooperation in Tax Matters and the High-level Panel on International Financial Accountability, Transparency and Integrity for Achieving the 2030 Agenda.

Source: United Nations, "Financing for Development in the Era of COVID-19 and Beyond, Menu of Options for the Consideration of Heads of State and Government, Part II," September 2020.
a Anti-money-laundering/combating the financing of terrorism.

approach (relying on information already held by, for example, financial institutions or other authorities). The FATF recommends that countries follow a multipronged approach.[103]

Availability of beneficial ownership information is weak but improving. FATF mutual evaluations generally show low effectiveness in the collection of beneficial ownership information. The United Nations Convention against Corruption (UNCAC) peer reviews also show weakness in the ability of countries to identify owners of funds and beneficial owners of high-value accounts.[104] However, more recently an increasing number of countsries have started adopting the registry approach in their legal framework, with the total now reaching almost about 80 countries, although implementation varies among the countries.[105] A new wave has also started to give public access to beneficial ownership information, mainly in the European Union[106] and the United Kingdom, but now extending to countries in Africa, Asia, Eastern Europe and Latin America and the Caribbean. However, this new trend is not universal, and does not address all weaknesses—such as insufficient information collection, inconsistent definitions, limited scope, lack of verification, limited cross-border information availability, and weakness of sanctions for non-compliance—in countries' current implementation of the practice.[107] Nevertheless, since the Global Forum introduced beneficial ownership information requirements in its standards, one third of recommendations from the second round of the EOIR peer reviews are related to improvements in this area; a large majority of jurisdictions are indeed working towards these improvements.[108]

Box III.A.8
Report of the FACTI Panel

The High-level Panel on International Financial Accountability, Transparency and Integrity for Achieving the 2030 Agenda (FACTI Panel) report states that illicit financial flows are a systemic problem requiring a systemic solution. The report further calls for an entire ecosystem approach to address the shortcomings of the present patchwork of structures and adapt them to ever-evolving risks.

The Panel proposes a Global Pact for Financial Integrity for Sustainable Development, a compact through which all countries agree to take comprehensive action to foster and strengthen financial integrity for sustainable development and commit to using the proceeds released by this action to make additional investments in achieving the Sustainable Development Goals. The Panel calls for three types of actions: reinforcing values for integrity, strengthening policy frameworks, and redesigning institutions.

"Values" refers to the ideas that are contained in the definition of financial integrity for sustainable development, and the report elaborates on accountability, legitimacy, transparency and fairness. In addition to accepting these values, policies that relate to enablers of crime, non-State actors, international cooperation, dynamism, and capacity-building are needed. To address the limited reach of existing international bodies, the Panel proposes better data collection and publication; strengthened implementation review systems; better national coordination; and more coordinated and inclusive global governance arrangements.

Source: FACTI Panel secretariat.

6.3 Money-laundering

The COVID-19 crisis impacted anti-money-laundering/combating the financing of terrorism (AML/CFT) activities, including changed financial behaviours. Under UNCAC, countries committed to combating money-laundering, which involves processing of the proceeds of crime to disguise their illegal origin, and is a common feature of all financial crimes. FATF standards promote effective implementation of legal, regulatory and operational measures for combating money-laundering, terrorist financing and other related threats to the integrity of the international financial system. The COVID-19 pandemic impacted government and private sector ability to implement AML/CFT obligations, primarily due to confinement and social distancing measures.[109] For example, AML/CFT on-site inspections were postponed, and operations of financial intelligence units (FIU) were scaled back. While COVID-19-related AML/CFT risks were identified, such as exploiting stimulus measures and insolvency schemes for money-laundering, there were no extraordinary reports of money-laundering due to the pandemic, but there were changes in predicate offences and changes in money-laundering and terrorist financing activity.[110]

Lack of resources hinder enforcement of regulations. Frequently, money-laundering is enabled by lawyers, accountants and financial institutions, and other actors. To comply with money-laundering regulations, they are required to report suspicious transactions to country authorities (e.g., FIUs). However, prosecutors, investigators and FIUs often lack the resources to investigate all suspicious transactions, and many reports are defensive filings by banks who want to avoid liability and are not useful to authorities in some countries. Even in the European Union, which has some of the highest capacity for monitoring and investigation, authorities use, on average, just over 10 per cent of reports submitted, a percentage that has not changed since 2006.[111] Countries should adopt a risk-based approach to ensure that limited resources are used effectively in addressing their most important money-laundering/terrorist financing risks in a country.

There is, however, growing global momentum to strengthen anti-money-laundering mechanisms. In July 2019, FATF launched a strategic review of its AML/CFT assessment architecture, which coincides with the conclusion of the fourth round of FATF mutual evaluations.[112] The review is considering how to make future mutual evaluations more timely, risk based, and effective, as well as considering changes to the standards, such as whether there is a need to strengthen beneficial ownership requirements. The strategic review, which concludes in 2021, [113] coincides with significant country-level advancement of legal and regulatory frameworks, often in response to the previous update of thestandards and round of mutual evaluations. For example, in January 2021, the United States passed the Anti-Money Laundering Act of 2020, the most comprehensive set of reforms in 20 years, including its first centralized, non-public register for beneficial ownership information targeted at smaller businesses and shell companies.[114] The European Union also recently agreed to set up an EU body to combat money-laundering and work is under way to harmonize anti-money-laundering rules and improve coordination among FIUs. Legislative work to adopt this is expected to conclude in 2021.[115]

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100 "… illegal activities that entail a forced and/or involuntary transfer of economic resources between two actors." (Ibid, pp.14-15).

101 Andres Knobel, "Transparency of Asset and Beneficial Ownership Information," FACTI Background Paper (FACTI Panel, July 19, 2020).

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108 Global Forum on Transparency and Exchange of Information for Tax Purposes, "Tax Transparency and Exchange of Information in Times of COVID-19: 2020 Global Forum Annual Report."

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Domestic and international private business and finance



Chapter III.B

Domestic and international private business and finance

1. Key messages and recommendations

The COVID-19 crisis has had a devastating socioeconomic impact on employment, poverty and inequality, and derailed private sector investment needed for recovery.

Short-term measures taken by Governments to support private companies have been essential to avoiding bankruptcies and limiting the long-term negative impact on economic activities. **But, for a long-term, sustainable and inclusive recovery, the current business and finance models have to be reimagined.**

- *The current crisis provides an opportunity to build a new business model that works for everyone, that extends to all stakeholders, not only shareholders. But such a paradigm shift requires Governments to change the rules of the game;*

Developing countries require a boost in private investment if they are to achieve sustainable development goals. Investment for a long-term recovery can be reignited by prioritizing sectors that are capable of driving sustainable economic growth and can attract private sector investment, such as telecom and renewable energy. But reducing the risk premium of developing countries is necessary to unlocking more capital-intensive projects.

- *National actions can mitigate some investment risks, for instance, by strengthening the business enabling environment and ensuring timely administrative decisions (e.g., construction permits);*
- *At the same time, the international community should help developing countries (a) benefit from cheaper financing sources; (b) develop a pipeline of investable projects; and (c) use risk-sharing mechanisms to leverage private investment (see chapter III.C). The multiple efforts and assistance of development partners should be further integrated, for instance, through creating a common marketplace for investments in developing countries;*

It is also important to harness the benefits of digital financial inclusion. Digital financial services have gained further importance amid the pandemic. This raises prospects for financial inclusion but accentuates the need for regulatory frameworks to address related risks. Digital financial services can also reduce remittance transaction costs, but are not always available in high-cost corridors.

- *Governments and development partners can promote digital services to reduce remittance transaction costs, but bottlenecks, including digital access gaps, need to be addressed for these technologies to have a greater impact. A corridor-by-corridor approach is also necessary to remove structural barriers, such as the lack of competition and the reduction of correspondent banking relationships;*

Scaling-up access to risk capital is limited by underdeveloped capital markets in many countries; their deepening depends on a range of enabling conditions that developing countries must first address.

- *The international community should provide support to countries with underdeveloped capital markets to put in place market infrastructure and develop action plans tailored to their local circumstances;*
- *Alternative measures, such as blended instruments and innovative financing approaches, can also be considered in order to enhance access to risk capital (see chapter III.C and the Financing for Sustainable Development (FSDR) 2020);*

The current crisis presents an opportunity to build a more sustainable financial system that channels resources to projects and companies with a positive contribution to sustainable development and the SDGs. To this end, a number of actions are necessary:

- *First, all actors in the investment chain should develop incentives that encourage a long-term approach in*

decision-making (such as remuneration structures of asset managers and company executives). Without a long-term approach, risks and opportunities critical for sustainable development will not be properly considered;

- *Second, companies must provide greater transparency regarding their environmental and social impact, as a prerequisite for making them accountable to their financiers and other stakeholders. This can be achieved by further converging existing reporting frameworks, ensuring global coherence and mandating a minimum level of disclosure. Countries could use the strong momentum in this area to realize ambitious changes;*
- *Third, companies should not only provide information on their current impact but also on their plan to shift activities towards more sustainability, and adjust internal governance for this purpose. For climate change, this means that every company should have a plan to reduce carbon emissions in line with the Paris Agreement, and the same holds for social issues, such as gender balance and labour conditions;*
- *Fourth, investors can help spearhead transformation of the companies they invest in, but they need the appropriate incentives, internal capacity, and tools to do so, including coherent taxonomies and credible labelling for sustainable investment projects and financial products;*
- *Fifth, standards and rules must be designed to make sure sustainable finance goes where the financing needs are the greatest. Without a specific attention paid to developing countries constraints, some actions could shift finance further away from developing countries in the short term, as companies would seek to manage sustainability-related risks.*

The first section of this report lays out the need for a business model aligned with sustainable development. The following section provides an overview of investment trends and ways to scale up private investment in recovery. The third section reviews ways to improve financial inclusion, reduce remittance transaction costs and mobilize capital markets. The chapter ends with actions and incentives to make the private sector and financial markets more sustainable. In its analysis, the chapter also builds on the work of the two discussion groups established after the initial High-Level Event on Financing for Development in the Era of COVID-19 and Beyond, respectively on: (i) external finance and remittances, jobs and inclusive growth; and (ii) recovering better for sustainability.

2. Developing a new business model aligned with sustainable development

Despite the growing interest in sustainable finance, it is unlikely that the current business model will achieve the private sector transformation and scale of financing required by the SDGs in the near future. Building a new business model requires a fundamental rethinking of the role of direct investment and financial and capital markets in economies; and of taxation, corporate practices, and infrastructure in promoting sustainable development. While the exact model may differ between countries, there is a universal need for a new business model that supports countries' ability to achieve the SDGs.

2.1 Creating the terms of the new business model

Financial markets are currently too short-term oriented to spur the investments needed for the SDGs. The COVID-19 crisis has highlighted growing systemic risks and interconnections between economic, social and environmental issues (see chapter II). However, the short-term nature of financial markets implies that risks and opportunities critical for sustainable development are often overlooked. Although investors increasingly consider sustainability-related risks, they tend to focus on those with a direct material impact on company financial performance in the near term and often lack the tools to conduct in-depth sustainability assessment of companies they finance.

The current business model, in which firms maximize shareholder value, does not properly account for the effects of private activity on environmental and social impacts (or externalities). The model consumes more natural resources and creates more waste than the planet can regenerate and absorb. It also creates large social inequalities. A new model of capitalism needs to reconcile the objective of profit maximization with the societal goals of sustainable development. To be resilient, the economic system needs to rely on a business model—dubbed as stakeholder capitalism—that works for everyone, including employees, suppliers, customers and local communities.

Government bailout packages in response to the crisis have increased the role of public support in both developed and developing markets. Such support has ranged from loan relief for small and medium-sized enterprises (SMEs) to research and development (e.g., of pharmaceuticals). As a result, taxpayers are subsidizing corporate shareholders. With stock markets at record highs, there is a need to rethink the responsibility of businesses towards society.

Focusing on a broader set of stakeholders can help companies perform better by creating long-term shareholder value,[1] while enabling corporations to give back to society. This rationale pushed 181 chief executive officers (CEOs) in the United States of America to commit, in 2019, to redefining the purpose of a corporation to one that serves not only its shareholders, but delivers value to all its stakeholders. This does not mean foregoing returns for shareholders to deliver more value to other stakeholders.[2] Rather it is a recognition that considering all stakeholders is essential to maximizing financial performance in the longer run, for instance, by adopting some or all of the following practices:

- Considering **employees** not as a cost but as an investment in human capital that enhances the company's productivity and helps attract talent. Companies with strong employee engagement are estimated to be 23 per cent more profitable than those with lower engagement;[3]
- Reflecting **customers'** long-term needs and sustainability preferences through innovation and development of new products and services. A survey found that 73 per cent of consumers say they would definitely or probably change their consumption habits to reduce their impact on the environment;[4]
- Improving **environmental** performance to reduce energy and raw material costs and building **resilience** to disasters in order to ensure business continuity;[5]
- Embedding sustainability issues in supply chains to improve **supplier** practices and avoid reputational scandals that could hurt a brand's

reputation, a critical component of intangibles that make up to 84 per cent of company valuation.[6]

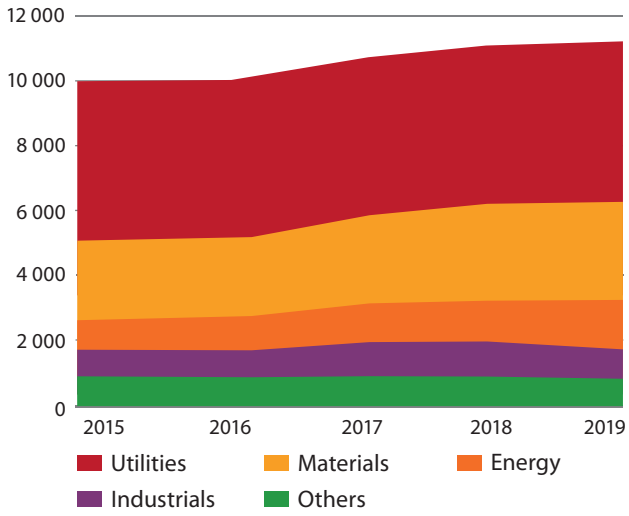
These considerations are not new, but they are growing in importance because there is a recognition that the system does not work well for all people—or for the planet—and that companies have a responsibility in addressing these issues. In developed markets, 56 per cent of respondents to a global survey believe that capitalism in its current form is doing more harm than good in the world, and less than 1 in 5 respondents agree that the system is working for them. The same survey found that 74 per cent of respondents believe that CEOs should take the lead on change rather than waiting for government to impose it.[7] Consumers and investors are also increasingly integrating environmental and social issues into their purchasing and investment decisions. A survey of large Japanese manufacturers confirms that consumer awareness and investor demand are two leading factors that motivate companies to integrate the SDGs into their decision-making—far more motivating than requirements from local authorities.[8] Companies that do not take sustainability issues seriously may face a higher cost of capital, as they will be perceived as riskier by investors. Another major change is that technology now makes information about companies more widely available. Companies should expect their unsustainable practices to be noticed.

Yet, reality currently falls short of the promise of stakeholder capitalism, as dramatically revealed by the COVID-19 crisis. This is visible in many areas:

- **Capital Markets.** While people were losing their jobs due to lockdowns, shareholders were benefiting from booming capital markets;
- **Taxation.** In the aftermath of COVID-19, private sector companies in many jurisdictions received public subsidies. Yet, at the same time, many large, profitable companies engage in tax avoidance and evasion. It is estimated that $500 billion to $600 billion in corporate tax revenue a year is lost from profit shifting by multinational enterprises;[9]
- **Carbon emissions.** Prior to the crisis, direct emissions from corporations increased by more than 10 per cent between 2015 and 2019 (figure III.B.1);
- **Circularity.** Companies are not sufficiently limiting single-use products and improving the circularity of products. Still, 98 per cent of plastic packaging is single use (only 2 per cent is reusable) and more than a third of this packaging is not recyclable;[10]
- **Biodiversity.** Agricultural expansion continues to be the main driver of deforestation and the associated loss of forest biodiversity;[11]
- **Gender equality.** The gender pay gap remains prevalent at 16 per cent globally;[12]
- **Human rights.** The Corporate Human Rights Benchmark, which assesses 229 global companies, found that 104 of them had serious allegations connected to them.[13]

Stakeholder capitalism can only succeed if capital markets and corporate governance push companies to adopt a long-term vision. Companies need a long-term outlook to properly consider most environmental and social elements that do not have an immediate visible impact. Yet, the current economic system has led companies to focus excessively on achieving short-term targets, often at the expenses of long-term growth and company resilience. This is despite the fact that companies with a long-term approach tend to outperform their peers, with earnings growth of 36 per cent more on average over a 15-year period.[14] Actions are needed to both reshape corporate governance, and to reform capital markets (see section 5.1).

Figure III.B.1
Scope 1 Direct greenhouse gas (GHG) emissions by sector, 2015–2019
(Million tonnes of carbon dioxide equivalent)



Source: UN DESA based on data of 4,768 companies accessed from S&P Market Intelligence.
Note: GHG protocol defines Direct GHG emissions as those that occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.

2.2 Rebuilding the partnership with the State

COVID-19 has highlighted the role of Governments in the economy, providing a window of opportunity to make bold changes. For countries that were able to afford bailout programmes, stimulus packages can be designed to encourage companies, including multinational corporations, to align their business model with sustainable development—for instance, by requesting commitments to reduce carbon footprints and encouraging investment in workers and better working conditions globally. Governments can also use public procurement to drive changes and increase demand for sustainably produced goods. About twelve per cent of gross domestic product (GDP) globally is spent on public procurement, both in developed and developing countries.[15] Governments can also direct state-owned enterprises to be at the vanguard of changes in corporate practices.

A paradigm shift in the business model depends on ambitious and forward-looking public policies, and a strengthened partnership between government and the business sector. The fact that many companies are embracing the idea of stakeholder capitalism is positive, but it would be unrealistic to think this alone will create the shift required. Many of these changes enumerated below will not be in the company's

financial interest unless the rules of the game are also changed.

- For **employees,** major gains have been achieved through public policies, for instance, on labour rights and minimum wages. Further improvements will require policy interventions, for example, to better protect people working in the informal sector and those with non-conventional forms of employment;
- For **capital markets** to take a more long-term approach to investment, they need to have access to information on the social and environmental performance of companies, which depends on company disclosure requirements put in place by regulators (see section 5.2);
- For **climate change,** it is crucial to penalize unsustainable practices, for example, through meaningful carbon prices (see chapter III.A), as well as regulation (e.g., emissions standards in automobiles);
- Regulations are also needed to foster a **circular economy,** for instance, through bans on single-use products and extended producer responsibility for the treatment of post-consumer waste;
- For **disaster risk reduction,** policymakers can put in place and raise awareness about incentives that encourage companies to build resilience throughout their operations, such as tax rebates and reduced insurance premiums;[16]
- Regulation and norms are also key to **consumer protection,** for instance, to prevent predatory lending or ensure product safety;
- Public policies also help shift **consumer demand** towards more sustainable products, for example, by ensuring proper information to consumers (e.g., on-pack carbon labelling), and providing financial incentives (e.g., for energy-efficient retrofits in building);
- For **suppliers,** regulation can require large companies to conduct supplier due diligence, for instance on issues such as labour standards including child labour, forced labour and human trafficking;
- For **taxation,** domestic public policy reforms and international cooperation are necessary to ensure that companies adhere to tax laws and that value is taxed where it is created (see chapter III.A).

Governments, including in developing countries, can also use investment policies to mobilize private investment in the SDGs, for instance, by re-orienting investment promotion and facilitation strategies towards SDG investment.[17] More than 150 countries have adopted national strategies on sustainable development or revised existing development plans to reflect the SDGs, and more than 70 are in the process of developing integrated national financing frameworks (INFFs) to support financing of these plans. Within the context of these frameworks, governments can use tools such as the UNCTAD Investment Policy Framework for Sustainable Development (IPFSD) to attract investment in the SDGs.[18]

Government policies set the business framework for investment in the real economy (section 3), for the financial sector and capital markets (section 4), and for aligning these with sustainable development (section 5). National efforts, however, will only be successful if complemented by reforms to the international system, including in the areas of tax cooperation, trade, debt sustainability and systemic issues, along with international support for those most in need (see chapters III.A/C/D/E/F).

3. Encouraging investment and job creation

Investment and business activity contribute to the achievement of many development goals, including through job creation, investment, innovation, and strengthening sustainable consumption and production. The extent of their contribution is in part driven by public policies that govern business activities and create incentives for aligning (or not aligning) business practices with sustainable development. Especially in the current crisis, policies need to be structured around both short-term objectives (e.g., keeping business afloat and preventing job losses), and rebuilding better by investing in sustainability and resilience.

3.1 Investment trends and the impact of COVID-19

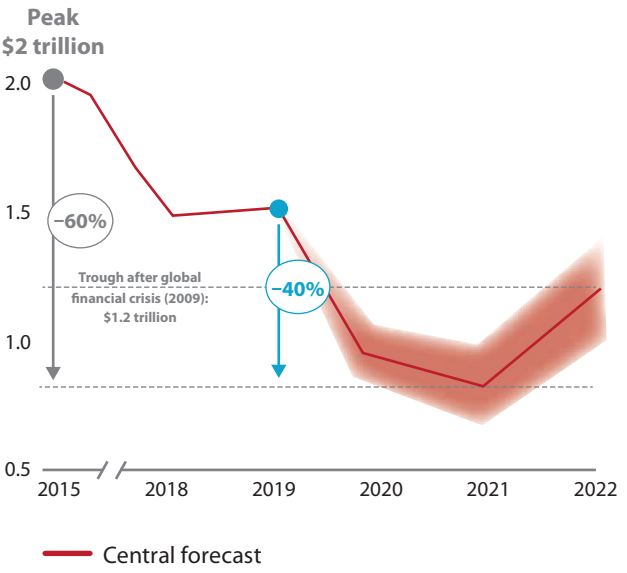
The COVID-19 crisis has derailed investment, which was already below historical average. Global foreign direct investment (FDI) plummeted 42 per cent in 2020[19] —a greater drop than occurred during the 2009 global recession (figure III.B.2). Ongoing investment projects were delayed, and foreign affiliate earnings—a significant share of which is generally re-invested in host countries—collapsed.[20] Many mergers and acquisitions were also suspended or cancelled. The decline was concentrated in developed economies. Investment in developing and transition economies excluding China also fell in 2020, by 22 per cent.

International private investment flows to developing and transition economies have been weak in sectors relevant for the SDGs. These flows are expected to have fallen by about one third in 2020. The decline was particularly strong in poorer regions and in infrastructure-related sectors (excluding renewables). International project finance announcement in these sectors dropped by 62 per cent in value.[21] Investment in renewable energy was more resilient, although growing more slowly than prior to the crisis.

Investment is expected to remain subdued for some time, not only because the firms are less profitable, and hence need to scale back their investments; the uncertainty about the global economic outlook makes investment riskier than what it would have been without the pandemic. Greenfield investment project announcements, which are indicators for future FDI trends, dropped by 35 per cent in 2020.[22] However, future trends in investment will depend on a host of factors, including the level of public spending, the interest rate environment, and the speed of vaccine roll-out, especially in developing countries.

The COVID-19 crisis has accelerated changes that have long-term implications for investment flows and international production. The pandemic is compounding ongoing changes in global and regional value chains controlled by multinational enterprises. Technological changes, increased protectionism and sustainable development imperatives are having far-reaching consequences for the configuration of international production. For instance, new technologies make the operations of multinational enterprises less dependent on investment in physical assets. Governments and the public may also pressure companies to increase national or regional autonomy in productive capacity. Future investment decisions of multinational companies are likely to be driven by the desire to strengthen supply chain resilience.

Figure III.B.2
Global foreign direct investment inflows, 2015 and 2018–2022
(Trillions of dollars)



Source: UNCTAD.

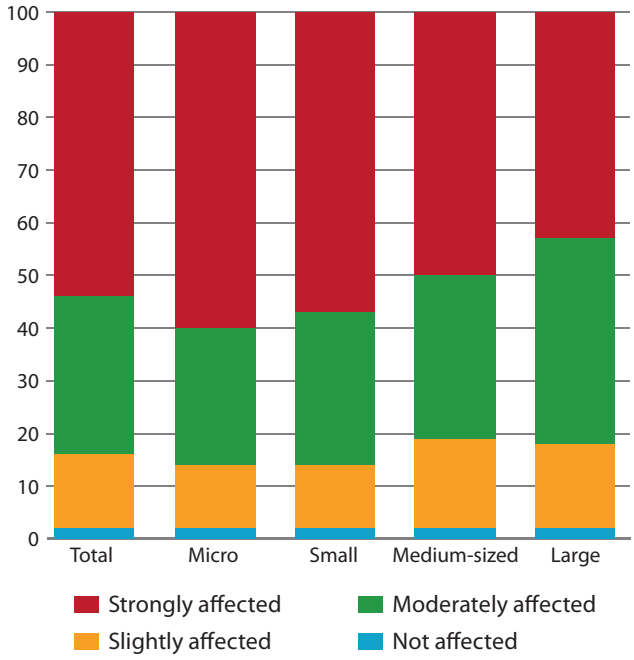
3.2 Preserving and creating jobs

The COVID-19 pandemic has created a major shock to labour markets, exacerbating inequalities (see chapter I). Job losses have been concentrated in low-earning sectors and have disproportionately affected women and young people. While developed countries have been able to adopt large-scale fiscal stimulus, countries with limited fiscal space have not been able to afford the same measures (see chapter III.A).

Micro, small and medium-sized enterprises (MSMEs), which account for a large share of employment worldwide, have been severely impacted by the crisis, particularly in developing countries. Smaller businesses are more affected by COVID-19 and face higher risk of permanent closure (figure III.B.3). MSMEs are overrepresented in sectors most strongly hit by the crisis, such as accommodation and food services. They also tend to have fewer assets and limited cash reserves to cushion against lockdown-induced liquidity shortages. In August 2020, 22 per cent of MSMEs surveyed reported that they risked shutting down permanently within three months, compared to 9 per cent for large firms; [23] this percentage rises to 34 per cent for companies operating in LDCs. [24]

Prompt actions from Governments and development banks have helped companies stay afloat and preserve employment, but need to be calibrated to reach the hardest-hit groups, including in the informal sector. Without policy interventions, a recent study estimates that the rate of businesses failures for SMEs would almost double.[25] Firms surveyed highlighted tax waivers, temporary tax relief and financial programmes as the most helpful measures to cope with the COVID-19 crisis (figure III.B.4). However, the level of support differs between developed and developing countries. Less than 30 per cent of SMEs in developing countries received or expect to receive government assistance compared to 75 per cent in developed countries.[26] Support measures may also overlook enterprises operating in the informal economy, which are often difficult to reach through conventional channels and may require tailored solutions, such as delivering support through microfinance institutions.

Figure III.B.3
Impact of Covid-19 on business operations by company size
(Percentage)



Source: International Trade Centre, ITC Covid-19 Business Impact Survey. Data collected Apr–Aug 2020.
Note: Respondents were asked 'How have your business operations been affected by the coronavirus (COVID-19) pandemic? Data on 3949 businesses in 123 countries.

Enabling companies to outlive the crisis is key to enabling a strong recovery post-crisis and limiting the long-term impact on economic activities. Without support, sound businesses may be forced to close due to liquidity pressures and factors beyond their control. Recreating these businesses will involve costly and time-consuming activities, such as rehiring workers and re-establishing connections with suppliers and clients. It is estimated that replacing lost employees can cost up to twice their annual salary.[27] Prolonged underemployment may also erode human capital.

Policy reforms can complement short-term support measures to engage entrepreneurs and MSMEs in recovery efforts and foster job creation. The crisis has slowed down entry into entrepreneurship, with business applications down by 40 per cent in some countries.[28] To encourage the resurgence of entrepreneurship and small business activity, countries can

- Strengthen the business-enabling environment and minimize regulatory hurdles for entrepreneurs and MSMEs, particularly those affecting women; [29]

Figure III.B.4
Government measures perceived as most helpful
(Percentage of survey respondents)

Source: International Trade Centre, ITC Covid-19 Business Impact Survey. Data collected Apr–Aug 2020.
Note: Respondents were asked 'Please select the top three government measures that would be most helpful as you cope with the COVID crisis. Data on 4035 businesses in 133 countries.

- Invest in entrepreneurial skills, including through trainings aimed at improving entrepreneurial mindset (e.g., Empretec);
- Encourage informal businesses to integrate into the formal system so they can better benefit from public support measures;
- Improve access to technologies by vulnerable groups, such as youth, women, migrants and refugees, by investing in digital infrastructure and education;
- Facilitate MSME participation in public procurement, for instance, by dividing contracts into smaller lots;[30]
- Support MSMEs through loan programmes (e.g., through public development banks) and couple them with training support (e.g., on financial literacy);
- Provide international support, including capacity-building assistance, to help countries in these efforts.[31]

The transition to a low-carbon economy also provides opportunities for job creation beyond the immediate crisis, but needs to be accompanied with assistance for workers in declining sectors. It is estimated that 12 million new jobs could be created over a decade through green investment and rising carbon prices.[32] Renewable energy, retrofitting of buildings, and other low-carbon sectors tend to be more labour intensive than those with higher emissions such as fossil fuel energy and heavy manufacturing. However, a transition to a low-carbon economy also presents challenges, such as reallocation of the workforce from shrinking to expanding sectors, which requires social dialogue and public intervention (e.g., training and reskilling support).

3.3 Unlocking private investment in sustainable and resilient infrastructure

While unlikely to fill the infrastructure gap on its own, private investment can play a role, particularly in sectors with strong cash flow potential. Closing infrastructure gaps requires investment of trillions of dollars. Public investment will continue to dominate infrastructure spending in many areas—especially in sectors where public intervention is warranted for social equity reasons or where social returns are much larger than private returns. But private investment can more easily be mobilized in other critical sectors, such as renewable energy and digital connectivity, which have the potential to generate returns to repay private investors. Due to the falling cost of renewables, renewable energy has become the default option for new energy investment, representing almost 80 per cent of the net generating capacity added globally in 2019.[33] Across major emerging markets, sustainable investment opportunities, which can be led by private investment, are estimated to be $10.2 trillion between 2020 and 2030.[34] Similarly, rising demand for digital connectivity has spurred investment by telecom companies, but the challenge remains to reach those excluded (see chapter III.G).

A risk-informed approach can help government prioritize quality infrastructure investments.[35] Examining risks throughout the project lifecycle is critical to properly strengthening infrastructure resilience against future shocks, ensuring the project relevance in the long run, and maximizing social and environmental impact. For example, it is estimated that making infrastructure more climate resilient can add about 3 per cent to the upfront costs, but has benefit-cost ratios of about 4:1, creating significant savings over time.[36]

One way for Governments to accelerate private investment is to review risks typically associated with infrastructure projectsand address those they can control. Private investors base their decisions on risk-adjusted returns. By mitigating risks, Governments lower infrastructure project financing costs, which impact the viability of capital-intensive projects. For example, Governments can secure land acquisition and streamline construction permits to alleviate regulatory risks for project developers. Additionally, national commitments to renewables targets can also reduce the risks of policy reversal. These actions address the root causes of risk and differ from financial instruments, such as public guarantees, that simply transfer risks from the private to the public sector (see chapter II).

The private sector may seek to transfer more risk to government as the crisis prompts reconsideration of risk allocation, but public guarantees need to be managed with caution. The COVID-19 crisis has derailed many infrastructure projects. For example, the crisis has caused a sudden drop in traffic for transport projects, such as roads and railway. The private sector may be reluctant to support this type of risk in the future. Shifting more risk to government can help make projects viable; but public guarantees can also impact public finance through contingent liabilities and should be managed cautiously. Public development banks (see chapters II and III.A) or guarantee funds (e.g., Indonesia Infrastructure Guarantee Fund) can be used to provide this kind of guarantee and ring-fence government liabilities.

When Governments must bear most risks, public financing might be the appropriate solution. The financing debate is too often oversimplified to imply the main reason countries need to raise private financing is because they lack public resources. Yet, while private finance can alleviate short-term financing constraints, infrastructure services cannot be provided "for free". If an infrastructure project is to be delivered profitably by a private company, the users and/or taxpayers still pay for it in the end. In addition, the Government could be forced to step in and replace the private partner in case of project failures as it cannot allow for public services interruption. As such, the Government is ultimately the risk bearer of last resort. The decision to seek private sector involvement in infrastructure services delivery needs to be based on a strong rationale as to why this would be a more efficient solution. For example, Governments may see value in having the company building the infrastructure asset being also responsible for its operation over time; or they may consider that the private sector will be more efficient in delivering infrastructure services due to the profit motive.[37]

Mobilizing private investment also depends on the capacity of Governments to develop a project pipeline, including by leveraging technology and strengthening international cooperation. Governments with limited resources may struggle to find the internal capacity to develop an attractive project pipeline. External support, such as the one provided by the Global Infrastructure Facility, is necessary for helping countries address this gap; it also necessary in optimizing existing resources. Information technology platforms, such as SOURCE, can help government officials strengthen project preparation and enhance project management (and promotion) while providing guidance at every project stage.[38] Governments could also discuss ways to further integrate technical assistance support provided by different development partners to improve efficiency and reduce administrative burden—for instance, by creating a type of single window for infrastructure-related technical assistance.

Countries with the greatest needs are also the ones facing the highest financing costs. This is not only true for public borrowing costs; it is also reflected in returns that private investors demand to compensate them for perceived risks. The crisis has amplified this risk premium in many countries.[39] Development partners can provide guarantees to help reduce the premium, particularly for countries that have been most impacted by the crisis. They can also provide relatively cheap financing options to private companies willing to invest in more frontier markets and make risk participations in their assets available to private sector investors (see chapter III.C). The development of local financial and capital markets is also required in order to sustain domestic private investment, including that in infrastructure development.

4. Developing local financial and capital markets

Countries need a well-functioning financial sector to support economic development. Financial institutions play an essential intermediation role that help put savings to productive uses. The economic literature has established the linkage between financial sector depth (i.e., the size of the financial sector relative to the economy) and economic growth—although an overly developed financial sector may have negative effects (see FSDR 2019). Today, only 20 per cent of global financial assets are held in developing countries.[40] Advancing local financial sectors could help channel more resources to these countries.

The financial sector also plays a role in achieving social and environmental goals. The financial sector breadth (i.e., access of the population to financial services or financial inclusion) is an enabler of development goals such as eradicating poverty, job creation and gender equality. Combined with digital access and literacy, the financial sector breadth can effectively boost economic empowerment of vulnerable groups such as youth, women, migrants and refugees. Inclusive financial markets can also lower the cost of remittance transfers. Financial institutions and capital markets may also help accelerate the transition to more a sustainable economy if they direct funds to activities in line with positive environmental and social impacts.

4.1 Improving financial inclusion

Despite notable advances in digital financial services, a significant share of the world's population remains unbanked, disproportionally affecting women and youth. A total of 1.7 billion adults (or 31 per cent globally) do not have access to a bank account, with inclusion strongly influenced by wealth and income disparities.[41] In higher-income countries, 94 per cent of adults have a bank account, while in developing countries only 63 per cent do. The gender gap also remains considerable. While 72 per cent of adult men globally have a bank account, only 65 per cent of women do; [42] and almost half of the world's young people (aged 15–24) do not have access to formal financial services.[43] Targeted efforts are required to address the financial needs of women and youth, for instance, by initiating public-private partnerships that focus on

the financial inclusion of these groups. Financial inclusion policies should also consider the needs of marginalized communities such as refugees.

Digital financial services have gained further importance during the pandemic, but this increased importance has also highlighted the risks related to these services. Digital financial services have allowed many households and MSMEs to access financial resources despite lockdowns and social distancing (see chapter III.G). In Nigeria, 54 per cent of customers increased their financial technology (fintech) usage over the past six months.[44] Digital financial services present a strong potential to bridge financial inclusion gaps, as two thirds of the unbanked globally have a mobile phone.[45] However, these services also present risks, including pre-existing risks of exclusion, fraud, identity theft, scams and over-indebtedness. In Indonesia, the Financial Services Authority has recently closed more than 1,000 illegal peer-to-peer lenders that were offering prohibited financial services or operating without a proper license. [46] While these issues and responses often precede the crisis, the increased resilience on digital financial services post-crisis amplifies them. To address these issues, policymakers can consider bringing mobile lending and other types of unregulated micro non-bank lending under regulatory oversight, as Kenya is currently considering. In doing so, regulators should balance (i) macroeconomic risks; (ii) a high standard for consumer protection; and (iii) limiting disincentives for innovation (see FSDR 2020).

4.2 Reducing the cost of remittance transfers

Remittances—an important source of income for receiving families in developing countries—are projected to decline by about $40 billion due to the COVID-19 crisis. Remittances are expected to decline by 7.2 per cent to $508 billion in 2020, and potentially by another 7.5 per cent in 2021. However, there are large disparities among regions. While remittance flows were almost at the same level in 2020 as in 2019 in Latin America and the Caribbean by year end, they declined by 16 per cent in Europe and Central Asia.[47] In 2020, the three main drivers affecting these flows were (i) increased unemployment among migrant workers; (ii) restrictions on entry of new migrant labour; and (iii) restrictions on physical access to remittance providers during lockdowns.[48] To raise awareness about the expected impact of declining cross-border remittances on millions of people, countries, organizations and industry players have joined the Swiss-UK co-launched call to action "Remittances in crisis: How to keep them flowing".[49]

But even prior to the impact of COVID-19, the high costs of sending remittances remained a challenge. The average costs of sending $200 remittances was 6.5 per cent at the end 2020, still more than double the Addis Ababa Action Agenda and SDG 10.c targets of 3 per cent by 2030. Costs continue to be highest in sub-Saharan Africa, at 8.2 per cent. Banks are the costliest channels, with average costs of around 10.7 per cent, while post offices recorded an average of 8.7 per cent, and money transfers operate at 5.6 per cent. Mobile operators are the cheapest at 3.1 per cent and thus the only ones on track to meet SDG target 10.c.[50]

Costs could be reduced by better informing customers about the available remittance options and increasing competition. The global average of the three cheapest options in each corridor is 4 per cent, implying that many customers could benefit from reduced transfer costs if they were better informed. Prices also tend to be higher in corridors with high bank participation, underscoring how important the competition across different provider types is in reducing costs.[51] But cheap options are not available in all corridors: about 6 per cent of the reviewed corridors do not have any remittances services that meet minimum criteria in terms of quality and accessibility.[52] At the same time, COVID-19 may have the opposite effect of reducing competition by forcing some providers out of business. Declining volumes caused by COVID-19 has had the effect of reducing the profitability of remittance providers, thus risking reducing competition further. About half of executives in remittances service providers indicated that their business will struggle if the crisis lasts more than six months.[53]

A bottleneck for reducing costs is the decline of correspondent banking relationships in some corridors. The number of correspondent banks fell by 20 per cent between 2011 and 2018, and costs for cross-border payments tend to be higher in countries with more limited access to correspondent banking services.[54] To avoid the potential risks of becoming involved in money laundering or terrorist financing, cross-border payment service providers terminated business relationships with some regions or classes of customers, thus reducing competition in those corridors. It is estimated that countries with a longer history of anti-money laundering/combating the financing of terrorism (AML/CFT) deficiencies lost 25 percentage points more of active correspondents than the average. [55] Some banks have also reconsidered their strategy and terminated less profitable relationships—for example, those with smaller countries—because of low volumes and profits.

Digital financial technologies have emerged as a potential solution to the challenge of providing low-cost remittance transfer channels, but their uptake depends on several enabling factors and proper regulatory frameworks. Fintech can help increase competition, facilitate AML/CFT compliance, and ensure that those hardest to reach, especially in rural areas, have access to remittances.[56] But while much emphasis has been put on the potential of fintech, some bottlenecks need to be addressed for these technologies to have a greater impact. For example, financial literacy strongly affects which remittance channels people are most likely to use.[57] The lack of appropriate identity documents is another hurdle for migrants, but technology may help, for example, through digital IDs or by leveraging the verification already conducted for SIM card registration (see also chapter III.G).

Group of Twenty (G-20) leaders endorsed a road map for providing a holistic approach to responding to the cost of remittances and enhancing cross-border payments. The objective is to make cross-border payments cheaper, faster, more transparent and more inclusive. The Financial Stability Board (FSB) will report annually on the progress of this road map in the following five focus areas:[58]

i Committing to a joint public and private vision to enhance cross-border payments (e.g., setting targets at the global level on cost, speed, transparency and access);

ii Coordinating on regulatory, supervisory and oversight frameworks (e.g., aligning these frameworks across jurisdictions);

iii Improving existing payment infrastructures and arrangements to support the requirements of the cross-border payments market (e.g., strengthening links between payment systems);

iv Increasing data quality and straight-through processing by enhancing data and market practices (e.g., promoting the adoption of common data formats);

v Exploring the potential role of new payment infrastructures and arrangements (e.g., digital currencies).

4.3 Mobilizing capital markets

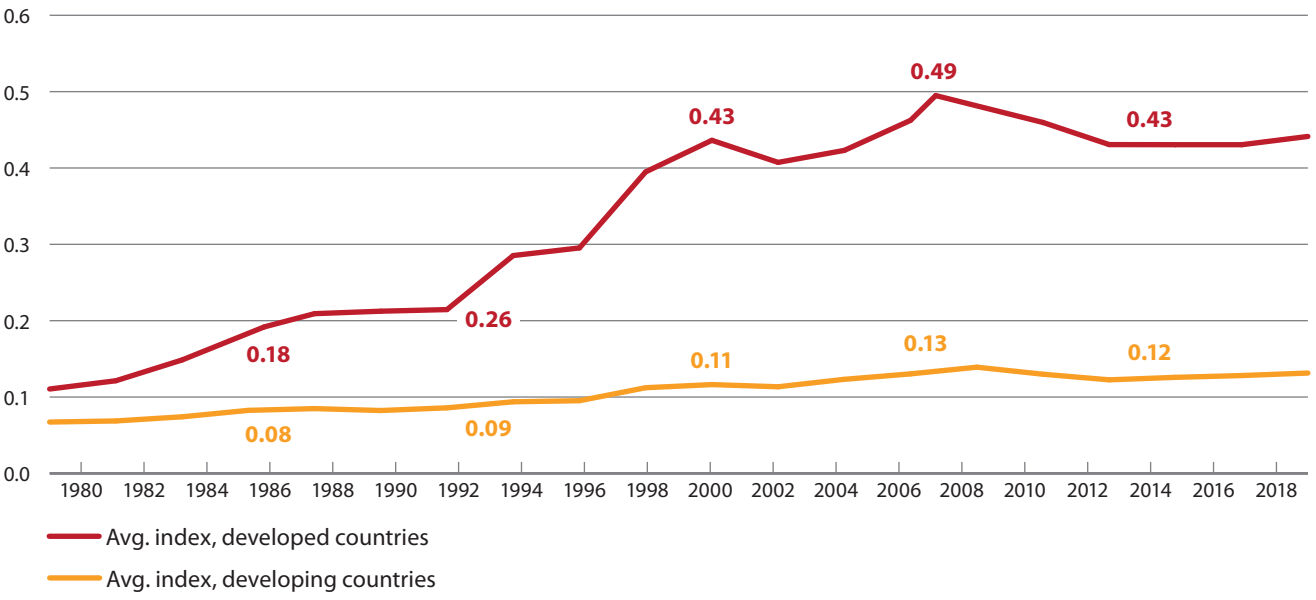
The Addis Ababa Action Agenda underscores the role of capital markets, which can be supportive of economic growth and sustainable development. Well-functioning capital markets act as intermediaries, transforming savings into capital needed for economic development while providing access to a wider investor base.[59] Compared to bank financing, debt markets may increase the availability of long-term and possibly cheaper financing, while equity markets can raise financing that is more risk tolerant and supportive of innovation. In addition, the rise in non-performing loans following the crisis might constrain future bank lending until new capital can be raised, increasing the importance of local capital markets for private sector funding.

Local capital markets in developing countries have grown in recent years, but most remain underdeveloped. In developing countries, market capitalization of listed companies roughly doubled between 2009–2019 to reach almost $25 trillion,[60] with debt issued by corporations reaching $13.7 trillion in 2018.[61] However, growth has been concentrated in a handful of countries. Excluding China, only about 11 per cent of global equity and debt issuances were by companies located in developing countries in 2019.[62] Issuances in developing countries remain dominated by sovereigns and state-owned companies.[63] In most of those countries, only a limited number of companies have used capital markets to fund themselves.

Enabling conditions are critical to sustained capital market development. Past efforts at capital market deepening have not always been met with success. Figure III.B.5 shows that capital markets in most developing countries have remained underdeveloped in terms of size, liquidity and maturity. The divergence in outcomes across countries is usually due to different enabling environments. The preconditions for capital market development include (a) a stable political and macroeconomic environment; (b) a certain level of complexity in the country's financial system; (c) a robust legal framework able to enforce financial contracts; and (d) an independent regulator that ensures fairness and transparency.[64] In fact, an entire ecosystem needs to be developed (figure III.B.6). Provided that countries work on improving their preconditions and significant commitment is in place, multilateral development banks and development partners can play a role in capital market development through policy advice and technical support, and, depending on country conditions, by participating in catalytic transactions.[65] One such programme is the Joint Capital Markets Program (J-CAP), implemented by the World Bank Group in select countries, which brings together policy support and transactions in a manner wherein one reinforces the other. Regarding the type of markets to develop first, there is no rigid sequencing. But while capital market development varies by country, debt markets tend to develop first with the emergence of government bond markets, which also build a yield curve. Corporate debt markets can then follow, with long-term debt especially important to finance the long-term investment needed for the SDGs.

Liquidity remains a stumbling block for capital markets in developing countries. Without a sufficient supply of securities and/or demand from investors, capital market growth is restrained by lowliquidity. This cycle of low liquidity is difficult to break. Pension funds are an

Figure III.B.5
Financial Markets (FM) Development Index
(Financial Markets score)



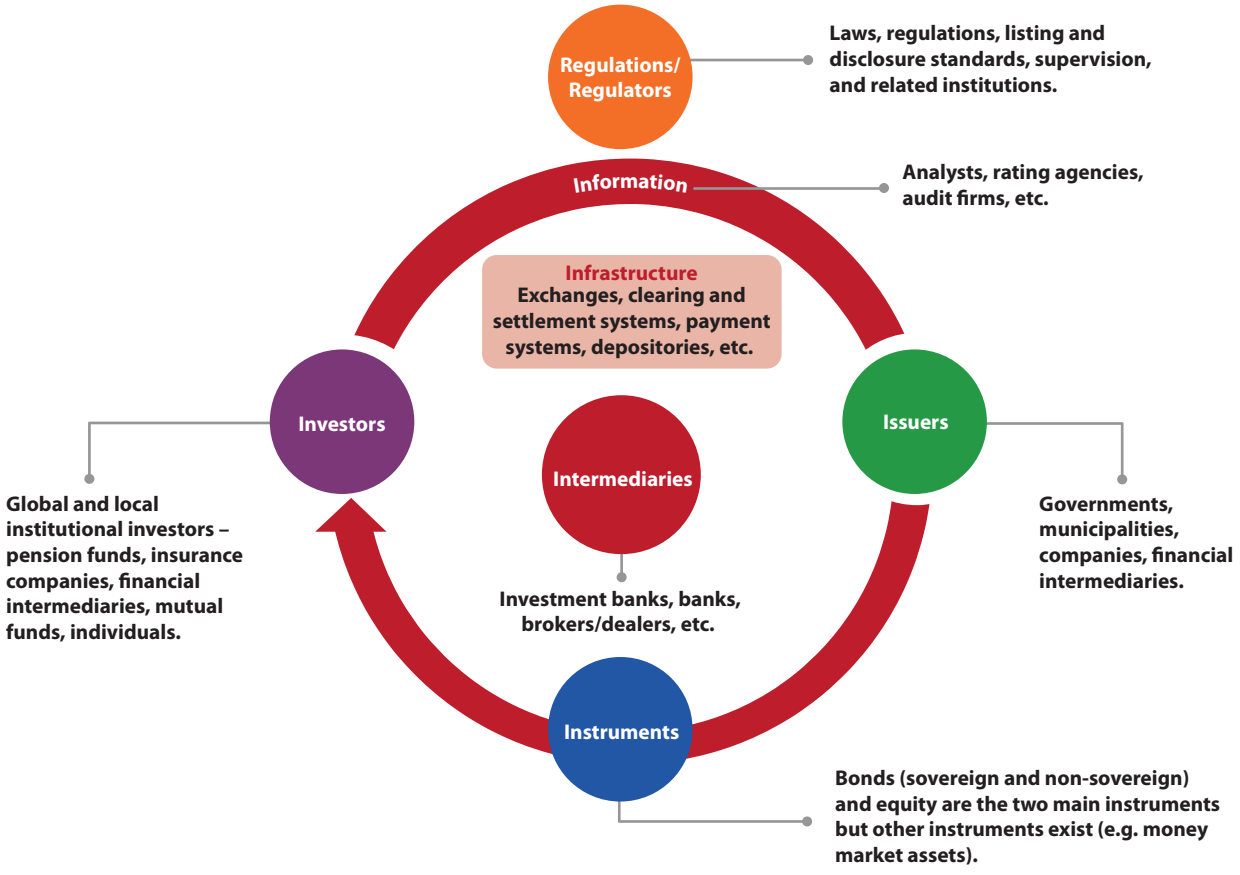
Source: IMF Financial Development Index Database

important source of capital market demand, yet they are undercapitalized in developing countries. Pension assets in developing countries totaled less than 20 per cent of GDP, versus 92 per cent in Organization for Economic Cooperation and Development (OECD) countries, in 2019.[66] In turn, this low demand reduces the supply of securities as potential listers and issuers elect to pursue other financing options, such as offshore listings and non-market financing. Ultimately, the result of this low liquidity results in a higher domestic interest rate due to the "liquidity premium," and higher volatility when investors risk appetite changes suddenly.[67]

Governments, as well as development finance institutions, can support capital market development by incentivizing both the supply of and demand for securities, especially long duration debt instruments. Public development banks can act as catalysts, by prioritizing the issuance of debt securities on domestic capital markets to meet local currency needs. In terms of equity markets, dual listings—that is, when a company lists or issues a security on two stock exchanges—can boost the supply of securities in some cases, although it does risk creating limited liquidity on the smaller exchange. In one case, a developed- and developing-country stock exchange have committed to cross-listing green bonds.[68] Measures to promote the growth of pension assets also boost the demand for securities. For example, Turkey's 37 per cent increase in its pension assets in 2019 can be attributed to its adoption of automatic enrollment. Countries with large informal sectors (who are otherwise excluded from pension initiatives) can trial micro-pensions for informal workers.[69]

Capital market integration has the potential to increase both supply and demand and has often been recommended for small markets, but progress has been lack-lustre. Over the last decade, several regional initiatives were launched to integrate regional stock exchanges. In Africa, a project has been under way to connect exchanges across the continent,[70] while another initiative is nearing completion in East Africa.[71] In Latin America, integration has been more successful and dates back to 2010. The limited scope of the existing integration (e.g., only four exchanges in Latin America) and delays in realizing integration speak to the operational difficulties of integration. Integration requires a common institutional and rule-based infrastructure. Market infrastructure must be integrated, for instance, through a technology platform that connects brokers across exchanges and a central securities depository. Financial laws and regulation (including rules on taxes and tariffs) must be harmonized to a certain degree. Given this difficulty, policymakers can explore alternative means of increasing liquidity in the medium term. Thiscould include the creation of an exchange-traded fund composed of local currency bonds.[72] Such funds can appeal to a wider investor base and bring liquidity to the market without full integration.

Figure III.B.6
Capital Markets Ecosystem



Source: World Bank, Capital Markets Development: A Primer for Policymakers, (2020).

5. Making private business and financial markets sustainable

5.1 Increasing long-termism

Short-term investment horizons contribute to market volatility and shape corporate behavior. A sustainable economy requires investment in people, innovation and physical capital. But these investments need time to come to fruition. If investors are too focused on short-term performance, companies might be reluctant to make the required long-term commitments, even if these are critical for future value creation. Rather, they may seek to improve quarterly financial performance to please investors through means with more immediate impacts, such as cost-cutting. In a recent FCLT Global survey, 70 per cent of company executives said their companies would take actions that do not enhance long-term growth just to meet short-term financial goals.[73] This short-termism goes against the interest of most savers (and thus of most shareholders), who have an estimated investment horizon of thirteen years on average because, for instance, they are saving for retirement.[74]

The prevailing focus on short-term financial returns for shareholders meant that companies entered the crisis ill-prepared and vulnerable to adverse demand shocks, such as those created by COVID-19. Over the past decade, many firms used over 90 per cent of profits to buy back shares, pay dividends and boost return ratios for shareholders. In 2019, companies in the S&P 500 bought an estimated $729 billion of their own stock. [75] As a result, some of these companies didn't build reserves or invest in their own future. Concerns are especially pronounced when buy-backs are financed by adding leverage to corporate balance sheets, as has been the case in recent years, with up to 50 per cent of buy-backs financed by corporate bonds.[76]

Policymakers have a range of options to disincentivize non-productive investments in favour of investment with positive sustainable development impact. For instance, tax codes could be adapted to reduce the advantage that stock buy-backs (taxed as capital gains) hold over dividends (taxed as ordinary income) in many jurisdictions. Financial regulators could also consider discouraging excessive debt leverage linked to non-productive investments by reviewing capital requirements for loans associated with non-productive investments. The feasibility of these options should be further examined.

Changes in corporate governance are needed to address short-termism. To this end, companies can take the following actions:

- Make public commitments towards long-term objectives linked to all their stakeholders, such as commitments to net-zero emissions, biodiversity conversation, waste reduction, decent work and gender equality. About 1,400 companies have joined the United Nations Race to Zero campaign and should issue a plan to make their business compatible with a net-zero economy;[77]
- Adopt internal carbon pricing to prepare themselves for a low-carbon transition. In 2019, at least 1,600 companies currently use internal carbon pricing or anticipate doing so within two years;[78]
- Ensure that long-term issues, such as environmental and social impacts, are discussed at the board level, and request management to produce sustainability-related strategies with internal responsibilities for implementation;[79]
- Revise compensation packages to link them not only to financial but also to social and environmental targets, and structure them over longer time horizons. This must start with CEOs and be mainstreamed throughout organizations to create a change in corporate culture. Yet, only 9 per cent of the 2,684 companies in the FTSE All World companies link executive pay to environmental, social and governance (ESG) criteria.[80]

Box III.B.1
Credit rating agencies and sustainable development

Credit rating agencies only assess the material impact of sustainability risks on the creditworthiness of an issuer, unlike some environmental, social and governance (ESG) raters, which also aim to assess a company's impact on sustainability issues. Yet, credit rating agencies have inconsistently and partially incorporated sustainability risks into their ratings. This is problematic as the majority of evidence confirms that more sustainable companies have a lower rate of default.[81] Not integrating sustainability can thus lead to the over or underestimation of creditworthiness, as illustrated by Pacific Gas & Electric that declared bankruptcy after being held liable for billions in damages for its role in California wildfires.[82] There are reasons to believe this is changing. Two of the "big three" credit rating agencies have acquired independent sustainability rating providers in recent years: S&P Global purchased RobecoSAM's ESG rating division in 2019, following the acquisition of Trucost, a sustainability rating and risk provider, three years prior.[83] Moody's acquired a majority stake in Vigeo-Eiris, a provider of ESG data and research, in April 2019 and purchased a climate risk start-up later that year.[84] This horizontal market consolidation can, over time, reduce institutional barriers to the integration of sustainability risks into credit ratings. According to Moody's, 36 per cent of its rating adjustments of issuers in emerging markets were informed by sustainability risks—a higher rate than in developed markets.[85] Since many of these adjustments recognize previously unrecognized sustainability risks, on average it could be expected to lower the credit ratings of developing-country borrowers and thus increase their already high cost of financing. For instance, S&P Global reported lowering its forward outlook of a small island developing State (Turks and Caicos) because of increased hurricane risks.[86] Given these implications, it is important that credit rating agencies increase both the transparency of their evolving methodologies and the integration of ESG risks (for instance, through scenario analysis to account for uncertainties and long-term risks).[87] If voluntary compliance with these requests is not sufficient, policymakers could consider instituting mandatory transparency requirements.

Source: UN DESA

But changing incentives along the investment chain will ultimately be necessary to lengthen business horizons. Asset managers need to lengthen their investment horizons in line with the longer-time horizon of their clients, the asset owners. The mandate given to asset managers may not properly align incentives with a long-term investment horizon. This could result from a fee structure that rewards short-term performance, or because asset managers are assessed against short-term benchmarks. To address this issue, the Global Investors for Sustainable Development (GISD) Alliance is working on a new "model mandate" that would seek to define the relationships between asset owners, asset managers and investee corporations with a view to advancing a long-term sustainable perspective. Additional mechanisms that can support lengthening investment horizons include long-term indices and credit ratings that further incorporate sustainability-related risks (see box III.B.1).

5.2 Reporting to make the private sector accountable

The transformation of the private sector cannot be achieved without more transparency on the impact of companies on the SDGs. In 2019, 90 per cent of S&P 500 companies published a sustainability report compared to only 20 per cent in 2011.[88] Yet, despite the increasing number of sustainability reports issued by companies, it remains challenging for investors and consumers to understand the environmental and social footprint of companies. Information published is often not comparable across companies or time, and tends to focus on qualitative indicators rather than on quantitative data. Companies select the issues they choose to communicate, as sustainability reporting remains largely voluntary. This creates incomplete and even misleading information. Furthermore, sustainability risk disclosures are currently published across several sections of annual reports, including both audited and unaudited sections. The lack of independent assurance of sustainability reports and information reduces their reliability.

Confusion still prevails over the framework companies should follow to provide sustainability-related information. Companies currently face fragmented reporting frameworks (figure III.B.7). Companies also provide sustainability information by responding to surveys and questionnaires, including from investors, data aggregators, indices, and ratings agencies. Large companies may receive more than 100 such queries each year. The same sustainability issue can thus be measured in many ways and reported through multiple channels depending on the framework selected and the specific questionnaire. This creates unnecessary complexity and reporting burdens for companies.

Defining the scope of sustainability reporting is as important as ensuring its harmonization. The more restrictive view is that companies should only disclose information on sustainability risks that are likely to impact their business performance (i.e., what is financially material). This level of disclosure helps financial institutions and investors in decision-making. A more comprehensive view includes disclosure of information on the external impact of company activities on environmental and social issues (what is environmental and socially material). This level of disclosure would provide meaningful information not just to those financing them, such as shareholders, but also to those they impact through their activities, including customers, employees and local communities. For example, on climate change, considering a narrow or wide reporting scope implies reporting on completely different metrics (see box III.B.2). Providing a comprehensive picture of carbon emissions might not be financially important for all businesses at this stage, but could become financially material in the future if regulations change (see the concept of dynamic materiality from figure III.B.7)

Organizations providing different reporting frameworks must consolidate their work into a single, coherent global set of reporting standards. There is already enormous traction in this area. Corporate executives and investors alike have called for reducing the number of sustainability reporting standards.[89] The standard-setting bodies recently announced their intent to work together to address the cacophony of metrics and standards.[90] This welcome development, facilitated by the Impact Management Project, needs to be encouraged by regulators. At the same time, the International Financial Reporting Standards (IFRS) foundation launched a consultation on the establishment of a dedicated Sustainability Standards Board within its institutional and governance structure.[91] Since IFRS standards enjoy worldwide recognition in financial reporting, this could constitute a breakthrough, if the IFRS foundation manages to properly integrate existing frameworks and does not curtail the scope of sustainability reporting to only those that are financially material.

The necessary harmonization of company sustainability reporting requires leadership from policymakers. Security commissions and country regulators specify the use of reporting frameworks, building on global norms. For instance, IFRS became the financial accounting standards used in more than 140 jurisdictions because they were adopted by national regulators. Stock exchanges also have a considerable influence on company disclosure. Out of 102 stock exchanges tracked by the Sustainable Stock Exchange (SSE) initiative, 24 already have mandatory ESG listing requirements (versus 8 in 2016).[92] To define the scope of sustainability reporting, mechanisms at the national level are needed in order to coordinate stakeholders, including investors and ministries (e.g., environment, planning and finance), and organizations (e.g., associations of accountants and auditors) that have an interest in corporate reporting.

International cooperation is fundamental to developing the basis of a globally coherent solution and avoiding various standards for companies and capital market fragmentation. Governments could use the United Nations intergovernmental platforms for this purpose. Without international collaboration, companies may be required to follow several (possibly incoherent) sustainability reporting frameworks, depending on where they operate and where they are listed. Different initiatives have been launched to facilitate coordination across jurisdictions. The International Organization of Securities Commissions (IOSCO) decided in 2020 to establish a Sustainable Finance Task Force to improve sustainability-related disclosures made by issuers and asset managers.[93] The International Platform on Sustainable Finance, launced in 2019, also aims to facilitate multilateral dialogue and now has 17 members representing 50 per cent of world population. These and other coordination efforts could be further brought together and advanced by leveraging the United Nations intergovernmental platforms, particularly the Financing for Development process, United Nations Conference on Trade and Development (UNCTAD)-International Standards of Accounting and Reporting (ISAR) sessions focusing on corporate reporting issues, and the Twenty-sixth United Nations Climate Change Conference (COP26). As

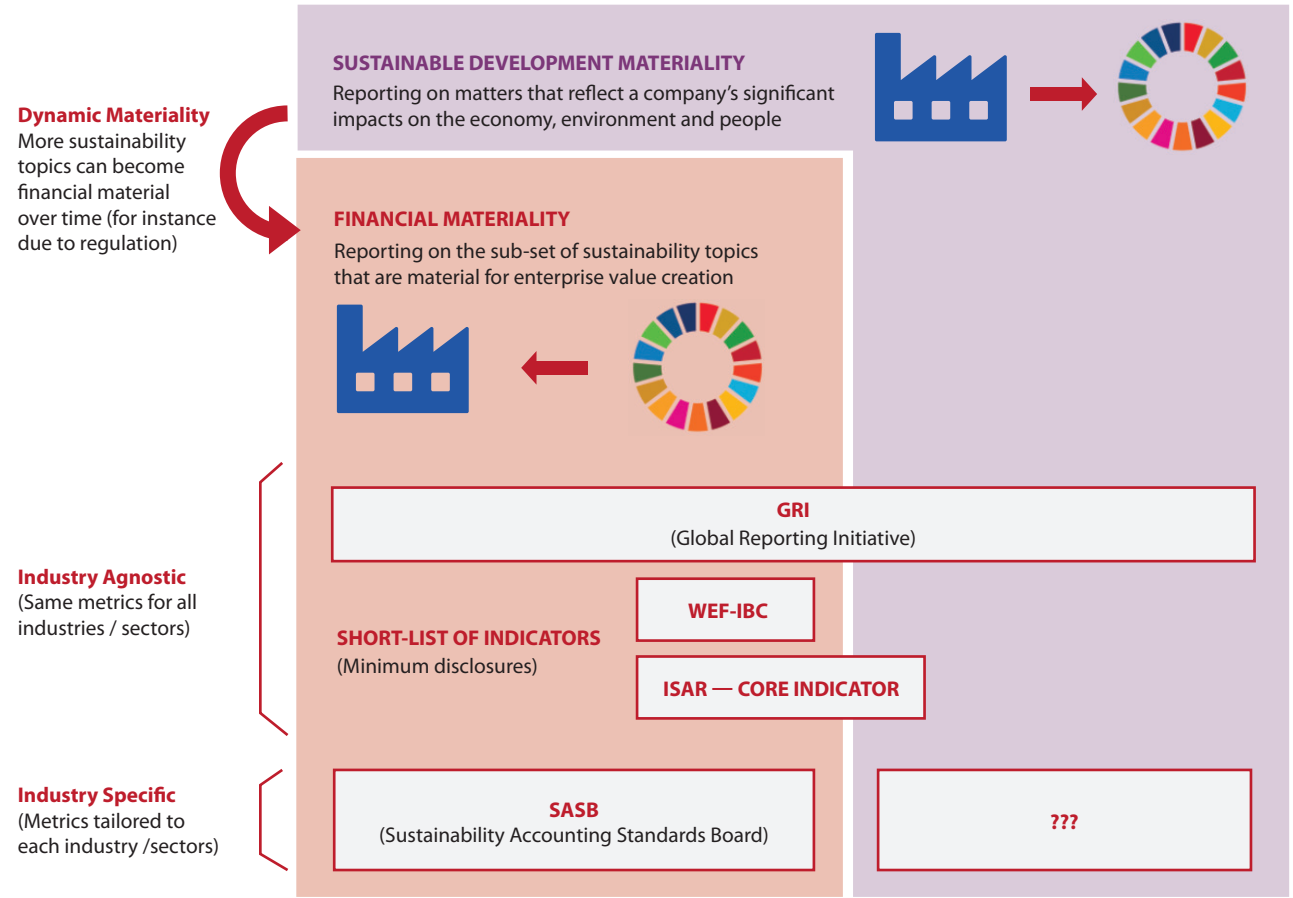
guardian of the SDGs, the United Nations system is well placed to support the development of social and environmental metrics for corporates that are linked to the global Goals.

To promote global harmonization and increased transparency, policymakers could make it mandatory for large companies, both listed and unlisted, to report on a core set of general (or industry-agnostic) metrics. To this end, they could build on the two lists of core metrics developed, respectively, by the UNCTAD-ISAR intergovernmental working group of experts (33 metrics) and by the World Economic Forum International Business Council (WEF-IBC) (21 core metrics and 34 expanded metrics).[94] It would help if these initiatives, representing the public and private sector respectively, could work together towards aligning their metrics on core indicators, as well as with standard-setting bodies, to converge on a globally harmonized list of core metrics. This list could then be implemented at the national level by appropriate regulatory bodies as a minimum level of corporate disclosure. On the issue of climate change, there are also calls to make reporting in line with recommendations from the FSB Task Force on Climate-related Financial Disclosures (TCFD) mandatory, as recently announced by New Zealand and the United Kingdom of Great Britain and Northern Ireland.

There is widespread support in the private sector for mandatory, legally binding sustainability disclosures. Without mandatory requirements, disclosure will remain partial and non-harmonized. Whereas in the past business leaders preferred voluntary disclosure, that view has shifted due to the proliferation of reporting standards and the increasing focus and importance of sustainability issues since the adoption of the SDGs. A survey conducted with corporate executives and investorsindicated strong support for mandatory sustainability reporting for companies; 82 per cent of investors and 66 per cent of executives agree with this.[95]

Harmonized, industry-specific impact metrics can provide a complete picture of a company's sustainable development impact. Existing reporting frameworks focus on measuring the impact of company operations (how they produce). Assessing company contributions

Figure III.B.7
Scope of reporting frameworks



Source: UN DESA based on the "Statement of Intent to Work Together Towards Comprehensive Corporate Reporting, CDP, CDSB, GRI, IIRC and SASB, September 2020" – more information on reporting frameworks are available on the Navigator (https://gisdalliance.org/navigator).
Note: Regarding climate change, the TCFD provides a framework to help companies disclose climate-related risks and opportunities but does not provide standards for defining metrics/targets. These standards are provided by other organizations such as the GHG protocol and the Science Based Targets initiative (SBTi), which respectively provides a methodology to measure emissions and one to set reduction targets.

to the SDGs also requires accounting for the impact of products and services (what they produce). For example, an information technology company may provide information on its energy consumption but not on the number of people granted Internet access for the first time. This information is inherently specific to an industry and is not captured by general sector-agnostic metrics. Therefore, it would be useful to identify a list of industry-specific reporting metrics, and integrate these into existing reporting frameworks. This list could benefit from the increasing willingness of companies to use the SDGs as a benchmark for impact. Out of 150 sustainability reports reviewed, 20 per cent aligned key performance indicators (KPIs) with the SDGs in 2020, while only 6 per cent did so in 2019.[96] The GISD Alliance has initiated work to address this gap.

Sustainability-related information mostly remains hidden behind paywalls and is not in the public domain; policymakers could change this. A great deal of sustainability data is collected by private companies, through company questionnaires or by using technology powered by artificial intelligence (AI) to search thousands of public sources for real-time information on companies (e.g., the OECD plans to use AI technology to assess private companies' alignment with the United Nations Global Compact principles and the OECD/UNDP Framework for SDG-Aligned finance). An open repository for company sustainability data

would create more transparency and help consumers and investors make purchasing and financing decisions. The World Benchmarking Alliance aims at providing this transparency by developing freely accessible benchmarks that will compare the performance on the SDGs of 2,000 influential companies. Policymakers could support this push for transparency by making corporate filings easily accessible to the public.

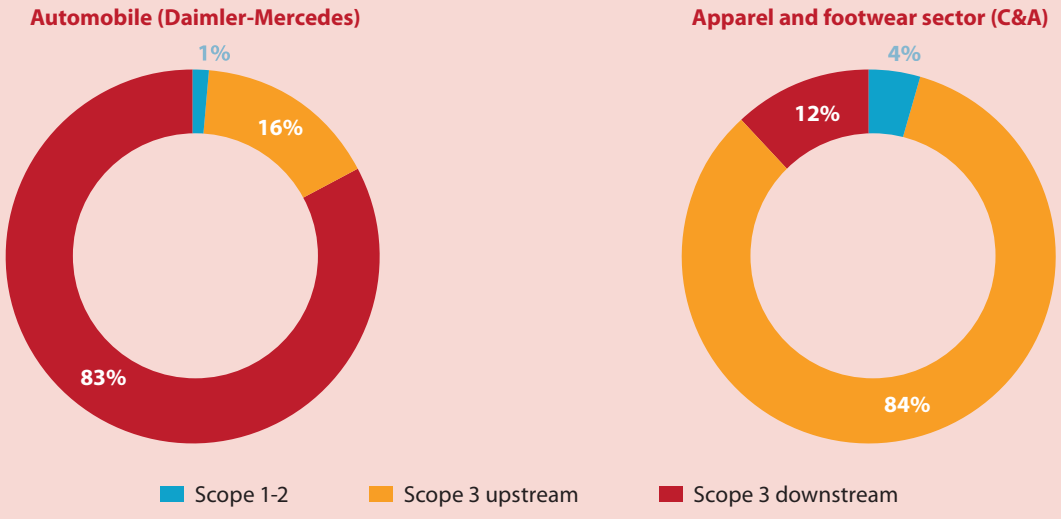
Box III.B.2
Why do we need to move beyond Scope 1 and Scope 2 GHG emissions disclosures?

The focus of company carbon disclosure has so far been on

- Scope 1 emissions, which are direct emissions from sources controlled by a company, such as emissions from combustion in owned vehicles or emissions from chemical production; and
- Scope 2 emissions, which are the emissions linked to the electricity purchased by a company.

However, carbon emissions for many sectors come from indirect emissions (Scope 3), such as those from suppliers (Scope 3 Upstream) or those related to the products that a company produces (Scope 3 Downstream). Figure III.B.8 demonstrates the importance of Scope 3 emissions for two selected industries. For automobiles, most carbon emissions result from downstream activities, which capture the emissions from the cars sold. For the apparel and footwear sector, the opposite holds true. Most emissions come from upstream activities, which represents the emissions in the supply chain. Among the 69 industries reviewed, Scope 1 and Scope 2 combined account for most of company emissions for only 8 industries (including airlines, utilities and construction materials). For 38 of them, Scope 3 accounts for more than 80 per cent of GHG emissions.[98] Yet, disclosure has been poor so far and most data comes from estimation models. As of March 2020, only 18 per cent of the 8,982 companies that make up a large market index had reported Scope 3 emissions.[99] While measuring Scope 3 emissions is a complex endeavour, it is essential to understanding the carbon footprint of many companies.

Figure III.B.2.1
Scope 1-2-3 emission for selected sectors
(Percentage)



Source: UN DESA based on Daimler Sustainability Report 2019 and C&A Global Sustainability Report 2018.

To mitigate regulatory burden, disclosure requirements should be proportional to company size and sophistication. Large multinational companies have deep social and environment footprints, as well as the resources to assess and disclose the impact of their operations, products, and services. Imposing the same standard on small and medium-sized enterprises (SMEs), and most companies in developing countries, would not be proportional to their footprint and means. Such companies could be subject to a "disclose-or-explain" standard, similar to the "comply-or-explain" standard used in regulation: they can choose to disclose their impact or justify why they did not. The annual reporting requirements for signatories of the United Nations Global Compact present another complementary approach, where multinationals are subject to a broader array of questions while SMEs have the option to respond to a condensed version of the questionnaire. For all companies, a transitional period during which they are excluded from legal liabilities arising from the collection and disclosure of new data categories should be considered, until they become familiar with new methods. Strengthening the infrastructure for corporate reporting may also be necessary in countries lagging behind in this area, and countries could consider using existing tools developed for this purpose, such as the UNCTAD Accounting Development Tool.[97]

5.3 Embedding sustainability in lending practices

Financial institutions' interest in integrating sustainability issues into their lending practices has been driven by the need to obtain a comprehensive picture of the risks they are taking. Climate change has been a catalyst for financial institutions to integrate sustainability-related risks into their risk management system. For example, loans to coal power plants may suffer write-offs from stricter carbon emission standards or higher carbon prices (referred to as transition risks). Similarly, extreme weather events can affect mortgage loan values and lead to defaults (referred to as physical risks) (see chapter III.F). TCFD published recommendations for voluntary climate-related financial disclosures in 2017. The uptake since then has been considerable, with financial institutions responsible for assets of $150 trillion expressing support for TCFD.[100] Yet, among 236 banks reviewed in 2019, less than a quarter disclosed climate-related metrics and targets.[101] Company credit risks, particularly for loans with longer maturities, can also be influenced by sustainability issues broader than climate change, such as unsustainable labour practices. Banks need to adapt their risk assessment models accordingly, and international organizations could develop tools to help lenders include these risks in their decision-making processes.

The need to manage sustainability risks, combined with calls from stakeholders and society, has pushed banks to voluntarily commit to sustainability targets. These commitments have been publicized through initiatives such as the Principles for Responsible Banking, which 200 banks have now joined, representing one third of the global banking industry. The United Nations Environment Programme Financial Initiative (UNEP FI) has developed a tool for banks to analyse the impact associated with their retail and wholesale loan portfolios on core elements of the SDGs.[102] In 2020, a group of 26 financial institutions also signed on to a Finance for Biodiversity pledge, wherein they committed, by 2024 at the latest, to engage on this topic with companies they finance, assess their own impact, and set targets.[103] An informal working group is also developing a workplan for a Taskforce on Nature-related Financial Disclosures, modelled after the TCFD approach. Regarding climate change, major banks have made pledges to reach net-zero financed emissions by 2050. To meet this pledge, banks will need to measure emissions associated with their loan portfolios, encourage clients' own reduction efforts, and offset the remaining emissions (see box III.B.3).

Methodologies for assessing the carbon emissions of bank portfolios are still evolving; reaching consensus on these is critical to ensuring that climate commitments by banks are meaningful. Banks are trying to assess the level of their financed emissions (i.e., the GHG emissions associated with their loans and investments). This is a complex endeavour; for instance, many small client companies do not disclose emissions, making it harder for banks to aggregate the data. To create a more standardized approach, the Partnership for Carbon Accounting Financials (PCAF) launched its first accounting and reporting standards for the financial industry in November 2020. Guidance has also been issued to help the financial sector set science-based targets.[104]

Banks can also positively contribute to society's goals by financing activities with positive impact, such as through green loans and sustainability-linked loans. A sustainability-linked loan ties the interest rate to the sustainability rating of the borrower. While modest, such lending has grown in importance, reaching $120 billion in 2020.[105] The advantage for banks to provide green or sustainability-linked loans—beyond, arguably, the lower risk of such lending—is that they help the bank prepare for potential policy changes, such as lower capital charges for sustainable lending or tax incentives aimed at encouraging sustainable lending in the future. Industry standards have been established to better define and create a shared understanding of these instruments in the market, including Green Loan Principles and Sustainability-Linked Principles in 2018 and 2019, respectively. Such a standardized approach could facilitate future intervention by regulators.

5.4 Promoting sustainable investment

The COVID-19 crisis has bolstered investor interest in sustainable finance by highlighting risks posed by non-financial factors. ESG funds performed better during the financial market turmoil than comparable non-ESG funds and experienced record inflows in 2020.[111] On the debt market, alongside green bonds, issuance of social bonds increased 7 times between 2019 and 2020 (to about $150 billion), mainly to fund relief packages by government agencies and development banks. Meanwhile, green bonds continued to increase, reaching more than $300 billion in 2020 (compared to $271 billion in 2019).[112]

Investors interest in sustainable finance has been driven by the conviction that companies need to manage sustainability-related risks and opportunities to create long-term value. This conviction has been backed by several studies (see FSDR 2019) and its rationale is explained in section 2 above. For investors, it starts with a question of risk management. For instance, some investors have started to stress-test their portfolios against higher carbon prices. A Swedish pension fund estimated that its equity portfolio could lose up to 48 per cent of its value as a result.[113]

Box III.B.3
Net-zero emission pledges and voluntary offset markets

The purpose of voluntary carbon markets is to allow companies and individuals to purchase carbon credits through independent mechanisms if they wish to offset carbon emissions to achieve their own climate targets. These markets differ from compliance markets, such as the EU Emission Trading Systems (ETS) and China ETS. Compliance markets are linked to mandatory reduction regimes that typically do not accept voluntary offset market credits for compliance purposes.

Voluntary carbon credits have had mixed success and remain relatively small (voluntary offset transaction values reached $320 million in 2019).[106] However, the demand for these credits could increase as more companies, including banks, make pledges to net-zero emissions. The demand for future carbon credits could also benefit from the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), whose pilot phase starts in 2021. It is estimated that a minimum of 2 gigatons of emissions will need to come from sequestration and removal to reach the 1.5° Celsius goal. This would require a fifteen-fold scaling up of voluntary offsetting in 2030 versus 2019.[107]

The supply of carbon credits will need to match an increase in demand. Carbon credits issuance can come from investing in carbon capture technology and nature-based solutions, which leverage forestry and land-based activities for carbon storage. Over the past five years there has been a large increase in the absolute amount and share of forestry credits, which makes up 42 per cent of the global total.[108] The World Bank is providing support to low-income countries to convert emissions reduction into carbon credits, in particular through the Carbon Initiative for Development (Ci-Dev) that mobilizes private finance for clean energy access projects. The World Bank has developed the Standardized Crediting Frameworks to simplify processes and lower transaction costs for national carbon crediting mechanisms, by learning from the Bank's experience with the clean development mechanism (CDM).

To scale up, voluntary markets need to be cost-effective and transparent, with credible carbon credits exchanged. Technology such as blockchain could help limit the risk of double counting and make carbon credits more easily tradable. Satellite imagery can also help monitor offsets and strengthen credibility, for example, by monitoring how many trees have been planted. Yet, the low price observed on voluntary markets raises concerns on whether cheap offsets may discourage a company's effort to cut emissions, which is the only way to address climate change (the average price in 2019 on voluntary markets was about $3 per ton of CO2).[109] Offsetting measures supplement but do not substitute the need to reduce value chain emissions in line with science. [110] In addition, it is important to put safeguards in place so that projects eligible for carbon credits do not harm local communities.

Source: UN DESA

However, institutional investors are increasingly unable to fully diversify away from climate and other complex systemic risks. Investors generally manage risk by diversifying across uncorrelated asset classes, so that when one set of assets underperform, another might outperform. However, the nature of climate change and other global systemic risks makes this strategy increasingly futile: these risks affect all asset classes and cannot be diversified away in the long term. While some smaller investors are able to rebalance their portfolio and/or divest entirely from exposed industries, institutional investors with universal investment mandates are unable to do so.[114] Investing only in companies aligned with a 1.5°C scenario would mean excluding around 90 per cent of listed companies (or 60 per cent for a 2.0° C scenario).[115]

Instead, large investors are building resilience into their portfolios. Because they cannot manage risks using traditional tools, institutional investors are compelled to increase the resilience of their portfolio to climate-related risks, for example, by working with investees to reduce their carbon intensity and leveraging their ownership position to influence company management.[116] Climate Action 100+, a group of over 500 institutional investors, engages with the world's 161 highest-emitting companies and demands them to publish strategies to reduce emissions.[117] Active ownership is an increasingly important tool, with investors privately engaging corporate managers on ESG matters as well as exerting public pressure through filing shareholder resolutions and (proxy) voting at annual meetings.

The growing investor interest in sustainability has led to the proliferation of sustainable investment funds and products, but their impact remains difficult to quantify. Some of these funds go beyond management of the sustainability-related risks discussed above to focus on achieving sustainable development impacts alongside financial returns. About $415 billion of assets are managed by private funds with the intent for sustainability impact.[118] To demonstrate that assets are being managed for impact in a disciplined and transparent way, these funds can adhere to common principles for impact management, including the Operating Principles for Impact Management and the United Nations Development Programme SDG Impact Standards. But impact funds, while growing, only represent a small subset of investment strategies that focus on profit maximization, while considering ESG factors. The impact of these broader investment strategies on sustainable development is often uncertain; this is compounded by the absence of agreed standards for labelling ESG funds or "sustainable development investment," which raises concerns about the robustness of selection criteria used to choose investments for inclusion in these funds. It is common for ESG funds to include companies whose impact on sustainable development is doubtful. These funds are also concentrated in developed markets, whereas the developmental impact is likely greater if these funds could have a stronger focus on companies active in developing countries (which may require blended financein some circumstances (see chapter III.C). In the same vein, green bonds have been a great

success in creating momentum around green investments, but it remains unclear to what extent they have changed the way issuers operate. A green bond label certifies that the activities financed are green, but does not guarantee the greenness of the firm issuing the bond. There is currently no strong evidence that green bond issuance is associated with reduction in carbon intensities over time at the firm level (i.e., in the issuer's overall activities).[119]

Policymakers can support sustainable development investing and increase its impact. Directing funds to companies and projects aligned with the SDGs requires providing investors with the appropriate tools:

- **First, there is a need to improve the quality and comparability of data/metrics on the impact of companies on social and environmental issues.** Without comparable data, investors cannot properly incorporate sustainability issues into their investment decisions and allocate capital to companies aligned with the SDGs. In addition to corporate reporting (see section 5.2), rating agencies could help inform market participants. However, sustainability is not fully incorporated into traditional credit ratings (see box III.B.1), and ESG rating providers often have different views on the same companies. ESG scores show a correlation of just 61 per cent among the leading ESG score providers; [120] and for some ESG rating providers, it has been found that high E scores positively correlate with high carbon emissions. This raises concerns about the suitability of current ESG scoring for helping investors align their portfolios with a low-carbon economy;[121]
- **Second, there is a need for a greater clarity on which economic activities positively contribute to sustainable development, for instance, through a globally harmonized taxonomy.** Different regulators have started developing taxonomies of activities with positive impacts to sustainable development, including Bangladesh, Canada, China, India, Malaysia, Mongolia, New Zealand, Singapore and the European Commission.[122] Developing taxonomies at the global level would help avoid investor confusion and financial markets segmentation. Also, the scope of existing taxonomies could be broadened to cover all the SDGs, as most of them currently focus exclusively on green activities. Development impact should also be considered, meaning that activities in countries with large SDG gaps should be favourably regarded when creating sustainable taxonomies or setting standards for sustainable financial products;
- **Third, there is a need to advance a common understanding of sustainable development investing to mitigate the risk of greenwashing or SDG washing.** Too many investment products and strategies claim to be sustainable without making a meaningful contribution to the SDGs. Without minimum standards or criteria, any investment can make such a claim and use sustainable development as branding. This can be misleading for investors and hurt the credibility of the industry. To address this issue, the GISD Alliance has developed a common definition of what constitutes sustainable development investing.[123] This definition could serve as an effective norm for the market if widely adopted by market participants and policymakers. The definition goes beyond broad principles and includes concrete steps for its operationalization in an investment portfolio centred around the SDGs. These steps build on the many initiatives under way to reinforce investment practices, as well as on existing sustainability-related standards and taxonomies (see box III.B.4);
- **Fourth, there is a need to strengthen over time the impact of sustainable debt products, such as green bonds.** For policymakers, as the green bond market matures, it is important to understand whether these bonds create additional positive outcomes and carbon reduction, or finance activities that would have been realized anyway. Complementing green bond labels with "green" ratings (e.g., attesting to a company's compatibility with a 2°C pathway) may be necessary to better align incentives and provide a complete picture to investors. Rather than focusing on the bond's use of proceeds, other approaches could also be promoted, such as sustainability-linked bonds where the issuer commits to improvements in overall firm performance against green or social metrics, or the labelling of bonds issued by companies aligned with the SDGs at the corporate level.

Policymakers can also encourage the demand for investment aligned with sustainable development.[124] For example, Governments could provide tax credits or regulatory relief for sources of financing directed towards sustainable investment. Central banks could also accept suitable sustainable debt instruments as collateral, and include these bonds in their asset purchase programmes.

Regulation could also enable individuals to express preferences on the way their money is spent. For retail investors, this would mean requiring investment advisors to ask their clients about their sustainability preferences along with other information they already request. For

Box III.B.4
Sustainable Development Investing (SDI) Navigator

The growing interest in sustainable finance has resulted in a multiplication of initiatives. To provide for the first time a structured overview, the Global Investors for Sustainable Development Alliance has developed the Navigator. This online tool makes it easier for market participants to operationalize the Sustainable Development Investing (SDI) definition, developed by the Alliance, by mapping about 70 existing principles, practice standards, and tools. Investors can find resources to help them deploy capital that makes a positive contribution to sustainable development. Finance institutions can locate resources to mainstream sustainable development objectives in their lending practices. Corporates, with the support of the investors and finance institutions, can build on existing work to reorient their business models towards the SDGs. This Navigator will hopefully help create synergies among these initiatives, avoid duplication, and lead to more coherent approaches.

Source: Global Investors for Sustainable Development. See https://gisdalliance.org/navigator.

institutional investors, this could mean adding a sustainability focus in the default pension plan or adding more sustainable options from which pension fund participants can choose. Employers may also be asked to conduct research on their employee views on these issues to better reflect the preferences of beneficiaries in pension plan investment strategies. A survey of pension fund participants in the Netherlands revealed that sustainable investments are commonly favoured by participants, even if they harm financial interests.[125]

Transforming businesses and financial markets should start with a fundamental rethink of firm-level reporting. The need to move beyond enterprise value to a more holistic understanding of a business's impact on people and the planet is necessary. Bringing corporate reporting in line with this reality has a multiplier effect, as the data provided in reports informs consumer purchases as well as lending and investment decisions. Ultimately, the reimagination of reporting forms the basis for a new partnership between business and society.

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International development cooperation



Chapter III.C

International development cooperation

1. Key messages and recommendations

International development cooperation is a crucial component of the COVID-19 response, especially in supporting efforts of the poorest and most vulnerable countries to respond to the pandemic and the resulting economic crisis. Development cooperation provides a vital countercyclical flow in times of crisis and can help fight poverty and prevent inequality from worsening within and between countries. At the same time, there is also fiscal pressure on donor budgets due to the pandemic. While some major donors increased their development cooperation budgets, others succumbed to domestic fiscal pressure and cut official development assistance (ODA).

- *ODA providers should scale up and meet their commitments of 0.7 per cent of ODA per gross national income (GNI). Grant finance rather than loans should be prioritized for vulnerable countries, such as least developed countries (LDCs) and small island developing States (SIDS), while the decline in ODA to health should be reversed;*
- *As an immediate priority, ODA providers should meet the financing gap of the Access to COVID-19 Tools Accelerator (ACT-accelerator) and rally behind the efficient and equitable distribution of vaccines for all countries.*

Multilateral development banks (MDBs) are playing an important role in supporting developing countries. There has been particularly strong support for LDCs, which has been achieved by front-loading concessional resources. The non-concessional lending windows of MDBs provide an important avenue for middle-income countries to access long-term finance at below-market rates. Such long-term finance is critical to rebuilding better and stimulating growth and development. However, financial capacity constraints are limiting MDB support for middle-income countries. Bolstering MDB financial capacity is critical for providing predictable countercyclical support at highly concessional terms needed in times of crisis.

- *Donors should: provide MDBs with additional funding to the existing concessional pool or advance scheduled replenishments—in particular, the successful twentieth replenishment of the International Development Association (IDA) will be critical to sustaining a high level of positive net flows to IDA eligible countries; and also replenish the capital of MDBs as needed;*
- *Official lenders should extend maturities of their lending and explore options to provide ultra-long-term (e.g., 50 years) financing to developing countries for investment in long-term growth and development. They should also consider offering more fixed-interest lending so countries can take advantage of ultra-low global interest rates.*

Innovative public finance instruments are already in use or are being considered for the COVID-19 response. For example, advanced market commitments (AMCs) are successfully supporting the equitable distribution of COVID-19 vaccines. Innovative finance, including blended finance, can be useful complements to traditional aid but are not panaceas.

- *Blended finance can play a role in areas that provide positive financial returns to repay the private partners, but that also support public goals. Partners should be careful not to divert grant finance from social needs for blending, based on country priorities;*
- *Bilateral and/or MDB official resources could be pooled into a blended finance fund;*
- *Donors should examine using below market rate non-concessional loans for blending, including equity-like components, to allow the public partner to share in possible financial returns.*

COVID-19 underscores the importance of incorporating risk analysis cohesively for more effective development cooperation. Despite having contingencies in place, there was a lack of coordination among partners in their responses,

and many were not prepared to respond to multiple crises, while being affected by the COVID-19 crisis.

- *Development cooperation actors should develop strategies and contingencies for better international crisis coordination and risk reduction. Country-owned integrated national financing frameworks (INFFs) can provide a basis to translate country priorities into concrete asks for development partners;*
- *All sources of international development cooperation should be firmly aligned with the Addis Ababa Action Agenda, 2030 Agenda for Sustainable Development, Paris Agreement and Sendai Framework, with a strong focus on supporting countries' efforts to reduce risk and build resilience.*

Political will is needed to scale up both climate finance and ODA to address the confluence of crises. The COVID-19 crisis has likely derailed the achievement of the $100 billion climate finance target in 2020. The pandemic has also highlighted the escalation of climate-related risks and the importance of better risk reduction and management. It has also brought to the fore the importance of financing global public goods.

- *Developed countries should scale up climate finance flows, with $100 billion per year as a floor;*
- *All providers should increase adaptation finance to equal mitigation finance, as well as prioritize grant finance for LDCs and SIDS;*
- *More work is needed to understand how to best capture financing global public goods in the sustainable development finance landscape.*

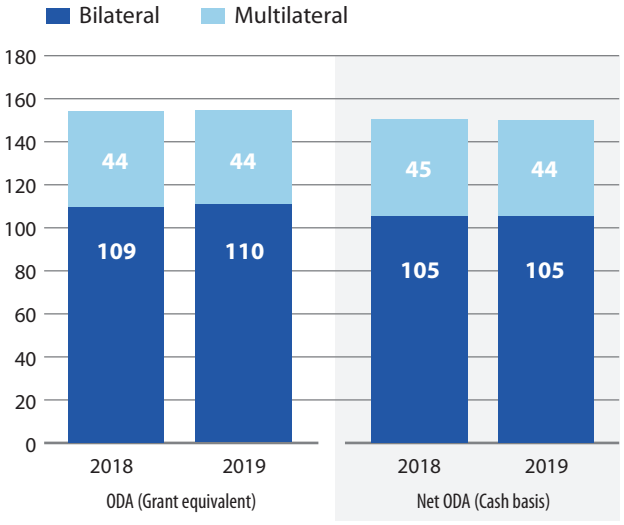
This chapter starts by outlining the international development cooperation response to COVID-19. It lays out trends in ODA and lending by multilateral providers, as well as in South-South cooperation, followed by an examination of the quality, effectiveness and impact of development cooperation. It then provides a deeper analysis on the international financial support for health and concludes with a discussion on climate finance and disaster risk reduction finance. The chapter also builds on the work of the discussion groups on external finance, remittances, jobs and inclusive growth, and recovering better for sustainability, established after the initial High-Level Event on Financing for Development in the Era of COVID-19 and Beyond (see chapter II).

2. International development cooperation and COVID-19

2.1 Official development assistance

Prior to the outbreak of the COVID-19 pandemic, ODA increased in 2019 according to the new "grant-equivalent" methodology but declined as measured by the previous "cash-flow basis" methodology. ODA increased by 0.7 per cent in 2019, to $155 billion in real terms, as calculated by the grant-equivalent measure (box III.C.1), while falling slightly as a share of donor country gross national income (GNI), from 0.31 to 0.30 per cent on average.[1] However, on a cash flow basis, 2019 net ODA declined by 0.5 per cent to $149 billion (figure III.C.1)—the difference likely due to higher-than-market discount rates used in the grant-equivalent methodology.[2] Debt relief by the new measure is also $43 million higher, based on new rules for debt relief (box III.C.1). At a time when the COVID-19 pandemic is underlining the importance of being able to reliably track ODA to ensure that support is reaching those most in need, it is important that both cash flow and grant equivalent methodologies continue to be reported to ensure transparency and comparability of ODA volumes. Issues over the modernization of ODA (box III.C.1) should be resolved in a transparent and inclusive manner to uphold the integrity and credibility of ODA statistics, which is central to the development finance landscape.

Figure III.C.1
Official development assistance, 2018–2019
(Billions of United States dollars, 2018 constant prices)



Source: OECD Creditor Reporting System database.

The impact of the COVID-19 crisis on ODA outcomes for 2020 is uncertain. The Organization for Economic Cooperation and Development (OECD) outlined three possible scenarios for 2020 ODA trends.[3] First, both ODA volumes and share of GNI may have increased. Indeed, some major donors, such as Germany and France, increased their aid budgets[4] despite domestic fiscal pressures. Second, donors may have maintained the same ODA levels as 2019, where ODA as a share of GNI would likely improve due to the fall in GNI in donor countries. This may be the case for the United States of America, the largest donor, given that their international affairs budget was largely unchanged.[5] Third, donors may have succumbed to domestic fiscal pressure, which could result in an estimated decline of $11 billion to $14 billion in net ODA. In this case, the share of ODA to GNI would decline if the fall in ODA is more than the decline in GNI, and vice versa. For example, the United Kingdom of Great Britain and Northern Ireland cut its 2020 aid budget but will still meet its commitment to the 0.7 per cent target. However, the United Kingdom announced that it would target ODA of 0.5 per cent of GNI in 2021.[6] Real-time ODA data published to the International Aid Transparency Initiative (IATI) Standard,[7] a rough proxy for ODA, indicates that bilateral disbursements for January–November 2020 declined slightly over the comparable period in 2019.[8] However, IATI data does not account for debt relief nor does it comprehensively capture ODA disbursements from all donors. Thus, there is still uncertainty on the likely outcome.

Box III.C.1
Official development assistance modernization

In 2012, the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee (DAC) began a process to modernize the way official development assistance (ODA) is measured and reported. The process aimed to amend reporting rules for ODA loans, debt relief, and in-donor refugee costs; in private sector instruments (PSIs); and in peace and security activities. All these changes, other than the treatment of PSIs, have now been agreed. [a]As a result, the 2018 and 2019 ODA figures include a mix of grant-equivalent data (for grants and sovereign loans) and cash-flow data (for PSIs).[b]

Under the grant-equivalent methodology, only the grant (or "gift") portion of a loan is reported as ODA, which is calculated using a system of differentiated discount rates that reflect the risk of lending to different country groupings (6 per cent for upper-middle-income countries; 7 per cent for lower-middle-income countries; and 9 per cent for LDCs and other low-income countries).[a] In addition, to incentivize lending on highly concessional terms to LDCs and other low-income countries, the rules also include thresholds for the grant element that can be reported as ODA (45 per cent for LDCs and other low-income countries; 15 per cent for lower-middle-income countries; and 10 per cent for upper-middle-income countries).[c]

PSIs are currently captured under the old cash flow methodology, where, in the case of loans, the full face value is counted as ODA if the grant element is at least 25 per cent, calculated using a discount rate of 10 per cent, with repayments subtracted when they are paid out. Equity investments must comply with the ODA definition (i.e., the primary purpose should be to support the economic development and welfare of developing countries). PSIs are recorded either (i) at the point of transfer of funds to a PSI vehicle, such as Development Finance Institutions and other PSI vehicles, which are counted at face value (institutional approach); or (ii) at the transaction/project level, between the PSI vehicle and private sector institution, where ODA-eligible loans and equities made to a private sector entity receiving the funding are counted on a cash-flow basis (instrument approach).[a]

In July 2020, the DAC agreed to count rescheduled or forgiven debt towards ODA,[d] despite their acknowledgement in 2014 that the grant-equivalent system "would value upfront the risk of default on ODA loans, [thus] the eventual forgiveness of these loans would no longer be reportable as a new aid effort."[e] While the change is meant to incentivize the forgiveness and rescheduling of debt in developing countries amid the COVID-19 crisis, it may risk double counting ODA. The method includes a ceiling to avoid a loan and subsequent debt relief generating greater ODA than a standard grant, but more work is needed to better understand the impact of the methodological changes on ODA.

Some concerns over the changes have been raised, spanning from the technical (such as the risk of double counting and overestimation), to the political (such as the creation of incentives for donors to favour loans rather than grants).[f] While similar concerns were also levelled on the previous cash-based methodology,[g] the COVID-19 crisis and the possibility of greater debt relief has brought these issues into sharper focus.

Source: UN DESA.

a OECD, "Modernisation of the DAC Statistical System," 2021.

b OECD, "Aid by DAC Members Increases in 2019 with More Aid to the Poorest Countries," April 16, 2020.

c OECD DAC, "DAC High Level Meeting, Final Communique," December 16, 2014.

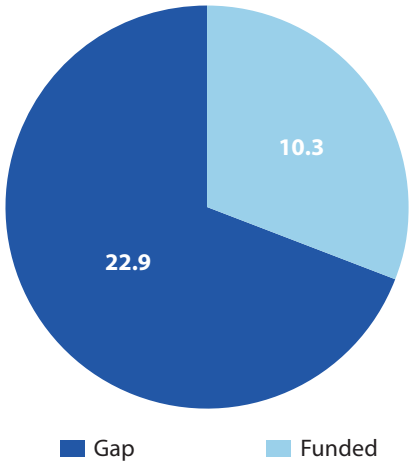
d OECD, "Donors Agree on Aid Treatment of Debt Relief - OECD," July 30, 2020.

e OECD DAC, "Background Paper: The Treatment of Loan Concessionality in DAC Statistics, DAC High Level Meeting, 15-16 December 2014, OECD Conference Centre, Paris," 2014.

f J. Brian Atwood, Richard Manning, and Hedwig Riegler, "Don't Undermine the Basic Architecture of OECD/DAC Statistics: A Letter of Warning," Future Development, Brookings, December 21, 2018; Simon Scott, "A Note on Current Problems with ODA as a Statistical Measure," Future Development, Brookings, September 26, 2019; Simon Scott, "The Ongoing Debate on the Reform of the Definition of Official Development Assistance," Future Development, Brookings, November 18, 2019; Anthony F. Pipa, "Statistics vs Political Relevance: Getting Official Development Assistance Right," Future Development, Brookings, November 18, 2019. "Joint CSO Letter on Accounting Rules for Debt Relief as ODA," May 14, 2020; Euan Ritchie, "New DAC Rules on Debt Relief – A Poor Measure of Donor Effort," *Center for Global Development Working Paper*, no. 553 (October 2020); Euan Ritchie, "Mismeasuring ODA - How Risky Actually Are Aid Loans?," CGD Notes, Center for Global Development, November 5, 2020; Andrew Rogerson and Euan Ritchie, "ODA in Turmoil: Why Aid Definitions and Targets Will Come Under Pressure in the Pandemic Age, and What Might Be Done About It," *Center for Global Development Policy Paper*, no. 198 (December 2020).

g Stéphanie Colin, "A Matter of High Interest - Assessing How Loans Are Reported as Development Aid" (Eurodad, 2014).

Figure III.C.2
ACT-accelerator funding gap as of February 2021
(Billions of United States dollars)



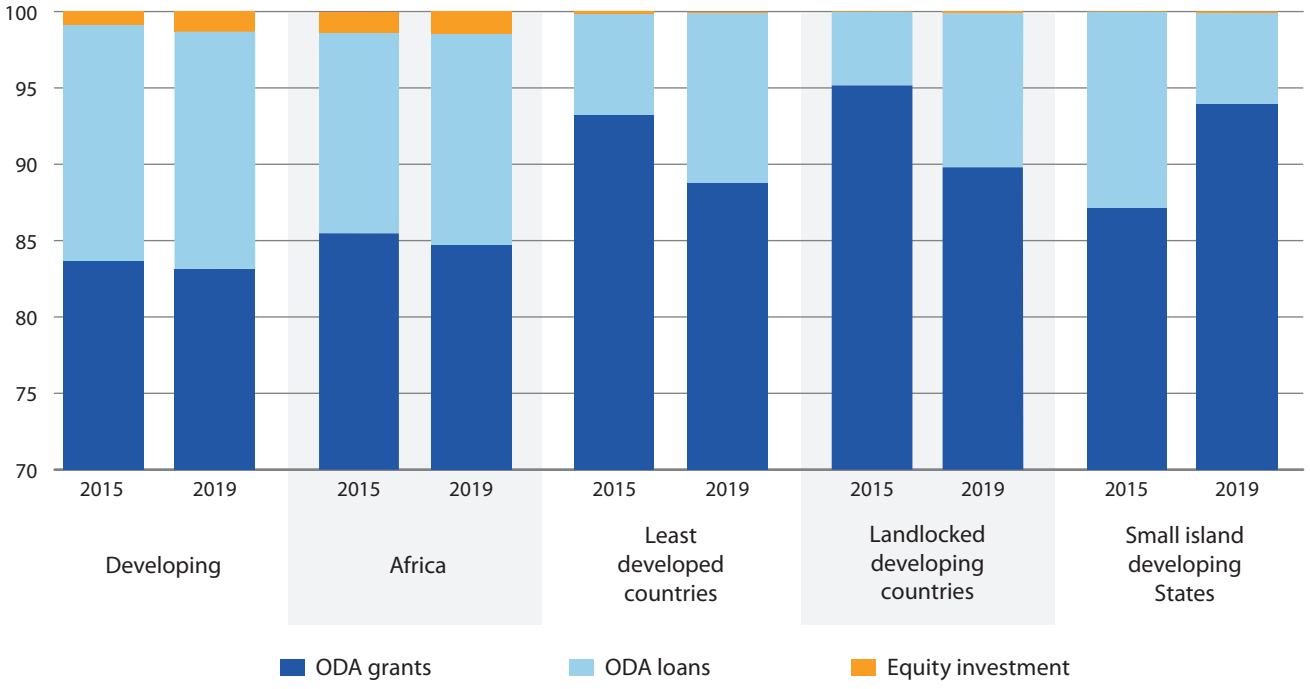
Source: WHO, "G7 Leaders Commit US$4.3 Billion to Finance Global Equitable Access to Tests, Treatments and Vaccines in 2021," February 19, 2021.

The Inter-agency Task Force on Financing for Development (Task Force) strongly reiterates its calls on Development Assistance Committee (DAC) members to scale up ODA in line with their 0.7 per cent of GNI commitments. Although endorsed in the 1970s, the 0.7 per cesnt of GNI commitment has never been met, except by only a few DAC members.[9] Reaffirmed in the Addis Agenda and Agenda 2030, only five donors have consistently met the target since 2015. This trend undermines both the ambitions expressed in the Addis Agenda and the achievability of the SDGs, which have been severely impeded by the COVID-19 crisis.

ODA providers should also urgently meet the financing demand for the ACT-Accelerator. The ACT-Accelerator, budgeted at $38.1 billion, aims to end the COVID-19 pandemic by rapidly developing and deploying diagnostics, therapeutics and vaccines. A key principle of the ACT-Accelerator is the need for equitable distribution of COVID-19 tools, particularly to support the neediest countries (see also section 4). The ACT-Accelerator is being funded by Governments (70 per cent), multilaterals (19 per cent) and philanthropists (12 per cent).[10] As of February 2021, there was a large funding gap of $22.9 billion (figure III.C.2). Vaccine nationalism, where countries seek to vaccinate their populations first before others by pre-ordering more vaccines than they need, raises the risk of prolonging the pandemic[11] and exacerbating the situation for many developing countries, particularly LDCs. As of January 2021, developed countries held 60 per cent of the COVID-19 vaccines purchased. Of the 38 countries administering COVID-19 vaccines, only 9 were developing countries.[12] While the majority of the adult population in advanced economies will be vaccinated by mid-2022, for middle-income countries, this may be late 2022 or early 2023 and for the poorer countries, by 2024, if at all.[13]

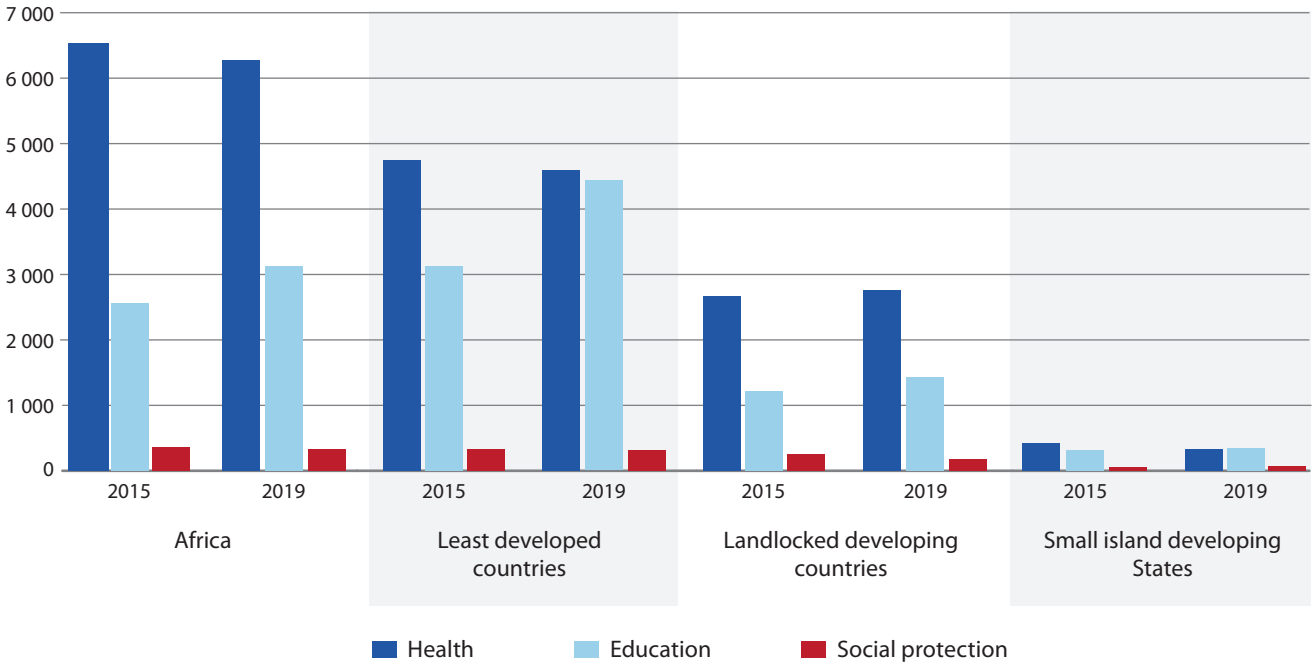
More grants than loans are needed for vulnerable countries, such as LDCs. An April 2020 OECD survey highlighted that donors were generally targeting their COVID-19 support for low-income and vulnerable countries, including countries in conflict and post-conflict situations.[14]

Figure III.C.3
Gross bilateral ODA disbursements by instrument by country groups on a cash basis, 2015 and 2019
(Percentage of total)



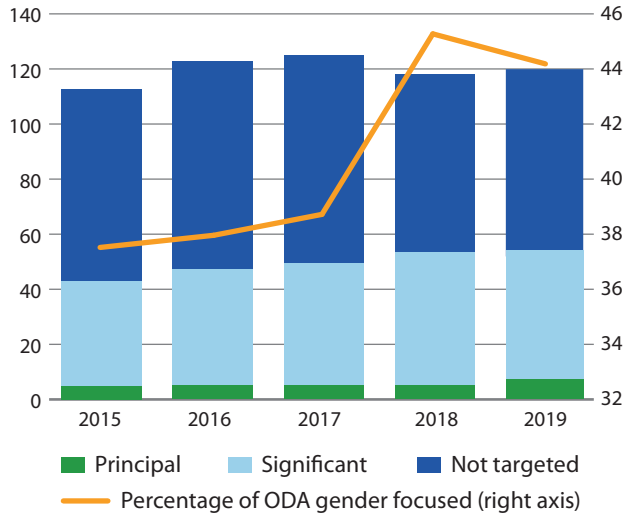
Source: OECD Creditor Reporting System database.

Figure III.C.4
Gross bilateral ODA disbursements for selected sectors by country groups on a cash basis, 2015 and 2019
(Billions of United States dollars, 2018 constant prices)



Source: OECD Creditor Reporting System database.
Note: Health includes population policies/programmes and reproductive health.

Figure III.C.5
ODA to gender equality and women's empowerment, 2015-2018
(Billions of United States dollars, 2018 constant prices)



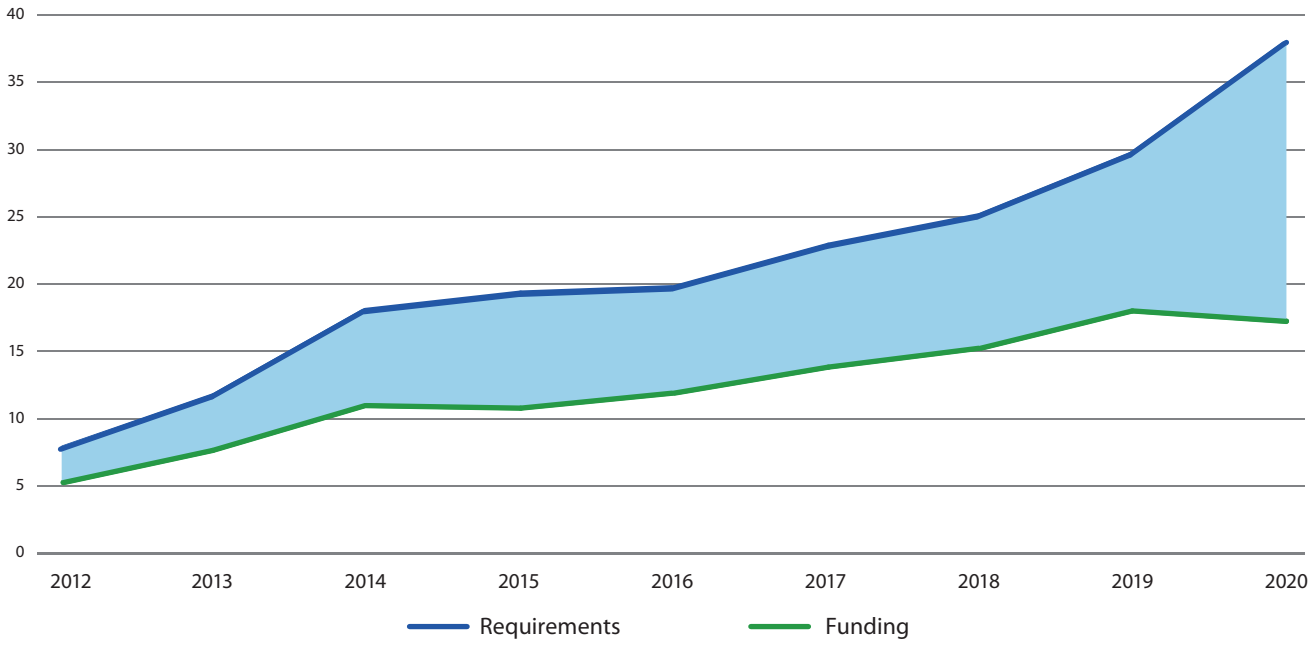
Source: OECD Creditor Reporting System database.

This is reflected by higher aid commitments reported for the poorest countries for the January–November period.[15] The Task Force welcomes the focus on the most vulnerable countries but also highlights that these countries need more grants as they have limited fiscal capacity to respond to the COVID-19 crisis (see chapter III.A) and are facing growing risks of debt distress (see chapter III.E). The pre-crisis trend of declining concessionality for LDCs (figure III.C.3) should be reversed.

ODA for the health and social sectors will help vulnerable countries strengthen their systems as a core strategy for building resilience to shocks. COVID-19 has exposed the weaknesses of health and social protection systems across the globe, especially for LDCs and SIDS. Since 2015, ODA to the health sector for developing countries has declined (figure III.C.4), with its share of total ODA falling to 12 per cent. There has also been less attention to strengthening national health systems (see also section 4). ODA to social protection systems has also been less prioritized, accounting for less than 1 per cent of ODA, and has declined for most vulnerable country groups (figure III.C.4), while ODA for education has increased.[16] In response to COVID-19, many ODA providers had indicated that they redirected their planned 2020 efforts towards the health and socio-economic sectors.[17]

Bilateral donors should further integrate gender equality throughout their ODA and in their COVID response. Prior to COVID-19, bilateral allocable ODA for gender equality and women's empowerment had steadily increased (figure III.C.5). However, considering the deep social

Figure III.C.6
Global humanitarian response plan funding gap, 2012–2020
(Billions of United States dollars, 2018 constant prices)



Source: OCHA, "Global Humanitarian Overview 2021," December 2020.

and economic impact of the COVID-19 crisis on women and girls, they should be at the core of recovery and longer-term development efforts.[18]

2.2 Humanitarian finance

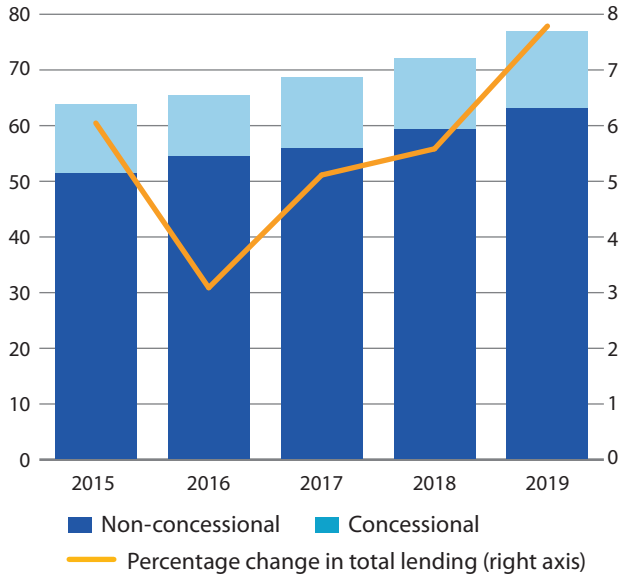
Humanitarian needs have risen significantly due to COVID-19, but funding has not kept pace. COVID-19 has accelerated an increase in extreme poverty, hunger and gender-based violence. The pandemic's impact on essential health services may also reverse gains made in HIV, tuberculosis and malaria.[19] At the same time, new conflicts emerged in areas that were previously considered stable, and countries continued to face extreme climatic events.[20] Thus, the global humanitarian response plan funding requirements for 2020 increased steeply. However, funding fell compared to 2019, resulting in a large financing gap (figure III.C.6). Pressure on humanitarian aid is expected to continue to mount due to continuing conflicts, growth of climate-related disasters and insufficient investment in disaster risk reduction.

Lessons from COVID-19 should be used to improve the efficiency and effectiveness of humanitarian finance.[21] International aid responses to COVID-19 were able to build on progress made previously in increasing the use of cash assistance, localization and flexibility in funding—key target areas of the Grand Bargain made between donor countries and aid organizations.[22] However, there were reports of delays in channelling funds where they were most needed,[23] highlighting shortcomings in the traditional humanitarian operating model.[24] As DAC members account for 80 per cent of development support for countries in conflict and post-conflict situations, while 89 per cent of humanitarian action is channelled through the multilateral system, greater coordination, collaboration and complementarity is needed within and between the two systems.[25] This requires joint, risk-informed analysis that builds resilience, as well as coordination structures that support rapid responses when unforeseen shocks occur.[26] The Grand Bargain could be adapted to address lessons and challenges in the wake of COVID-19, particularly in risk management, where there has been less discussion in the past. This could include determining which risks are a priority across the system, how constituent groups could work together to share rather than simply transfer these risks (often to local actors), and agreement on what level of residual risk is acceptable to different groups.[27] Integrated national financing frameworks may be used to guide a risk-informed approach to financing at the country level, including with a view to enhancing coherence, collaboration and complementarity between development and humanitarian activities, which is a cross-cutting commitment under the Grand Bargain.

2.3 Multilateral development banks response to COVID-19 and future implications

Multilateral development banks (MDBs) collectively announced over $200 billion of support to developing countries (table III.C.1). Before COVID-19, MDB lending had grown by 6.9 per cent in 2019 to $77 billion (figure III.C.7). This is expected to rise even further in 2020. The World Bank Group made available $160 billion in financing, including $50 billion from the International Development Association , its concessional window, for support towards the health, economic and social sectors, with a focus on countries with limited capacity to respond to the crisis, such as LDCs and SIDS.[28] Regionally, the African Development Bank (AfDB) is deploying $10 billion,[29] the Asian Development Bank (ADB) more than $20 billion,[30] and Inter-American Development Bank (IADB) $21.6 billion

Figure III.C.7
Lending by multilateral development banks, 2015–2019
(Billions of United States dollars, current)



Source: World Bank, International Debt Statistics.

(figure III.C.7).[31] The International Monetary Fund (IMF) also significantly increased emergency lending to low-income countries of about SDR9.3 billion in 2020, compared to SDR0.9 billion per annum previously (see chapter III.F).

As they did during the 2008 world financial and economic crisis, MDBs are playing an important countercyclical role, with particularly strong support for LDCs. Overall, the MDB immediate response to the crisis has been unprecedented in scale and speed, outpacing the response from bilateral development partners.[32] The World Bank's IDA commitments for the 2020 fiscal year are estimated to have grown by about 40 per cent compared to the previous period, which is larger than its response to the global financial crisis (26 per cent increase in the 2009 fiscal year) (table III.C.2).[33] Resources allocated for the 2021 fiscal year are also higher than the usual one third of the envelope for the first year of the IDA cycle. In addition, the AfDB concessional window, the African Development Fund (AfDF), which many LDCs in Africa benefit from, is expected to reach its $3.0 billion target in 2020, which is a stronger response than in 2009 (table III.C.2). The overall response of the ADB to the COVID-19 crisis is higher than its response to the global financial crisis (table III.C.2), owing to significant lending headroom gained from the merger of its concessional and non-concessional windows in 2017. Many Pacific SIDS benefit from the concessional window.

Financial capacity constraints are, however, limiting MDB countercyclical support for middle-income countries. International Bank for Reconstruction and Development (IBRD) loan commitments for middle-income countries are estimated to have increased by a lower magnitude in 2020 (36 per cent), compared to its response during the global financial crisis (145 per cent increase in 2009) (table III.C.2). Despite its 2018 capital increase (with $7.5 billion in paid-in capital over 5 years), the IBRD sustainable annual lending level, including the utilisation of a $10 billion crisis response buffer, is $35 billion for its 2021 fiscal year, constraining its response. Similarly, AfDB lending through its non-concessional window is hampered by financial constraints and expected to fall compared to 2019. The situation is similar for IADB, whose 2020 response is lower than its response to the global financial crisis (table III.C.2), due to insufficient financial capacity.[34]

Donor injections are needed to shore up MDB medium-term concessional capacity. There are clear indications that the current financial capacity of multilateral organizations will be insufficient to respond to the needs and demands of developing countries in the medium to long term. Due to front-loading of resources in the 2021 fiscal year, the IDA lending capacity for the 2022 and 2023 fiscal years is reduced. IDA has the option to issue more bonds to raise more resources, but without additional partners contributions it may have to offer less concessional terms, which may impact debt sustainability issues of IDA-eligible countries[35] (7 countries are currently in debt distress and 28 countries at high risk of debt distress (see chapter III.E)). Similarly, AfDF resources are expected to fall to about $2.4 billion per year for 2021 and 2022, but unlike IDA, AfDF cannot issue bonds to raise additional resources. Grant resources for ADB are also expected to remain flat for the 2021–2024 period[36] against higher demand for COVID-19 recovery support. Thus, donors may need to provide additional funding to the existing concessional pool or advance scheduled replenishments.

Table III.C.1
COVID-19 response packages announced by multilateral development banks

World Bank[a]	African Development Bank[b]	Asian Development Bank[c]	Inter-American Development Bank[d]
$160 billion, of which $50-$55 billion each from IBRD and IDA resources; includes $12 billion for vaccines	$10 billion, of which $5.5 billion for sovereign operations, $3.1 billion under the concessional African Development Fund and $1.35 billion to private sector operations	$20 billon, of which $14.9 billion in loans, grants and technical assistance and $9.9 billion in quick-disbursing budget support; $20.3 million in additional technical assistance; and $9 billion vaccine initiative	$21.6 billion, of which $12.6 billion dedicated to public sector projects and $9 billion for the private sector

Source: UN DESA.
Note: IBRD stands for International Bank for Reconstruction and Development, the World Bank's non-concessional window.
a World Bank.
b African Development Bank, "African Development Bank Group Unveils $10 Billion Response Facility to Curb COVID-19," African Development Bank - Building today, a better Africa tomorrow, April 29, 2020.
c Asian Development Bank, "$9 Billion ADB Facility to Help Members Access and Distribute COVID-19 Vaccines," News Release, December 11, 2020.
d Inter-American Development Bank (IDB), "IDB Group Announces Priority Support Areas for Countries Affected by COVID-19," March 26, 2020.

Table.III.C.2
Comparison of multilateral development banks lending for COVID-19 crisis and the global financial crisis

MDBs		*Global financial crisis*			*COVID-19 crisis*		
		2008	2009	2010	2019	2020 (e)	2021 (f)
World Bank[a,c]	IBRD	16.0	39.2	51.8	23.2	27.9	35.0
	IDA	13.3	16.7	17.1	21.9	30.4	35.0
African Development Bank[a,d]	Non-concessional	3.3	10.5	4.7	7.1	5.0	5.5
	Concessional	3.1	4.5	2.6	1.7	3.0	2.4
Asian Development Bank[b]	Non-concessional	10.0	13.1	10.9	17.2	25.2	23.4
	Concessional	2.1	2.6	2.6	4.5	5.8	
Inter-American Development Bank[a]		13.2	18.2	14.2	14.3	15.5	14.0

Source: Chris Humphrey and Annalisa Prizzon, "Scaling up Multilateral Bank Finance for the Covid-19 Recovery," Insight, ODI, November 18, 2020.
Note: Figures adjusted for inflation with 2019 as base year; (e) = estimate; (f) = forecast.
a Loan commitments.
b 2008–2010 (loan approvals), 2019–2020 (loan commitments).
c Figures are for the World Bank's fiscal year (July-June), which is not directly comparable to the other MDBs in the table.
d AfDB numbers for 2020 reflect projected lending, rather than the $7 billion target.

Access to MDB lending can help middle-income countries' COVID-19 response and recovery efforts. While some middle-income countries can access private debt markets, others have difficulty accessing affordable financing (see chapter I). The non-concessional lending windows of MDBs provide an important avenue for middle-income countries to access finance at below-market rates. In the medium term, donors could replenish the capital of MDBs, which could represent a small share of annual donor aid budgets but generate 5–7 times more lending capacity than providing those funds directly to developing countries.[37] MDBs could also incorporate countercyclical buffers into their capital management, similar to the shocks buffer built into the IBRD financing framework. There is also scope for other methods of balance sheet optimization, although gains may be marginal and have trade-offs.[38] For example, MDBs could use securitization to transfer risk, such as done by AfDB, but this would only cover private sector loans[39] and would be less effective than increasing share capital.

Extending maturities and providing fixed interest rates can provide developing countries with long-term financing for post-COVID-19 recovery investments for sustainable development. Raising the maturity for loans, as well as offering fixed interest rates to take advantage of prevailing low interest rates, can help provide long-term financing for investments. Currently, concessional loans are typically offered a term of 40 years, while non-concessional loans are offered up to a maximum weighted average maturity of 20 years; both terms could be raised to 50 years, for example. Long-term financing with fixed low interest rates can be particularly suitable for productive investments that will have a positive impact on growth in the long run and can help developing countries overcome limited fiscal space to make investments for equitable and sustainable growth. However, such extensions of loan maturities consume more risk capital, requiring capital injection into MDBs. In the absence of capital increase, MDBs would need to cut financing volume.

MDBs are expanding their efforts to address debt vulnerabilities. For well over a decade, IDA has been providing grants to countries based on the risks of future debt distress. IDA grant allocation framework, which has been adopted by some other MDBs, provides increasing levels of concessionality in response to greater debt distress risks, ensuring that financing is provided in a way that does not undermine debt sustainability. In the absence of a unified approach by all creditor groups, the increasing concessionality of MDBs alone is unable to fully stem the tide of rising debt risks. In their 2020 fiscal year, the World Bank launched the Sustainable Development Finance Policy, which provides incentives and a focused policy dialogue to strengthen debt transparency, fiscal sustainability and debt management, an important step towards supporting debt sustainability. MDBs are also providing fresh financing for COVID-19 to ensure net positive flows for IDA countries that complement the DSSI while still protecting their own ratings (see chapter III.E).

2.4 Innovative public finance instruments

Various public finance instruments are already in use or are being considered for the COVID-19 response. These range from blended finance, innovative bonds, pooled funds and solidarity taxes to innovative debt instruments (see chapter III.E). Many innovative international public finance mechanisms, such as advanced market commitments, have been used most frequently in the health sector (see section 4.2). As discussed in the *Financing for Sustainable Development Report 2020 (FSDR 2020)*, all such public finance instruments have advantages and disadvantages. For example, pooled funds for a specific focus can better link funding and outcomes but are criticized for fragmentation. Solidarity taxes have had some measure of success, such as the airline levy for funding UNITAID, although a financial transaction tax for development has not materialized.

Blended Finance

Blended finance is most relevant for investments in projects with high sustainable development impact, which are not attracting private investment but still have a solid business rationale and potential cash flows to repay the private partner. The objective is to unlock investment that the private sector would not have done on its

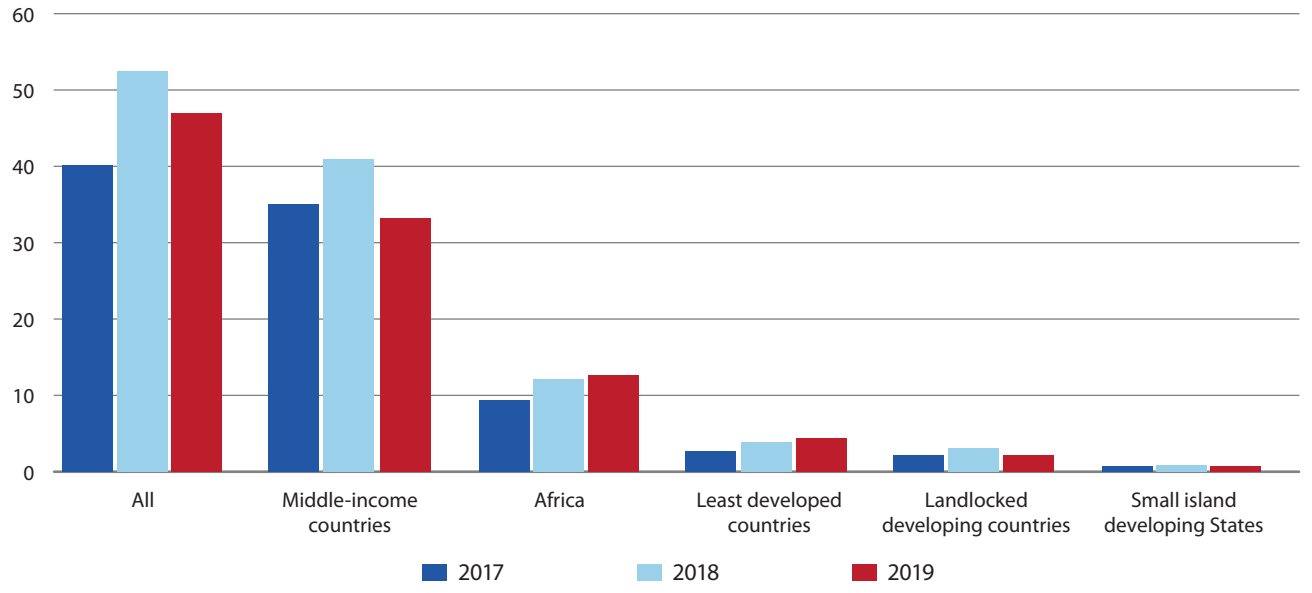
own in support of national development priorities, and to do this with minimum concessionality or subsidy (i.e., just enough to make a project attractive to commercial investors). The Addis Agenda sets several guiding principles for blended finance: (i) appropriate use (i.e., financial and developmental additionality); (ii) sharing risks and rewards fairly; (iii) alignment with sustainable development; (iv) clear accountability mechanisms; (v) transparency; (vi) participation, particularly of local communities, in decisions affecting their communities; (vii) effective management, accounting, budgeting for contingent liabilities, and debt sustainability; and (viii) alignment with national priorities, promotion of country ownership and other relevant principles of effective development cooperation. Different groups of actors have defined principles for blending for their own activities, which are in line with the Addis Agenda principles, including the 2017 OECD/DAC Blended Finance Principles for Unlocking Commercial Finance for the SDGs, and the 2017 DFI Working Group Enhanced Blended Concessional Finance Principles.

Blended finance has grown since the adoption of the Addis Agenda, but its developmental impact is largely unknown, due to weak monitoring and poor transparency. Middle-income countries attract most blended finance deals. In 2019, 87 per cent of private finance mobilized by official development finance interventions were for middle-income countries (figure III.C.8). While there has been considerable focus on blended finance for LDCs and some signs of growth (figure III.C.8), only 9 per cent of private finance mobilized in 2019 went to LDCs (box III.C.2).[40] The Task Force has previously highlighted that for blended finance to be applicable to LDCs, there first needs to be a switch from a search for bankability to a search for impact. As noted in the *FSDR 2020*, this includes: (i) developing a country blending strategy linked to country needs, such as through an INFF; (ii) focussing on development impact; (iii) measuring the cost of blending versus other financing structures; (iv) accounting for complementary investment; (v) providing capacity development; and (vi) ensuring transparency and impact reporting, participation, and monitoring throughout the life of a project. Efforts to enhance governance are underway, including by the DFI Working Group on Blended Concessional Finance for Private Sector Projects.[41] In 2019, the International Finance Corporation also started to publish the level of subsidy embedded in blended concessional finance-supported transactions, both at the portfolio and the transaction level, along with the rationale for its usage, expected development impact, source and amount of concessional financing.

The COVID-19 crisis most likely dampened blended finance activities in 2020. MDBs are major providers of blended finance, accounting for 75 per cent of amounts mobilized in 2017–2018, the remaining being mobilized by bilateral providers.[42] In 2019, private finance mobilized by official development interventions is likely to have declined by about 10 per cent, due mostly to a decline in middle-income countries (figure III.C.8).

Blended finance can be an option to support post-COVID-19 recovery efforts, in the context of an integrated national financing framework. Scaling up blended finance may be more challenging in the COVID-19 era as blended finance deals generally favour low-risk, less-costly projects,[43] which may prove difficult to find due to heightened financial risks from the crisis. Reorienting blended finance to focus on impact within the context of an INFF can help better position it as an option to support recovery efforts. As noted in box III.C.2, blended finance deals could include equity upside for the public partner, to achieve the Addis Agenda call to "share risks and *rewards* fairly." Public partners could assume stronger equity roles in blended finance structures to benefit from potential business/asset value increases. Other options would be to pool bilateral and/or MDB official resources in a blended finance fund, which

Figure III.C.8
Amounts mobilized from the private sector by official development finance interventions, 2017–2019
(Billions of United States dollars, current)



Source: OECD.
Note: 2019 figures are preliminary.

Box III.C.2
Blended finance in least developed countries

Most of the blended finance transactions recorded in least developed countries (LDCs) have used concessional funds to mobilize public finance at commercial terms. To date, these transactions have mobilized only limited private finance, highlighting the challenges of attracting private finance to LDCs, given high perceived risks, even with subsidies. There have been five main types of blended finance transactions in LDCs:

i **Country and regional investment funds.** These localized funds target equity investment in small and medium-sized enterprises (SMEs) or small-scale infrastructure projects (e.g., mini grids). Little to no private finance is mobilized at the fund level, with development finance institutions (DFIs) and foundations providing capital on commercial or concessional terms and donors providing additional risk coverage (e.g., first loss tranche). At the enterprise/project level, investment from these funds helps facilitate other private sector investments. The first fund is usually at a low scale (< $25 million), with other, larger funds raised once there is proof of concept.

ii **Country and global risk facilities.** These facilities mobilize additional capital by providing risk coverage (e.g., against currency risk) to private and public investors. Mobilization of private finance takes place when the instrument is used in a multilateral or private financial transaction. Global facilities frequently set up country-level subsidiaries (e.g., TCX Facility in Myanmar), although smaller countries are unlikely to offer sufficient scale.

iii **Liquidity facilities.** These facilities seek to fill a financing gap for SMEs. By providing a loan to a bank or non-bank financial institution in an LDC, which on-lends it to its clients, a DFI can use the operational footprint of the intermediary to reach a large number of enterprises. These facilities are often thematically focused (e.g., energy companies), include enhancements that share the risk between the intermediary and the DFI or another donor, and provide technical assistance to the intermediary.

iv **Single project transactions.** These transactions seek to realize a single project where blending takes place at the level of the special purpose vehicle, usually for infrastructure projects (e.g., for water and sanitation). Debt capital attracted is in most cases from public development banks and grant money from donors to bridge the viability gap or donor-funded investment tranches (e.g., subordinated loans). Donor-funded technical assistance features prominently in structuring the transaction. Given the complexity of these transactions, they become options for larger projects.

v **Single corporate transactions.** These transactions mobilize an investment in one company, and are usually originated by one or more DFIs, sometimes alongside a local private financial institution. Companies involved are usually substantially larger than SMEs given the transaction costs involved relative to the financing need.

The low degree of private finance mobilized to date underscores two points. First, leverage ratios for blended finance in LDCs are likely to be much lower than in other blended finance deals. Indeed, this is not only acceptable—for example, for investments with a greater sustainable development impact in these countries—it is also necessary for risk management purposes. Second, blended finance providers might need to refocus blended finance deals. This might mean focusing on sectors that usually attract private finance but are not yet fully commercially financeable in LDCs—such as information and communications technology or energy, where there are future cash flows to repay the private investor, rather than sectors such as water and sanitation, which are often funded by public finance, even in developed countries. Such deals could include equity upside for the public partner, to achieve the Addis Ababa Action Agenda call to "share risks and *rewards* fairly" (also see chapter III.G).

The Organization for Economic Cooperation and Development and the United Nations Capital Development Fund put forth an action agenda for blended finance in LDCs that includes using blended finance to develop sustainable domestic markets, targeting those hardest to reach; promoting transparency; and supporting sustainable and resilient economies.[a]

Source: UN DESA.

a OECD and UNCDF, *Blended Finance in the Least Developed Countries: Supporting a Resilient COVID-19 Recovery* (Paris: OECD Publishing, 2020).

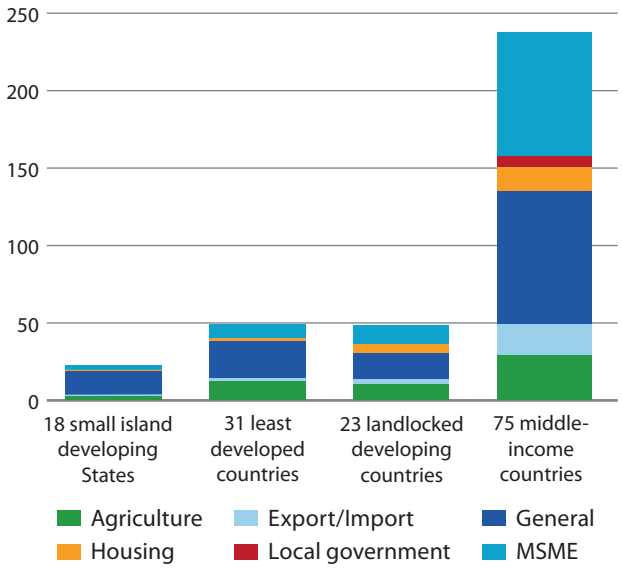
could take on more risk (see chapter II); one such proposal is the so-called COVID-19 Stretch Fund. Alternatively, this could be done by building on an existing fund, such as the Global Innovation Fund.[44] However, given the high demands, ODA should be allocated to first meet the needs of the most vulnerable countries through grant finance or scalable blended concessional finance vehicles.

Development cooperation partners should prioritize the use of non-concessional loans to mobilize private finance, using ODA only when necessary. Instruments to leverage private finance can involve the blending of three types of financing: (i) concessional resources (e.g., ODA); (ii) non-concessional official resources (e.g., from public development banks); and (iii) commercial finance from private financiers. It would be preferable to use non-concessional resources from development banks to mobilize private finance, rather than concessional resources. Non-concessional loans that include equity-like components are particularly well suited for projects where there is a possible financial upside, such as investments in digital technologies (see chapter III.G). Concessional resources should be used only when duly justified and to the minimum necessary to attract the private sector and provided in line with national sustainable development priorities[45]—for instance, to effectively address market failures.

The blended finance community should build on enhanced collaboration practices. Since the crisis, more actors have been pursuing collaborative initiatives to mitigate risks to help incentivize greater investment in sustainable development.[46] For example, in response to COVID-19, the DFI Alliance, made up of DFIs from 16 OECD countries, has been working together through risk sharing, guarantee agreements, capital arrangements, as well as sharing due diligence processes and pipelines.[47] The DFI Working Group on Blended Concessional Finance for Private Sector Projects also provides an example of a platform for sharing experiences and best practices among DFIs. In addition, the Multilateral Investment Guarantee Agency is working to expand collaboration among partners to increase the use of political risk insurance to de-risk and catalyse private investment into emerging markets, piloting an approach using a set of principles to inform a new and systematic form of collaboration. Building on these collaborations can help to lower risks and transaction costs, as well as expedite deal flows.[48]

The network of public development banks (PDBs) can also support blended finance when appropriate. There are about 450 PDBs across the globe, at sub-national, national, sub-regional, regional and multilateral levels, sometimes operating simultaneously at these levels (see chapter II).[49] About 236 PDBs operate in 75 middle-income countries (figure III.C.9), with assets ranging from $2 million to $2 trillion. However, to date, these networks have only been remotely engaged in blended finance. For example, in Brazil, despite an extensive multi-layered system of national/subnational development banks and DFIs, blended finance is still nascent.[50] MDBs and international DFIs should aim to leverage the local knowledge and expertise of national and subregional development banks for blended finance, including through providing liquidity or risk sharing, while simultaneously sharing global expertise with national and subnational banks, thus helping these banks build capacity where appropriate. Together, in addition to their own efforts, PDBs can help mobilize and provide finance for sustainable development sectors, such as low-carbon investments (see section 5).

Figure III.C.9
Public development banks by country group and mandate
(Number of PDBs)



Source: UN DESA calculations from Agence Française de Développement PDBs database.
Note: MSME stands for micro, small and medium-sized enterprises.

2.5 South-South cooperation

COVID-19 response efforts included a wide range of South-South cooperation activities. Regional mechanisms were activated, including by the Association of Southeast Asian Nations (ASEAN), South Asian Association for Regional Cooperation (SAARC) and African Union (AU). ASEAN members cooperated in the implementation of conjoined measures to combat COVID-19, including information-sharing and coordination, as well as leveraging technologies and digital trade to support micro, small and medium-sized enterprises,[51] while SAARC proposed the creation of a COVID-19 emergency fund with voluntary contributions from members. The AU developed the Africa Joint Continental Strategy for COVID-19, which also saw the establishment of the AU COVID-19 Response Fund and Africa Medical Supplies Platform.[52] The Arab Coordination Group, made up of Arab DFIs, collaborated on a joint COVID-19 response focussed on emergency humanitarian and medical relief and assistance.[53] South-led development funds, such as the China South-South Cooperation Assistance Fund, India-Brazil-South Africa Facility for Poverty and Hunger Alleviation (IBSA) and India-United Nations Development Partnership Fund, were also active in combating COVID-19. South-South trust funds managed by the United Nations Office for South-South Cooperation fast-tracked finance totalling almost $12 million to 30 countries, including over $10 million through the India-UN Development Partnership Fund, for the purchase of ventilators and personal protective equipment, as well as resources to mitigate the socioeconomic impact, particularly in LDCs and SIDS.[54] The China South-South Cooperation Assistance Fund included support for refugees to cope with COVID-19,[55] IBSA activities included support for online training of health workers and dissemination of educational materials on COVID-19 to vulnerable communities.[56] At the bilateral level, countries donated medical supplies and vaccinations, sent medical personnel, provided finance and shared their experiences, among other activities, to support COVID-19 efforts.

South-led regional and subregional development banks are also playing an important role. In the Latin America and the Caribbean region, the Central American Bank for Economic Integration allocated $1.96 billion for emergency aid, regional purchases and supplies of medicines and medical equipment. The Andean Development Bank announced emergency credit lines of up to $2.5 billion. The Caribbean Development Bank and the Southern Common Market (MERCOSUR) scaled up finances and opened credit lines. MERCOSUR established a Structural Convergence Fund of $16 million to boost research, education, and biotechnology related to fighting the virus. Similarly, the Asian Infrastructure Investment Bank made available $5 billion to $10 billion under its COVID-19 Crisis Recovery Facility.[57] The Islamic Development Bank also provided $1.86 billion to its members to fight COVID-19,[58] and set up a Strategic Preparedness and Response Facility of $730 million to mitigate the negative health and socioeconomic impact of the COVID-19 pandemic for Islamic countries.

3. Quality, impact and effectiveness of development cooperation in a COVID-19 world

COVID-19 underlines the necessity to deliver development cooperation better. Evidence collected on the lessons from the COVID-19 response highlighted a lack of coordination of priorities, responses and synergies among partners.[59] Resources were allocated without a clear overview of priority needs and channels for support, or of other actors' responses. Lack of a coherent and integrated real-time global monitoring and reporting system for COVID-19 relief efforts also added to coordination issues. In addition, responses largely failed to consider gender issues, despite the gendered impacts of the crisis and the high investments in raising awareness and commitments to gender equality and women's empowerment. Even though partners had a combination of risk registers, business continuity plans, crisis response plans, contingency budgets and rapid funding instruments in place, their systems were not prepared to face several crises affecting developing countries, as well as being affected by the COVID-19 crisis.

The crisis has highlighted the importance of incorporating multi-hazard risk analysis into national development planning. As noted in chapter II, to achieve the Sustainable Development Goals (SDGs), countries need to embed risk analysis in their national planning processes and mainstream risk considerations in all development and financing policies (e.g., in the context of an INFF). National development cooperation policies (NDCPs) and related tools can translate this risk mainstreaming into concrete asks for development cooperation partners, who should base their support on needs identified via risk-informed processes at the country-level, including national disaster risk reduction strategies. All forms of development cooperation should support efforts at the country-level to reduce all types of risk and avoid the creation of new risks, such as in health (see section 4), climate change and disaster risk reduction (see section 5). This requires support for strengthened risk governance at the country level. Development cooperation providers should also strengthen their current systems to handle multiple crises in diverse country contexts and enhance gender policy safeguards.

National development cooperation policies can facilitate behaviour changes among the different actors and stakeholders for more effective development cooperation. Before COVID-19, development partners' alignment to partner country priorities and country-owed results frameworks were declining[60]—this has been compounded by the pandemic. The Development Cooperation Forum (DCF) Survey exercise has found that NDCPs bring together several tools to strengthen country capacities to mobilize and manage development cooperation effectively, including country results frameworks (CRFs), development cooperation information systems (DCIS) and national development cooperation forums (NDCFs). Collectively, these tools can facilitate behaviour changes so that development partners better support national priorities, including through predictable spending plans, and the use of national systems to deliver, monitor and evaluate development cooperation. These tools can help Governments establish a risk-informed approach to development cooperation, build multi-stakeholder partnerships, and improve monitoring and reporting.[61] They can also help partners and Governments invest in strengthening capacities at national and local levels.

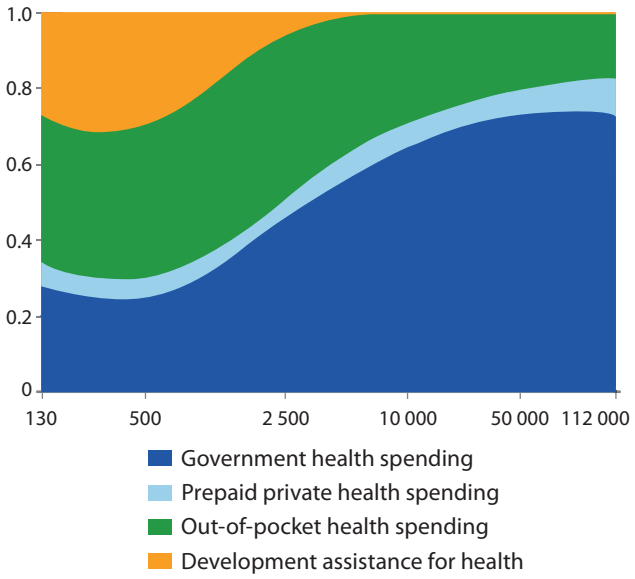
Countries are making progress in strengthening their development cooperation systems. According to the 2020 DCF Survey results, 36 of 55 responding countries reported they had NDCPs or an equivalent in place, with 16 of these working towards an INFF. There were also eight additional countries reporting that their NDCP was in the process of being finalized, of which three were also developing INFFs.[62] More than half of respondents also had country results frameworks and development cooperation information systems in place, although countries needed support to operationalize and strengthen their results frameworks and improve the quality of data. Countries are also gradually engaging multi-stakeholders through their NDCFs, although more work is needed to include non-state actors. The Global Partnership for Effective Development Cooperation monitoring exercise found that while most country governments consult civil society (77 per cent) and the private sector (73 per cent) in the creation of their national development strategies, few countries (17 per cent) engage them systematically and transparently in participatory processes.[63]

The international response to COVID-19 benefited from existing national-level structures and partnerships. Travel bans, remote working and staff reassignments affected in-country operations, but development partners were able to rely on existing mechanisms, such as the United Nations country teams or humanitarian response platforms, which became national partnership platforms or command centres. There was greater localization as development ministries and agencies reduced red tape, raised their risk tolerance and improved digitalization of their systems. Partners and Governments have also been flexible in adapting and continuing programmes—reallocating funds only if certain criteria were met, for instance. Moving forward, strengthening country capacity and systems could further enhance development cooperation and locally led crisis responses.[64]

4. International financial support for health: lessons and implications of COVID-19

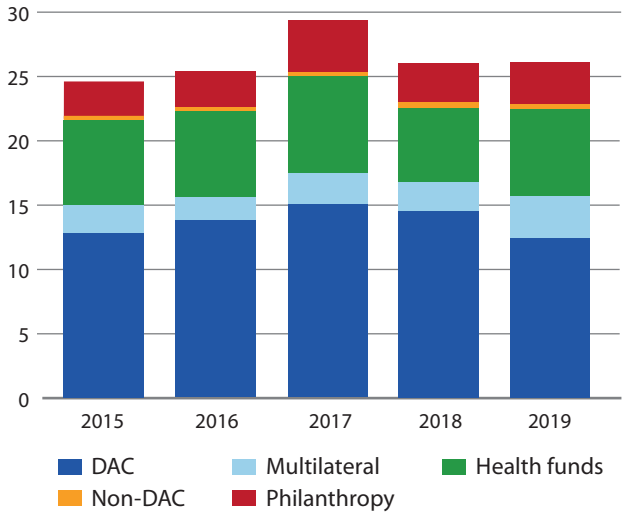
Development assistance is an important source of health spending for the poorest countries. ODA is an important source of health finance for the poorest countries, where domestic public resources are not able to adequately meet the sector's need. Many of the poorest countries also rely disproportionately on out-of-pocket spending for health due to insufficient government health spending (figure III.C.10; see also chapter II.A), raising inequities in access to health coverage. As countries' incomes grow, countries progressively lose access to concessional finance, which enhances the risk of financing gaps in critical sectors, such as health or education, if government spending does not increase sufficiently to compensate.[65] Nevertheless, people still cover a significant share of health spending through out-of-pocket costs.[66]

Figure III.C.10
Share of health spending by source and GDP per person, 2017
(Modeled proportion of total health spending)



Source: Institute for Health Metrics and Evaluation, "Financing Global Health 2019: Tracking Health Spending in a Time of Crisis," 2020.

Figure III.C.11
Funding to the health sector by donor, 2010–2019
(Billions of United States dollars, 2018 constant prices)



Source: OECD Creditor Reporting System database.
Note: Health sector includes population policies/programmes and reproductive health. Health funds includes the Global Fund for AIDS, Tuberculosis and Malaria (Global Fund) and the Global Alliance for Vaccines and Immunization (Gavi, the Vaccine Alliance).

4.1 Trends and impact of COVID-19

The COVID-19 crisis underscores the need for investment in health systems (figure III.C.11). Bilateral ODA for health has been falling, by 3 per cent between 2017 and 2019, on average (figure III.C.11), with a decline in support for most country groups. Funding for health funds also declined. Although multilateral ODA increased over this period, the total official support for health also fell (figure III.C.12). Within the category of health financing, there has also been a gradual shift away from general health-system strengthening towards more targeted funding, such as for communicable diseases (AIDS, tuberculosis and malaria), vaccination and reproductive/maternal and new-born/child health, which make up about two-thirds of development assistance for health. Health-system strengthening accounted for about 22 per cent of total development assistance for health in 2000, falling to about 12 per cent in 2015 before picking up slightly to 14 per cent in 2019.[67] A significant portion of these resources were allocated to build systems for specific health focus areas, such as the prevention and treatment of HIV/AIDS, and new-born and child health.

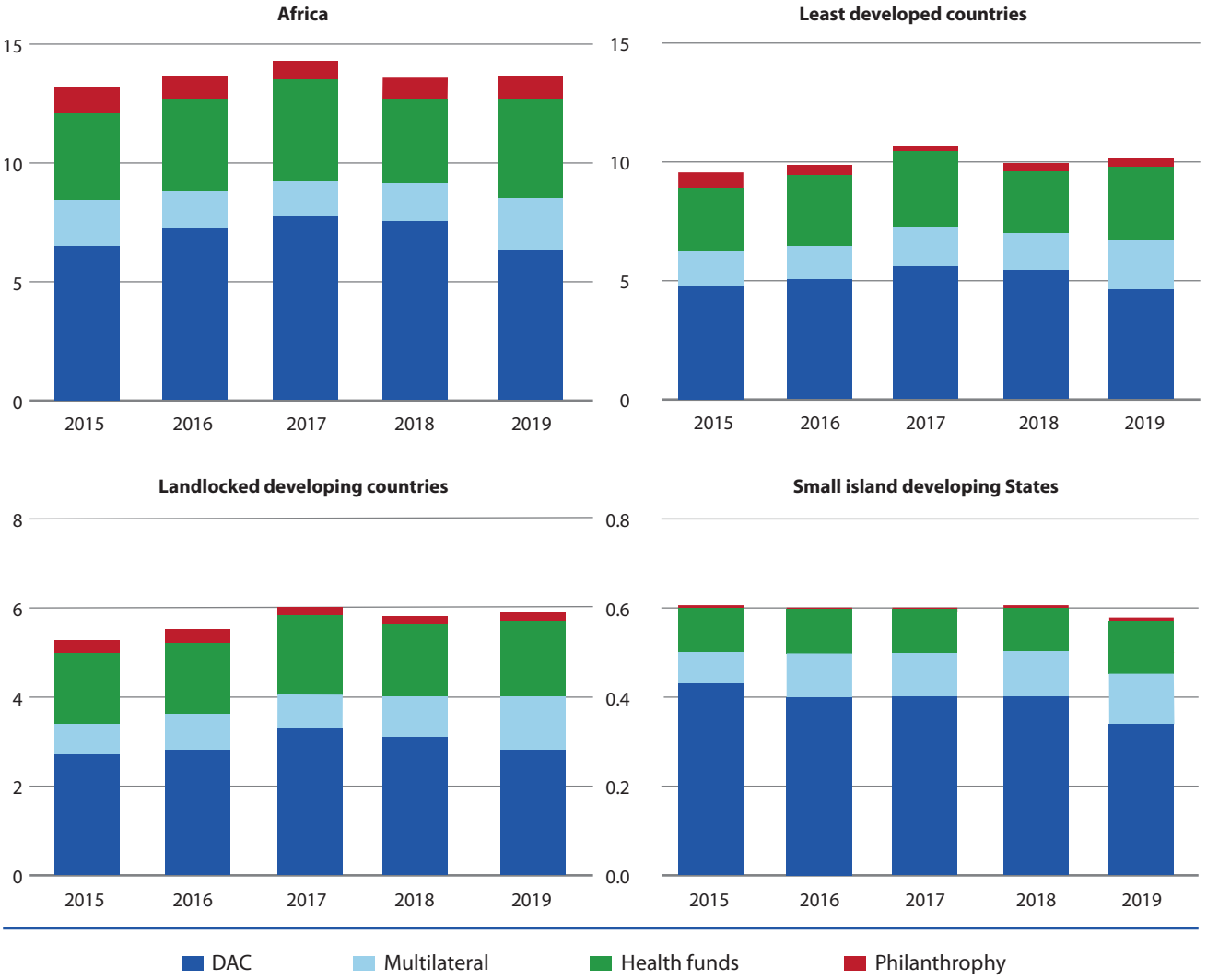
COVID-19 also provides a reminder of the importance of financing global common goods for health. A major lesson of the 2014–2016 Ebola epidemic in West Africa was the importance of investments in global common goods for health, such as pandemic preparedness, including both research and development for neglected diseases (see examples in table III.C.3**).** In the aftermath of the Ebola crisis, donors increased investments in epidemic and pandemic preparedness and response; but attention and funding tapered off by 2017, demonstrating a cycle of panic and neglect.[68] These investments can be made (a) at the global and regional levels through supranational entities or institutions (e.g., the global vaccine stockpile by the World Health Organization (WHO)); (b) within the provider's country, such as for product development for neglected diseases; or (c) within developing countries (in-country spending), particularly for LDCs.[69] Tracking financing for pandemic preparedness could be done through the OECD creditor reporting system by including it as a separate item.[70]

Capturing the financing of global public goods[71] within the sustainable development finance landscape requires further deliberation. The definition and measurement of global public goods have been brought to the fore by COVID-19. The World Health Assembly recognized the "role of extensive immunization against COVID-19 as a global public good for health."[72] This was done to encourage countries to finance initiatives that provide equitable access to vaccines and to deter vaccine nationalism. While all funding for the ACT-Accelerator helps finance this global public good, only the portion of the financing that supports developing countries directly and predominantly would be captured by ODA. For example, research for COVID-19 vaccines, tests and treatments do not count as ODA, as it contributes to a global challenge and not to fighting a disease that disproportionately affects developing countries.[73] There are ongoing discussions on how best to measure financing of global public goods and whether these should be incorporated into broader measurements of development support, although measures have not been agreed by all States Members of the United Nations (box III.C.3).

4.2 Public finance instruments for health

COVID-19 provides the opportunity to revamp, restructure and redesign public finance instruments for health. The health sector has been a source for many innovative financing instruments, developed since the 2000s to fund global health programmes to provide immunizations,

Figure III.C.12
Gross ODA disbursements to the health sector by country group, 2015–2019
(Billions of United States dollars, 2018 constant prices)



Source: OECD Creditor Reporting System database.
Note: Includes population policies/programmes and reproductive health.

and deliver treatments for communicable diseases. These include pooling public and private resources for a specific health issue, such as the Global Fund for AIDS, Tuberculosis and Malaria (Global Fund) and Gavi, the Vaccine Alliance. Another example is Gavi's International Finance Facility for Immunisation, which front-loaded resources through vaccine bonds to fund vaccine campaigns.[74] Gavi and the Global Fund both have been active in COVID-19 response efforts. Some innovative instruments are already being used, while others could also be considered in response efforts.

Advance market commitments (AMCs) are supporting the equitable distribution of COVID-19 vaccines. AMCs, which have primarily been used in the health sector, were designed to incentivize investment in research and development to accelerate product development. Building on what is now more than a decade of experience with AMCs for pneumococcal vaccines, Gavi introduced the COVAX AMC facility, co-convened with the Coalition for Epidemic Preparedness Innovations and World Health Organization and funded by donors, to ensure equitable distribution of COVID-19 vaccines. The Facility provides guarantees to purchase vaccine candidates before they are licensed; once licensed and prequalified by WHO, AMC funds pay for the purchase of doses for ODA-eligible countries.[75] Over 260 million doses of COVID-19 vaccines are expected to be distributed to eligible countries by mid-2021.[76] There is still, however, a $740 million funding gap for 2021 for the COVAX AMC,[77] and even if fully implemented, LDCs and other vulnerable countries may still have to wait for years before the majority of their populations get vaccinated.

The pandemic bond delivers funds for the COVID-19 response. The 2014 Ebola crisis in West Africa highlighted the difficulty in rapidly mobilizing funding from the international community to contain a pandemic outbreak. To address this challenge, the Pandemic Emergency Financing

Table III.C.3
Global common goods for health

Category	*Activities*
Provision of global public goods	▪ Research and development for health tools ▪ Development and harmonization of international health regulations ▪ Knowledge generation and sharing ▪ Intellectual property sharing ▪ Market-shaping activities (e.g., to drive down costs of health technologies, including bulk procurement)
Management of negative regional and global cross-border externalities	▪ Outbreak preparedness and response ▪ Responses to antimicrobial resistance ▪ Responses to marketing of unhealthy products (e.g., alcohol and tobacco) ▪ Control of cross-border disease movement
Fostering of global health leadership and stewardship	▪ Health advocacy and priority setting ▪ Promotion of aid effectiveness and accountability
Country specific	▪ Support to achieve universal reduction in deaths from infections and maternal and child conditions ▪ Control of non-communicable diseases ▪ Health systems support

Source: Adapted from Marco Schäferhoff and others, "International Funding for Global Common Goods for Health: An Analysis Using the Creditor Reporting System and G-FINDER Databases," *Health Systems & Reform 5*, no. 4 (October 2, 2019).

Box III.C.3
Broader measures of development support

Total official support for sustainable development

Initiated by the Organization for Economic Cooperation and Development (OECD) and developed by an international task force of experts created in July 2017, total official support for sustainable development (TOSSD) aims to capture both cross-border resource flows and support to international public goods and global challenges. It includes concessional and non-concessional support from traditional and emerging bilateral and multilateral finance providers, including South-South and triangular cooperation providers.[a]

In May 2020, the TOSSD Task Force published a TOSSD dataset for 2017 activities, based on a data survey, to which 28 countries and 14 organizations responded, identifying additional activities that were not well covered in OECD statistics, such as contributions towards peace and security and Islamic finance.[b] Several pilot studies have also been conducted and more are planned for 2021. The first regular TOSSD data collection will be published in March 2021, covering 2019 activities from 89 bilateral and multilateral providers.

Working Group on Development Support

The Inter-agency and Expert Group on SDG Indicators agreed that it would be beneficial to include an additional indicator in the Sustainable Development Goals global indicator framework to measure development support in the broadest sense that goes beyond official development assistance (see chapter IV of the *Financing for Sustainable Development Report 2021*). However, the Expert Group was not fully in agreement with the TOSSD methodology, and a working group was established in May 2020 to further consider the methodology.[c] Subsequently, the working group held several meetings, with divergent views emerging on some of the components of development support, including international public goods.[d] The working group will submit its recommendation to the United Nations Statistics Commission in 2022.[c]

Source: UN DESA.

a OECD, "Total Official Support for Sustainable Development (TOSSD)," 2020.

b OECD, "Total Official Support for Sustainable Development (TOSSD): Key Findings from the 2019 TOSSD Data Survey," May 2020.

c Economic and Social Council resolution E/CN.3/2020/2.

d Ann Lisbet Brathaug, "IAEG-SDGs Working Group on Measurement of Development Support: Progress Report to the 11th Meeting of the IAEG-SDGs," November 3, 2020, available at https://unstats.un.org/sdgs/meetings/iaeg-sdgs-meeting-11/.

Facility (PEF) was launched in 2016 to provide an additional source of financing to the world's poorest countries when facing cross-border, large-scale outbreaks. PEF financing consisted of donor funding as well as insurance coverage provided in 2017 through catastrophe bonds issued by the World Bank and sold to capital market investors as well as insurance-linked swaps executed by the World Bank with insurance. The PEF insurance window was triggered on April 17, 2020 when the virus had Facility (PEF) was launched in 2016 to provide an additional source of financing to the world's poorest countries when facing cross-border, large-scale outbreaks. PEF financing consisted of donor funding as well as insurance coverage provided in 2017 through catastrophe bonds issued by the World Bank and sold to capital market investors as well as insurance-linked swaps executed by the World Bank with insurance. The PEF insurance window was triggered on April 17, 2020 when the virus had met all the necessary activation criteria, including outbreak size, spread and growth. The triggers had been chosen in close coordination with WHO, based on historical data available for the diseases covered. At the time when the insurance window was triggered, IDA countries accounted for 0.62 per cent (4,653 cases) of reported COVID-19 cases globally. On April 27, 2020, the PEF Steering Body allocated $195.84 million to 64 of the world's poorest countries with reported cases of COVID-19, with special attention given to areas with the most vulnerable populations, especially in conflict and post-conflict countries. All funds have been transferred to support the 64 countries in their COVID-19 response, including with essential and critical lifesaving medical equipment and personal protective equipment. However, there have been criticisms that the funds were not delivered fast enough, and that high payments made to private investors could have been invested in disease surveillance, diagnostics and other capacities for response to outbreaks.[78] The World Bank has not renewed the PEF insurance window after the pandemic bonds and swaps matured on July 15, 2020. The Early Response Financing mechanism, introduced in the nineteenth replenishment period of IDA, aims to learn from the PEF lessons (see chapter II).

COVID-19 has also spurred interest in blended finance for health. Previously, the amounts mobilized from the private sector for health was only 1.8 per cent of all transactions in 2017–2018.[79] Convergence, a global network for blended finance, reported that 19 per cent of blended finance transactions that were actively fundraising in 2020 were targeting the health sector. Past experience suggests that blended finance may be appropriate in health financing for small and medium-sized enterprises, and pharmaceuticals and vaccinations. [80]

4.3 Philanthropy

Philanthropic flows have also been growing in the last decade, particularly for health (figures III.C.11 and III.C.12). Collectively, 38 private foundations represent the third largest source of development assistance to health, behind the United States and the Global Fund, with the Bill and Melinda Gates Foundation (BMGF) accounting for 50 per cent of all philanthropic flows in 2019. Philanthropic foundations mainly target initiatives in middle-income countries, [81] focusing mostly on communicable diseases, vaccination and reproductive/maternal and new-born/child health.[82] They have also been active in the COVID-19 response, with the BMGF injecting $1.75 billion towards the production and procurement of medical supplies, as well as vaccine distribution.[83]

The growth of philanthropic flows can help to meet health financing gaps but should be led by country priorities. Philanthropic foundations help diversify funding sources for health, spur innovation, and direct attention to neglected parts of the global health agenda. However, they can also have an outsized influence on public policy decisions, focusing on areas of their own priorities rather than the priorities of Governments they are aiming to assist. [84] Thus, philanthropic providers should strengthen the quality, impact and effectiveness of their international development cooperation (see section 3). As expressed in the Addis Agenda, they should also consider managing their investment portfolio through impact investments, to leverage the impact of their activities.

5. Climate change and disaster risk reduction finance

While the initial reaction to the Covid-19 crisis has been to the health and immediate economic crisis, the pandemic has also highlighted the growing nature of systemic risks, particularly climate-related risks, and the importance of financing for disaster risk reduction. It has also underscored the importance of national actions on climate, such as carbon pricing and resilient investment (see chapter III.A), and of strengthening the climate finance ecosystem.

5.1 Climate finance

The international climate finance architecture is complex. Climate finance flows through multilateral channels—both within and outside of the United Nations Framework Convention on Climate Change financial mechanisms, as well as through bilateral, regional and national climate change channels and funds. MDBs and other public development banks as well as development agencies play a prominent role in delivering climate finance, in addition to various funds or institutions with a more dedicated focus, such as the Green Climate Fund, the Adaptation Fund and Global Environment Facility.

The COVID-19 crisis may have affected the delivery of the $100 billion target in 2020. Under the climate agreements, developed countries agreed to jointly mobilize $100 billion a year in finance by 2020 from public and private sources to address the needs of developing countries. Based on pre-COVID-19 data up to 2018, climate finance counted towards the $100 billion target had been trending upward and there were reasonable expectations that the target would be met. However, partial data indicates that COVID-19 may have adversely affected both the demand and delivery of climate finance: developing countries' investment in climate-related projects decelerated as priorities shifted to combating COVID-19, while donors and MDBs found it difficult to sustain and expand climate finance as operations reoriented to supporting developing countries' COVID-19 responses (see sections 2.1 and 2.3).[85]

Adaptation finance needs more attention. According to the latest OECD estimates, adaptation finance increased to $17 billion in 2018, but accounted for only 21 per cent of international climate finance in 2018. Broader estimates by the Climate Policy Initiative (including both domestic and international climate finance), found that adaptation finance almost doubled to $35 billion in 2018, but still accounted for only 5 per cent of

total climate finance.[86] These estimates are much smaller than the annual adaptation costs in developing countries, currently estimated at $70 billion and expected to rise to $140 billion to $300 billion in 2030 and $280 billion to $500 billion in 2050.[87]

Increasing climate finance for LDCs and SIDS, particularly grant finance, should support efforts to combat climate change and recover from the COVID-19 crisis. Climate finance to LDCs and SIDS has steadily increased between 2016 and 2018 but represent only a fraction of total climate flows—14 per cent for LDCs and 2 per cent for SIDS. SIDS typically receive the highest receipts per capita due to their small populations,[88] though it fulfils only a small part of total needs.[89] In contrast, low-income countries, almost all LDCs, are among the lowest per capita recipients of climate finance. LDCs receive most of their climate finance through loans (66 per cent) (figure III.C.13), which contrasts with ODA to LDCs more generally, of which 89 percent is in grants (figure III.C.13).[90] This in part reflects that a majority of climate finance is for the energy, transport and storage sector (45 per cent in LDCs, and 41 per cent in SIDS), where ODA support is also usually through loans. As LDCs and SIDS face steeper fiscal and debt sustainability challenges from the COVID-19 crisis (see chapters III.A and III.E), increasing grant finance and the overall volume of climate finance should help meet their nationally determined contributions (NDCs) and better support their recovery from COVID-19. How much climate finance contributes to debt challenges will depend in part on how much the investments financed contribute to a country's growth and development.

Streamlining methodologies and improving the transparency of data will better support the reporting and monitoring of climate finance. This should be done through an inclusive process, including through the Enhanced Transparency Framework of the Paris Agreement.

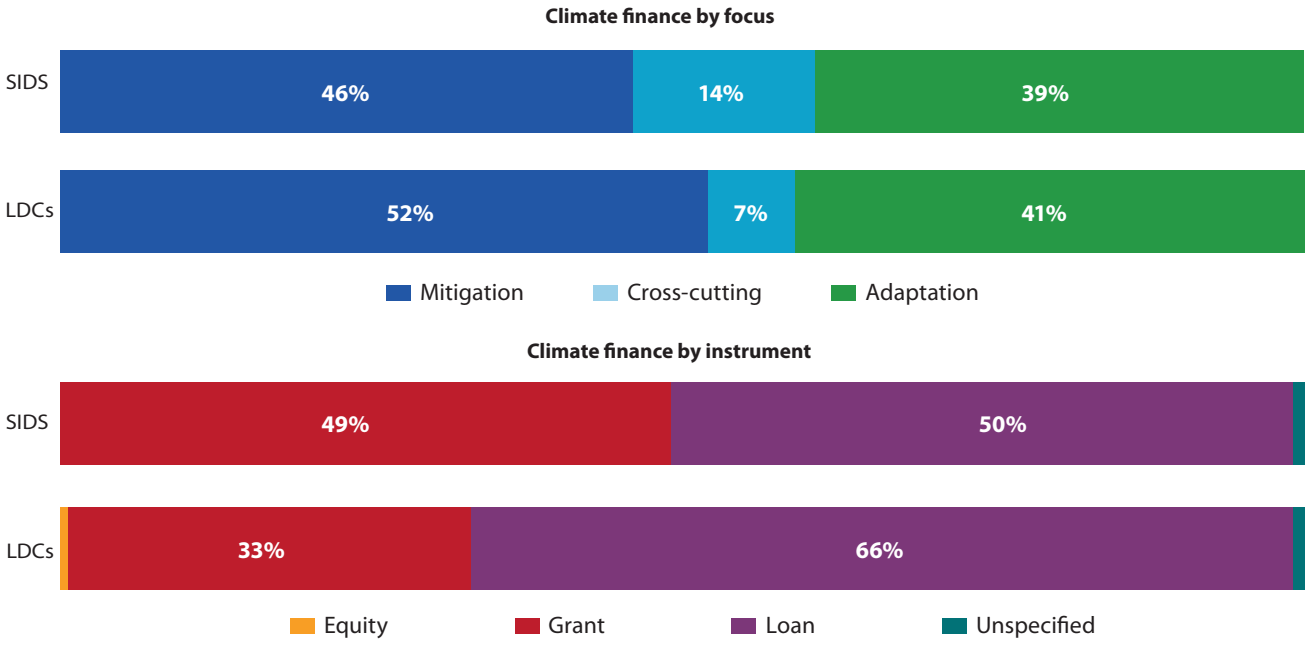
Options for strengthening and scaling up climate finance flows

Political will is needed to scale up both climate finance and, more broadly, development assistance to address the confluence of crises. The unprecedented $14 trillion COVID-19 response (see chapter III.A) demonstrates the ability to mobilize finance. It is an example that climate finance too, could be mobilized at the scale needed to address the climate crisis, if there is political will.

Climate finance and COVID-19 recovery efforts must be mutually supportive. Climate action must help to revive economies, and economic packages designed to overcome the COVID-19 crisis must be "green". Failure to do so could lock economies into fossil fuel dependence, putting achievement of the Paris Agreement and the SDGs out of reach. Many investments, including in climate-resilient infrastructure and water management can meet the dual objectives of economic recovery and climate action.[91] Policy integration between climate finance, development assistance and the COVID-19 response is critical and could almost halve the investment required to meet the SDGs and the goals of the Paris Agreement in developing countries.[92]

Strengthening and scaling up climate finance flows requires a coordinated effort from bilateral donors, the system of public development banks, climate funds and the private sector. The share capital of MDBs and other multilateral DFIs should also be increased so that they can scale up their climate finance operations, including through blended finance where appropriate (see section 2.4). Public development banks can also play a key role in climate finance, both through direct

Figure III.C.13
Climate finance to least developed countries (LDCs) and small island developing States (SIDS) by focus and instrument, 2016–2018
(Percentage)



Source: OECD, *Climate Finance Provided and Mobilised by Developed Countries in 2013-18* (OECD, 2020).

investments and mobilizing private finance (see chapters II and III.A);[93] however, they need support to build their capacity and to facilitate their access to international climate funds, such as that demonstrated by the Green Climate Fund in setting up Development Bank of Southern Africa's climate finance facility (box III.C.4). Private finance is also critical to meeting the Paris Agreement's climate finance targets and there is increased momentum in the business community to advance the low-carbon transition, although not yet at the pace or scale needed (see chapter III.B).

Simplifying access and improving the effectiveness of climate finance can better support NDCs. Developing countries have highlighted that accessing climate finance can often be a resource-intensive and time-consuming process that can stretch beyond the term of an incumbent government.[94] The Task Force has previously highlighted that policies and procedures to access climate finance should be simplified. A more coordinated and complementary approach by bilateral and multilateral agencies is also required to overcome the complex and fragmented climate finance architecture. Efforts toward this end are continuing, including to increase inclusiveness and complementarity, and simplify access.[95]

Increasing the gender responsiveness of climate finance is an opportunity to increase the effectiveness and efficiency of adaptation and mitigation programmes. For example, in sub-Saharan Africa, women are still the primary agricultural producers but because they seldom own land, they are excluded from formal consultations to determine the adaptation needs of their communities.[96] Thus, to be effective, adaptation programmes should consider gender perspectives, without which they can exacerbate discrimination against women. Investments in cleaner public transport systems can also benefit from accounting for the different needs of men and women for mass transit, including gender-specific security concerns of women. Although the Green Climate Fund was the first multilateral fund to have a comprehensive gender-responsive approach from the beginning, implementation of the approach has been delayed and subsequent updates to its gender policy and action plan have become less ambitious.[97] Other climate funds have also been making substantial efforts to incorporate gender considerations, albeit retroactively, into fund programming guidelines and structures.

Bilateral and multilateral providers should expedite the alignment of their activities with the Paris Agreement. Average commitments of official development finance for upstream and downstream fossil fuel activities were estimated at about $3.9 billion annually in 2016 and 2017, 70 per cent of which were by non-concessional finance from multilateral providers.[98] In 2016, MDBs agreed to a joint framework for aligning activities with the Paris Agreement and, although promising, progress has been slow, as MDBs have indicated that full implementation would not occur until 2023–2024. Frameworks to assess alignment also require more clarity, and assessments should be fast-tracked and cover all activities. Currently in development, assessment frameworks will initially apply to new direct operations, with assessments of intermediated lending planned for 2021 or 2022; existing portfolios will not be evaluated.[99] Bilateral providers also need to do more to end support for oil, gas and coal; almost half of COVID-19 stimulus by 21 of the largest OECD countries supported the fossil fuels sector.[100]

5.2 Financing for disaster risk reduction finance

The significant increase in disaster risk in recent decades—driven by the unintended consequences of policies and investments that are not risk-informed and the increased frequency and intensity of disasters from climate change—further underscores the urgency of greater investment in risk reduction and resilience. As part of a wider disaster risk reduction strategy, contributors to disaster response will need to realign their financing from an ex post to ex ante provision of risk-pooling funds and instruments in order to improve the efficiency, predictability and speed of response. An increased focus on preparedness should include developing instruments that build incentives for risk mitigation and reduction into their design.

The international response to disasters has mainly concentrated on emergency efforts and preparedness, with a much smaller share of ODA going to disaster risk reduction (figure III.C.14). In the last ten years, ODA to disaster risk reduction averaged 0.1 per cent of total ODA, while 10 per cent was for emergency response. Unless there are more investments in disaster risk reduction, pressure on humanitarian aid is expected to mount as the climate crisis intensifies. This may impact ODA flows to other sectors, which appears to be happening already with support for LDCs. About 40 per cent of all humanitarian and disaster risk reduction aid goes to LDCs, where emergency support has risen steadily from 15 per cent of total ODA to LDCs in 2010 to 22 per cent in 2019. By aligning their operations and activities with the Sendai Framework, bilateral and multilateral donors, including MDBs can ensure that disaster risk reduction is mainstreamed across their support to developing countries.

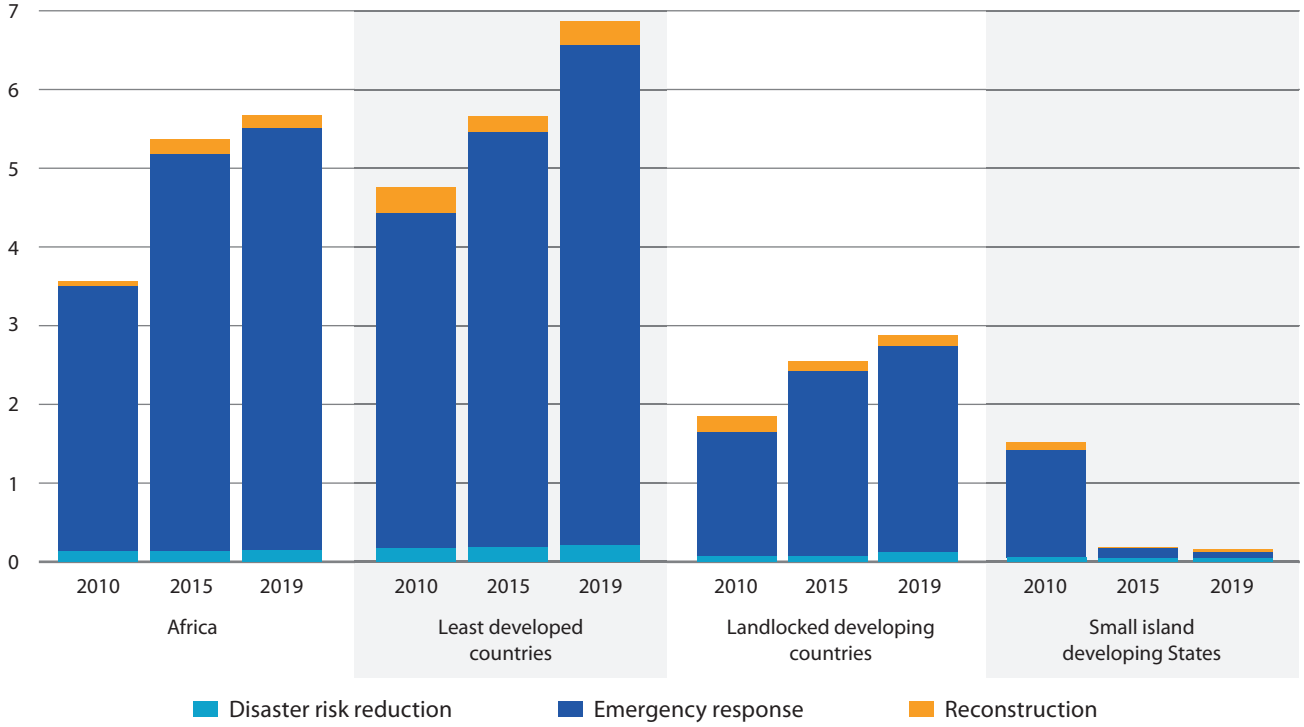
Box III.C.4
Development Bank of Southern Africa's Climate Finance Facility

The Green Climate Fund supported the Development Bank of Southern Africa (DBSA) to create the first private sector Climate Finance Facility in Africa. The DBSA Climate Finance Facility is a specialized lending facility designed to increase private investment in climate-related infrastructure projects in the Southern African Development Community (SADC) region, which faces significant climate mitigation and adaptation challenges. The Climate Finance Facility is the first time the "green bank" model has been applied to an emerging market. Green banks are public, quasi-public, or non-profit entities established specifically to facilitate private investment into low-carbon, climate-resilient infrastructure. The lending facility consists of credit enhancements including first loss or subordinate debt and tenor extensions to catalyse private sector climate investments, primarily in water and renewable energy.

Source: Green Climate Fund, "FP098: DBSA Climate Finance Facility," Projects & Programmes, October 20, 2018; Convergence, Development Bank of Southern Africa, and Coalition for Green Capital, "Design Grant Case Study, Climate Finance Facility," June 2019.

Ensuring that infrastructure investments are resilient to disasters is an opportunity to reduce risk. Infrastructure investments can either improve the efficiency and resilience of existing infrastructure assets or develop new projects to address climate and disaster risks (e.g., a new coastal defence project to reduce the effects of sea-level rise). As noted in chapter II, these risks can be managed through (i) better incorporating multi-hazard disaster risks, including climate risks, in early-stage planning of infrastructure; (ii) investments in adaptation projects that reduce the risks that infrastructure, and its users, would otherwise face; and (iii) mainstreaming the use of standards and regulations throughout infrastructure development.[101] While a range of international public financing options are available, such as through MDBs, the Green Climate Fund and other similar funds,[102] these need to be scaled up and leveraged, including through blended finance where appropriate (see section 2.3 and 2.4), to meet the infrastructure financing demand.[103] There are also various proposals, particularly from SIDS, for resilience funds to finance resilient infrastructure and disaster risk reduction (box III.C.5).

Figure III.C.14
Gross bilateral ODA disbursements for disaster risk reduction, emergency response and reconstruction by country groups on a cash basis, 2010, 2015, 2019
(Billions of United States dollars, 2018 constant prices)



Source: OECD Creditor Reporting System database.
Note: Disaster risk reduction includes ODA for disaster prevention and preparedness. The higher ODA disbursements for SIDS in 2010 was due to the emergency response to Haiti that year.

Box III.C.5
Resilience funds for small island developing States

The unique characteristics of small island developing States (SIDS) (e.g., small size, remoteness, susceptibility to natural disasters) make them particularly vulnerable to the impacts of climate change. Between 2003 and 2019, SIDS (except Singapore) have received about $1.8 billion from multilateral climate funds to finance mostly adaptation projects, with the Green Climate Fund the largest contributor.[a] Although funding has risen in the past few years, it meets only a fraction of actual needs,[a] which are at high risk of increasing due to more frequent and intense disasters.

Hence, in the 2019 mid-term review of the Samoa Pathway,[b] SIDS called for the "possible development of a targeted voluntary disaster fund. . . to manage disaster risk and build back better after disasters."[c] Work is underway to review the proposal, and the United Nations General Assembly will consider the findings in September 2021. Similar proposals are being advanced at the regional level:

- In 2018, Pacific SIDS agreed to develop a Pacific Resilience Facility to finance small-scale disaster risk reduction projects ($50,000–$200,000) within the region,[d,e] which were unlikely to be financed by global climate funds due to their small size. A global pledging event is scheduled for 2021 to raise $1.5 billion for the Facility;[e]
- In 2019, Caribbean SIDS discussed the creation of a SIDS Resilience Foundation[f] that would attract private sector funds to support resilience-building activities,[g] although it did not gain traction. The Economic Commission for Latin American and the Caribbean (ECLAC) has since proposed a Caribbean Resilience Fund under its Debt for Climate Adaptation Swap initiative; instead of debt-service payments, countries would make payments into the resilience fund (see *Financing for Sustainable Development Report 2020; see also chapter III.E of Financing for Sustainable Development Report 2021*). Donors, including the Green Climate Fund, are being approached to capitalize the Fund.[h]

Source: UN DESA

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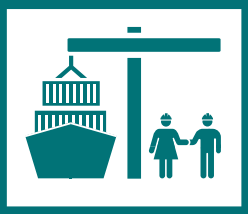
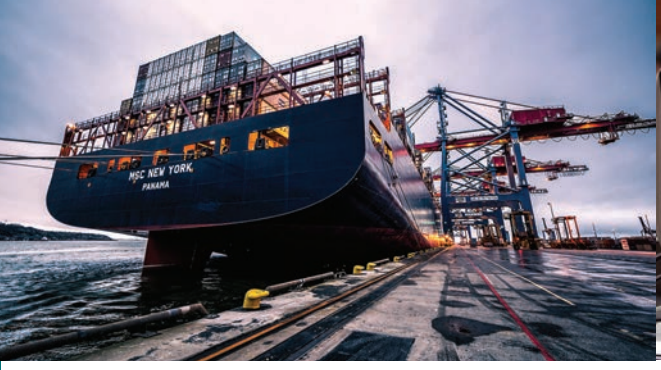


International trade as an engine for development



Chapter III.D

International trade as an engine for development

1. Key messages and recommendations

The COVID-19 crisis temporarily put the brakes on the contribution of trade to the Sustainable Development Goals, such as poverty alleviation, food security, and decent jobs. The unprecedented fall in tourism, for instance, drastically reduced external earnings of many developing countries, in particular small island developing States (SIDS) and least developed countries (LDCs). The impact of the drop in tourism is particularly severe on those with precarious jobs such as women, youth and migrant workers. With regard to LDCs, it is unlikely that the Sustainable Development Goal (SDG) target 17.11 was met (i.e., doubling their share in world exports by 2020). The crisis also highlighted the vulnerability of landlocked developing countries (LLDCs) due to their dependence on their transit neighbours.

Reigniting global trade is indispensable for achieving an inclusive and sustainable recovery from the COVID-19 crisis. Global trade was a major transmitter of demand and supply shocks across the globe. But the crisis also highlighted the fundamental importance of trade in making essential goods and services available to people in need. Trade remains a source of income, jobs and opportunities for women and men, and an important source of public revenue in many developing countries.

Life-saving vaccines and medical supplies still bypass many countries. Only a tiny fraction of vaccines and other medical supplies to fight the pandemic have reached LDCs and other low-income countries. COVID-19 vaccine production can be extended by localizing more production in developing countries. Different multilateral initiatives are also pursuing voluntarily sharing vaccine-related intellectual property rights and knowledge.

- *The international community should continue efforts to keep markets open to ensure equitable flows of essential goods and services in times of crisis;*
- *The international community must reject vaccine nationalism and protectionism, and meaningfully improve access for all countries to COVID-19 vaccines, including through facilitating technology transfer within the framework of multilateral rules, so as to encourage research and innovation while at the same time allowing licensing agreements that help scale up manufacturing.*

The multilateral trading system helped maintain transparency on trade measures during the COVID-19 crisis. The multilateral trading system could not prevent the initial proliferation of temporary protectionist measures such as export restrictions on essential medical supplies. However, the system supported a steady shift from the use of trade-restrictive measures in the early stage of the pandemic to the use of trade-facilitating measures, such as temporary elimination of import tariffs on essential supplies, in the latter half of 2020.

- *Countries are encouraged to fully meet their transparency obligations on trade measures taken to fight the pandemic and its socioeconomic impacts and ensure that these measures are consistent with their World Trade Organization (WTO) commitments.*

Still, the COVID-19 crisis prompts us to review the multilateral trading system, regional trade and investment agreements, and trade policy through the lens of an inclusive and sustainable recovery. The existing multilateral and regional trade agreements can be transformed to help countries pursue trade-led economic recovery in a manner that leaves no one behind.

- *Reforms are urgently needed to make the multilateral trading system responsive to sustainable development priorities. This calls for addressing, inter alia, the functioning of the dispute settlement system and reaching agreements on key issues under negotiation, such as fisheries subsidies;*

- *Multilateral and regional trade agreements and international investment agreements can be continually modernized with a view to enhancing their contribution to sustainable development, including public health, climate change, circular economy, decent jobs, and gender empowerment, particularly in times of crisis.*

Making trade more inclusive also requires addressing trade finance gaps that disproportionally affect small businesses and countries not fully integrated into global supply chains or the international financial system.

- *Facilitating a rapid transition to paperless trading can help reduce costs of transactions while streamlining trade finance verification process;*
- *Increasing coordination between multilateral development banks and the private sector can help fill trade financing needs, particularly those of small businesses in developing countries.*

The digital divide within and across countries persists. Rapid progress of digital technologies and e-commerce has become an effective tool for economic recovery. But the digital divide prevents equitable sharing of benefits from the digital economy and e-commerce. In addition, digital trade platforms have raised concerns about anti-competitive practices by dominant market players, as well as vulnerabilities of consumers to unfair and fraudulent business practices.

- *Governments and development partners should increase investment in infrastructure and technology and knowledge transfer to eliminate the digital divide;*
- *International and regional cooperation is essential for redressing cross-border anti-competitive practices and in combating fraudulent and deceptive cross-border commercial practices.*

This chapter starts by reviewing trends in world trade amid the COVID-19 crisis. It then examines the trade measures that affect the distribution of vaccines and other medical supplies. The following sections consider recent trade negotiations at the multilateral and regional levels; measures to facilitate trade and mitigate trade finance gaps; and ways to mainstream sustainable development in international trade, including by addressing the risks of anti-competitive practices of dominant digital platforms.

2. Developments in international trade

2.1 Trends in world trade

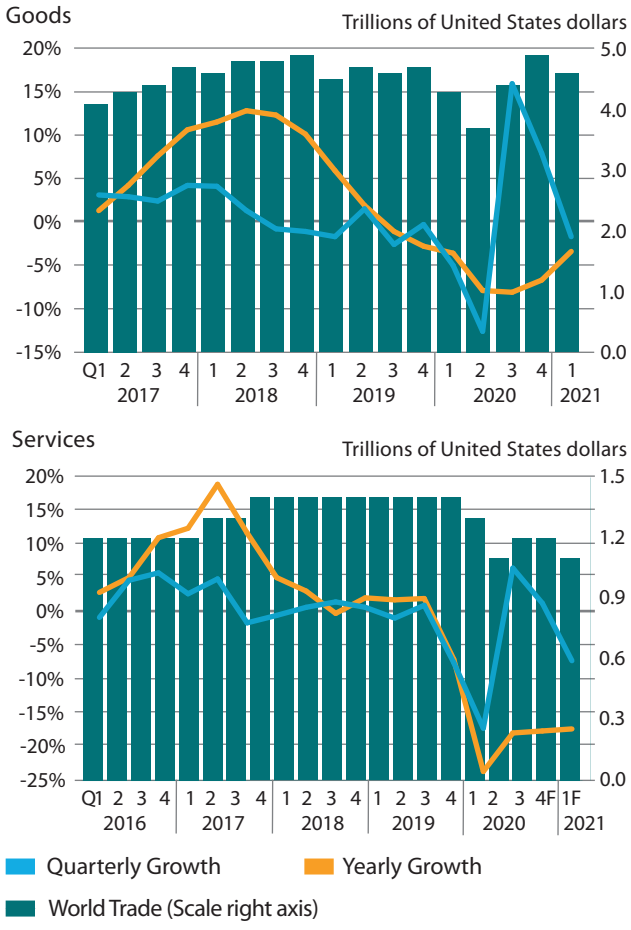
The COVID-19 pandemic brought great disruption to international trade in 2020. World trade in 2020 contracted by about 9 per cent from the previous year, with trade in goods declining by 6 per cent and trade in services declining by 16.5 per cent.[1] Following a significant fall in the first half of 2020, trade rebounded strongly in the third quarter, thanks largely to recovery in trade in goods. Trade in services continues to lag substantially below average (figure III.D.1).

Developing regions except East Asia have faced large and prolonged trade shocks under the COVID-19 pandemic. All regions experienced declines in both exports and imports during the first three quarters, with deep declines in the second quarter followed by sharp but incomplete recoveries in the third quarter (table III.D.1). West Asia/North Africa and South Asia have experienced export declines of over 40 per cent compared to the previous year in the second quarter. Trade among developing countries (South-South trade) also declined, but at a less pronounced magnitude. Impact on LDCs, both in terms of exports and imports, appears to be less pronounced than on other developing countries.

The COVID-19 crisis has highlighted the vulnerability of the landlocked developing countries due to their dependence on their transit neighbours. The introduction of cross-border restrictions aimed at combating the spread of COVID-19 by neighbouring transit countries affected the smooth flow of imported essential goods and services to LLDCs, including medical and pharmaceutical products and food. This highlights the importance for LLDCs and their transit neighbours to enhance cross-border collaboration by ensuring coordinated interventions between national border agencies during COVID-19.

The energy sectors, such as oil, gas, coal and other petroleum products, experienced the largest trade fall. These sectors experienced a drop of more than 35 per cent for January to September compared to the previous year (figure III.D.2). Steep declines in trade were also

Figure III.D.1
Global trade trends and short-term forecasts



Source: UNCTAD, Global Trade update (February 2021). Quarterly growth is the quarter-over-quarter growth rate of seasonally adjusted values. Yearly growth is the average growth rate of last 4 quarters. Figures for Q4 2020 are preliminary. Q1 2021 is a forecast.

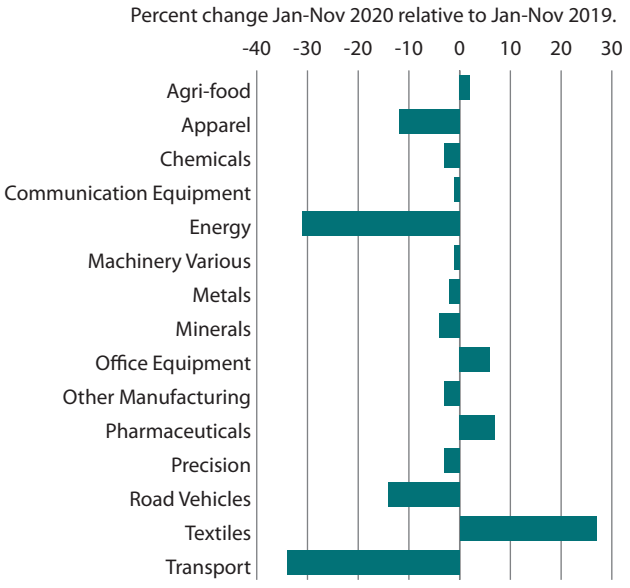
Table III.D.1
Changes in exports and imports in developed countries and developing regions, * 2020

	Q1 2020		Q2 2020		Q3 2020		Q4 2020	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
World	-6		-21		-5		3	
South-South	-4		-17		-3		7	
Developed countries	-5	-6	-24	-22	-9	-5	-1	1
Developing regions:								
East Asia	-8	-1	-6	-12	6	0	13	10
Transition economies	-13	-3	-29	-20	-21	-5	-14	0
Latin America	-4	-6	-27	-31	-8	-17	3	-1
West Asia & North Africa	-9	-2	-42	-25	-21	-8	-18	-1
South Asia	-16	-10	-40	-48	-7	-18	7	-3
Sub-Saharan Africa	8	1	-28	-24	-9	-5	-4	3
LDCs	8	2	-18	-19	-2	-4	2	1

Source: UNCTAD, Key Statistics and Trends in International Trade 2020. UNCTAD calculations are based on national statistics. Changes are year over year. Data exclude intra-EU trade. Q3 statistics are preliminary.

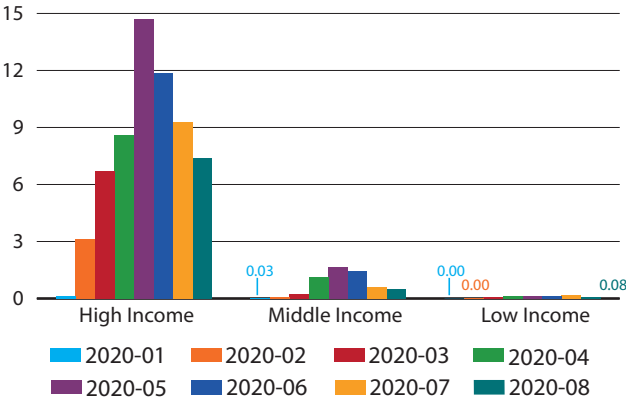
* Categorization of developing regions is based on the United Nations Standard Country or Area Codes for Statistical Use (M49).

Figure III.D.2
Changes in trade, by sectors
(Percentage)



Source: UNCTAD, Key Statistics and Trends in International Trade 2020.
Note: UNCTAD estimates based on national statistics. Changes are estimated from HS6 digits data of China, European Union, and United States. Data excludes intra-EU trade.

Figure III.D.3
Average year-on-year change in per-capita imports of medical supplies related to COVID-19
(Additional per-capita imports in USD)



Source: UNCTAD Global Trade Update.
Note: Estimates based on national statistics of China, the European Union and the United States. Categorization of high-, middle- and low-income countries corresponds to the World Bank definitions.

observed in the automotive sector, the apparel sector, and the metals and ores sectors.

Trade in essential medical supplies bounced back in the second quarter of 2020, but supplies were mostly absorbed by wealthier countries. In May 2020, exports of essential medical supplies from China, the United States of America and the European Union, representing about two thirds of world exports of these products, increased by over 70 per cent from the previous year to reach $46 billion per month.[2] However, only a tiny fraction of such medical supplies have reached low-income countries (figure III.D.3). Between April and August 2020, each citizen of a high-income country received, on average, an additional $10 per month in medical supplies. The number was about $1 per person in middle-income countries, and was a mere $0.10 in low-income countries.[3]

The massive fall in international trade in goods negatively affected the price of commodities. The decline of the UNCTAD Commodity Price Index in 2020 in the second quarter of 2020 was comparable to the declines experienced in 2015 and 2016 (figure III.D.4). When fuels are excluded, year-on-year changes are much more muted.

The crisis may have accelerated the reconfiguration of global value chains in favour of shorter and more flexible supply chains. Companies are expected to increasingly favour resilience over efficiency (characterized by small inventories and just-in-time delivery) and thus diversify their suppliers and shorten their supply chains.[4] This may affect the export interest of developing countries over time.

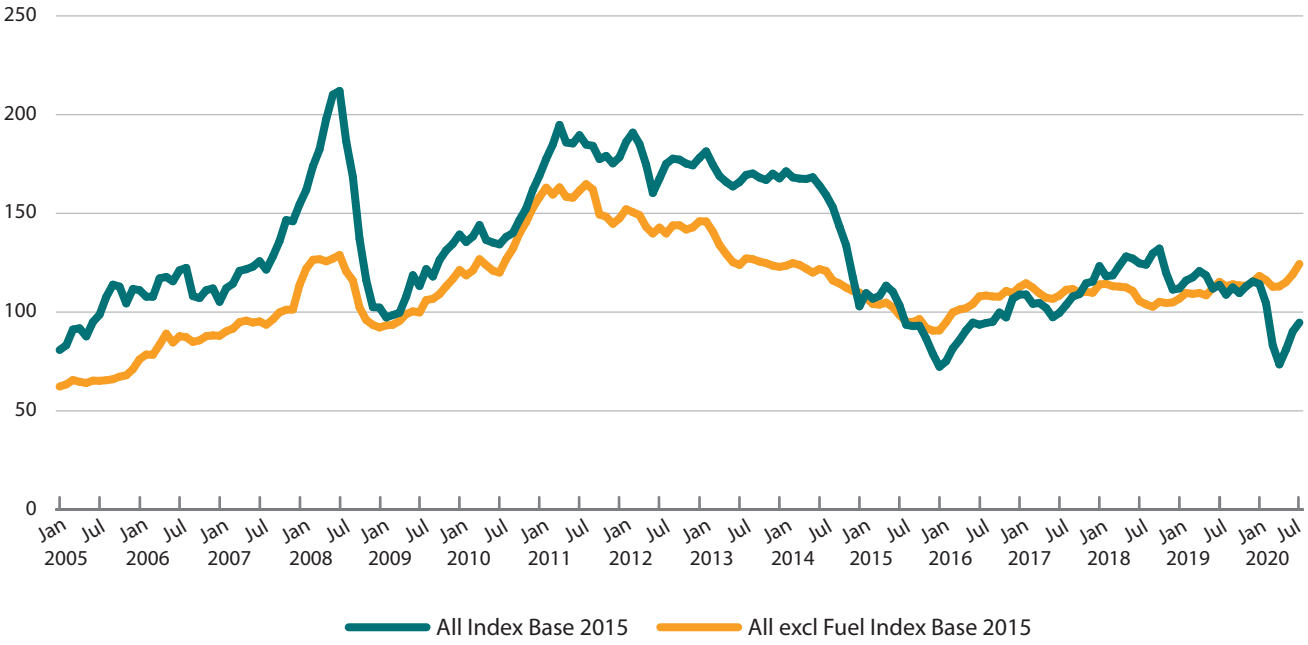
The unprecedented fall in tourism drastically reduced external earnings of SIDS and LDCs. Tourism has been a major component of services exports of many developing countries. International tourist arrivals were down by 700 million, or 70 per cent, in the first eight months of 2020 compared to the same period in 2019. This translates into a staggering estimated loss of $1.1 trillion in export revenues from international tourism in 2020.[5] SIDS, where tourism accounts for up to 80 per cent of total export revenues, were particularly affected.[6] Loss in tourism has a knock-on effect on other economic sectors that supply the goods and services travellers seek while on vacation, such as food, beverages and entertainment. It is estimated that for every $1 million lost in international tourism revenue, a country's national income could decline by $2 million to $3 million.[7] According to this estimate, employment of unskilled workers in the worst-affected countries, such as Thailand and Jamaica, could be reduced by about 25 per cent if two thirds of inbound tourism expenditure is eliminated.[8] The impact of loss in tourism is particularly severe on women, who account for a significant share of unskilled employment in tourism-related sectors (see section 6.2).

2.2 The progress of LDCs in meeting the trade-related SDG target 17.11

Meeting SDG target 17.11—doubling the LDC share of global exports by 2020—would imply bringing the LDC share of merchandise exports to about 2 per cent of world trade. This target is unlikely to be achieved given that the LDC share in 2019 remained at 1 per cent, as in the past several years (figure III.D.5.a). The share of exports of developing countries has remained at about 45 per cent. As regards trade in services, both LDCs and developing countries have increased their share over the last 20 years. In 2019, the LDC share in world services exports stood at 0.8 per cent compared to 30 per cent for developing countries (figure III.D.5.b).

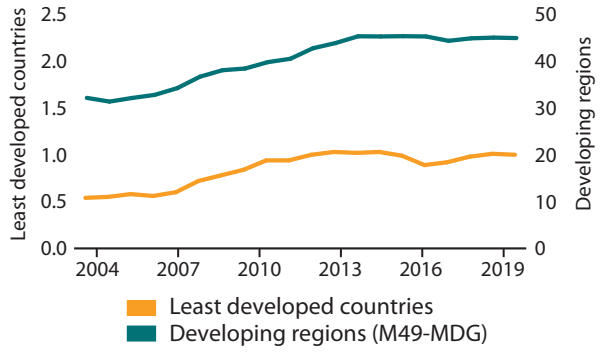
The new SDG Trade Monitor portal deepens the understanding of the linkages between trade and the SDGs.[9] Launched on World Statistics Day (20 October 2020) jointly by the International Trade Center

Figure III.D.4
UNCTAD Commodity Price Index
(2015 = 100)



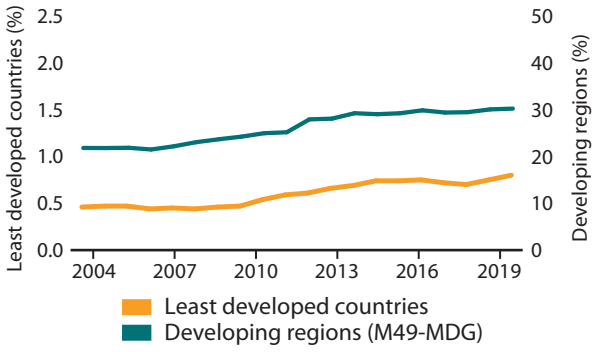
Source: UNCTAD (2020a).

Figure III.D.5.a
Share of exports of LDCs and Developing Countries in World Merchandise Exports
(2000 -2019, %)



Source: ITC/UNCTAD/WTO.

Figure III.D.5.b
Share of exports of LDCs and Developing Countries in World Services Exports
(2000 -2019, %)



Source: ITC/UNCTAD/WTO.

(ITC), the United Nations Conference on Trade and Development (UNCTAD) and the WTO, the SDG Trade Monitor allows users to access and download the up-to-date statistical information on six trade-related SDG indicators and other complementary indicators.

2.3 Trade-restrictive and trade-facilitating measures under the COVID-19 era

Trade tensions and uncertainty significantly affected trade prospects from 2017 to 2019, but the situation slightly improved in 2020. WTO members and observers introduced the lowest number of regular (i.e., those unrelated to the COVID-19 pandemic) trade-restrictive and trade-facilitating measures since 2012. The trade coverage of the regular import-facilitating measures stood at $731 billion (up from $545 billion in the October 2018–October 2019 period), while that of import restrictions came in at $441 billion (down from $747 billion). The lower number of trade-restrictive measures was likely due to four factors: a sharp decline in overall global trade flows; the diversion of government attention towards fighting the pandemic; a relative standstill in major bilateral trade tensions; and a general commitment to keep trade flowing.

Most of the 335 COVID-19-related measures taken on goods since the outbreak of the pandemic were trade-facilitating and temporary. Although most measures in the early stages of the pandemic were trade restrictive, at mid-October 2020, 195 (58 per cent) of all measures taken in response to the pandemic were of a trade-facilitating nature. A total of 140 measures (42 per cent) could be considered trade restrictive.

Export restrictions targeting products such as surgical masks, gloves, medicines and disinfectant were gradually phased out after their introduction in the early stages of the pandemic. About 39 per cent of the COVID-19 trade-restrictive measures implemented by WTO members and observers had been repealed by mid-October. By then, about 18 per cent of COVID-19 trade-facilitating measures had also been eliminated. The trade coverage of COVID-19 related trade-facilitating measures implemented since the beginning of the pandemic was estimated at $227 billion, while that of the COVID-19 trade-restrictive measures stood at $180 billion.

Members adopted 124 measures affecting trade in services in response to the pandemic. While most of these measures appear to be trade facilitating, some of the measures adopted also appear to be trade restrictive, including measures tightening foreign investment regimes. Measures adopted relate to telecommunications services, e-commerce services, and services supplied online, including bans on certain communication apps, as well as different types of taxation measures. Various Governments have also introduced new measures limiting foreign investment in areas considered strategic or linked to national security.

Transparency about trade-restrictive and trade-facilitating measures is key, but compliance with regular notification requirements of the various WTO agreements remains very uneven. Although there have been significant efforts by some delegations to bring their notifications further up to date, progress is slow. The lack of compliance with notification obligations across WTO bodies is problematic, as it undermines individual agreements and, more generally, the operation of the multilateral trading system.

The international community calls on Governments to minimize COVID-19 emergency trade restrictions, which can disproportionately harm LLDCs. In June 2020, heads of the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS), UNCTAD, Economic Commission for Africa (ECA), Economic Commission for Europe (ECE), Economic Commission for Latin America and the Caribbean (ECLAC) and Economic and Social Commission for Asia and the Pacific (ESCAP) called on Governments to refrain from any unjustified restraints on traffic and goods in transit in order to ensure that goods, medical equipment and basic goods and commodities, can depart from and reach the LLDCs when needed, without delay or hindrance. UN-OHRLLS and the World Customs Organization issued a joint statement calling on LLDCs and their transit neighbours to enhance cross-border collaboration by ensuring coordinated interventions between national border agencies during COVID-19. Heads of WTO and the Food and Agriculture Organization (FAO) also issued a joint statement calling on Governments to minimize the impact of COVID-19-related border restrictions on trade in food.

2.4 Intellectual property rights and the response to the COVID-19 pandemic

As new COVID-19 vaccines start receiving regulatory authorization, questions have been raised as to whether Trade-Related Aspects of Intellectual Property (TRIPS) flexibilities are sufficient to ensure adequate and timely supply of COVID-19 vaccines to all countries. India and South Africa have initiated a discussion for a waiver from certain provisions of the TRIPS Agreement. The waiver, if granted, would allow countries not to protect and enforce certain intellectual property (IP) rights in relation to the prevention, containment or treatment of COVID-19 until extensive vaccination is in place globally and most of the world's population has developed immunity.[10]

Private-sector partnerships for the deployment of new technologies have facilitated the production of vaccines worldwide. AstraZeneca has granted licenses to vaccine manufacturers in developing countries, including Brazil and India, on a no-profit basis to produce its vaccine when it receives regulatory approval.[11] The pharmaceutical industry is reportedly engaged in various collaborations via, inter alia, sharing their compound libraries, processes or technologies, and partnering with public and private research organizations. In such collaborations, the industry negotiates terms of cross-licensing and sharing of IP rights, data and other inputs on a commercial and collaborative basis, but without necessarily disclosing the terms of these licenses. Yet, although developed countries are extensively engaged in funding private sector initiatives, the funding conditions often bypass issues related to sharing IP rights for the benefit of facilitating access to COVID-19 vaccines and other treatments.[12]

Initiatives at the multilateral level call for voluntary sharing of IP rights, data and knowledge in the fight against the COVID-19 pandemic.[13] The WHO has launched a COVID-19 patent pool as a repository for IP rights to support collaborative research and manufacturing to facilitate the development, production and supply of COVID-19 vaccines, treatments and tests.[14] The United Nations Technology Bank for LDCs has also initiated a technology sharing initiative to facilitate manufacturing of products necessary to combat COVID-19.[15] UNCTAD has developed guidelines and implemented capacity-building programmes on how to use the IP rights system to stimulate local production of pharmaceuticals.[16] The Medicines Patent Pool (MPP), which aims at enhancing voluntary licensing and patent pooling for improving access to life-saving medicines, has expanded its mandate in March 2020 to include the licensing of COVID-19 related health technology.[17] These initiatives remain at initial stage and it is not yet clear to what extent technology owners will participate in these initiatives.

National and regional IP offices have also taken initiatives to expedite or simplify their administration of the IP system, especially concerning patents and trademarks, and to provide practical support for firms seeking to develop products of potential benefit in combating the pandemic. Furthermore, transparency of legal and policy measures taken by WTO members is critical for information-sharing and policy responsiveness in a globally turbulent situation. Many are available through the WTO COVID-19 webpage[18] and the World Intellectual Property Organization (WIPO) COVID-19 IP Policy Tracker.[19] Lastly, a number of initiatives have addressed the voluntary sharing and pooling of IP rights, thus responding to the spirit of collaboration that is required for any global effort to tackle the COVID-19 pandemic.

Box III.D.1
The role of trade policies in ensuring adequate supply of vaccines, treatments and tests

The COVID-19 vaccine trade value chain intersects with trade-related policies and World Trade Organization (WTO) rules at multiple points, as such trade policies have an important role to play in ensuring adequate supplies of vaccines, treatments and tests in response to COVID-19. The WTO has produced a non-exhaustive checklist of trade-related policies that countries can use to foster dialogue and transparency and to encourage timely and safe development and delivery of COVID-19 vaccines. This checklist combines the issues of trade facilitation and intellectual property (IP) rules to help countries navigate and streamline the process of vaccine discovery and approval all the way to domestic delivery. The policies run along all stages of vaccine creation and delivery, including development; domestic approval in both manufacturing and importing countries; international distribution and border clearance; and domestic distribution. For example, in the initial stages, countries that develop vaccines should ensure that policies and regulations promote an effective and timely cross-border exchange of scientific information, data and physical samples. Existing IP frameworks should also incentivize development and support IP sharing. In vaccine manufacturing, countries can consider how components, inputs and raw materials can be expedited through streamlined export, import and transit controls as well as technology transfer and increased local production capacity. Likewise, it is important to have a comprehensive understanding of domestic and export market IP rights. Importing countries stand to gain by exploring means of fast-tracking domestic approval schemes—for example, by accepting domestic approval of producing countries or World Health Organization decisions, including vaccine pre-qualification.

Source: WTO

3. Progress on multilateral trade negotiations and WTO reform

The pandemic and its impact only compound the challenges that the multilateral trading system is facing. The pandemic has come on the heels of two years of increased trade tensions and uncertainty as Governments around the world introduced an unprecedented number of trade restrictions. While the WTO remains highly relevant to the operation of the global economy, with over 80 per cent of world trade conducted under its terms, some of its rules need to be updated to be a better fit for the modern digital economy. Without reform to the multilateral trading system, the international trade landscape could become more fragmented and polarized in the coming decades, to the detriment of small and poorer countries in particular.[20]

Over the course of the pandemic, WTO members have emphasized the critical importance of international cooperation and coordination to meet current challenges and the importance of open and predictable markets to foster a strong and inclusive recovery for all countries. They have also highlighted the adaptability in

the multilateral trading system as crucial for the response to COVID-19. The tasks ahead are to ensure that trade contributes to making the COVID-19 response more effective, and that the trading system emerges from the crisis stronger and better equipped to respond to the aspirations of all countries.

Concluding the fisheries subsidies negotiations remains a priority for WTO members, not only to comply with the mandate in SDG target 14.6, but also as a test case for the credibility of the WTO negotiating function. Despite the challenges brought on by the COVID-19 crisis, the negotiations have been able to move forward significantly, although the deadline of 2020 was missed. Members aim to build on the momentum achieved in 2020 to forge an agreement early in 2021.

WTO members also continue to give high priority to the agriculture negotiations. Agricultural trade reform is more critical than ever, particularly in a COVID-19 environment. An outcome on trade distorting agricultural support remains a key priority for the WTO Twelfth Ministerial Conference (MC12) and is critical to safeguarding global food security. Members also started discussing the possible adoption by the WTO General Council of a decision on exempting foodstuffs purchased by the World Food Programme from export restrictions.

Effective special and differential treatment (SDT) for developing countries remains a fundamental pillar of any outcome that may be achieved at MC12. Some developing-country members remain disappointed at the reluctance by some other members to engage in a constructive discussion on SDT, especially given that the COVID-19 pandemic has exposed the vulnerabilities of developing countries from a health, economic and social perspective.

Progress has also been made in the Joint Statement Initiatives (JSIs) which have been launched by like-minded groups of WTO members to advance discussions on certain topics, such as investment facilitation, e-commerce, domestic regulation, and micro, small and medium-sized enterprises (MSMEs). Participants in these JSIs are currently working on concrete outcomes for MC12.

In the area of trade and women's economic empowerment, a decision has been taken to establish a WTO informal working group. The informal working group's objectives are to (i) continue to share best practices among members on increasing women's participation in trade; (ii) consider and clarify what "gender lens" is in the context of international trade; (iii) review how gender could be applied to the work of the WTO; (iv) review and discuss gender-related analytical work produced by the WTO secretariat; and (v) explore how best to support delivery of the WTO Aid for Trade Work Programme.

In the area of WTO reform, members are encouraged to see a growing international realization that fundamental WTO reform is both necessary and feasible. This reform must find solutions to the pressing problems faced by the multilateral trading system through improvements in the negotiating function of the WTO. It should also address both the functioning of the dispute settlement system, so that it regains its effectiveness, and the defects in its governance structure. Every Government of every WTO member that has the capacity to do so must consider how to improve on the WTO.

The response to the pandemic—both by the WTO secretariat and members—has been strong in terms of providing information to increase transparency. However, to date, the substantive collective response, in terms of determining what measures are needed to spur trade and to curb trade restrictions, has been weaker.

Despite what has been termed as fundamental "geostrategic tensions" between the major economies that may make finding agreements difficult, there are areas of common ground. These include, notably, general agreement that

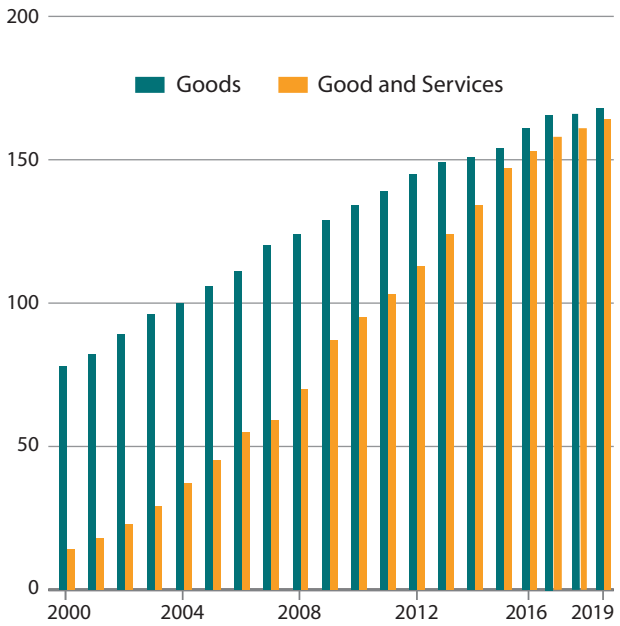
- Trade should facilitate access to essential goods and services to combat the pandemic;
- Trade policy should become a means to spur a global economic recovery and build back better;
- Trade should play its part in dealing with climate change.

4. Regional trade and investment agreements

4.1 Regional trade agreements

The international trading system is regulated by an increasing number of regional trade agreements (RTAs). The number of RTAs in force has almost doubled from less than 150 in 2005 to more than 300 in 2019 (figure III.D.6). In recent years, about half of all RTAs aim at so-called deeper integration—that is, those with trade rules going beyon d traditional tariffs and existing WTO agreements—to cover behind-the-border regulatory measures.[21]

Figure III.D.6
Regional trade agreements in force, 2000-2019



Source: UNCTAD, Key Statistics and Trends in International Trade 2020.
Note: UNCTAD secretariat calculations based on WTO RTAIS data and COMTRADE data.

Box III.D.2
Global Initiative on Model Provisions for Trade in Times of Crisis and Pandemic in Regional and other Trade Agreements: emerging recommendations

The ad hoc use of trade measures to counter the COVID-19 crisis in 2020 suggests that regional trade agreements played little role in minimizing trade disruptions in crisis situations. In an effort to better prepare for possible future crises, the United Nations Economic and Social Commission for Asia and the Pacific, together with the United Nations Conference on Trade and Development and the other United Nations Regional Commissions, and in collaboration with the World Trade Organization and other organizations, launched the Global Initiative on Model Provisions for Trade in Times of Crisis and Pandemic in Regional and other Trade Agreements in June 2020.

The Initiative organized a Policy Hackathon in July 2020, which collected substantive and innovative ideas from trade experts from government, academia, international organizations and civil society on possible provisions in regional trade agreements that could complement national trade policies during and after a crisis.

Key recommendations that emerged from the Global Initiative include the following:

(a) Regional and other trade agreements are encouraged to have provisions addressing trade measures in emergency or crisis situations. This can be achieved either by revising or extending existing provisions, or by creating a separate chapter on trade in times of crisis/emergencies and with clear but flexible definitions of "emergency situation" and "essential supplies," building upon existing international instruments whenever possible;

(b) Transparency and information-sharing are fundamental. It is recommended to raise transparency obligations under trade agreements, including publishing trade measures that have been taken during emergencies and information concerning the crisis situation;

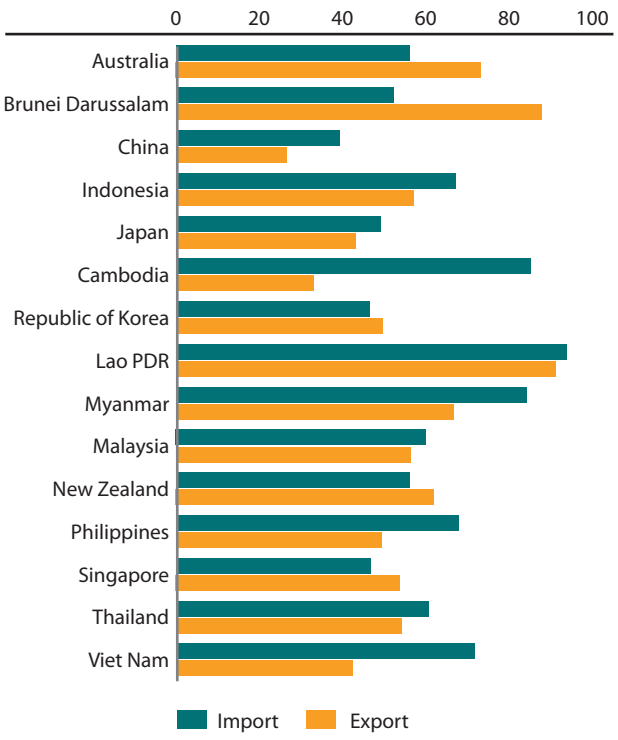
(c) Digitalization of trade procedures should be promoted;

(d) Crisis management needs sustainable development as the core objective. As such, making trade agreement provisions more inclusive, by addressing issues such as trade and climate change, gender empowerment in trade, and labour rights, is recommended.

All the ideas collected during the Policy Hackathon and discussed during the Initiative's webinar series are available in an online repository.[62]

Source: UN ESCAP.

Figure III.D.7
Share of intra-RCEP trade, by country



Source: UNCTAD, Key Statistics and Trends in International Trade 2020.
Note: UNCTAD calculations based on UNSD COMTRADE data.

More than 50 per cent of world trade in 2019 received most-favoured nation (MFN) tariffs agreed at the WTO. A large part of the remaining trade took place among countries that provide reciprocal preferential market access to each other (e.g., RTAs or bilateral trade agreements). In addition, about 7 per cent of world trade received unilateral (i.e., non-reciprocal) preferences such as the Generalized System of Preferences for developing countries and those provided specifically to LDCs.

The signing of the Regional Comprehensive Economic Partnership (RCEP) in November 2020 demonstrates a new impetus for deeper regional integration in Asia and the Pacific.[22] The RCEP as a group represents about 30 per cent of 2019 global gross domestic product (GDP). Its fifteen members include countries with the second and third largest GDP in the world (China and Japan) as well as LDCs (Cambodia, Lao People's Democratic Republic and Myanmar). It includes a landlocked country (Lao People's Democratic Republic) with all its transit neighbours. Intra-RCEP merchandise trade was close to $2.5 trillion in 2019, or about 13 per cent of global trade.[23] On average, the share of intra-RCEP merchandise trade accounts for about 40 per cent of the RCEP members' total trade (figure III.D.7). The share is particularly high for the imports of LDC members from the region (Cambodia, Lao People's Democratic Republic and Myanmar). One characteristic of intra-RCEP trade is that it has been driven by the growth of regional value chains, particularly communication equipment. Trade in intermediate inputs to communication equipment in 2019 (over $550 billion) claimed more than a quarter of intra-RCEP trade in the manufacturing sectors for the year.

The African Continental Free Trade Agreement (AfCFTA) is another prominent example of regional integration under way. The agreement aims at removing tariffs on 97 per cent of imported goods over a period of between 5 and 15 years. It also aims at reducing non-tariff barriers and at fostering standards harmonization, customs cooperation, and trade facilitation. Empirical analysis estimated that the continent's GDP could increase from $28 billion (low liberalization scenario) up to $44 billion (high liberalization scenario) after full AfCFTA implementation in 2040, compared to a baseline without tariff liberalization.[24] Although the COVID-19 crisis caused a delay, the start of trading under the AfCFTA officially started in January 2021, marking an important milestone for the continent.

4.2 International investment agreements

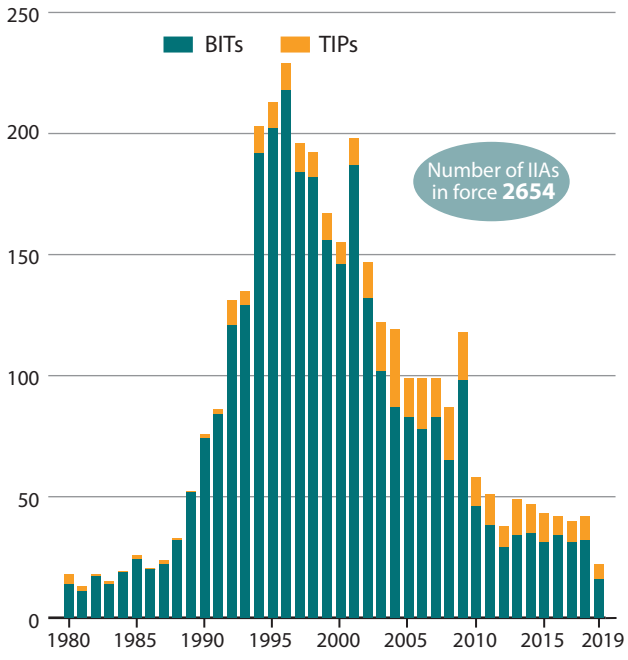
The year 2019 saw the lowest number of new international investment agreements (IIAs) in the past three decades. A total of 22 new IIAs were signed in 2019, of which 16 were bilateral investment treaties (BITs) and 6 were treaties with investment provisions (TIPs). At the same time, at least 34 IIAs were terminated—22 were unilaterally terminated, 6 were terminated by consent, 4 were replacements, and 2 expired. For the second time since 2017, the number of IIA terminations in a year exceeded the number of treaty conclusions. With 12 IIAs entered into force in 2019, there were a total of 2,654 IIAs in force at year-end 2019 (figure III.D.8).

As observed in recent years, the inclusion of specific "modernized" provisions with reform-oriented clauses continues to rise in new IIAs.[25] Such provisions aim at, inter alia, safeguarding States' policy space (e.g., with general exceptions for the protection of human health); the conservation of exhaustible natural resources; or limiting treaty scope (e.g., by excluding certain types of assets from the definition of investment).[26] A large number of new IIAs also included provisions relating to the promotion of sustainable development via, among others, making a reference in the preamble to the protection of health and safety, labour rights, and environment or sustainable development, and including provisions for the promotion of corporate and social responsibility.[27]

The number of new investor-State dispute settlement (ISDS) cases remained high, although below the average of the past five years. In 2019, investors initiated 55 publicly known ISDS cases pursuant to IIAs (figure III.D.9), the lowest number in the preceding five years. As some arbitrations can be kept confidential, the actual number of disputes filed in 2019 and previous years is likely to be higher. As investor–State arbitration remains at the core of broader IIA reform actions, countries continued to implement many ISDS reform elements in IIAs signed in 2019, using four principal reform approaches: (i) no ISDS; (ii) a standing ISDS tribunal; (iii) limited ISDS; and (iv) improved ISDS procedures.[28] The most recent data cover 1,061 treaty-based ISDS cases, scattered among different arbitration forums as of 31 July 2020.

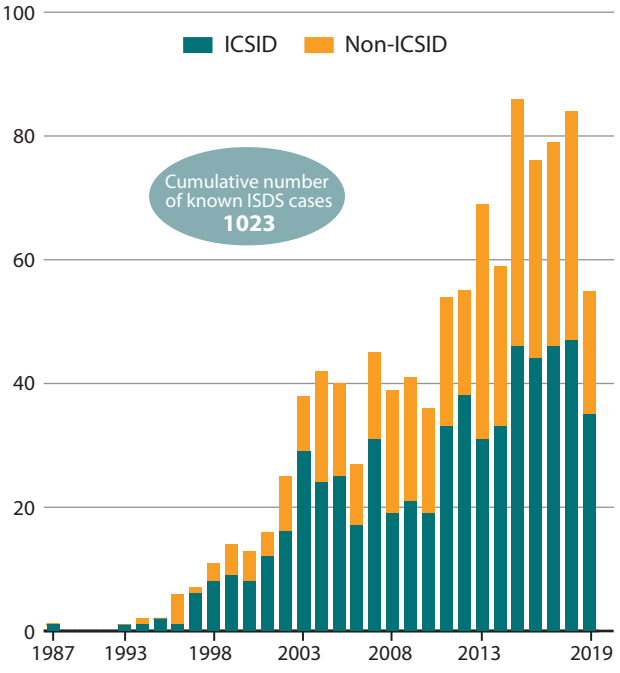
Emergency measures to tackle the COVID-19 crisis—such as lockdowns and travel bans—could expose Governments to legal disputes and litigation. Foreign investors may seek to recover compensation through a range of legal tools, including arbitration under the 2,600

Figure III.D.8
Number of IIAs signed, 1980-2019
(Annual number of IIAs)



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

Figure III.D.9
Trends in known treaty-based ISDS cases, 1987-2019
(Annual number of cases)



Source: UNCTAD, ISDS Navigator.
Note: ICSID = International Centre for Settlement of Investment Disputes. Information has been compiled from public sources, including specialized reporting services. UNCTAD statistics do not cover investor–State cases that are based exclusively on investment contracts (State contracts) or national investment laws, or cases in which a party has signalled 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 case numbers reported in previous years.

or so international investment treaties in force worldwide. This could put States at risk of being ordered to pay a large sum to individual investors at a time when they are trying to rebuild from the crisis.[29]

The COVID-19 pandemic is expected to slow down the pace of new IIAs. In 2020 to date, a number of negotiating rounds for BITs and TIPs have been cancelled or postponed due to the pandemic. The COVID-19 mitigation measures are also likely to result in a reassessment by States of the role of IIAs in national development. Indeed, certain policy responses by Governments to mitigate the negative economic impact of the pandemic, depending on the way they are implemented, could expose Governments to arbitration proceedings initiated by foreign investors under IIAs and/or investor-State contracts. This highlights the need to safeguard sufficient regulatory space in IIAs to protect public health and to minimize the risk of ISDS proceedings, while protecting and promoting international investment for development.[30]

5. Facilitating international trade

5.1 Trade finance gaps and instruments

Developments in trade finance in 2020 have been largely driven by the impact of the COVID-19 pandemic. The issue of trade finance has resurfaced acutely, twelve years after the great financial crisis. While the current crisis was not financial in origin, access to trade credit has become more difficult in many countries than ever before. Trade finance gaps were already high before the crisis, in the order of $1.5 trillion globally, with gaps being the highest in proportion of demand in LDCs. MSMEs are also particularly affected by trade finance gaps.

Flows of trade finance plummeted during the first semester of 2020 due to the fall in trade flows, operational difficulties processing trade finance documents, and the retrenchment of international banks from the most vulnerable countries. The situation has since eased somewhat on the main routes of trade, thanks to the effects of payment deferral and guarantee schemes from national Governments, export credit agencies, and public development banks.[31] The demand for trade—and hence for trade finance—picked up at the end of the second quarter of 2020, after the easing of lockdowns.[32]

With the health crisis lasting, banks had been expecting increased payment failures from counterparties, beyond sectors initially impacted by the lockdowns, such as airlines, tourism and, to some extent, the automotive sector. In many developing countries, sovereign risk had deteriorated along with the corporate risk, resulting in increased caution by international banks to engage in cross-border trade finance. Importers' banks in poor and even middle-income countries could not find counterparties for financing of many goods, ranging from energy commodities to consumer goods. Domestically, the high demand on large banks for lending also explains the greater reluctance to engage in cross-border trade operations. In view of recorded and expected losses, several large banks (albeit not all) either limited lending for cross-border trade, or withdrew altogether from certain market segments and regions, leaving additional gaps in financing that are still difficult to fill.[33]

The countries most affected by greater selectivity of lending are those not fully integrated into global supply chains or the international financial system. As in previous economic crises, trade finance shortages have been most acute in Africa, Latin America and the Caribbean, Central Europe and developing Asia. Multilateral development banks (MDBs) have also been reporting an increasing demand for support from middle-income countries for trade transactions that would typically be supported by the private sector, such as the importation of grain and of energy commodities in preparation for the upcoming winter.

Multilateral development banks have been filling some of the gaps left by a withdrawing financial system. Trade finance programmes from MDBs have been integral to these institutions' crisis response and have been in high demand: the European Bank for Reconstruction and Development doubled its maximum intervention limit for trade finance, from €1.5 billion to €3 billion; demand for International Finance Corporation trade finance facilities increased threefold since the start of the crisis; the Asian Development Bank increased the number of trade transactions supported by its trade finance facilitation programme by 50 per cent; the African Development Bank and African Export Import Bank implemented exceptional measures to support local banks in having their letters of credit endorsed internationally; and the Islamic Trade Finance Corporation has also been working through local financial institutions to support small and medium-sized enterprises (SMEs) across its membership. Requests for MDB facilities have come from over 80 countries, showing the global extent of the problem.

International support and cooperation are required to address shortages in trade finance that have emerged during the crisis. In July 2020, heads of the WTO and six MDBs issued a joint statement pledging greater coordination in providing support to trade finance markets for developing countries and small businesses. The WTO expert group on trade finance will support this greater coordination and monitor the evolution of trade finance gaps. The WTO, the International Chamber of Commerce and B20 Saudi Arabia also issued a joint statement in July 2020 to urge private and public sector actors to work together to address trade finance gaps, for instance, by enabling a rapid transition to paperless trading and addressing regulatory constraints that hinder trade finance. Guidance specific to trade finance for SMEs has also been released in 2020, which describes the main trade finance structures available to SME importers and exporters and can help them reduce their trade-related costs.[34]

The situation is expected to remain challenging for the months to come, well into 2021. A combination of increased commercial risk and deteriorated sovereign risk deters many private sector banks from expanding financing. Trade credit insurers also warn that potential losses and claims had been simply delayed in some cases, thanks to Government programmes. This explains why there has not yet been a significant increase in claims payments.

5.2 Aid for Trade

SDG target 8.a calls for increased Aid for Trade support for developing countries, particularly LDCs. The objective of the Aid for Trade initiative is to help these countries build the supply-side capacity and trade-related infrastructure they need to implement and benefit from WTO agreements, and to expand their trade.

In 2018, the most recent year for which data are available, global disbursements of Aid for Trade reached $45.1 billion. This represents a yearly increase of $1.7 billion (3.8 per cent) compared to 2017, and $25.8 billion

Box III.D.3
Aid for Trade and the African Continental Free Trade Area

Aid for Trade can improve national capacity to implement the African Continental Free Trade Area (AfCFTA) and benefit from the trade agreement. Financial initiatives supporting the Agreement's implementation, such as the AFREXIMBANK AfCFTA Adjustment Facility, may be a consideration for Aid for Trade donors in supporting structural transformation and long-term competitiveness. Beyond investments in infrastructure, initiatives can focus on capabilities to develop, harmonize and meet AfCFTA standards, and to build affordable and sustainable conformity assessment capacity and service (accreditation, certification, testing and inspection). It can also support public-private dialogue that facilitates value addition within the region and positive spillovers to other sectors, by supporting national AfCFTA implementation committees and the inclusive implementation of national and regional strategies for value chain development and trade. To ensure inclusive benefits from AfCFTA, efforts must be made to increase Aid for Trade projects that specifically target small and medium-sized enterprises, women and youth. Similarly, there is little focus within Aid for Trade on digitalization: only 1 per cent of all funding provided under Aid for Trade is currently allocated to information and communications technology solutions.[63] Regional Aid for Trade towards the AfCFTA can offer a platform for these partnerships.

Source: ECA

(149.2 per cent) compared to the 2006 baseline recorded following the launch of the Aid for Trade initiative. Commitments have also been on a steady increase. Overall, global Aid for Trade disbursed in 2018 has amounted to $455.5 billion, with 27 per cent of the total going to LDCs ($122.2 billion).

5.3 Trade facilitation

Since the entry into force of the WTO Trade Facilitation Agreement (TFA) in 2017, 153 of 164 WTO members (93 per cent) have ratified the TFA. Significant progress has also been achieved in its implementation. An estimated 66.5 per cent of commitments are being implemented, based on members' notifications to the WTO Trade Facilitation Committee.

The crisis caused by the COVID 19 pandemic highlighted the important benefits gained from implementation of the provisions of the TFA. Countries that had established channels to make trade-related information available were able to help government officials and traders keep up with the new and frequently changing requirements. Streamlined border procedures and border agency cooperation minimized disruption to supply chains and the delivery of essential goods. Digitalization of procedures helped keep goods and duties flowing across borders despite lockdowns and restrictions. Trade facilitation portals can also help by providing access to trade procedures of priority products, including medical and pharmaceutical ones.

Prioritizing implementation of the TFA provisions will help countries to overcome the barriers they faced in dealing with the crisis. For example, this could help countries that are still in the process of implementing the TFA to be in a better position to expedite the rapid delivery of vaccines. A key starting point would be more effective coordination among border agencies, cooperation between transit countries and their landlocked neighbours, cooperation with private sector, and reaching out to donors to obtain the necessary assistance.

A wealth of resources to assist with TFA implementation are available through the WTO Trade Facilitation Agreement Facility (TFAF). The TFAF was created to help developing-country and LDC WTO members find the support they need to implement the provisions of the TFA. It is funded by WTO members on a voluntary basis. It provides this support by making information on development-partner assistance programmes available on its website, conducting matchmaking, and offering project preparation and project implementation grants. Moreover, the website also provides access to a wealth of COVID-19-related resources as well as information on international standards and case studies for each provision of the TFA.[35]

6. Mainstreaming sustainable development in international trade

During 2020, international trade acted as a transmitter across the globe of economic disruption that stemmed from national emergency economic measures. Yet, international trade also plays a key role in fostering sustainable economic recovery. This section addresses selected policy areas that are important for countries in balancing the trade-led economic recovery with the aspiration of inclusive and sustainable growth in accordance with the 2030 Agenda for Sustainable Development.

6.1 Competition policy and consumer protection policy in e-commerce

The pandemic has highlighted the importance of digital technologies in general—and e-commerce in particular—as tools for continuing economic activity during the crisis. In 2019, an estimated 1.5 billion people—which accounts for 27 per cent of the world's population over 15 years old—shopped online. This represented a 7 per cent increase over 2018.[36] E-commerce has continued to grow—and rapidly—amid the crisis as more consumers moved to shopping online. This calls for the immediate elimination of the digital divide across countries as well as within a country, with specific considerations to women, youth and other marginalized segments within economy (see chapter III.G).[37]

Today's digital platforms can be highly non-competitive. Most digital solutions being used for e-commerce, teleworking, social media, or cloud solutions are provided by a small number of very large companies, based mainly in China and the United States. These companies have seen significant growth of their market valuations in the face of increased demand under the COVID-19 pandemic. Meanwhile, the increased market dominance of a handful of global digital players is accentuating concerns about the distribution of the values arising from the digital platforms, as well as about how to adequately protect online consumers and how to ensure fair competition in the digital economy.[38]

Market concentration is likely to increase in the COVID-19 "new normal".[39] On the one hand, smaller firms with fewer financial reserves have received disproportional damage from lockdown and other emergency measures. On the other hand, there has been a significant rise in the magnitude of surplus profits, mostly driven by top corporations. SMEs or start-ups may become attractive targets of mergers and acquisitions by dominant firms, especially by multinational companies.

Anti-competitive practices could be of particular concern in connection to dominant digital platforms. Google, Amazon, Apple, Facebook and Microsoft have made 19 acquisitions in 2020, which represents the fastest pace of acquisitions and strategic investments since 2015.[40] This contrasts with an overall short-term decline in cross-border mergers and acquisitions. In April 2020, such deals had decreased by more than 50 per cent compared to April 2019. There is a need for strong competition law enforcement and a robust merger control regime to address increasing market power and concentration in digital markets. Possible abuse of dominance by large digital platforms may go beyond the reach of existing competition laws. Therefore, new competition tools and pro-competition ex ante regulations to deal with gatekeeper digital platforms are necessary to address exploitative practices of these platforms and to keep markets open for new entry.

Consumers have become more vulnerable than before to unfair, misleading and fraudulent business practices, particularly in e-commerce.[41] As consumers turn increasingly to digital platforms for shopping or other purposes, underlying shortcomings, such as insufficient legal and institutional frameworks, have become more evident. Shortfalls particularly in cross-border transactions include limited coverage and efficacy of existing online dispute resolution mechanisms; insufficient reach of national enforcement against businesses based in other countries; and uncertainty over payment security and data protection.[42] Protecting consumers amid and after crises such as COVID-19 requires swift and decisive action. Adequate legal frameworks for consumer protection and competent and well-resourced institutions are key to effective responses to emerging challenges.

International and regional cooperation is essential for redressing cross-border anticompetitive practices and in combating fraudulent and deceptive cross-border commercial practices. In Africa, a significant number of regional economic communities already have regional competition rules.[43] The Competition Commission of the Common Market for Eastern and Southern Africa, for example, conducts cross-border merger reviews. Regional frameworks could also be more effective in better protecting consumers by providing a common platform for consumer protection authorities to cooperate and exchange information and experience. The African Consumer Dialogue and the Ibero-American Forum of Consumer Protection Agencies are good examples.

6.2 Trade anwd vulnerability: empowering women and migrant workers

Women account for a significant share of workforce in international trade. In developing countries women make up 33 per cent of the workforce of firms that trade internationally, compared with just 24 per cent of non-exporting firms. In some countries, they represent more than 50 per cent of the exporting firms' workforce. For example, many African countries rely on labour-intensive sectors to achieve export-led growth—sectors that have higher rates of women's employment, such as agriculture and garments and textiles.

Women entrepreneurs face many barriers to integration in international markets. Gender-specific challenges, including physical and sexual harassment, personal safety, bribery, corruption, time-consuming trade procedures and documentary requirements, and other traditional non-tariff barriers tend to be disproportionately higher for female small-scale traders. A key obstacle is also the lack of access to information on trade rules and to training on trade rules. Between 2019 and 2020, the WTO conducted three regional surveys on "Assessing women entrepreneurs knowledge gaps in trade" in East Africa, Latin America and the Caribbean and South Asia.

Market disruption and reduced mobilities under COVID-19 exacerbated barriers facing women as traders. Across regions, COVID-19-related restrictions on freedom of movement are affecting small-scale/informal cross-border traders, many of whom are women, who earn a living by making regular trips between countries.[44] Earnings from such informal trade are often the mainstay for their families and communities. Revenue forgone due to the cessation of trading activities squeezed their capital. This erodes their capacity to respond and recover when activities reopen for business,

Women are often not included in the design of government measures to mitigate the economic impact of COVID-19. Only about 10 per cent of measures such as fiscal and monetary measures directly target women's economic security.[45] Measures that support informal workers or MSMEs, especially in tourism, are expected to benefit women because they constitute a large proportion in these categories. Women's economic empowerment, in turn, is closely linked to their access to technology as well as digital skills, which calls for increased emphasis on these areas as part of inclusive and sustainable COVID-19 recovery measures.

Measures to address the non-tariff barriers faced by women cross-border traders play a key role in economic empowerment of women. Such interventions include gender-sensitivity training for customs officers and border officials, information desks at border posts, and gender focal points for police patrols. Regional approaches such as simplified trade regimes can reduce the cost of formal cross-border trade for small traders, encourage formalization, and strengthen their position in the face of future shocks.46 Innovations that have addressed these challenges during COVID-19, such as aggregation of goods by professional associations, should be harnessed, sustained and built upon post-COVID-19.47

The COVID-19 crisis has highlighted the plight of migrant workers worldwide, resulting in a steep decline in remittance flows (see chapter III.B). The number of migrants worldwide is estimated to have reached 281 million in 2020.[48] The COVID-19 pandemic has shed light on the important economic role they play in host countries. For example, in Europe, an estimated shortfall of up to 1 million seasonal agricultural workers impacted the timely supply of certain agricultural produce.[49]

Agreements on trade in services can enable safe, regular and orderly mobility. Trade agreements provide a platform through which measures can be put in place to facilitate mobility, including by removing barriers to the temporary movement of natural persons to supply services abroad, or "Mode 4" of trade in services. Multilateral commitments in this regard have been limited and conditioned by measures such as economic needs tests, quotas, or pre-employment requirements.[50] Access for

Mode 4 services providers is sometimes limited to those possessing formal qualifications, excluding skills and experience. Since 1998, qualification requirements and procedures, which are not trade barriers per se, have been addressed in the WTO Working Party on Domestic Regulation with the aim of developing any necessary disciplines to ensure that these measures, inter alia, do not constitute unnecessary barriers to trade in services.

6.3 Trade in environmental goods and services

Tackling climate change and other environmental crises requires the development and widespread dissemination of technological solutions around the world. Trade can serve as a powerful tool to help achieve this goal. Environmental goods and services perform a variety of functions to making production and consumption more sustainable. They comprise goods and services needed to, for example, produce clean and renewable energy; improve resource and energy efficiency; reduce pollution of air, water and soil; manage solid and hazardous waste; and treat wastewater and monitor environmental quality, among other important functions.

Trade barriers against environmental goods and services can increase the cost to firms, Governments and consumers when trying to access environmentally sound and affordable solutions. According to a World Bank study, the top 18 developing countries ranked by greenhouse gas emissions would be able to import 63 per cent more energy-efficient lighting, 23 per cent more wind power generation equipment, and 14 per cent more solar power generation equipment if the trade barriers they maintain on these goods were to be abolished. Trade-opening efforts need to address trading conditions for the components and capital goods necessary to produce environmental goods, not just the finished products. Negotiations on the Environmental Goods Agreement were launched by a group of 46 WTO members in 2014. The resumption and successful conclusion of the negotiations, which have not been active since December 2016, could give a boost to trade in environmental goods.[51] In November 2020, a group of WTO members announced their intention to intensify work on trade and environmental sustainability at the WTO by organizing the Trade and Environmental Sustainability Structured Discussions (TESSD) for interested WTO members as well as a dialogue with external stakeholders.[52]

It is equally important that trade-opening efforts tackle barriers affecting the international supply of services related to the environment. Services are essential to deliver environmental goods and ensure that they function properly. Examples include the construction of a geothermal power plant and the use of data analytics to improve energy efficiency in buildings. Other services unrelated to the delivery of environmental goods also play a key role in safeguarding the environment, such as sewage service. Several WTO members have recently expressed interest in resuming work on trade opening for environmental services that can help the rapid dissemination of environmentally sound technologies around the world.

In the margins of the 2019 United Nations General Assembly Leaders' Week in New York, Costa Rica, Fiji, Iceland, New Zealand and Norway launched an initiative to negotiate the Agreement on Climate Change, Trade and Sustainability (ACCTS). The ACCTS initiative is intended to demonstrate in practical terms how trade rules could be used to support climate-related and other environmental goals while generating momentum towards an eventual multilateral outcome. Besides removing tariffs on environmental goods and the establishment of new and binding commitments for environmental services, ACCTS would include measures related to the elimination of harmful fossil fuel subsidies and the development of guidelines to inform voluntary eco-labelling programmes and mechanisms. ACCTS would be open for accession by other countries able to meet its obligations.[53]

6.4 Trade and circular economy: the case of plastics[54]

A transition towards a more resource efficient and circular economy has broad linkages with international trade. A circular economy is an economic paradigm that aims at minimizing pollution and waste, extending product lifecycles and enabling natural systems to regenerate. The linkages with trade can occur at various levels along the product value chain, such as trade in second-hand goods, end-of-life products and secondary materials, as well as trade in related services.[55]

Plastic pollution is one of the most pressing global environmental challenges alongside climate change and biodiversity loss. Over two thirds of plastic consumption comes in the form of packaging and building inputs, such as plastic pipes and vinyl siding. Plastics production and disposal processes generate substances that seriously pollute the air, water and ecosystems. Furthermore, plastic production, disposal and waste management are responsible for an increasing level of greenhouse gas emissions. It has been estimated that plastic-related greenhouse gas emissions may represent more than 1 per cent of the global annual carbon budget[56] and could represent up to 15 per cent by 2050, if no action is taken.[57]

The rising trade of plastic waste exacerbates environmental concerns, particularly for developing countries. In addition to being major producers and consumers of plastics and plastic products, developing countries are the main importers of plastic waste, 71 per cent ($4.3 billion in 2017) of which originates in developed economies.[58] In 2018, China, the largest importer, banned the import of non-industrial plastic waste. Other developing countries in Asia, including Indonesia, Malaysia, Thailand and Viet Nam, followed suit.[59]

Promoting trade in plastic substitutes would promote a more sustainable and circular plastics economy. Developing countries are key suppliers of materials—such as jute, cotton, natural rubber, milk protein, and paper and cardboard—that may substitute plastics in some of their functions. Developing countries, for instance, accounted for 92 per cent of jute exports and 94 per cent of natural rubber exports in 2019.[60] Replacing plastics with natural materials can significantly lower the health and the environmental risks; an increased demand for such materials creates trade and investment opportunities for the rural poor in many developing countries.Trade and trade policies are highly relevant to national and international efforts to shift towards a more resource-efficient and circular plastics economy. In 2020, a group of WTO members held the inaugural meeting of the WTO informal dialogue on plastics pollution and environmentally sustainable plastics trade.[61] Domestic policies such as eco-design and recyclability standards can increase the capacity to recycle and reuse plastic products. In this regard, harmonizing technical standards of material design and use can also facilitate the international trade and reuse of raw materials, bringing about positive benefits to the environment.

End Notes

1 UNCTAD Global Trade Update (February 2021).

2 The COVID-19 related essential medical supplies include personal protective equipment, disinfectants, diagnostic kits, oxygen respirators and other related hospital equipment, following the joint classification by World Customs Organization (WCO) and World Health Organization (WHO) of COVID-19 medical supplies.

3 While there are various reasons explaining such differences, the positive and significant relationship between the level of income of a country (measured by per capita GDP) and additional imports of COVID-19 medical supplies remain valid also in more detailed econometric analysis. On average, for each US$1000 increase in GDP per capita we observe additional monthly imports of COVID-19 related products worth almost US$1 since April 2020.

4 UN (2021). Word Economic Situation and Prospects 2021. 25 January 2021.

5 UNWTO (2020). World Tourism Barometer, Vol. 18, Issue No. 6, October 2020.

6 UN (2021). Word Economic Situation and Prospects 2021. 25 January 2021.

7 UNCTAD (2020). COVID-19 and tourism: Assessing the economic consequences. (UNCTAD/DITC/INF/2020/3). 2 July 2020.

8 The "moderate" scenario corresponds to a removal of one-third of inbound tourism expenditure, "intermediate" scenario corresponds to a removal of two-third (2/3) of inbound tourism expenditure, and the "dramatic" scenario corresponds to a removal of all inbound tourism expenditure in a year.

9 ITC/UNCTAD/WTO, SDG Trade Monitor https://sdgtrade.org/en

10 WTO, 2020. Waiver from certain provisions of the TRIPS Agreement for the prevention, containment and treatment of COVID-19: Communication from India and South Africa, IP/C/W/669. Geneva.

11 Fletcher, Elaine Ruth, et al., op cit.

12 By way of comparison, in the United States, the Bayh-Dole Act allows institutions to maintain IP rights over results of federally funded research and development, while the government maintains the right to use the invention. In exchange the institutions are required to engage in transfer and dissemination of the resulting technology.

13 A more detailed overview of international initiatives is included in the COVID-19 extract of the WTO-WIPO-WHO Study at https://www.wto.org/english/res_e/booksp_e/extract_who-wipo-wto_2020_e.pdf

14 WHO, 2020. COVID-19 Technology Access Pool (C-TAP). Available at https://www.who.int/publications/m/item/c-tap-a-concept-paper.

15 IISD, 2020. UN Tech Bank Supporting Local Production to Fill COVID-19 Shortages. Available at https://sdg.iisd.org/news/un-tech-bank-supporting-local-production-to-fill-covid-19-shortages/.

16 See, UNCTAD, 2020. Intellectual Property. Available at https://unctad.org/Topic/Science-Technology-and-Innovation/Intellectual-Property.

17 Medicines Patent Pool, 2020. COVID-19. Available at https://medicinespatentpool.org/what-we-do/disease-areas#pills-COVID-19.

18 www.wto.org/covid

19 https://www.wipo.int/covid19-policy-tracker/#/covid19-policy-tracker/ipo-operations

20 UN (2021). Word Economic Situation and Prospects 2021. 25 January 2021.

21 UNCTAD (2020). Key statistics and trends in trade policy 2020.

22 The fifteen members of the RCEP are: Australia, Brunei Darussalam, Cambodia, China, Japan, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, the Republic of Korea, Thailand, and Viet Nam.

23 Trade involving China and Japan accounted for about a half of the total intra-RCEP trade in 2019.

24 United Nations Economic Commission for Africa. 2018. "An Empirical assessment of AfCFTA Modalities on Goods." UNECA. See: https://repository.uneca.org/handle/10855/41828 and https://repository.uneca.org/handle/10855/24379 for more details on the scenarios presented.

25 UNCTAD (2020). World Investment Report 2020.

26 Others included circumscribing the fair and equitable treatment (FET) obligation; and clarifying or omit indirect expropriation.

27 Several economic groupings and regional organizations have adopted non-binding Core Principles for investment policymaking set out in UNCTAD's Investment Policy Framework for Sustainable Development. Examples of guiding principles elaborated in collaboration, or jointly, with UNCTAD include the G20 Guiding Principles for Global Investment Policymaking, the Joint African, Caribbean and Pacific Group of States (ACP) – UNCTAD Guiding Principles for Investment Policymaking, and the D-8 Organization for Economic Cooperation – UNCTAD Guiding Principles for Investment Policymaking.

28 To support and accelerate IIA reform, UNCTAD will launch its IIA Reform Accelerator to provide a concrete policy tool with actionable recommendations to assist economies in reforming their IIA regimes in line with sustainable development objectives.

29 UNCTAD (2021). UNCTAD releases data on over 1,000 investor-state arbitration cases. 11 February 2021.

30 UNCTAD (2020). Investment Policy Monitor: Special Issue - Investment Policy Responses to the COVID-19 Pandemic. 4 May 2020.

31 WTO Document WT/WGTDF/W/96.

32 As an example, please see, Global Trade Review (GTR), "Asian trade finance stages a V-shaped recovery while supply chain finance demand surges", by Eleanor Wragg, dated 9 September 2020, available at www.gtreview.com.

33 Bank retreat is discussed in the following news item: "ABN-AMRO exit threatens commodity-trader liquidity squeeze", available at www.bloomberg.com (12 August 2020).

34 https://www.tradefinanceglobal.com/trade-finance/sme-guide/

35 TFAFacility.org

36 UNCTAD (2021). The UNCTAD B2C E-commerce Index 2020, 17 February 2021.

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39 F. Jenny, May 2020, Competition law enforcement and the COVID-19 crisis: Business as (Un)usual?

40 See "Google, Amazon and Other Tech Cos. Making M&A deals Amid Pandemic" (PYMNTS.Com, 28 May 2020) and "The economy is reeling. The tech giants spy opportunities" (New York Times, 13 June 2020).

41 UNCTAD (2020), "COVID-19: Firmer actions needed to better protect consumers". 8 April 2020.

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43 Such regional economic communities include the Common Market for Eastern and Southern Africa, East African Community, West African Economic and Monetary Union, Economic Community of West African States and Economic Community of Central African States.

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48 United Nations, Department of Economic and Social Affairs. (2019). International Migration 2020: Report.

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50 WTO (2009). Presence of natural persons (MODE 4): Background Note by the Secretariat. (S/C/W/305). 15 September 2009.

51 Environmental goods can include energy efficient LED bulbs, solar panels, solar cook stoves, air and water filters, machines for recycling solid waste, floating barriers to contain oil spills, devices to prevent turtles and aquatic mammals such as dolphins from being trapped in fishing nets and a broad range of instruments to monitor environmental quality.

52 The TESSD are intended to complement the work of the Committee on Trade and Environment and other relevant WTO bodies and to support the objectives of the Marrakesh Agreement Establishing the WTO, which envisages a global trading system that protects and preserves the environment in accordance with sustainable development. A total of 53 WTO members currently participates in TESSD.

53 Switzerland formally joined the initiative in January 2020.

54 The contents of this sub-section are based on Communication on trade in plastics, sustainability and development by UNCTAD, which was circulated as a working document (JOB/TE/63) by Fiji and China to the WTO Committee on Trade and Environment on 3 July 2020.

55 OECD (2020) International Trade and the Transition to a Circular Economy. https://www.oecd.org/environment/waste/policy-highlights-international-trade-and-the-transition-to-a-circular-economy.pdf

56 A carbon budget refers to the tolerable quantity of greenhouse gas emissions that can be emitted in total over a specified time.

57 Barra, Ricardo and Sunday, Leonard (2018). Plastics and the circular economy. STAP, GEF, and UNEP.

58 UNCTAD calculation based on UN Comtrade.

59 The entry into force of the Basel Convention's Plastic Waste Amendments on 1st January 2021 will oblige member States to accelerate efforts to ensure plastic wastes are traded only with countries with infrastructure for their environmentally sound management. The UNECE e-Basel standard facilitates tracking transboundary movements of waster in compliance with the Convention.

60 UNCTAD calculation based on UN Comtrade.

61 Aiming to complement existing international processes in other fora – and avoid duplication – the informal dialogue will explore how improved trade cooperation, within the rules and mechanisms of the WTO, could contribute to domestic, regional and global efforts to reduce plastics pollution and transition to a more circular and environmentally sustainable global plastics economy. Possible subjects for discussion include improving transparency, monitoring trade trends, promoting best practices, strengthening policy coherence, identifying the scope for collective approaches, assessing capacity and technical assistance needs, and cooperating with other international processes and efforts. See WTO document WT/CTE/W/250, 15 December 2020.

62 Information is available in the following links: https://www.unescap.org/events/policy-hackathon-model-provisions-trade-times-crisis-and-pandemic-regional-and-other-trade; https://www.unescap.org/events/webinar-series-towards-model-provisions-trade-times-crisis-and-pandemic-regional-and-other; and https://www.unescap.org/resources/online-repository-contributions-policy-hackathon-model-provisions-trade-times-crisis-and

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Debt and debt sustainability



Chapter III.E

Debt and debt sustainability

1. Key messages and recommendations

Debt levels are rising across developing and developed countries, as economies contract and fiscal deficits widen, under the impact of the COVID-19 pandemic. Global public debt is projected to approach 100 per cent of gross domestic product (GDP) in 2020, up from 65 per cent in 2008. The increase in public debt is more pronounced for developed countries, as developing and least developed countries were more financially constrained in their response to the pandemic and recession. Nonetheless, debt sustainability indicators worsened across the board. Five sovereigns defaulted in 2020. A third of emerging market economies are assessed to be at high risk of fiscal crisis, and over half of least developed and other low-income countries are assessed to be at high risk of, or already in, debt distress.

International support helped prevent a more widespread and systemic crisis in 2020. Actions by central banks across income groups helped ease financing conditions and reduced stress in debt markets for middle-income countries. Least developed and other low-income countries relied on emergency financing from the International Monetary Fund (IMF) and multilateral development banks. The Debt Service Suspension Initiative (DSSI), available to 73 least developed and low-income countries, allowed participating countries to redirect limited resources from debt service to crisis response.

Nonetheless, risks remain elevated. More developing countries may face worsening solvency concerns requiring fiscal adjustments, that would be challenging in the context of COVID-19. Debt sustainability in many cases hinges on fiscal adjustment, that would be hard to achieve in the current crisis context. Some countries' debt may become unsustainable, particularly if the impact of the COVID-19 shock is more protracted. Even where debt remains sustainable, pandemic related scarring effects could be exacerbated without access to fresh finance, if authorities are forced to withdraw fiscal support prematurely and deprioritize investment.

For countries where debt remains sustainable despite rising vulnerabilities, debt crisis prevention is a priority. This includes enhancing debt transparency by both debtors and creditors, enhancing fiscal sustainability and strengthening debt management capacity. The international community is assisting members in these areas, including through the World Bank and IMF Debt Management Facility, which coordinates closely with many other debt management technical assistance providers, and the Debt Management and Financial Analysis System programme of the United Nations Conference on Trade and Development (UNCTAD) in the area of debt management. The IMF and World Bank's Multipronged Approach addresses debt vulnerability through improved transparency, debt management capacity, analytical tools, and international financial institutions' debt policies.

- Borrowers should regularly disclose comprehensive and timely information of public and publicly guaranteed debt, including borrowing terms and collateral conditions.
- Creditors should also ensure that lending practices are fully in line with sustainable, responsible, and transparent financing practices and disclose the amounts and terms of financing provided.

A range of instruments and tools exists to create fiscal space for investments in pandemic response and recovery, and to reduce the likelihood of future crises. Greater use of state-contingent debt instruments could provide automatic and fast relief for future shocks, and ensure faster and more durable restructurings (e.g., in case of climate-related disasters or other shocks).

- The international community could further develop standard terms for inclusion in sovereign debt contracts, and official bilateral creditors could systematically include such clauses in their own lending, building on existing experiences.
- In addition, debt swap initiatives have been or are being launched in several regions, and could be further expanded.

The current crisis provides an opportunity to further strengthen the international debt architecture to allow speedy and efficient restructuring. The debt resolution architecture has proven generally effective in addressing most recent restructuring episodes, which primarily involved private sector holdings of sovereign bonds. Yet, the architecture should be strengthened to cope with the potential increase in restructurings in the aftermath of the pandemic, and amid a changing creditor landscape. A range of actions can be considered.

- Collective action clauses and equivalent terms should be included in all bond and nonbond debt contracts to reduce holdout risks. Debt restructuring would also be facilitated by greater transparency of contract terms.
- Credit enhancements and debt buy-backs could be considered in specific circumstances to incentivize creditor participation without reducing relief for the debtor.

Market-based solutions may not be sufficient in case of a systemic crisis. Statutory instruments may be needed.

- As a last resort, in the context of systemic crisis, legal options in major financial jurisdictions should be considered to limit litigative action by hold-out creditors; any such legislation would need to be carefully tailored to limit the impact on creditors' rights and avoid undermining the secondary market in sovereign debt.
- The international community could provide additional financial and technical support for countries with limited legal capacities (e.g., by strengthening support to existing facilities such as the African Legal Support Facility).

The recently adopted G20 Common Framework for debt treatments beyond DSSI is a step on the road to improving the international debt architecture. The Common Framework brings together Paris Club and Group of 20 (G20) non-Paris Club creditors and requires that participating debtor countries seek a treatment at least as favourable as the one agreed under the Framework from other official bilateral and private creditors. It could serve as a first step towards a more universal and possibly permanent framework for efficient sovereign debt resolution.

- The United Nations continues to provide a valuable platform for considering and advancing such proposals, and to bring all relevant stakeholders together to consider debt crisis prevention and fair and effective debt crisis resolution as a necessary condition for achieving the Sustainable Development Goals (SDGs).

2. Debt trends and vulnerabilities

2.1 The COVID-19 shock and trends in global debt

Fiscal support to mitigate the impacts of COVID-19 has pushed public debt levels that were already elevated before the pandemic to record highs. The pandemic unleashed a compound shock of shrinking economies, falling revenues and rising expenditures, pushing debt up across all income groups. Unprecedented fiscal actions, amounting to about $16 trillion globally, in combination with falling revenues due to the fiscal shock, are expected to push public debt to 98 per cent of global GDP—up 14 percentage points over end-2019.[1] In total, non-financial sector debt (sovereigns, households and non-financial corporates) was expected to reach $210 trillion, or 274 per cent of GDP, by end-2020—up $16 trillion over the last 12 months, with public debt accounting for almost two thirds of the overall increase.[2]

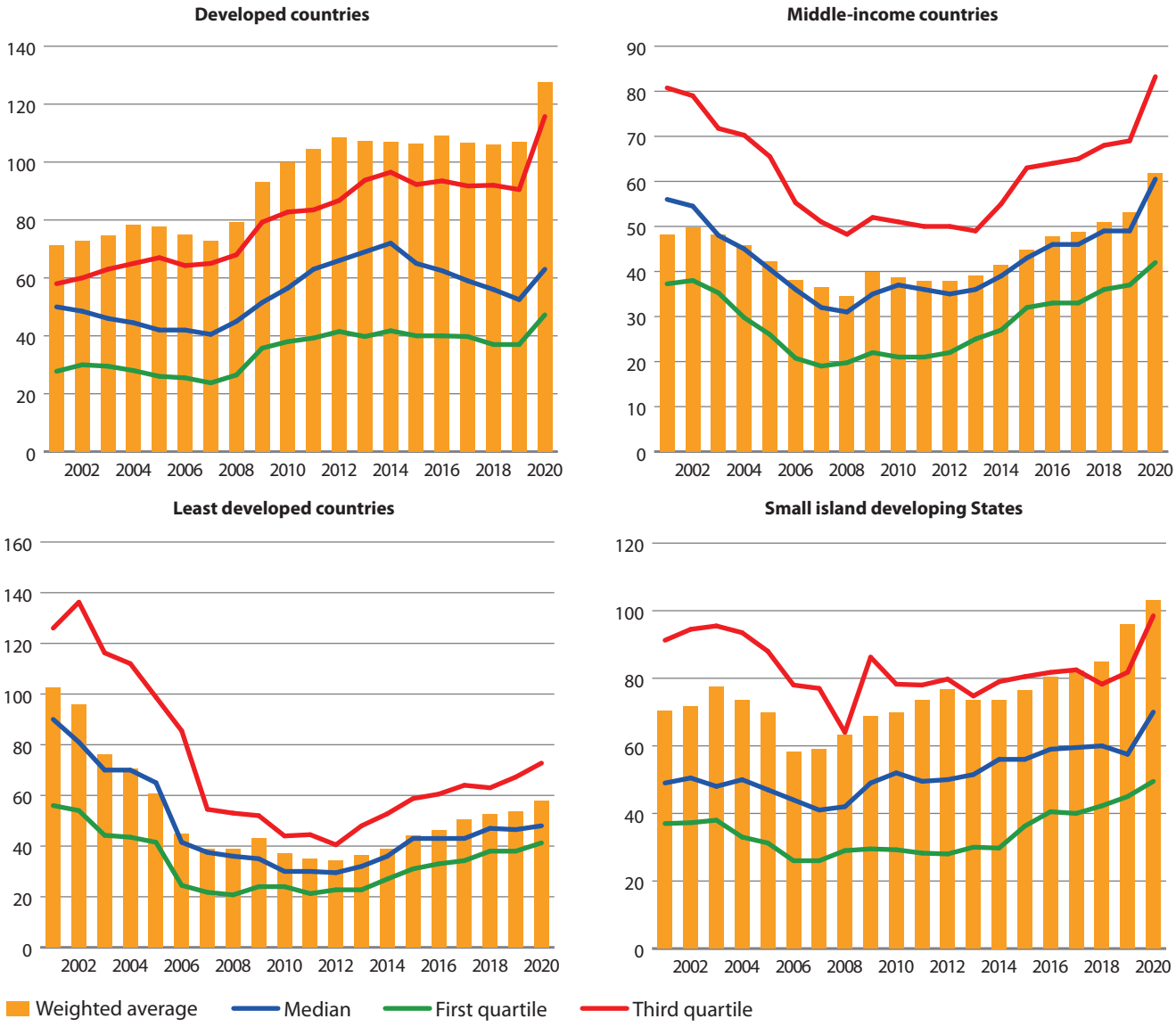
The increase in public debt is more pronounced for developed countries, followed by middle-income and least developed and other low-income countries. Public debt in developed countries is projected to increase by 20 percentage points compared to 2019, reflecting their very strong fiscal response to the crisis. Middle-income countries are also projected to continue expanding their borrowing, pushing public debt up by 9 percentage points to 62 per cent of GDP. For least developed and other low-income countries, the increase is more moderate (figure III.E.1), reflecting limited fiscal space and financing capacity. Despite emergency support, these countries' limited market access has constrained their COVID-19 response: least developed countries (LDCs) have increased their fiscal support by only 2.6 per cent of GDP, compared to significantly larger stimulus in developed countries (see chapter I).

Growing debt service in developing countries is diverting public expenditure and foreign currency from the COVID-19 response and recovery, and from investments in the SDGs. Debt service will exceed 25 per cent of tax revenue in over half of developing countries for which data is available in 2020, and exceed 40 per cent of tax revenue in a quarter of them. In small island developing States (SIDS), median debt service represents 30 per cent of revenue (figure III.E.2). In part, this reflects the changing composition of debt and developing countries' growing reliance on commercial debt. In LDCs, commercial debt accounts for 17 per cent of external debt, up from 12 per cent a decade ago, and for more than one third of debt servicing costs (see previous editions of the Financing for Sustainable Development Report (FSDR) and figure III.E.3). In part, it also reflects the growing divergence of interest rates, and the rising relative cost of borrowing in developing countries. While median effective interest rates fell in developed countries over the last decade, they increased in developing countries.[3] This dichotomy has worsened since the start of the crisis.

2.2 Financial vulnerabilities had been rising in developing countries prior to the pandemic

Many developing countries entered 2020 in a vulnerable position, with public and external debt already at elevated levels. Public and external debt levels of developing countries were already elevated on the eve of the COVID-19 outbreak (see previous editions of the FSDR), with developing countries spending 14.6 per cent of their export revenues to meet external debt obligations in 2019, at almost twice the level of a decade earlier. In a post-2008 environment marked by extensive monetary accommodation and near-zero interest rates in developed countries, global financial investors' search for yield led them to increasingly invest in "frontier economy" sovereign bonds issued in international debt markets. Many LDCs and low-income countries who had not been able to access capital markets before were now able to borrow on international financial markets. In sub-Saharan Africa alone, 21 countries had outstanding obligations on sovereign Eurobonds to the equivalent of $115 billion at the beginning of 2020, following a steep increase in their issuance since 2017. The rise in external indebtedness was not matched by sufficiently strong GDP growth in developing countries, with average external debt-to-GDP ratios rising from 26.5 per cent in 2009 to 33.1 per cent in 2019. Median debt was significantly larger still, at 39 per cent of GDP, owing in part to the modest external debt-to-GDP ratio of China.[4]

Figure III.E.1
Public debt across income groups, 2001–2020
(Percentage of GDP)



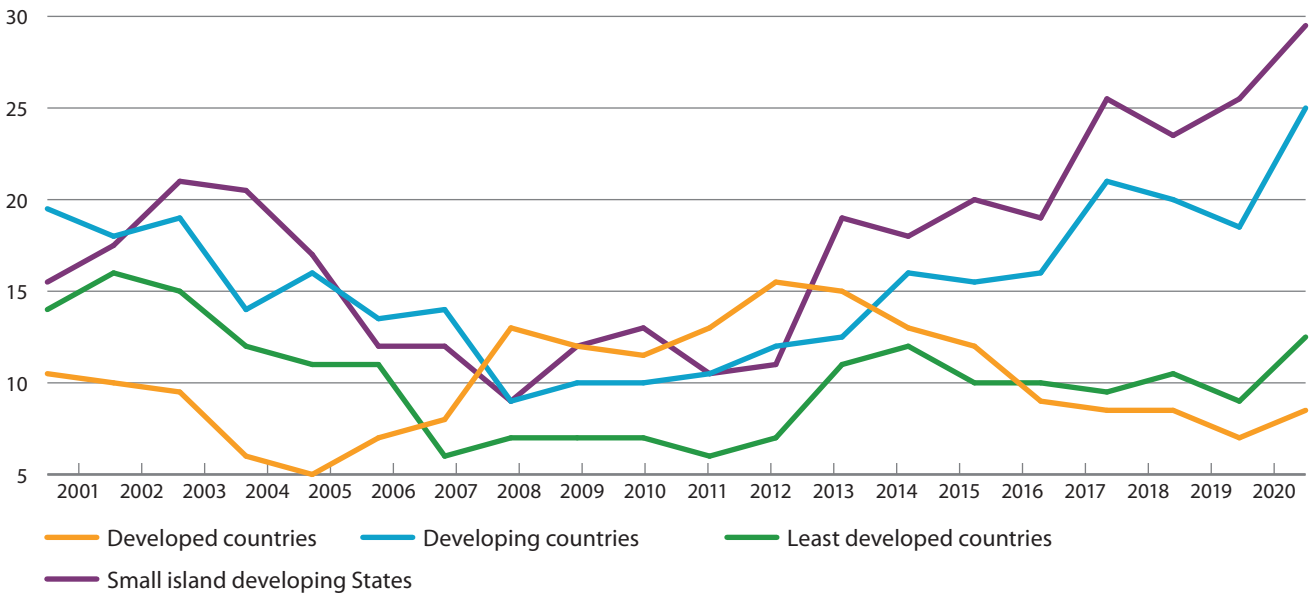
Source: UN DESA calculations, based on IMF WEO.

The increased reliance in commercial borrowing, in the context of a relative decline in official development assistance and other forms of official finance, contributed to growing financial vulnerabilities in some countries, including risks of sudden stops. While funding from international and domestic capital markets allowed countries to finance new investments, it also raised refinancing and rollover risks (see FSDR 2020). Volatility of flows was exacerbated by the growth of passively managed, benchmark-driven financial investment strategies, and the inclusion of frontier economies in flagship benchmark indices.[5] Such investment strategies are highly sensitive to shifts in global financial conditions, with the resulting capital flows amplifying adverse financial conditions. Their influence is not limited to passive fund management, since "active" funds aim to outperform passive investment strategies. By some estimates, 70 per cent of emerging market country allocations of investment funds are influenced by benchmark indices.[6]

2.3 Responding to the COVID-19 shock

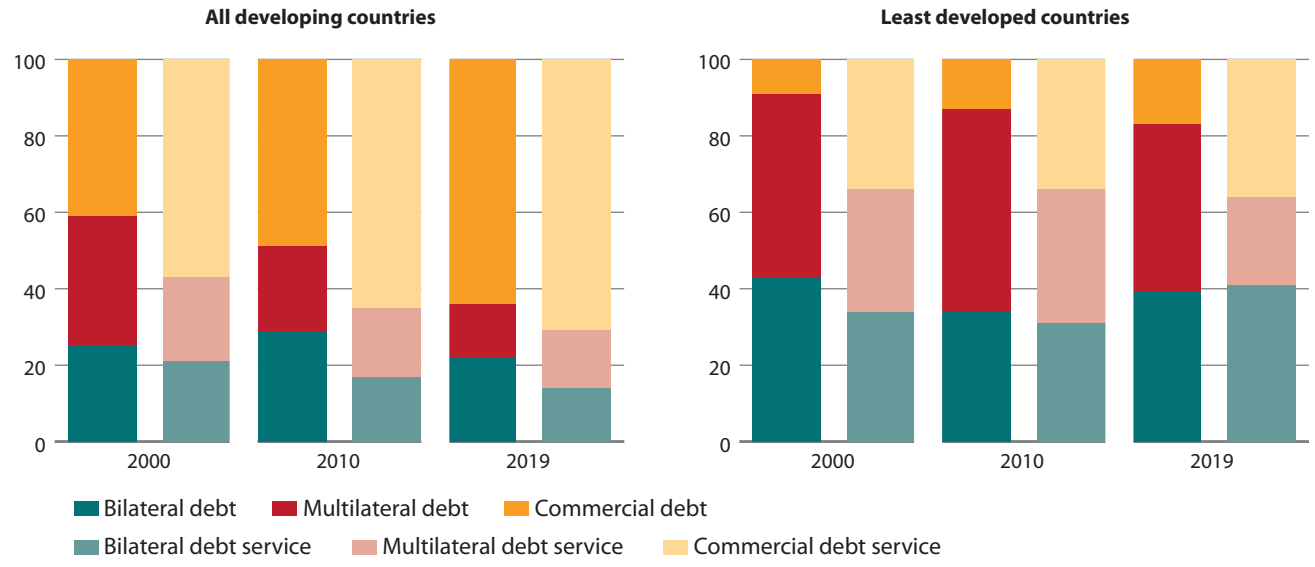
Debt issuance by emerging markets maintained its upward trend despite the pandemic, benefiting from accommodative monetary policies by major central banks; but economies with lower credit ratings or weak fundamentals—many least developed and other low-income countries among them—saw their access curtailed by rising costs (figure III.E.4 and figure III.E.5, panel 1). Five countries that are eligible for the G20 Debt Service Suspension Initiative issued Eurobonds post-COVID-19 (Benin, Côte d'Ivoire, Honduras, Mongolia and

Figure III.E.2
Debt service as a share of revenue, median, selected countries
(Percentage)



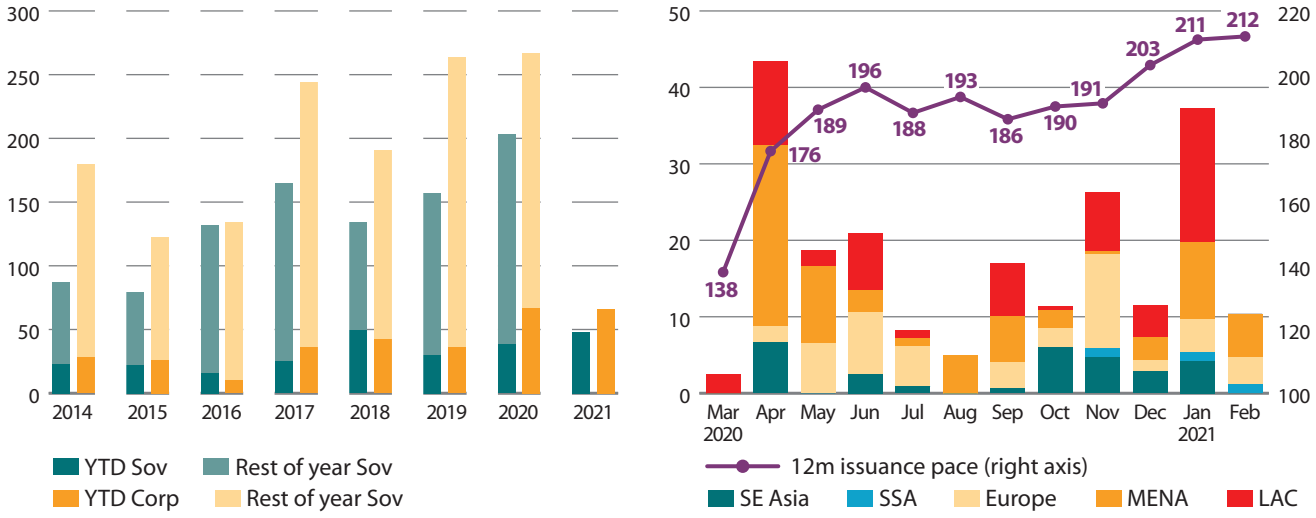
Source: UN DESA, based on IMF data.
Note: Selected countries for which data was available (including 8 developed countries, 57 developing countries, 20 LDCs, and 18 SIDS; details available upon request).

Figure III.E.3
Composition of external debt stock and debt service
(Percentage)



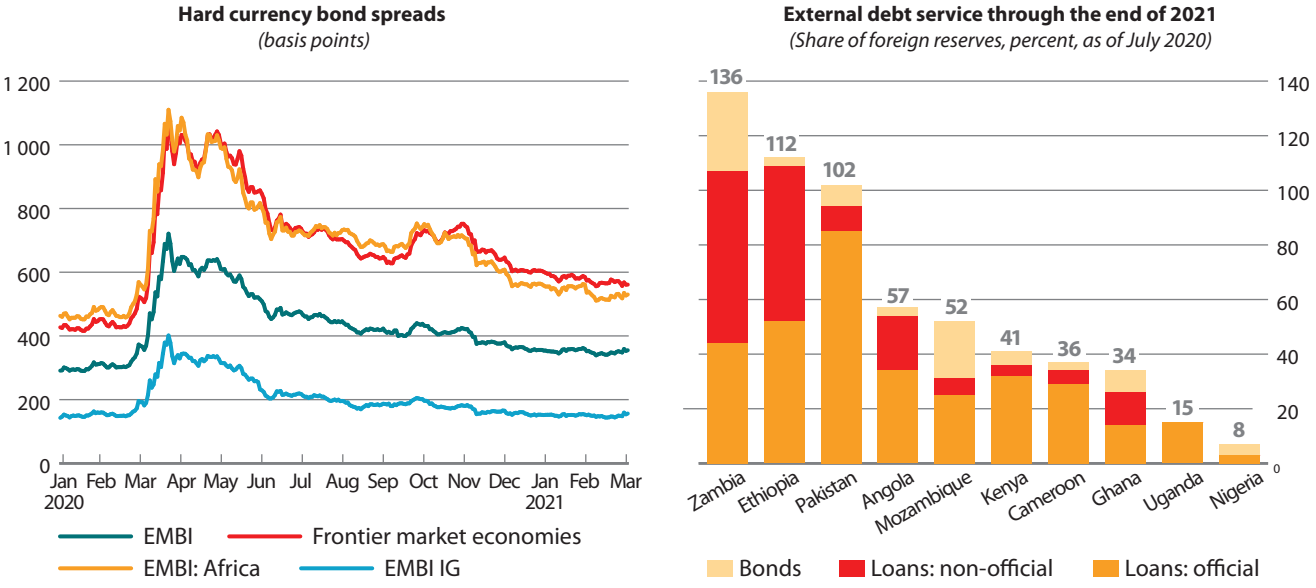
Source: UN DESA, based on World Bank World Development Indicators.

Figure III.E.4
Emerging markets bond issuance continued apace despite the pandemic
(Percentage)



Source: Bloomberg, Bond Radar.

Figure III.E.5
Emerging market and frontier economy spreads and refinancing needs



Source: Bloomberg, Bond Radar.

Uzbekistan), several were able to borrow in the syndicated loan market, albeit in smaller amounts. Middle-income-country issuers continued to tap the international capital markets in 2020 (Albania (B+), Belarus (B), Jordan (B+), El Salvador (B-), Ukraine (B), etc.).

Least developed and other low-income countries in particular face significant external financing pressures. Developing countries face significant external debt repayments on their public and publicly guaranteed external debt over the coming years. Some of the African countries and LDCs with very high refinancing needs in 2021 (figure III.E.5, panel 2) will not have access to financial markets at affordable rates. At the same time, many of them have seen their access to foreign currency curtailed through multiple channels, including non-resident capital flight, contractions in trade, remittances, and investment volumes. As a result, external financing needs of LDCs and other low-income countries are projected to have more than doubled compared to recent historic averages in 2020. Although the pressure should moderate somewhat in 2021, external financing needs are expected to remain elevated.[7] LDC and other low-income country foreign exchange reserves are projected to fall by about $22.5 billion collectively in 2020, leaving half of these countries with less than 2 years of coverage for external financing needs, and some with less than a full year of coverage. After receiving emergency financing in the first half of 2020 from the IMF, and increased lending by multilateral development banks (MDBs), many LDCs and other low-income and countries will continue to rely on international support, or else face liquidity challenges (see chapter III.F.) or unsustainable debt situations.

2.4 Debt sustainability and risk reassessed in the pandemic context

The rapid growth of debt levels and financing needs has exacerbated debt sustainability risks across the globe. Among the 151 economies covered by the three major rating agencies, 42 have experienced downgrades since the pandemic, including 6 developed countries, 27 emerging market economies, and 9 low-income and least developed countries. More than one third of emerging market economies (31 out of 84) are at high risk of fiscal crisis,[8] according to a new IMF methodology for assessing the risk of a fiscal crisis using machine learning (figure III.E.6).[9]

Least developed and other low-income countries' debt vulnerabilities further worsened during 2020. Just over half (56 per cent) of low-income and least developed countries that use the IMFWorld Bank Debt Sustainability Framework (LIC-DSF) are now assessed at a high risk of debt distress or in debt distress—a modest increase compared to end-2019 when the share was 51 per cent (figure III.E.7). Since the onset of COVID-19, LIC-DSF debt distress ratings were downgraded for six countries (Guinea-Bissau, Kenya, Madagascar, Papua New Guinea, Rwanda and Zambia), while two were upgraded (Gambia[10] and South Sudan) (table III.E.1). The downgrades largely relate to the worsened macroeconomic outlook amid the pandemic. Zambia recently defaulted on its commercial debt, having been hit hard by the impact of the pandemic, exacerbating an already difficult economic situation.

So far, rising debt levels and downgrades of credit and risk ratings have been associated with a limited number of cases of evident debt distress. Three middle-income countries were in debt restructuring/distress at the outset of the pandemic (Argentina, Lebanon and Venezuela), and one initiated a restructuring soon after its onset (Ecuador). The number of least developed and other low-income countries in debt distress fell to 9 from 10, with Gambia and South Sudan leaving the list and Zambia joining it. In both Ecuador and Zambia, substantial preexisting vulnerabilities were exacerbated by the COVID-19 shock. Actions by monetary authorities in advanced countries, which supported historically low interest rates, and favourable market financing conditions for middle-income countries, along with international support measures for low-income and least developed countries, helped forestall more widespread defaults.

3. Responding to the crisis

Liquidity support helped countries weather the immediate impact of the crisis, but additional measures may be needed to address rising solvency risks. Initial measures included monetary easing, access to fresh concessional financing, suspended debt payments on bilateral debt service, and targeted but limited relief on some multilateral debt.

3.1 Monetary policy

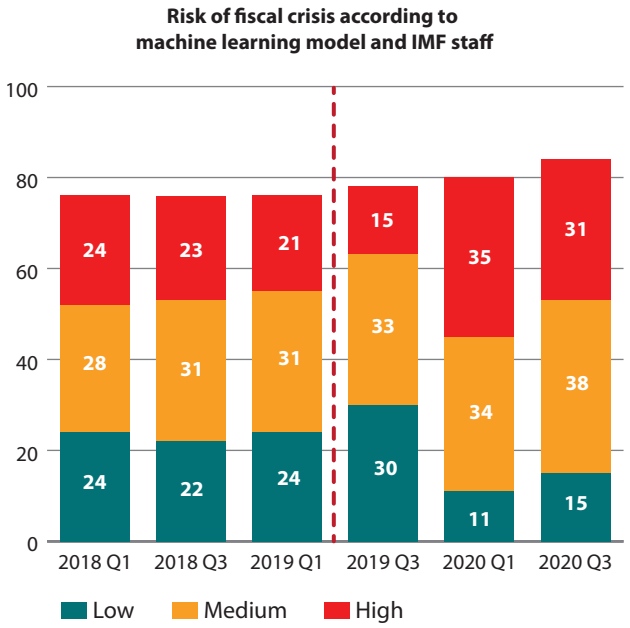
Monetary authorities across the world cut policy rates, undertook asset purchases, macroprudential and other easing measures, bringing borrowing cost to historical lows and increasing liquidity. Ninety per cent of central banks lowered interest rates, some to historic lows.[11] The Group of 10 central banks expanded their balance sheets by $7.5 trillion, easing liquidity and stabilizing debt markets for both developed and some middle-income countries, and about 20 emerging market economy central banks launched asset purchase programmes (APPs) for the first time (see also chapter I).[12] Monetary easing and liquidity support was also beneficial to countries cut-off from bond markets: it prevented disruption to trade credit and syndicated loan markets and helped mitigate the shock on global liquidity and the world economy.

3.2 Support by international financial institutions

In response to the pandemic, the IMF provided over $100 billion in financing to over 80 member countries. As of end-November 2020, $11.8 billion went to 50 low-income countries, while $90.4 billion has been made available for emerging market economies. The countries requesting emergency financing committed to supporting priority and COVID-19-related spending, including for the health response and social and economic support (see chapter III.F).

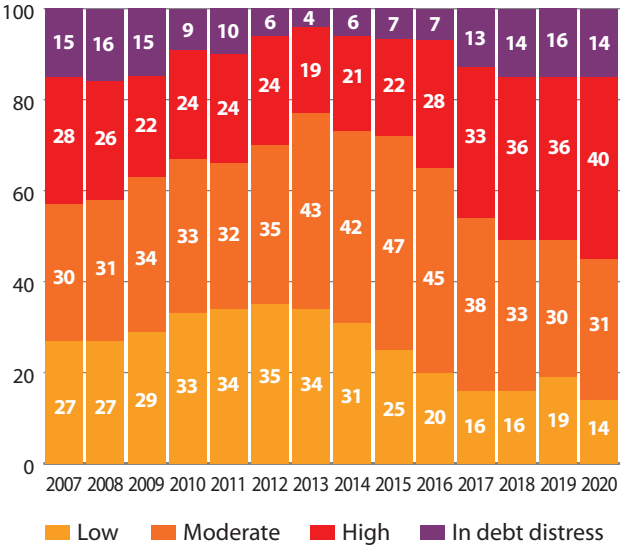
In March 2020, the IMF adapted the Catastrophe Containment and Relief Trust (CCRT) to provide debt service relief for its poorest and most vulnerable members for up to two years. To date, all 29 CCRT-eligible members have received grants covering one full year of debt service payments to the IMF through April 2021, totaling about $500 million. The second year of debt service relief is estimated at about $463 million, but further relief will require donors to commit additional resources. CCRT-eligible countries have used the freed-up resources to support priority and COVID-19-related public spending, including on health. IMF staff estimates that average 2020 expenditures on health and social protection in CCRT beneficiary countries will increase by about 0.5 percentage points of GDP compared to the pre-COVID 2020 baseline projections.

Figure III.E.6
Debt vulnerabilities in emerging economies
(Percentage)



Source: IMF.
Note: Red dashed line denotes methodological break (adoption of machine learning model as basis for IMF staff judgment). High/moderate/low risk refer to countries with risks above the 80th percentile, between the 50th and 80th percentile, and below the 50th percentiles of all model-based ratings based on data for the last 15 years.

Figure III.E.7
Evolution of the Risk of Debt Distress of Lower Income Countries covered by the World Bank, IMF DSF
(Percentage)



Source: IMF-World Bank LIC DSF database.
Note: As of November 17, 2020.

Table III.E.1
Upgrades and Downgrades in the IMF World Bank Debt Sustainability Framework since March 2020

	2018	2019	2020	2021*		Main reasons for a change in risk of debt distress
Downgrades						
Kenya	M		H		May 2020	A worsening in economic outlook due to the pandemic.
Zambia		H	D		May 2020	Entered into restructuring negotiations.
Rwanda	L	L	M		June 2020	A worsening in economic outlook due to the pandemic and updates on investment program.
Papua New Guinea	M		H		June 2020	A worsening in economic outlook due to the pandemic.
Madagascar	M	L	M		July 2020	A worsening in economic outlook due to the pandemic.
Guinea-Bissau	M			H	January 2021	A worsening in economic outlook due to the pandemic and better debt coverage, borrowing for infrastructure projects, higher fiscal deficits in 2018–19.
Upgrades						
Gambia	D	D	H		March 2020	
South Sudan		D	H		November 2020	

Source: Low-income countries debt sustainability assessments.
Note: D: in debt distress (orange), H: high (red), M: moderate (yellow), L: low (green). Blank years reflect the rating assigned in the latest DSA available at that time.
* As of 19 February 2021.

Box III.E.1
A regional perspective: fiscal implications of COVID-19 and rebuilding better in Asia-Pacific

In 2020, Asia-Pacific developing countries announced an estimated $1.8 trillion, or 7 per cent of their GDP, for COVID-19 health response and relief measures for households and firms. However, countries that entered the crisis with limited fiscal space—including least developed countries (LDCs), small island developing States and countries at high risk of debt distress—relied on smaller fiscal support packages, at the risk of delaying the recovery.

The International Monetary Fund and multilateral development banks committed $38 billion to assist Asia-Pacific developing countries in combating the pandemic (figure III.E.1.1). Such support was greater than 1 per cent of gross domestic product (GDP) in 22 out of 37 recipient countries and on a par or exceeding the government COVID-19 fiscal package in 8 countries. However, support was predominantly in the form of loans, with grants and debt relief accounting for less than 4 per cent of total support. Moreover, given that many countries need to continue servicing debt to these same multilateral lenders, net inflows are substantially smaller, as shown here for LDCs in the Asia-Pacific region.

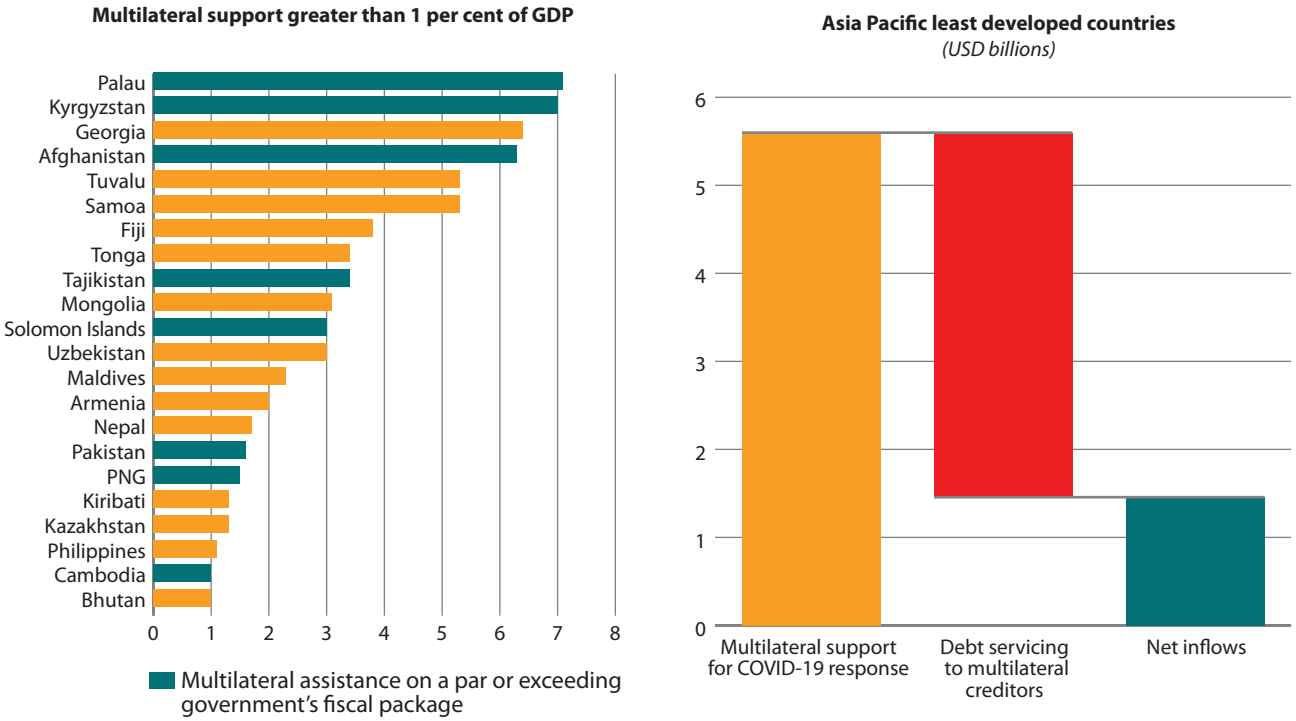
Policy options for recovery

Policymakers will have less room to maneuver going forward. However, abrupt fiscal consolidation in 2021 could be self-defeating, as seen in the post-2009 European debt crisis as well as the 1997 Asian financial crisis, when fiscal and monetary tightening led to a deeper recession. Instead, investing in Sustainable Development Goal (SDG) priorities could reap a double dividend by enhancing a country's resilience to future shocks as well as supporting economic recovery. In the Economic and Social Survey of Asia and the Pacific 2021, the Economic and Social Commission for Asia and the Pacific (ESCAP) proposes a "build forward better" recovery package with a focus on social services, digital access, and green development. Model simulations illustrate that such a package would deliver significant positive economic outcomes as well as social and environmental benefits. It would reduce the number of poor people in the Asia-Pacific region by almost 180 million people and cut carbon emissions by about 30 per cent in the long run. The package, which includes the elimination of fuel subsidies and introduction of a carbon tax, would likely push up the government debt-to-GDP ratio by 10 percentage points by 2030.

Nevertheless, the outlook is challenging. Combined with the impacts of COVID-19, the government debt-to-GDP ratio in Asia-Pacific developing countries is projected to rise steeply from 51 per cent in 2019 to about 74 per cent by 2030. The increase is steeper still for the region's LDCs. The ESCAP Survey therefore recommends a range of policy options that are implementable given countries' institutional capacity, along with closer engagement with international development partners and the private sector.

Source: UN ESCAP.

Figure III.E.1.1
Multilateral support committed



Source: UN ESCAP

Multilateral development banks have pledged to scale up support to developing countries. MDBs collectively announced a total of over $200 billion of support to developing countries. The World Bank Group expects to deploy up to $160 billion between April 2020 and June 2021 and has provided $4 billion in grant financing to low-income and least developed countries (see chapter III.C.). World Bank financing is usually provided on highly concessional financial terms or grants to low-income countries and loans at below-market pricing to middle-income countries. International development association (IDA) credits, which constitute a large share of IDA resources, are provided at low interest rates and with long grace periods and maturities. More than half of IDA19 active countries already receive all or half of their IDA resources on grant terms, which carry no payments at all. These significant amounts of grants are targeted to low-income countries at higher risk of debt distress. The grant share in IDA has been increasing over time in response to increased debt vulnerabilities in client countries, since the Grant Allocation Framework (based on the joint IMF-World Bank Debt Sustainability Assessment) uses a forward-looking methodology. For countries that borrow on regular IDA terms, the six-year grace period means that debt service on new borrowing to address the COVID-19 crisis will not commence until the country has had a chance to recover.

3.3 Debt Service Suspension Initiative

In April 2020, G20 Finance Ministers endorsed the Debt Service Suspension Initiative to bolster crisis mitigation in low-income and least developed countries. By suspending debt service payments to official bilateral creditors for a limited period (initially from May to December 2020, now extended until end-June 2021, with the possibility of a further six-month extension), the DSSI temporarily frees up resources for eligible countries (all active IDA countries and LDCs). The first phase of DSSI benefited 43 out of 73 eligible countries with debt service suspension to official bilateral creditors of $4.9 billion (75 per cent of eligible payments).

Participating countries made commitments on monitoring fiscal impacts, transparency of public debt, and compliance with IMF and World Bank policies on debt limits. Fiscal monitoring supported by the IMF and the World Bank suggests that DSSI relief (totaling 0.4 per cent of GDP) has contributed—together with IMF/World Bank lending—to COVID-19-related spending averaging just over 2 per cent of GDP in DSSI participants, notwithstanding major revenue losses. Under the DSSI, debtor countries also commit to disclosing public debt to IMF and World Bank Group staff; the World Bank has published detailed data on external public debt and potential debt service suspension amounts from the DSSI, facilitating data sharing and coordination among creditors. Participants under the DSSI also commit to prudent borrowing: new non-concessional debt is undertaken only if such borrowing is in compliance with limits agreed under the IMF Debt Limit Policy (DLP) or the World Bank Sustainable Development Financing Policy (SDFP) (see also *FSDR 2020*).

The financing impact of the DSSI would have been stronger if not for the lack of private sector participation, and the exclusion of some vulnerable and highly indebted countries. Participating countries were not obligated to seek comparable treatment from their private creditors, even in countries where commercial debt accounts for about one fifth of external debt. This was due to concerns that such an obligation would deter countries concerned about potential adverse impacts on their creditworthiness from participating. While private sector creditors were encouraged to participate in the DSSI, very few countries elected to make DSSI requests to private creditors; with the exception of a national policy bank participating as a commercial creditor, no private creditors participated on a voluntary basis. DSSI eligibility criteria also exclude a number of developing countries in need—for example, non-IDA-eligible small island developing States that are highly vulnerable and have high debt service burdens. There were calls from the beginning of the DSSI to not only expand the time frame (which has since been done) but also to broaden the scope of beneficiary countries.

4. Additional proposals to address the immediate crisis

Despite international support, solvency concerns are rising in 2021, threatening to deepen development setbacks and undermine recovery from the pandemic. Risks are high for more countries to tip into unsustainable debt, especially if the COVID-19 shock is more protracted and deeper than envisaged in macroeconomic frameworks, underlying the debt sustainability assessments. High debt service repayments already facing many developing-country Governments in 2021 and beyond, and the wider adverse macroeconomic impacts of the COVID-19 crisis, make decisive action to widen the scope of existing initiatives imperative.[13]

A range of proposals have been made, including in discussions at the United Nations, to prevent a spiraling of sovereign debt crises that would undermine not just pandemic response and recovery, but also SDG achievement. Discussions in the follow-up to the High-level Event on Financing for Development in the context of COVID-19 have brought to the fore a wide range of proposals to address both liquidity challenges and the immediate debt crisis, and more medium-term proposals and structural changes, including to advance reform of the sovereign debt architecture (box III.E.2). The remainder of the chapter will look at progress in these areas, with section 4 focusing on proposals to provide immediate relief that do not require changes in the debt architecture, and section 5 focused on forward-looking, medium-term and architectural issues.

4.1 Moving beyond liquidity support: targeted debt relief

A menu of instruments and tools exist to address solvency concerns in highly indebted countries. Debt standstills and new concessional emergency loans can help address liquidity crises arising from temporary balance-of-payment problems in the wake of the COVID-19 crisis. As the impact of COVID-19 becomes clearer, the focus is shifting from providing liquidity support to addressing solvency concerns and debt situations of those countries that face unsustainable debt situations. Adoption of the Common Framework for Debt Treatment Beyond DSSI by the G20 and the Paris Club last November reflects this recognition (see section 5 below). There are several other mechanisms that could be used to give countries relief in the short run. Depending on countries'

specific circumstances and debt profiles, debt swaps, debt exchanges and reprofilings, and debt buybacks can be considered:

- *Debt swap initiatives have been, or are being launched in several regions, and could be further expanded.* Under the Economic Commission for Latin American and the Caribbean's Debt for Climate Adaptation Swap initiative for the Caribbean, three pilot countries—Antigua and Barbuda, Saint Lucia, and Saint Vincent and the Grenadines—are ready to initiate negotiations with creditors for debt swaps under this programme.[14] More recently, the Economic and Social Commission for Western Asia launched a Climate/SDGs Debt Swap Initiative to establish a Debt Swap Mechanism for Member States in the Western Asia region. Such initiatives have the potential to overcome high transaction and monitoring costs of project-based debt swaps, by standardizing terms and linking to existing cooperation frameworks and their monitoring;[15]
- *To address commercial debt, debt buy-backs have been proposed.* Similar to the Debt Reduction Facility (DRF) accompanying the Heavily Indebted Poor Country Initiative (HIPC), commercial debt trading at a discount would be bought at market prices, thus providing relief to the debtor without restructuring. Debt buy-backs are thus similar to the market-based swap discussed above, but have no conditionalities for the use of proceeds. However, such a mechanism would be appropriate only if debt is trading at a steep discount. Because buy-backs increase secondary market prices, strict criteria for eligibility, including price

Box III.E.2
Debt vulnerability discussions at the high-level events on Financing for Development in the Era of COVID-19 and Beyond*

In the follow-up to the High-level Event on Financing for Development in the Era of COVID-19 and Beyond, two discussion groups composed of States Members of the United Nations and various international institutions developed a menu of policy options[a] to address financing challenges in the area of sovereign debt: one group on debt vulnerability and one focusing on private sector creditors engagement (see box 1 in the Introduction of *Financing for Sustainable Development Report 2020* for more details on this process). A range of policy options that were not negotiated or endorsed by the international community or members of the Inter-Agency Task Force on Financing for Development were organized into three broad areas:

(i) *Debt standstills and alternatives to provide liquidity,* to extend and expand the Debt Service Suspension Initiative, in terms of eligibility (e.g., on the basis of vulnerability to exogenous shocks rather than standard per capita income criteria), time frame (to at least the end of 2021), and creditor participation (e.g., through a voluntary credit facility, see also below);

(ii) *Provision of debt relief in the short term,* to allow countries to immediately address the fallout from the pandemic, consider debt cancellations, exchanges, swaps or buy-backs;

(iii) *Improvements in the international sovereign debt architecture,* to prevent future crises (e.g., through improved transparency, greater use of state-contingent debt instruments) and improve crisis resolution (e.g., through improvements to market-based approaches, legislative strategies, or multilateral approaches such as a Sovereign Debt Forum or Sovereign Debt Authority).

Proposals on debt standstills

One proposal to enhance private sector creditor participation in standstills is the establishment of a central credit facility (CCF)[b] at financial institutions with preferred creditor status. Countries requesting assistance from private creditors in the form of temporary standstills would pay interest payments coming due during the standstill period into the CCF to fund crisis response and later on to repay creditors. In exchange for releasing the debtor from its obligations to the private creditor, the relevant amount would be credited to the creditors' account in the CCF. In addition to a guarantee of equal treatment, there would also be an international (seniority) backup to assurances of future full repayment of outstanding debt obligations.

It has also been suggested that debtor States could make use of the International Law Commission's Articles on the Responsibility of States for Internationally Wrongful Acts, and thus of customary international law, through two avenues: invocation of the necessity defence that excuses temporary non-performance on international obligations to address "a grave and imminent peril" (arguably including the servicing of commercial debt during a pandemic);[c] or plea of distress with less taxing requirements or burden of proof to meet relevant criteria in a debtor country affected by a global pandemic.[d] However, it is important to acknowledge that private sector standstills can trigger debt default, depending on the structure.

Proposals for the debt architecture

Proposals discussed included the establishment of a sovereign debt forum, which could provide a platform for discussions between creditors and debtors—particularly in the context of debt relief and its role in achieving the Sustainable Development Goals—and facilitate agreements on voluntary stays; or an international sovereign debt authority—constituted as an expert-based authority or standing body independent of creditor as well as debtor interests—that could coordinate and further develop many of the proposals discussed here.[e]

Source: UN DESA.

a Available at https://www.un.org/en/coronavirus/financing-development.

b Bolton. P. et al. 2020. "Born out of necessity: A debt standstill for Covid-19." CEPR Policy Insight Nr. 103, April.

c Weidemaier, Mark, and Mitu Gulati. 2020. "Necessity and the Covid-19 pandemic." Capital Markets Law Journal, Volume 15, Issue 3, July 2020.

d Paddeu, F. and F. Jephcott. 2020. "Covid-19 and Defences in the Law of State Responsibiity. Part II." Blog of the European Journal of International Law, 17 March.

e UNCTAD (forthcoming). 2020. A modest proposal for an International Sovereign Debt Authority. Trade and Development Report 2020. Update, March.

* This box summarizes discussions at the high-level event on FfD, and presents some elements of the menu of options emerging from these discussions. These options were meant to provide a broad array of ideas, but there is no consensus on them, and they have not been endorsed by members of the Inter-Agency Task Force on Financing for Development or the international community.

caps, would be needed, and may impact scale of operations;

- *To address official debt, official creditors could also reprofile or exchange their debts, granting more concessional terms to vulnerable countries.* For example, official bilateral creditors could apply IDA-terms to their credits to least developed and other vulnerable countries, lengthening average maturities or lowering average interest costs. They could also systematically include relevant state-contingent elements—for terms of trade shocks, disasters (e.g., hurricane clauses), among others—to help countries better manage future shocks. A joint initiative and/or development of common term sheets could set standards and reduce the time for implementation;
- *Outright debt cancellations of official debt could be considered for the most vulnerable countries.* The IMF has provided relief to the 29 poorest developing countries through the donor-funded CCRT, providing grants that effectively cancel debt repayments through April 2021. With sufficient donor funding, these types of trust-funded multilateral initiatives could be expanded. Debt cancellation done bilaterally would partially count as official development assistance (ODA) under updated Development Assistance Committee rules (see chapter III.C). One proposal is to provide comprehensive debt relief on official debt in return for commitments in investments in health and social spending, and climate action, building on experiences of the HIPC Initiative / Multilateral Debt Relief Initiative (MDRI).[16] Another proposal has been for use of ODA to reduce external debt burdens in vulnerable developing countries in exchange for commitments by beneficiary developing countries to use liberated funds for response and recovery investments in local currency, primarily in their health and social sectors.[17] Any debt cancellation efforts of official debt also must address burden sharing across creditors, and inclusion of private creditors in particular. Such inclusion has proven difficult in the current architecture (see below).

5. Rebuilding better: sustainable debt and investing in recovery and the SDGs

The current crisis reflects the materializing of debt risks that have built up over several years. While the dramatic impact of the crisis requires an immediate response, there is also a need to address the underlying challenges, both at national levels and in the global architecture. Such challenges and efforts to address them relate to debt crisis prevention and debt crisis resolution.

5.1 Debt sustainability and the SDGs after COVID-19

The COVID-19 shock has dramatically worsened the baseline for debt sustainability and SDG investments. The fiscal outlook for developing countries is significantly more challenging than it was just 12 months ago. At the same time, the global pandemic and ensuing recession have also caused sustainable development setbacks across many SDG investment areas (see chapter I). Yet, even prior to COVID-19, the borrowing needed to finance the SDGs would have sharply increased interest burdens and debt vulnerabilities (see FSDR 2020). Creating fiscal space for public investment in the SDGs, particularly in heavily indebted countries, has become an even greater challenge. This requires progress across the action areas of the Addis Ababa Action Agenda.

Taking into account medium- and long-term risks, liabilities and assets can help improve management of public balance sheets and support SDG achievement. As discussed in last year's report, how borrowed resources are used has implications for the ability to repay debt. Productive investments in the SDGs can generate future revenue and growth; while increasing debt ratios in the short run, they can lead to lower debt ratios over time and create a positive feedback loop. Balance sheet analysis (see chapter III.B) has several benefits. It can help Governments (i) link and improve management of public assets and liabilities, including by better matching maturity profiles of assets and liabilities; and (ii) more consistently consider medium- and long-term risks and contingent liabilities, such as pandemic risks and climate-related risks. Efficient long-term investments in the SDGs and in climate resilience may enhance long-term debt sustainability, even when the rise in debt could increase vulnerabilities. Longer-term balance sheet analysis could help countries design instruments that can reduce debt vulnerability risks while facilitating such investments.

Debt sustainability assessments are also increasingly incorporating such elements. For example, the IMF/World Bank low-income countries' debt sustainability framework (LIC-DSF) includes, since 2018, a "realism tool" to assess contributions of public investment on growth. Recent revisions to the debt sustainability assessment for market-access countries have introduced long-term assessment tools.

5.2. Debt crisis prevention

Debt management and debt transparency

Debt crisis prevention requires strengthening debt management and debt transparency. However, there are important gaps in the data on public debt in low-income and least developed countries that the international community is working to address. Few countries achieve the recommended data coverage of (i) the general government; (ii) government-guaranteed debt; and (iii) non-guaranteed debt of non-commercial public corporations.[18] Data on the terms and conditions of loans are also often incomplete. Collateralized debt exposures have also come to light, alongside increased use of escrow accounts to stockpile debt service. These gaps hinder assessment of risks and can lead to debt surprises. Since the fall of 2018, the IMF and the World Bank have been implementing a Multipronged Approach to address debt vulnerabilities and improve debt management and transparency (box III.E.3); UNCTAD also provides support in the area of debt management (box III.E.4).

Responsible borrowing and lending

Multiple initiatives are under way to promote responsible borrowing and lending. Responsible borrowing and lending practices are critical for crisis prevention. Efforts to promote responsible borrowing and lending include dedicated policies by international financial institutions (IFIs), such as the IMF Debt Limits Policy, and the World Bank Sustainable Development Financing Policy. They also include "soft-law" approaches that promote good practices, enhance transparency, and promote cooperation

between debtors and creditors, such as the G20 Operational Guidelines for Sustainable Financing, the Institute of International Finance (IIF) Voluntary Principles for Debt Transparency (which the OECD has proposed that it host the IIF data repository), and the UNCTAD principles on promoting responsible sovereign lending and borrowing. In the Addis Ababa Action Agenda, Member States had committed to working towards a global consensus on guidelines for debtor and creditor responsibilities, but such global consensus remains elusive (see FSDR 2020).

Box III.E.3
The International Monetary Fund and World Bank Multipronged Approach

Under the first pillar of the Multipronged Approach (MPA), the International Monetary Fund (IMF) and the World Bank are working to strengthen debt transparency by assisting borrowing countries, and by reaching out to creditors. For instance, the IMF is providing technical assistance to build borrower capacity to record, monitor, and report debt. The IMF and the World Bank provided analytical guidance to borrowers and creditors and are supporting the Group of 20 (G20) in enhancing debt transparency under the Debt Service Suspension Initiative.

The second MPA pillar supports capacity development in public debt management to avert and mitigate debt vulnerabilities, through diagnostic tools, training, and in-depth technical assistance on medium-term debt strategies and annual borrowing plans, risk management and other issues.

The third pillar seeks to provide suitable analytical tools to analyze debt developments and risks. The IMF and the World Bank have operationalized a new low-income-countries debt sustainability framework (LIC DSF) since July 2018, which recommends a broader coverage and reporting of public debt, including of contingent liabilities. It also contains new tools to gauge the realism of the debt baseline and macroeconomic projections, incorporating impacts of public investments. The market access country debt sustainability assessment (MAC DSA) is currently being updated to provide a more comprehensive and consistent coverage of debt-related risks; incorporate relevant country-specific factors; better capture uncertainty around baseline assumptions, including through tools to assess realism of assumed fiscal multipliers and potential growth rates; and provide more structure for the application of judgment in the assessment.[a] The IMF applies this framework to 120 countries with significant market access.

Under the fourth pillar, the IMF and the World Bank are adapting their lending policies to better address debt risks and to promote efficient resolution when a debt problem arises. In this context, the review of the Debt Limits Policy aims to provide countries with more flexibility while adequately containing debt vulnerabilities.

Both the IMF and the World Bank have developed various fiscal risk management tools to encourage governments to identify, evaluate, and manage their exposure in view of the significant impact that fiscal risks present to public finances. Finally, the IMF and the World Bank have extensive interactions with creditors, including at the Paris Club and G20, which enable a continuing dialogue on responsible lending and related issues.

Source: IMF.

a IMF. 2021. Review of The Debt Sustainability Framework For Market Access Countries. Policy Paper No. 2021/003.

The IMF modified its Debt Limits Policy to provide countries more flexibility in financing while still containing debt vulnerabilities.[19] A key objective of the review, completed in October 2020, was to strike the right balance between providing space for public investment and maintaining debt sustainability. The review found that debt vulnerabilities have been broadly contained for countries with IMF-supported programmes, notwithstanding remaining challenges in relation to off-balance-sheet debt risks and debt transparency. At the same time, implementation of the policy on non-concessional borrowing appears to have been tighter than anticipated in several countries, thus restricting their ability to borrow for needed investments. To address these challenges, the policy was modified to (i) enhance debt data disclosure; (ii) allow for greater tailoring of debt conditionality for low-income countries with market access; (iii) broaden the deployment of present value limits to more countries that normally rely on concessional financing and are at moderate risk of debt distress; (iv) provide greater clarity on circumstances under which exceptions to non-concessional borrowing limits can be accommodated in countries that normally rely on concessional financing and are at high risk of debt distress; and (v) clarify the definition and measurement of concessional debt. These reforms are currently targeted to take effect in Spring 2021.

The IDA and other MDBs have maintained or even enhanced the concessionality of their support over more than a decade to avoid exacerbating debt risks. Learning from the past, the IDA developed a grant allocation framework that aimed to help countries maintain the hard-won gains of HIPC and MDRI. Several other MDBs followed suit with similar grant allocation frameworks. These frameworks provided grants to countries based on the risks of future debt distress. However, in the absence of a unified approach by all creditor groups, increasing concessionality of MDBs alone is unable to fully stem the tide of rising debt risks. The newly introduced IDA Sustainable Development Financing Policy takes a broad and more systematic view of drivers of rising debt vulnerabilities with the aim of providing stronger incentives and a more proactive and systematic engagement at the country level.

Financing instruments to share risks

Financial instruments that tie debt service to economic conditions could reduce the likelihood of future crises. State-contingent debt instruments (SCDIs) link debt service obligations to a predefined state variable (GDP, exports, or commodity prices, for example). They can be designed to provide additional creditor compensation in good times (value recovery instruments) and/or provide additional relief in bad times, such as disasters. In the context of debt restructurings, they may help avoid protracted disputes about the economic outlook by tying debt service to future outcomes. They can thus facilitate quicker agreements and facilitate countries' return to markets. The United Nations has long called for such clauses to be incorporated into official lending. However, to date, such clauses have been used only sparingly, both in official and commercial debt.

The use of state-contingent debt instruments in market debt has been relatively limited so far, although sovereign debt

restructurings have presented opportunities to use them to embed long-term resilience in debt structures. Creditors have historically discounted these instruments severely, given their illiquidity, idiosyncratic risk profiles, and lack of correlation with fixed income investment portfolios. In designing new instruments, it will be important to learn from historical experience and choose appropriate state variables that minimize measurement issues, avoid lagging indicators, and structure payouts properly (including through the use of floors and caps). So far, SCDIs have most commonly been used in debt restructurings, where key challenges—such as first-mover problems on the sovereign side (i.e., stigma of issuing an instrument that provides debt relief in downturns) and on the creditor side (i.e., first buyers of such instruments risk subordination to other fixed income creditors)—do not apply. (Stigma concerns are less relevant, and the entire debt stock can turn over, avoiding subordination.) During recent restructuring in Barbados and Grenada, clauses were introduced to allow for maturity extension and interest forbearance following hurricanes and other disasters. Such clauses provide valuable insurance at low cost against exogenous shocks, and are increasingly relevant in the context of climate change. Their use could be expanded to a wider group of countries and broader sets of shock criteria, such as commodity prices or public health crises.

Symmetric instruments could be particularly suited to the post-COVID-19 context, but their effectiveness will depend on market uptake. The post-COVID-19 outlook leaves sovereign debtors exposed to uncertainty on both the upside and downside. In this environment, exchange bonds with symmetric payoffs linked to growth could reduce the chance of repeated defaults in a manner mutually beneficial to both creditors and debtors. Good state variables should be outside the control of debtor governments but still well correlated with debt sustainability. Examples include commodity prices, trading-partner GDP, or merchandise exports as measured by trading partners.

State-contingent debt instruments are not a panacea for the inherent challenges of a debt restructuring, but with official sector leadership, they can play a bigger role going forward. To realize the potential of SCDIs, the official sector can (i) endorse standardized term sheets developed by reputable legal and market professionals (akin to the approach adopted for enhanced collective action clauses (CACs)), such term sheets have been developed for GDP-linked bonds;[20] (ii) enhance data provision to facilitate the use of common state variables not subject to manipulation risk; (iii) explicitly recognize the resilience afforded by downside or symmetric SCDIs in assessments of debt sustainability; and (iv) incorporate standardized SCDIs in official debt restructurings and official lending, such as for example France's prêts très concessionnel contracyclique.[21] This would also signal support for the instrument class (see section 5.3 on standardizing triggers in debt contracts).

Box III.E.4
Technical assistance for debt management and transparency: the UNCTAD Debt Management & Financial Analysis System Programme

Concerns about debt data transparency have deepened as a result of the COVID-19 crisis. It highlighted and, in many instances, aggravated existing weaknesses in countries' capacity to record, monitor and report public debt effectively. Common problems include incomplete coverage of total public debt, increasingly complex debt portfolios, poor information flows, weak information systems, high staff turnover and inadequate capacity-building. These problems have been compounded by the constraints associated with COVID-19-related sanitary measures; in particular, the need for staff to telework has highlighted inadequacies in the management of operational risk by many debt management offices.

The international community can provide valuable support to developing countries' efforts to respond to these challenges. Technical assistance has been proven to be an effective way to strengthen capacity in areas such as debt data recording, monitoring and reporting, and there is significant demand for support. For example, in 2020, over half of the 60 countries supported by the United Nations Conference on Trade and Development (UNCTAD) Debt Management & Financial Analysis System (DMFAS) programme benefited from support in accessing their debt databases remotely as a result of COVID-19-related restrictions, and many countries received technical advice and support for implementing debt restructuring. As part of the international response to the crisis, efforts to enhance and improve capacity for public debt management should be scaled up and adapted to the current challenges. Importantly, providers need to intensify their efforts to adapt their delivery methods, capitalizing on technology to provide more remote support and online capacity-building opportunities while travel restrictions continue to impede traditional face-to-face training.

Source: UNCTAD.

5.3. Debt crisis resolution

Reforming the international debt architecture is urgently needed to address a potential increase in sovereign debt restructurings in the aftermath of the pandemic, including the possibility of a systemic crisis. The international architecture for debt resolution includes debt contracts, institutions such as the IMF and the Paris Club, and policy frameworks that support orderly debt restructuring. Reforms should be aimed at providing speedy and sufficiently deep debt relief to countries that need it, benefiting not only these countries but the system as a whole.

Challenges in the current system

The existing market-based system for restructuring sovereign bonds—based on CACs, bond exchange offers and supported by IMF debt sustainability analyses and financing—has improved restructuring processes. The inclusion of CACs—a provision in bond contracts which allow a majority of bond holders to bind the minority of holders to the terms of a restructuring—has reduced minority creditors' ability to delay or derail restructuring while "holding out" for better terms. Relative to previous restructuring episodes, the dozen restructurings of privately held sovereign debt, mostly involving bonds, since 2014 have generally proceeded smoothly. In particular, these restructurings have mostly been pre-emptive and undertaken before default, had a shorter average duration (1–2 years), and had a higher creditor participation on average.

However, challenges remain with a market-based approach. These challenges include the large outstanding stock of international sovereign bonds without enhanced CACs; an increase in subsovereign debt without enhanced CACs; and information asymmetries preventing common understandings on both the perimeter of restructuring operations (i.e., the debts subject to the treatment) and on how each claim is classified (e.g., official versus private claims). In addition, other types of debt have been harder to restructure, because they either lack majority restructuring provisions (syndicated bank loans) or involve collateral. Restructurings in some developing countries involving such loans were protracted, incomplete, and non-transparent. These types of claims, particularly the use of collateral, have become more prevalent and pose a challenge to the system. They exacerbate coordination challenges in a decentralized market-based process, where both individual creditors and debtors may be incentivized to postpone necessary restructurings.

Options for reform

The market-based system can be further strengthened, by promoting the adoption of enhanced CACs, inclusion of majority restructuring provisions for payment terms in loan agreements, and more widespread use of state-contingent clauses. In addition to continued promotion of enhanced CACs, proposals have been made to further strengthen them (e.g., by an increased use of trust structures). The greater use of state-contingent clauses could also promote fast and successful debt restructuring, for example, in case of disasters.

In a systemic crisis, statutory "sticks" and financial "carrots" can be used to discourage holdout creditors. Financial "carrots" include financing by the IFIs of debtor-provided cash or credit enhancements that lower the risk, and hence the value of the assets offered to creditors, without reducing debt relief from the perspective of the debtor. "Sticks" could include both targeted domestic law tools and international law options. The former could include "anti-vulture fund" legislation to limit litigation by uncooperative creditors, which has been used to prevent holdout behaviour in the context of the HIPC and MDRI initiatives. The latter could include a United Nations Security Council resolution, which could be used to immunize specified assets from attachment by holdout creditors or otherwise discourage holdout behaviour. These tools have their drawbacks and limitations. IFI resources used to support debt restructuring could be diverted from other uses and undermine the institutions' balance sheets and credit ratings, so they need to be used judiciously. Statutory instruments can raise important legal and policy issues, and would be expected to be used only as a last resort and on a time-bound basis to address the unique challenges posed by a systemic crisis.

Developing countries require additional legal support to safeguard their interests in complex restructuring processes. Financial and legal advisors play a key role in restructuring processes, guiding sovereigns through the process and leading their engagement with commercial creditors.[22] The international community could provide financial and technical support to strengthen such legal advice for countries with limited legal capacities—for example, by strengthening support to existing facilities such as the World Bank's Debt Reduction Facility or the African Legal Support Facility.

International coordination needs to be further strengthened to promote comprehensive and orderly debt resolutions.

The G20 and the Paris Club adopted a Common Framework for Debt Treatment Beyond DSSI on November 13, 2020. The Common Framework[23] brings together existing Paris Club creditors and other official creditors in the G20. It establishes principles to guide this group of official creditors to coordinate debt resolution for DSSI-eligible countries that request it, on a case-by-case basis. The framework aims to facilitate comprehensive and timely debt resolution and equitable burden sharing among creditors, including private creditors: countries are expected to seek treatment on comparable or better terms from other creditors, including private sector creditors. A debtor seeking a debt treatment must also have or request an IMF programme. Three countries (Chad, Ethiopia and Zambia) have so far requested debt restructuring through the Common Framework.

The Common Framework is only available to DSSI countries but could serve as a step towards a more universal and permanent framework for sovereign debt resolution. Eligibility for debt treatment under the Common Framework is limited to countries eligible under the DSSI. It thus excludes a number of highly vulnerable middle-income countries, including SIDS. It also requires complex case-by-case negotiations, even if the purpose of the Common Framework is to streamline those. And while countries are expected to seek comparable treatment from private creditors, voluntary participation in debt relief initiatives such as HIPC has historically been challenging[24] (box III.E.5). Despite its limitations, the effective operationalization of the Common Framework will help provide relief to low-income and least developed countries with unsustainable debt burdens or liquidity difficulties on a case-by-case basis. It may also serve as a step towards a more universal and possibly permanent framework for efficient sovereign debt resolution. Proposals for such frameworks were discussed during the High-level Event on Financing for Development in the Era of COVID-19 and Beyond (see box III.E.3). The United Nations continues to provide a valuable platform for advancing them, due to its capacity to bring all relevant voices to the table and to link sustainable debt and fair and effective debt crisis resolution to sustainable development progress.

Box III.E.5
International debt relief initiatives: a brief historical perspective

The only modern debt relief programme based on an international treaty is the 1953 London Agreement on Germany's war debt. The treaty brought all West Germany's official and private creditors to the table, excluded all debt incurred by Germany during the occupation of Europe in the Second World War, and forgave over 50 per cent of the remaining war debt incurred prior to 1933 and after 1945. It also limited the amount of export revenues that could be spent on debt servicing to 5 per cent of the total in any one year; allowed low interest rates of between 0 and 3 per cent to be paid in Deutsche Mark; and included a state-contingent clause: all debt service payments could be postponed in the event of an annual trade deficit.

Since the 1980s, with the advent of more frequent developing-country debt crises, two informal negotiation forums—the Paris Club, founded in 1956, for official bilateral debt owed to its creditor member states, and the London Club founded in 1976, to address sovereign debt owed to private creditors—gained greater attention. The Paris Club takes decisions by consensus, with its members agreeing to act as a group to protect their collective interests. Terms to allow debt relief for poor developing countries were first introduced in 1988 under the so-called Toronto terms and subsequently revised until the adoption of the "Naples terms" in 1994 that allow for up to 67 per cent reduction of bilateral debt owed to its member states on a present-value basis. The last debt relief programme agreed under these terms was for $1.4 billion of Somalia's debt with Paris Club creditors in March 2020.

The London Club originally provided an ad hoc forum for debtor countries to renegotiate their commercial bank debt with members of the Club. Each "London Club" is formed at the request of a debtor country and dissolved on agreement of a restructuring, with negotiations led by an Advisory Committee that more recently has also included non-bank creditors, such as hedge funds holding sovereign bonds. Support to the negotiations—for instance in the form of debt sustainability analyses—is provided by the Institute of International Finance (IIF), founded in 1983, and an Economic Subcommittee. However, the London Club does not establish binding resolutions and there is currently no comprehensive mechanism for the restructuring of sovereign debt owed to private creditors—a situation that has provided ample opportunities for uncooperative creditors to purchase distressed sovereign debt at a steep discount and aggressively litigate to recoup the debt's full value plus interest.

The 1989 Brady Debt Reduction Plan recognized that London Club sovereign debt restructurings were insufficient to resolve mounting developing-country debt crises. Under the plan, defaulted sovereign bank loans by London Club members were exchanged for cheaper collateralized 30-year bonds. In exchange for some amount of debt relief to participating, mainly middle-income developing countries by London Club members, multilateral and bilateral creditors provided the funds for debtor countries to buy back their remaining commercial debt and swap it for "Brady bonds" guaranteed by zero-coupon US Treasury bonds.

In the meantime, debt by poor developing countries kept rising to increasingly unsustainable levels. This eventually led to the first international debt relief initiative, the Highly Indebted Poor Countries (HIPC) initiative in 1996. This initiative was followed in 2005 by the Multilateral Debt Relief Initiative (MDRI). Overall, both initiatives afforded about $70 billion of debt relief to just over 30 poor developing countries. Commercial debt reductions were mainly channelled through the Commercial Debt Reduction Facility (DRF) of the International Development Association (IDA) that channelled donor funding to eligible countries to reduce this debt.

While these international debt relief initiatives succeeded in reducing external sovereign debt burdens substantively in beneficiary developing countries, this achievement has largely been reversed following the global financial crisis, with the renewed sharp rise of sovereign and private indebtedness across the developing world.

Source: UNCTAD. 2020. From the Great Lockdown to the Great Meltdown: Developing Country Debt in the Time of Covid-19. Trade and Development Report 2019 Update 2, April, pp 14-15.

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3 Fitch Ratings. 2021. Global Perspectives: The Growing Inequality in Global Government Debt Burdens. Special Report.

4 United Nations, Report of the Secretary-General on external debt sustainability and development 2020, A/75/281. Available from https://undocs.org/A/75/281.

5 The main benchmark index that tracks USD-denominated government bonds issued by frontier economies, the J.P. Morgan NEXGEM index, was launched in 2011 with only 17 countries. By April 2020, this had increased to 36 countries (3 HICs, 25 MICs, 2 LICs, 6 transition economies, 4 Least Developed Countries (LDCs) and 2 SIDS).

6 Raddatz, Claudio., Schmukler, Sergio L. and Williams, Thomas. 2017. "International Asset Allocations and Capital Flows: The Benchmark Effect." Journal of International Economics, 108 (C): 413–30.

7 External financing needs are calculated as current account balance + capital account balance + external debt amortization - net FDI inflows. These are calculated for 53 out of 73 LICs for which data is available from the WEO. The overall EFN estimate is derived by extrapolating to cover the countries for which data is not available.

8 The methodology referenced in this paragraph models the probability of a fiscal crisis and is distinct from the low-income country DSF, which assesses the risk of debt discress.

9 IMF staff developed a machine learning model to assess the probability of a fiscal crisis on the basis of an extensive range of variables. The methodology allows for interactions between variables and non-linearities. This exercise is distinct from the debts sustainability assessment for market access countries (MAC DSA) and the IMF-World Bank debt sustainability framework for lower income countries (LIC DSF). For more on the machine learning methodology please see "How to Assess Country Risk: The Vulnerability Exercise Approach Using Machine Learning", IMF Forthcoming (1).

10 Gambia's upgrade from an "in debt distress" rating to a high risk of debt distress is related to the finalization of a restructuring agreement. Also, the downgrade of Senegal's risk rating preceded the onset of COVID-19.

11 For more on Policy Responses to COVID-19 please refer to the IMF Policy Tracker.

12 See Chapter II in the IMF Global Financial Stability Report, October 2020: Bridge to Recovery, IMF October 2020 (2).

13 See UNCTAD (2020) Trade and Development Report 2019 Update, April, pp.9-12; UNDESA (2020). COVID-19 and sovereign debt. Policy Brief # 72. May; UN (2020). Secretary-General Report on Debt and COVID-19: A Global Response in Solidarity, April; United Nations (2020). Financing for Development in the Era of Covid-19 and Beyond. Menu of Options for the Consideration of Heads of State and Government. Part II. September.

14 For more information, see: https://www.cepal.org/sites/default/files/news/files/19-00814-debt_initiative_flyer-web.pdf.

15 See for example Steele, Paule and Patel, Sejal. 2020. Tackling the triple crisis: Using debt swaps to address debt, climate and nature loss post-COVID-19. IIED Issue Paper, September 2020.

16 Volz, Ulrich, et al. 2020. Debt Relief for a Green and Inclusive Recovery. A Proposal. Heinrich Böll Foundation, Center for Sustainable Finance, SOAS, University of London, Global Development Policy Center, Boston University.

17 See UNCTAD. 2020. From the Great Lockdown to the Great Meltdown: Developing Country Debt in the Time of Covid-19. Trade and Development Report 2019 Update 2, April.

18 For further discussion on Improving debt transparency and the World Bank DeMPA assessment, please refer to: IMF and World Bank. 2020. The Evolution of Public Debt Vulnerabilities in Lower Income Economies.

19 IMF. 2020. Reform of the Policy on Public Debt Limits in IMF-Supported Programs. IMF Policy Paper, November 2020.

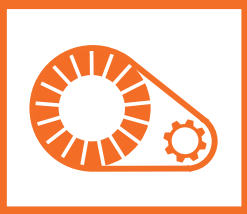
20 See Manuelides, Yannis. 2017. GDP-linked bonds: a commentary on a termsheet. Capital Markets Law Journal, Volume 12, Issue 2, April 2017.

21 Commonwealth Secretariat. 2016. Extending Countercyclical Loans. Lessons from Agence Française de Développement. London: Commonwealth Secretariat. Available at https://thecommonwealth.org/sites/default/files/inline/Extending%20countercyclical_0.PDF.

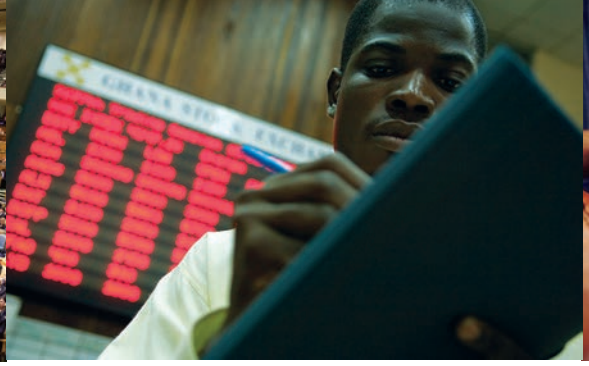
22 Buchheit, Lee et al. 2019. The restructuring process. In Sovereign Debt: A Guide for Economists and Practitioners, edited by Abbas, Ali, et al. Oxford: OUP Oxford.

23 For more information, see: https://clubdeparis.org/en/file/3380/download?token=M3y76DWX.

24 Kharas, Homi and Meagan Dooley. 2021. Debt distress and development distress. Twin crises of 2021. Brookings Global Economy and Development Working Paper.



Addressing systemic issues


Chapter III.F

Addressing systemic issues

1. Key messages and recommendations

The COVID-19 pandemic, and the social and economic crisis it triggered, has amplified underlying risks in the international financial system. After record capital outflows from developing markets in early 2020, international financial markets have stabilized, thanks in large part to fast and aggressive actions by central banks of major economies. Nonetheless, many developing countries continue to face liquidity shortages. While the international community has taken steps to respond to the crisis, the scale of the economic downturn and uncertain prospects for recovery merit additional joint efforts to address urgent needs and ensure a more inclusive, sustainable and risk-informed recovery.

Emergency financing, along with debt service relief for the poorest countries, helped address urgent liquidity and balance-of-payment needs. However, external financing needs are expected to remain elevated throughout 2021, and many developing countries continue to face debt and liquidity pressures. They will need additional funding to mitigate the social and economic impacts of the pandemic, and resulting external imbalances.

- A new allocation of special drawing rights (SDRs) would help meet a global long-term need to supplement countries' official reserves, help restore confidence, and support a resilient and lasting recovery of the global economy;
- Countries in strong external positions can voluntarily use their SDRs to help countries most in need—for example, by lending them to the Poverty Reduction and Growth Trust (PRGT) of the International Monetary Fund (IMF);
- IMF member countries should replenish IMF concessional financing and debt relief instruments;
- The Sixteenth General Review of Quotas should ensure that the IMF remains strong, quota based and adequately resourced in the medium term, while continuing with the process of governance reform. It should ensure that any adjustment in quota shares results in increases in the quota shares of emerging and developing countries, while protecting the voice and representation of the poorest members;
- The international system should also provide additional concessional finance to countries in need, and make available longer-term financing for sustainable development that takes advantage of the current low interest environment, including by replenishing the capital of multilateral development banks (MDBs) as necessary (see also chapters III.C and III.E).

The COVID-19 crisis once again highlighted the importance of managing the consequences of capital flow volatility. Countries need to consider the full policy toolkit—including monetary, exchange rate, macroprudential, capital flow management, and other policies—to address capital flow volatility.

- Countries should explore coherent, Integrated Policy Frameworks that bring together the full policy toolkit as part of integrated national financing frameworks (INFFs) to manage excess leverage and volatility in domestic and cross-border finance;
- The international community should be mindful of spillovers from domestic policy choices, including on the volatility of private capital flows to developing countries. Efforts to incentivize long-term investment to facilitate achievement of the Sustainable Development Goals (SDGs) can contribute to this objective.

The financial market turmoil at the onset of the pandemic also shone a spotlight on remaining vulnerabilities in different market segments. While the banking sector was more resilient than at the beginning of the 2008 financial crisis (thanks to the financial regulatory reforms agreed by the Group of Twenty (G20) along with extraordinary

policy support), risks in the non-bank financial sector had increased over recent years. Large tech companies could also become systemically important in financial markets, which would create new challenges for policymakers to manage growing risks without impeding innovation.

- Regulators should continue to move towards regulating financial intermediation based on the function it performs rather than the type of institution involved;
- Regulators will also need to ensure that so-called "stablecoins" comply with financial stability and integrity requirements, including by cooperating across jurisdictions and making sure that the voices of all countries are part of discussions on setting new regulatory standards.

The growing threat of non-economic risks to financial and macroeconomic stability has underscored the need for monetary and regulatory authorities to incorporate the impact of climate risks in regulatory and policy frameworks. While there is broad agreement that financial institutions need to better integrate climate risks into their risk management frameworks, there is less consensus around the potential role of monetary authorities in the transition towards a low carbon economy.

- Climate risk considerations need to be further included in global financial regulation in a timely fashion; policymakers should support climate risk management of financial institutions by setting mandatory reporting standards and integrating climate risk scenarios in financial stress tests;
- Central banks should continue to integrate climate risks into policy frameworks, including protective measures to safeguard financial stability and protect central banks' own balance sheets; they could also explore the impact of "market neutral" bond purchasing strategies on climate risk, as such strategies tend to reflect market bias towards heavy carbon emitters.

To emerge from the COVID-19 crisis and recover better, the international policy response must be inclusive and coherent, taking into account the voices of all countries and addressing interconnected global risks, including non-economic risks such as climate change. The crisis is an opportunity for the international community to build consensus around necessary reforms to the global architecture and align financial, investment, trade, development, environmental and social policies. The United Nations provides a universal platform for high-level political discussions on comprehensive policies for financing for sustainable development.

- States Members of the United Nations should consider whether governance arrangements at various international institutions need further reform, especially those that have not undertaken reforms in many years.

This chapter is organized in five sections: the first reviews the international crisis response and the role of the global financial safety net; the second considers policy options for managing capital flow volatility; the third reviews financial regulatory reforms and the role of climate risks; the fourth section addresses the growing role of digital finance; and the final section discusses how to strengthen global governance and coherence.

2 International monetary system and the global financial safety net

2.1 International crisis response

Policymakers took aggressive actions to avert a full-fledged global financial crisis. Creative and decisive actions by central banks in major economies during the market turmoil in March of 2020 put a floor on falling asset prices and injected much-needed liquidity into the markets, which helped stop a collapse in global financial markets and unprecedented capital outflows from developing countries (see chapter I).

The international community also stepped in, by offering debt service relief to the poorest countries and providing emergency financing to many developing countries in need. To address liquidity pressures caused by the crisis, international support included the Debt Service Suspension Initiative (DSSI) of the G20, which offered the suspension of debt service payments to the poorest countries. More recently, the G20 has agreed on a common framework for debt treatment beyond DSSI to address debt solvency issues (see chapter III.E). The IMF is also providing debt service relief to its poorest members under its Catastrophe Containment and Relief Trust (CCRT), and supporting other member countries through its financing facilities. The World Bank and regional development banks have also mobilized significant resources in support of their member countries (see chapter III.C). Yet, continued debt and liquidity pressures for some countries have also been a stark reminder of limitations of the global financial safety net.

Some developing countries have continued to experience balance-of-payment pressures and face liquidity shortages due to COVID-19. The COVID-19 shock adversely affected developing countries' access to foreign currency through four channels: (i) non-resident capital flight shutting low-income and least developed countries (LDCs) out of capital markets (see chapter I); (ii) dramatic falls in international trade volumes (see chapter III.D); (iii) stark falls in global remittances (see chapter III.C); and (iv) a sharp contraction in foreign direct investment (see chapter III.B). As a result, external financing needs of LDCs and other low-income countries, in particular, are projected to have more than doubled compared to recent historical averages in 2020 (see chapter III.E). Although the pressure should moderate somewhat in 2021, external financing needs are expected to remain elevated.[1] At the same time, these countries' foreign exchange reserves are projected to fall by around $22.5 billion collectively in 2020, leaving half of them with less than 2 years of coverage of external financing needs, and some with less than a full year of coverage. After receiving emergency financing in the first half of 2020 from the IMF and increased lending by MDBs, many LDCs and other low-income countries will continue to rely on additional concessional financing, or else face unsustainable liquidity or debt situations.

2.2 The global financial safety net

Countries have drawn on all layers of the global financial safety net to mitigate the impacts of the COVID-19 crisis, but this support, overall, is unlikely to be sufficient. With the IMF at its centre, the global financial safety net further includes regional financing arrangements,

bilateral swap arrangements and, at the national level, countries' own foreign exchange reserves. While it has expanded substantially since the 2008 global financial crisis, gaps still remain, and many countries don't have access to either one or more of its layers. For most developing countries, the main source of external liquidity support during the COVID-19 crisis came from IMF lending facilities.[2]

IMF lending

At the end of January 2021, the IMF had approved $105.5 billion for 85 countries under emergency loans, new financing arrangements, and augmentations of existing arrangements. The IMF made financing available under emergency loans, expanded member countries' access to concessional resources, and streamlined approval processes. This includes around $30 billion without formal adjustment programmes ($7.9 billion through the Rapid Credit Facility for low-income countries and $22.2 billion through the Rapid Financing Instrument available to all IMF member states) (table III.F.1). In April 2020, the IMF established a new Short-term Liquidity Line for member countries with very strong policies and fundamentals, but by the end of 2020, no qualifying country had officially requested access to this new facility.

Regional financing arrangements

Regional financing arrangements (RFAs) also responded to the COVID-19 crisis, but have made few loan disbursements so far. RFAs can provide support to their member countries through regional reserve pooling arrangements, swap lines, lending facilities and technical support. During the current crisis, the Arab Monetary Fund (AMF), the Chiang Mai Initiative Multilateralization (CMIM), the Eurasian Fund for Stabilization and

Table III.F.1
IMF COVID-19 financial assistance and debt service relief, March 2020–January 2021
(Millions of United States dollars)

Lending facility	Commitment (US$ millions)	Description	Jurisdiction eligibility	Access type/conditions
Rapid Credit Facility (RCF)	7,947	Rapid concessional financial assistance to low-income countries (LICs) with an urgent balance-of-payments (BOP) need, financed through the Poverty Reduction and Growth Trust (PRGT)[a]	69 PRGT-eligible member states of the IMF	Limited conditionality; 10 years
Extended Credit Facility (ECF)	1,073	Highly concessional financing to LICs facing a *protracted* BOP problem	69 PRGT-eligible member states of the IMF	Case-by-case basis consistent with strong and durable poverty reduction and growth; 3–5 years
Joint augmentation of Standby Credit Facility (SCF) and Stand-By Arrangement (SBA)	223	Concessional financing to LICs with *short-term* BOP needs.	69 PRGT-eligible member states of the IMF (SCF)	For BOP need that is expected to be resolved within two years; 12–36 months
Rapid Financing Instrument (RFI)	22,232	Rapid financial assistance for BOP needs	190 member states of the IMF	All member countries facing an urgent BOP need, when a full-fledged economic programme is neither necessary nor feasible; 3.25–5.0 years
Flexible Credit Line (FCL)	51,878	Crisis-prevention/mitigation lending	190 member states of the IMF	Precautionary facility for very strong performers who meet ex ante qualification criteria
Precautionary and Liquidity Line (PLL)	2,700	Financing to flexibly meet liquidity needs of member countries	190 member states of the IMF	Precautionary facility for very strong performers, with sound economic fundamentals but with some vulnerabilities that preclude them from using the FCL; 3.25–5.0 years
Extended Fund Facility (EFF)	9,101	Financing for countries facing serious medium-term BOP problems	190 member states of the IMF	Assistance for countries with structural weaknesses that require time to address; 4.5–10.0 years
Stand-By Arrangement (SBA)	10,375	Main lending instrument for emerging and advanced market countries facing external financing needs	190 member states of the IMF	12-36 months
Total Financial Assistance	**105,529**			
Debt relief facility	**Commitment (US$ millions)**	**Description**	**Jurisdiction eligibility**	**Access type/conditions**
Catastrophe Containment and Relief Trust (CCRT)[b]	489	Grants for debt relief for the poorest and most vulnerable countries hit by catastrophic natural disasters or public health disasters	PRGT-eligible or small States, with per capita income cutoffs	IMF debt repayments relief

Source: IMF. COVID-19 Financial Assistance and Debt Service Relief, as of 29 January 2021. Available at https://www.imf.org/en/Topics/imf-and-covid19/COVID-Lending-Tracker.
Notes: a The IMF is seeking bilateral loans and donations to augment PRGT resources, with a fundraising target of SDR 12.5 billion ($17.5 billion); b The IMF has issued a call for additional grant funding for the CCRT, with a fundraising target of SDR 1 billion ($1.4 billion).

Development (EFSD), the European Stability Mechanism (ESM) and the Latin American Reserve Fund (FLAR) have intensified their existing cooperation with the IMF. However, despite having a combined financing capacity of over $1 trillion, by the end of 2020, only AMF, EFSD and FLAR had disbursed emergency loans to some of their members, amounting to a total of less than $1.5 billion. Other measures included the development of new financing instruments (EFSD, FLAR); guidelines for central banks to deal with COVID-19 (AMF); and intensified regional surveillance efforts (CMIM).[3] For eurozone members, ESM offered Pandemic Crisis Support up to an amount equivalent to 2 per cent of their GDP, but so far, no country has made use of this facility.[4]

Box III.F.1
Financing for Development in the Era of COVID-19 and Beyond: policy options for global liquidity and financial stability

The Discussion Group on global liquidity and financial stability put forward concrete policy options that were submitted for the consideration of the Ministers of Finance at their Meeting on 8 September 2020 and thereafter to the Heads of State and Government at the High-level Meeting on 29 September 2020.

Short-term policy options include

- A new general allocation of special drawing rights (SDRs);
- Encouraging countries with strong external positions to voluntarily use part of their SDR holdings to help countries hit hard by the crisis;
- An expansion of bilateral swap lines or the facilitation of multilateral swap lines through regional financing arrangements/the International Monetary Fund (IMF);
- Enhanced access to concessional loans and grants, through strengthening the IMF Poverty Reduction and Growth Trust, and the recapitalization of multilateral development banks (MDBs) and public development banks to support additional concessional lending.

Middle-income countries in need, but with overall sustainable debt levels, would benefit from additional financing from MDBs and regional development banks at low fixed interest rates and with long maturities. A specific emergency financing mechanism could play a similar role, such as the proposed *Fund to Alleviate COVID-19 Economics (FACE),* which would channel $500 billion through MDBs providing loans with 50 years maturity, and allowing them to take advantage of the current low interest rate environment.

A proposed *new liquidity and sustainability facility* for developing countries could provide short-term liquidity and lower borrowing costs to developing countries with strong macroeconomic fundamentals.

For the medium to long term, discussion group members highlighted the importance of enabling developing-country policymakers to deploy the full policy toolkit to address international capital flow volatility, including capital flow management measures, which are often prohibited in international trade and investment agreements (see section 3).

Source: United Nations. 2020. "Financing for the Development in the Era of COVID-19 and Beyond Initiative (FFDI)." Available at https://www.un.org/en/coronavirus/hle-financing-development.

Bilateral swap lines

The extension of bilateral swap lines by central banks in major economies also supported financial markets and helped ease international liquidity pressures. Since the beginning of the COVID-19 crisis, the United States Federal Reserve System (Fed) has expanded the set of countries that are offered swap lines from 5 to 14 (including 4 developing countries). This was complemented by a temporary repurchase agreement facility for other central banks—although this mainly benefits countries with large foreign exchange reserves and US Treasury holdings. Swap line usage peaked in May at $449 billion, below the $583 billion at the height of the 2008 financial crisis. The Fed recently extended the swap lines and repo facility until the end of September 2021.[5] Despite their importance for ensuring international liquidity, most developing countries do not have access to foreign currencies under these arrangements.

2.3 Strengthening the global financial safety net

Resource constraints and coverage gaps have lent new urgency to long-standing calls for strengthening the global financial safety net. Some of these were part of the menu of options for strengthening global liquidity and financial stability, developed by the workstream on Financing for Development in the Era of COVID-19 and Beyond (box III.F.1).

IMF resource envelope and toolkit of instruments

Before the outbreak of the COVID-19 pandemic, IMF members agreed to maintain the Fund's overall lending capacity of around $1 trillion,[6] composed by quotas (about 45 per cent), New Arrangements to Borrow (NAB, about 40 per cent) and bilateral borrowing arrangements (about 15 per cent).[7] Currently, only the quota component is being used to finance new financial commitments. As of 19 February 2021, the Fund's total forward commitment capacity was $221.6 billion.[8]

Concessional financing and debt relief instruments of the IMF need replenishing to support all eligible countries in need. The IMF concessional emergency lending instrument—the Rapid Credit Facility—is financed through the Poverty Reduction and Growth Trust (PRGT). To meet the increased demands stemming from the COVID-19 pandemic, the IMF is seeking bilateral loans and donations to augment PRGT resources. Total new PRGT loan resources mobilized to date as part of the PRGT fast-track loan mobilization round launched last spring amount to about SDR 17 billion ($24 billion). Debt service relief for the poorest members of the IMF is financed through the grant-based CCRT. Current funding levels of the CCRT will not be sufficient to cover an envisaged further extension of debt relief until April 2022. The IMF has issued a call for additional grant funding from member states, with a fundraising target of SDR 1 billion ($1.4 billion). To date, it has received pledges of about SDR 550 million.

Around half of total IMF lending capacity currently relies on borrowed resources from member countries. The Sixteenth General Review of Quotas, to be concluded in 2023, is an opportunity for member states to revisit the adequacy of quotas and continue the process of IMF

governance reform, and ensure the primary role of quotas in IMF resources (see also section 6.1).

Beyond its lending capacity, the IMF has the authority to allocate special drawing rights to supplement member countries' official reserve assets when there is a long-term global need. A new allocation of SDRs in a crisis context is not without precedent: in 2009, during the global financial crisis, the IMF issued 183 billion in SDRs to support developing countries, bringing the total cumulative allocations to about SDR 204 billion (equivalent to around $294 billion in 2020). A new allocation of SDRs could bring important benefits to the membership (box III.F.2).

Strengthening regional financial safety nets

RFAs could strengthen their role at the centre of regional safety nets by expanding their member base and increasing their resource envelope. Expanding the member base would depend on the political will of existing and potential new member countries. While additional quotas would also enhance financing capacity, new financing instruments, including through blended finance, could also help mobilize additional resources. In this context, RFAs could benefit from enhanced exchange of experience and peer learning, including through their annual high-level dialogues and joint research seminars. Continuing cooperation with the IMF will also be important, to exchange information and coordinate assistance to member countries on the ground.

Box III.F.2
A role for special drawing rights?

An allocation of special drawing rights (SDRs) is a unique instrument that would help meet a long-term global need for reserves.[a] An SDR allocation is a way of supplementing IMF member countries' foreign exchange reserves. In the ongoing COVID-19 crisis, an SDR allocation could help restore confidence and send a powerful signal of a cooperative multilateral response. It would help many countries that are liquidity constrained to smooth the needed adjustment and avoid distortionary policies, while providing scope for responding to the crisis.

SDRs are also a means of providing timely support to countries in need. SDR allocations are distributed across the membership in proportion to IMF quota shares. Therefore, about 42.2 per cent would be allocated to emerging markets and developing countries (EMDCs), of which 3.2 per cent corresponds to low-income countries. By helping stabilize EMDCs, an SDR allocation can help mitigate risks of economic and social fragility, minimize spillovers, support a sustainable and resilient global recovery, and contribute to the stability of the international monetary system.

The formal decision on a new SDR allocation is taken by the IMF Board of Governors and requires support by an 85 per cent majority.

Countries with strong external positions could also use their allocated SDRs on a voluntary basis to help countries hit hard by the crisis and secure a strong and resilient recovery. Already several countries have contributed part of their SDR holdings to expand IMF concessional financing by scaling up the Poverty Reduction and Growth Trust (PRGT). Indeed, the fast-track PRGT loan mobilization round launched in April 2020 has secured about $24.3 billion so far, with existing SDRs accounting for about two thirds of that amount.

Source: IMF.

a The IMF has the authority to allocate SDRs "to meet the long-term global need, as and when it arises, to supplement existing reserves assets" (International Monetary Fund Articles of Agreement, Article XVIII). An allocation requires Board of Governors approval by an 85 percent majority of the total voting power in the IMF.

3. Managing capital flow volatility

Policymakers need to be able to deploy the full policy toolkit to address international capital flow volatility. Cross-border capital flows can provide significant benefits, such as improving access to funding for sustainable development. However, as highlighted again by the COVID-19 crisis, volatile short-term capital flows pose significant challenges for developing economies, with potential impact on asset prices, exchange rates, debt sustainability and financial stability. In the Addis Ababa Action Agenda, Member States recognized that necessary macroeconomic policy adjustments could be supported by macroprudential and, as appropriate, capital flow management measures. They also acknowledged the far-ranging effects that national policy decisions in source countries can have on international capital flows.

Source countries can consider policy combinations that would meet their macroeconomic objectives and strengthen the resilience of their financial sectors, while also reducing large international spillovers. Indeed, efforts to align capital markets with sustainable development can support longer-term-oriented and risk-informed productive investment and help avoid excessive leverage in source countries' financial sectors, which could decrease domestic financial stability risks (see also chapter III.B). This could have the additional benefit of reducing international spillovers in the form of short-term capital flow volatility.

3.1 Monetary and exchange-rate policy

The traditional approach to capital flow swings—letting foreign exchange rates adjust freely to allow monetary policy to focus on domestic cyclical conditions—has been shown to work better in developed market contexts than in many developing economies. In particular, large swings in foreign exchange rates can threaten financial stability in countries with shallower financial markets and larger currency mismatches in the financial positions of domestic actors.

During the COVID-19 crisis, more developing countries than in the past have been able to implement countercyclical monetary policies. The limitations of the traditional policy approach have, in the past, caused many developing countries to tighten monetary policy in response to capital outflows, to lure back investors and defend their domestic currencies. However, such tightening in times of economic distress can trigger recessions by putting additional pressure on domestic investment and growth.[9] During the current crisis, a number of developing countries were able to loosen their monetary policies to support their domestic economies, and about 20 emerging market economy central banks launched asset purchase programmes for the first time (see chapter I).[10] Many developing countries also employed active foreign exchange rate interventions, and several eased macroprudential regulations. A few have also used capital flow management measures.

3.2 Macroprudential regulations

Macroprudential measures can strengthen the resilience of domestic financial systems and shield economic activity from domestic and external shocks. Since the 2008 financial crisis, the use of macroprudential regulation has expanded significantly in both developing and developed countries. Policies range from measures targeted at bank capital and liquidity buffers, credit demand (e.g., loan-to-value ratios or debt service-to-income ratios), credit supply (such as limits on credit growth), and foreign currency exposure. The latter tend to be among the most widely employed measures in developing countries, reflecting their importance for managing exchange rate risks.[11] During the COVID-19 pandemic, many countries, including developing countries, were able to support domestic liquidity provision and business continuity by temporarily loosening regulations on capital and liquidity buffers (see section 4.1).

However, macroprudential regulation may have unintended consequences that still need to be better understood. There is evidence that macroprudential regulations can create leakages—shifts in lending or credit to less regulated institutions—and may lead to spillovers to other countries. Further research is needed to better understand under what circumstances such leakages and spillovers occur, and what they mean for domestic and international financial stability.[12]

3.3 Capital flow management measures

Capital flow management measures can limit speculative inflows and currency mismatches during economic booms, and reduce outflows during crises. There is substantial empirical evidence that capital flow management measures can shift the composition of capital inflows towards longer maturities or away from portfolio debt, and thereby mitigate financial stability risks, although it is less clear whether they impact the overall size of flows.[13]

During the COVID-19 crisis, some developing countries have used capital flow management measures to incentivize inflows and mitigate large outflows. Several larger emerging economies relaxed existing limits on capital inflows, while others reduced foreign-currency reserve requirements or suspended taxes on financial institutions' foreign-currency liabilities.[14] Some smaller countries put in place restrictions on capital outflows and tightened restrictions on international payments and transactions and on the purchase of foreign currency for transfers abroad.[15] While capital flows to many countries recovered strongly towards the end of 2020, aided by very loose global financial conditions, lingering downside risks mean that a broader use of the policy toolkit may still be warranted in the near future.

Capital flow management measures should be a part of the policy toolkit, within a broader macroeconomic and financial management framework. The optimal combination of policy measures depends on a country's characteristics and the nature of the shock. The Integrated Policy Framework (IPF), put forward by the IMF, can help determine the best policy mix by taking into account the country situation and possible interactions between different policies.[16] This should include monitoring and recalibrating policies as needed, to avoid a loss of effectiveness if market conditions change. This approach will inform the upcoming review of the IMF "Institutional View on the Liberalization and Management of Capital Flows". There is also a need to strengthen policy coherence; for example, trade and investment agreements may include restrictions on the use of capital flow management measures, which can impede effective macroeconomic management for sustainable development (see also box III.F.1). Embedding IPFs in a broader INFF can strengthen the coherence between policies for financial and macroeconomic stability, debt sustainability, trade, and public and private financing strategies for sustainable development.

4. Financial and monetary policy and the SDGs

The COVID-19 crisis has demonstrated again the interconnectedness of the global financial system, as well as interrelationships between economic, social and environmental risks. There has been significant progress in the implementation of the financial market reform agenda initiated in the wake of the 2008 global financial crisis, which made the banking system more resilient to the current crisis. Nonetheless, the pandemic has underscored how growing non-financial economic and social risks can threaten financial stability. Financial regulation must aim to address systemic risks to financial stability from all sources, including disasters and the impacts of climate change. At the same time, all regulation affects incentives; as noted in the Addis Agenda, unintended consequences of regulation on inclusive finance and implementation of the SDGs should continue to be monitored. The strong crisis response of financial and monetary policies also turned new attention to their interrelation with sustainable development.

Table III.F.2
Adjustments of global regulatory reform timetables

Standard-setting body	Area	Change
BCBS	Basel III	Extended the implementation date of the final Basel III framework by one year, to 1 January 2023
BCBS	Basel III	Clarified the treatment of payment moratoria and public guarantees in the context of risk-based capital requirements, and agreed to amend its transitional arrangements for the regulatory capital treatment of expected credit loss accounting
BCBS	Basel III	Postponed implementation of revised G-SIB framework by one year, to 2022
BCBS-IOSCO	OTC derivatives	Deferred by one year the two final implementation phases of the framework for margin requirements for non-centrally cleared derivatives
FSB	NBFI	Extended the implementation timelines for minimum haircut standards for non-centrally cleared securities financing transactions
IAIS	Ending TBTF	Deferred by one year the 2020 Global Monitoring Exercise (GME) of the Holistic Framework for systemic risk in the insurance sector

Source: FSB.
Notes: Basel Committee on Banking Supervision (BCBS), International Organization of Securities Commissions (IOSCO), Financial Stability Board (FSB), International Association of Insurance Supervisors (IAIS), over-the-counter (OTC), non-bank financial intermediation (NBFI), too-big-to-fail (TBTF), global systemically important bank (G-SIB).

Figure III.F.1
Progress of regulatory reform implementation, 2020
(Percentage of FSB member jurisdictions)

Source: FSB.
Note: For systemically important banks (SIBs), the five European Union members of the FSB are presented as separate jurisdictions.

4.1 Implementation and effects of agreed regulatory reforms

Strengthened resilience to macroeconomic shocks

The banking system was more resilient at the outset of the COVID-19 crisis than it was before the 2008 financial crisis. Put to the test by the pandemic, regulatory reforms agreed by the G20 in the wake of the 2008 crisis served the financial system well. The increased resilience of major banks allowed the financial system in many countries to broadly absorb the macroeconomic shock, rather than amplify it.[17] Nonetheless, implementation of reforms is still somewhat uneven. Financial system resilience was also supported by fiscal and monetary policies that reduced stress on the financial sector, for example, through government support for loan forbearance and other assistance to struggling companies, along with the injection of much needed market liquidity.

Continuing implementation progress

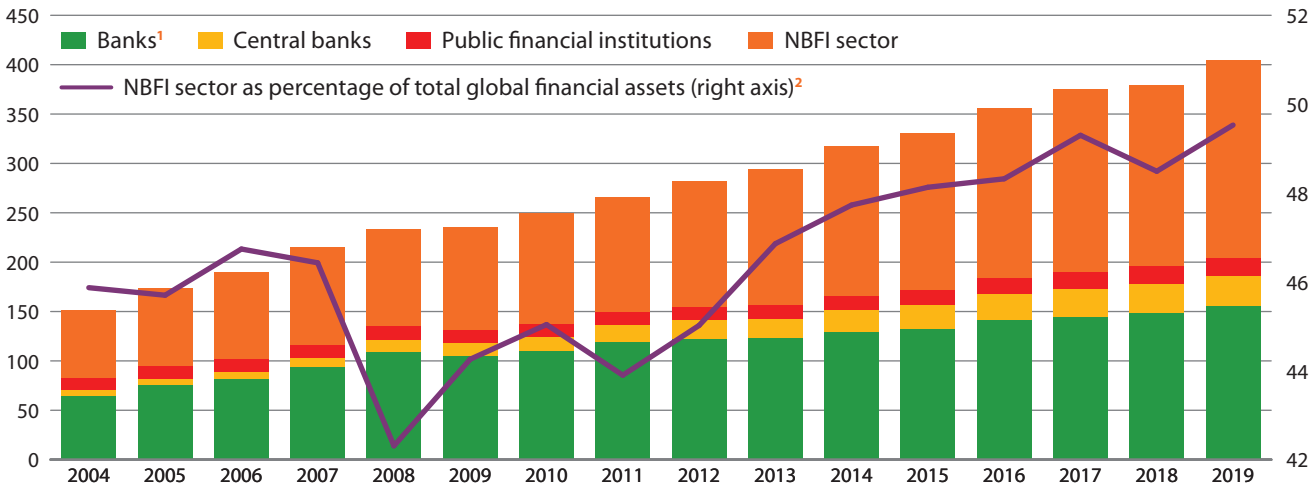
Supervisors used flexibilities within global standards to address the crisis. Further implementation of agreed reforms slowed down, as standard-setting bodies extended deadlines. As part of the policy response to the COVID-19 crisis, financial supervisory authorities in many countries took a range of measures to support liquidity provision and maintain business continuity of banks and payment systems, including by using flexibility within global standards (e.g., through the use of firm-specific and system-wide capital and liquidity buffers).[18] The Financial Stability Board (FSB) and standard-setting bodies have been monitoring and advising national authorities on the consistency of their policy responses with international standards. They also provided additional breathing space by extending deadlines for the implementation of financial regulatory reforms agreed by the G20—where possible, without undermining underlying objectives (table III.F.2).[19]

Nonetheless, there has been some implementation progress in 2020, mainly in the banking sector. Among the Basel III standards that are still lagging behind in implementation, the supervisory framework for measuring and controlling large exposures moved ahead in four jurisdictions, bringing the number of countries with full adoption to 13 (with an additional 10 countries having published draft or final rules). Two countries finalized the implementation of the agreed leverage ratio and the net stable funding ratio, respectively (figure III.F.1). Overall implementation of reforms in the over-the-counter derivatives market is well advanced, although there has been limited progress since 2019.[20]

Progress was also made in addressing financial institutions that are considered too big to fail. A June 2020 FSB consultative evaluation report found that prior to the outbreak of the pandemic, systemically important banks (SIBs) were better capitalized than prior to the 2008 global financial crisis (all relevant global SIBs had already met the final minimal requirements for 2022 for external total loss-absorbing capacity). Progress in the implementation of resolution regimes has given authorities more options for dealing with banks in stress. Evidence from market prices and credit ratings suggest that these reforms are seen as credible by market participants, and that they bring net benefits to society. Credit rating agencies have also removed the assumption of sovereign support in several FSB member countries. However, more work is needed to (i) address obstacles to resolvability for SIBs; (ii) limit instances of state support for failing banks, which is still occurring; and (iii) improve reporting and disclosure. In addition, the application of the reforms to domestic SIBs, and risks arising from the shift of credit intermediation to non-bank financial intermediaries (NBFIs) warrant closer monitoring.[21]

The COVID-19 crisis revealed continued vulnerabilities in non-bank financial intermediation. Implementation of NBFI reforms is lagging behind other financial sector reforms.[22] As highlighted in the *Financing*

Figure III.F.2
Total global financial assets, 2004–2019
(Trillions of United States dollars)



Source: FSB. 2020. Global Monitoring Report on Non-Bank Financial Intermediation.
Notes: 1 All deposit-taking corporations; 2 the NBFI sector includes insurance corporations, pension funds, other financial intermediaries (particularly investment funds) and financial auxiliaries.

for Sustainable Development Report (FSDR) 2020, the "lower for longer" interest rate environment prior to the pandemic had contributed to increased leverage in financial markets in "a search of yield".[23] The share of global financial assets held by NBFIs had risen to almost 50 per cent in 2019, compared to 42 per cent in 2008 (figure III.F.2). NBFIs have also become important providers of market liquidity, partially in response to financial market reforms that may have constrained the market-making capacity of large banks. Together with the growing interconnectedness among NBFIs and between NBFIs and banks, this increased liquidity stress across market segments during the March market sell-off, as investors tried to rapidly unwind their positions.[24] The FSB identified margin calls, significant outflows from non-government money market funds and certain types of open-ended funds, as well as substantial sales of US Treasury bills by some leveraged investors, as sources of liquidity imbalances and propagation mechanisms. Additional work is needed to strengthen the resilience of NBFI, including by (i) examining and, where appropriate, addressing specific risk factors and markets that contributed to the market turmoil; (ii) enhancing the understanding of systemic risks in NBFI and in the financial sector as a whole; and (iii) assessing policies to address such systemic risks. To this end, the FSB has developed a comprehensive work programme to enhance the resilience of the NBFI sector while preserving its benefits.[25]

4.2 Climate risks for financial institutions and sustainable finance

The COVID-19 crisis has highlighted the impact of social and environmental risks on the financial sector. There are two main types of financial risks related to climate change: (i) physical risks, as climate-related hazards may erode the value of financial assets and/or increase liabilities; and (ii) transition risks, as policy shifts to mitigate and adapt to climate change, as well as market sentiment and technology shifts, affect the value of financial assets and liabilities. Climate change can also create liability risks, when actors are held accountable for losses related to environmental damage they may have caused (see chapter III.B).

However, the number of financial institutions that are incorporating climate-related risks in their decision-making and risk management, while growing, remains small. Only a minority of financial institutions are directly integrating specific climate variables into credit risk models, or into institution-wide risk management frameworks. Even fewer regularly incorporate the full range of climate and non-climate related disaster risks. The UK Prudential Regulation Authority and the European Central Bank find that most institutions in their jurisdictions are not yet taking a sufficiently comprehensive, strategic and/or long-term approach to addressing climate risks. The efficacy of such actions may also be hampered by a lack of data with which to assess clients' exposures to climate-related risks, or the magnitude of the effects (see also section 4.3).[26]

Financial standard-setting bodies and authorities can give guidance to financial institutions on how to include climate and other SDG factors into risk assessments. Authorities can also incorporate climate-related stress tests to assess the exposure of financial institutions.[27] Climate risk assessments require new forward-looking models, based on scenario analyses, rather than traditional models based on extrapolating historical trends.[28] Some countries have started moving ahead with such models, and the IMF is also working on incorporating climate risk in macrofinancial stress testing.[29] Climate change–related standards could also be incorporated into the Basel capital adequacy framework.

Reporting on climate and other SDG risks is necessary to generate reliable and comparable data as a basis for implementing measures to safeguard financial stability. The recommendations of the private-sector led FSB Task Force on Climate-related Financial Disclosures (TCFD) go in this direction, but their voluntary nature so far has meant that, on average, only 23 per cent of banks align with their recommended set of disclosures.[30] In addition, it is also important to measure banks'

contributions to climate goals and the SDGs (rather than only measuring the impact of climate and SDG risks on banks' balance sheets), as more banks make pledges to net-zero emissions (see chapter III.B).

4.3 Central bank policies for sustainable development

The large and unconventional policy responses to the COVID-19 pandemic have turned new attention to the question of how financial and monetary policies interact with sustainable development. While policymakers are still responding to the current crisis, they (and other stakeholders) are looking ahead at how central bank policies can help societies to rebuild better. This includes considerations of when and how to return to a more neutral policy stance, but also what a new normal should be. Among the lessons of the COVID-19 crisis is the increased recognition of the importance of non-economic risks, and the need to address rising inequalities within many countries (see chapter I).

Despite a general awareness of climate-related risks on macroeconomic stability, the response of central banks has been uneven. All respondents of a recent survey by the Central Banks and Supervisors Network for Greening the Financial System—an association of 83 central banks and supervisors, including those from almost all G20 countries—considered climate change a challenge to the economy and to the functioning of central banks' operational frameworks. *Protective measures* (to safeguard financial stability and protect central banks' own balance sheets) would help reduce threats to monetary policy transmission from climate-related shocks to asset prices, supply and demand, and market expectation, in line with central bank mandates of price stability. However, a majority of central banks indicated that they had not yet considered implementing specific protective measures, although several respondents say that they may do so in the future. The main arguments cited against such measures were a lack of reliable and comparable data and appropriate analytical techniques, indicating a need for additional research and enhanced cooperation on data standards.[31]

Several central banks have started moving ahead with *protective measures*. For instance, some central banks have started using climate change considerations to assess collateral, and ensuring that collateral meets certain climate-related reporting obligations.[32] In early 2021, the Bank for International Settlements (BIS) launched a euro-denominated green bond fund for investments by central banks and official institutions. This follows the introduction of a first BIS green bond fund denominated in US dollars in 2019. Together, the two funds manage $2 billion worth of high-quality bonds that comply with international green standards and finance environmentally friendly projects, providing an option for central banks to include environmental sustainability objectives in their own reserve management.[33]

Some central banks are taking or considering more *proactive measures* to support climate change mitigation. For example, the European Central Bank is considering how best to account for climate-related risks.[34] The People's Bank of China also announced plans to incorporate ways to promote low carbon emissions and other sustainable development measures into its financial plans over the next five years.[35] Most recently, the Government of the United Kingdom of Great Britain and Northern Ireland announced a change in the mandate of the Bank of England, to explicitly consider environmental and climate goals, including as part of its quantitative easing programme.[36] Current discussions around "green" monetary policy options are mainly focused on whether central banks' bond purchases, as part of their quantitative easing strategies, should be directed away from sectors and companies with high carbon emissions. Opponents argue that this (i) oversteps central banks' mandates (which generally focus either solely on price stability or on price stability and other socioeconomic factors, such as employment); (ii) may conflict with conventional monetary policy targets; and (iii) risks creating financial distortions.[37] Others claim that current purchasing strategies are not truly neutral, since they reflect market bias towards heavy carbon emitters, given that sectors like oil and gas companies, utilities and airlines issue more bonds than others.[38] Other proposed options for greening monetary policy include collateral frameworks and credit allocation policies that take climate change into account.[39]

However, better data, harmonized reporting standards, and new, forward-looking risk assessment models are needed to support climate-risk informed financial policy. All policy options discussed above rely on better (consistent, reliable and meaningful) climate risk data, and harmonized reporting standards to ensure a level playing field. Data availability is often limited in developing countries, in particular. There is also a need for longer-term impact assessments following disasters, to strengthen the understanding of cascading risks. International cooperation can help forge consensus around reporting standards, including by building on existing frameworks such as the TCFD recommendations and sustainable finance taxonomies (see chapter III.B).

5. Digital finance

Another important shift in financial markets with systemic implications has been the growth of digital financial services. The rapid growth of these services during the COVID-19 pandemic—including innovative fintech solutions—supported the functioning of the financial system, but also raised equity and regulatory concerns. These include the need to ensure that basic building blocks are in place (such as science, technology and innovation (STI) and complementary infrastructure), as well as appropriate regulatory frameworks for dynamic and inclusive digital finance (see chapter III.G) that still leave room for innovation, while tackling increased threats to cybersecurity, financial integrity and stability. To date, national regulators and standard-setting bodies have made progress in this area, through active engagement with service providers, innovation hubs and regulatory sandboxes. The growing role of global big tech platforms in the provision of financial services will require a review of these policies, as their potential for market domination poses additional risks.[40] Another longer-term trend that has come to the fore in 2020 is the development of digital currencies, including both privately issued so-called "stablecoins" and central bank digital currencies.

5.1 Regulation of digital financial services

The quick and nimble regulatory adjustments that supported the expansion of digital financial services during the COVID-19 crisis can inform future regulatory innovation. While most measures were focused on payments and remittances (see chapter III.G), this experience could be used to inform flexible measures for other services, such as digital lending and capital

raising. Examples include the reduction of fees and facilitation of onboarding processes. The effects of such crisis measures should be closely monitored and evaluated, to avoid unintended side effects and build-up of risks—such as threats to cybersecurity, digital fraud, and potential credit bubbles—and to use them as natural experiments that could inform more long-term measures.[41]

Financial stability risks

The expansion of big tech's role in financial services is changing financial markets. As discussed in chapter III.G, big tech companies have continued to expand their digital financial services offerings, especially in some developing countries. At the same time, some smaller providers had difficulty raising funding in 2020 and consolidation trends in the fintech sector are creating larger and more systemically important actors. The growing role of large fintech companies that compete with incumbent financial institutions may affect the latter's resilience, either by affecting their profitability or by reducing the stability of their funding. This is particularly problematic when the tech firms are outside of the regulatory umbrella, so that traditional firms are unable to compete. Interlinkages with the rest of the financial system may also prove disruptive, an issue that would be augmented by an increase in scale and concentration. As such firms become "too big to fail", they may pose financial stability risks similar to those of systemically important banks (see section 4.1).[42]

Policy responses should follow the principle of "same business, same risk, same rules" and will need to cut across regulatory realms. To mitigate the financial stability risks posed by tech companies, authorities will need to carefully monitor their financial services activities and close regulatory gaps between those companies and regulated financial institutions (e.g., around know-your-customer and anti-money-laundering and combating the financing of terrorism (AML/CFT) measures), following the principle of "same business, same risk, same rules," as highlighted in previous issues of this report.[43] For instance, the regulatory obligations in some jurisdictions for banks to share data with new entrants (as in open banking regulations) may create an uneven playing field if big tech companies are not also required to share relevant data. This implies focusing regulations on the functions that actors are performing (e.g., payments, deposit taking, intermediation, etc.) rather than the type of institution. As fintech markets and the role of big tech continue to evolve—creating new linkages between sectors and different market participants—this may require a mixed or hybrid regulatory framework that combines elements of both activity- and entity-based approaches. Regulators will need to collaborate with other regulatory authorities, including ICT and competition authorities. In the case of data governance—which is key for consumer protection and fair competition—this may also require international cooperation to regulate cross-border data flows.[44]

Regarding competition policies, there has been recent movement in several large jurisdictions. In December 2020, the European Union presented two new proposals to reign in the market dominance of big tech companies: the Digital Markets Act and the Digital Services Act. The former aims at anti-competitive behaviour by so-called internet gatekeepers, while the latter would oblige them to remove illegal content and be more transparent about their algorithms (see also chapter III.G). Once passed, these regulations are expected to have a wider impact, as they will serve as legislative benchmarks and are likely to be adopted by large companies for their global operations. At the same time, Chinese authorities have increased scrutiny of big tech companies' financial sector activities and released new draft rules against anti-competitive behaviour.

Cybersecurity

Another growing risk to financial stability is the increase in cybersecurity breaches targeting financial institutions. In a recent survey, financial regulators have identified cybersecurity threats as one of the fastest growing risks, with a potential to severely disrupt the financial sector.[45] This is in line with longer-term trends of increasing cyberattacks over the last decade, with the financial services sector being the most targeted. According to a recent report, banks and other financial services providers are the target of over 25 per cent of all malware attacks. For instance, the number of compromised credit cards increased by over 200 per cent in 2019 compared to 2018.[46] As hacking tools have evolved and become more widely accessible, threats range from small breaches carried out by individual hackers to cyberattacks spanning multiple jurisdictions perpetrated by sophisticated organizations and cyber warfare units. Cyberattacks on financial institutions or third-party technology and service providers can threaten the broader stability of the financial system by disrupting the underlying trading, clearing and settlement infrastructures and/or causing a loss of confidence by investors and depositors, leading them to withdraw funds and cancel accounts and services.[47]

Strengthening the financial system's cyber resilience requires collaboration of national and international actors. While individual institutions have an incentive to manage their own exposure to cyber risks, national supervisory and regulatory authorities need to protect the broader financial system from spillovers and cascading effects. International organizations and standard-setting bodies can support national authorities by promoting a better understanding of effective practices, facilitating information exchange on common threats and coordinating responses. In addition, many developing countries will require support to develop cybersecurity capacity.[48] In 2016, the Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions published detailed guidance on cyber resilience for financial market infrastructures,[49] and in 2020, the FSB released a toolkit of effective practices to help both individual institutions and national authorities better prepare, respond and recover from cyber incidents.[50] Collaboration at the regional level is also increasing. For example, the European Union is building a three-pronged approach by (i) testing cyber resilience through a voluntary test programme that mimics sophisticated cyberattacks (TIBER-EU); (ii) sharing intelligence through the market-driven Cyber Information and Intelligence Sharing Initiative (CIISI-EU); and (iii) strengthening regulation and oversight through the proposed Digital Operational Resilience Act (DORA).[51]

Digital technology for regulation and supervision

Authorities and financial institutions are also leveraging digital technology to support supervision and compliance. To mitigate increasing risks from the rapid growth of digital finance and meet the challenge of remote supervision during the COVID-19 pandemic, many regulatory and supervisory authorities have increased efforts to harness technology for their regulatory, supervisory and oversight tasks (SupTech).[52] The use of such strategies has been growing steadily over the past five years. According to a recent survey of regulatory and supervisory authorities, only 4 out of 25 respondents had a SupTech strategy in 2016, while in 2020, 24 out of 25 had a SupTech strategy in place or were in the process of developing one. The main

perceived benefits of SupTech include "efficiency and effectiveness" gains in regulatory processes, and "improved insights" into risk and compliance developments, which strengthen oversight, surveillance and analytical capacities. In turn, regulated institutions can harness digital technologies to improve compliance outcomes and risk management capacities to meet their regulatory requirements (RegTech).[53] In addition to market surveillance and the digitalization of regulatory processes, Suptech/RegTech can also strengthen consumer protection, for example, through the electronic handling of complaints and dispute resolutions.[54]

While SupTech and RegTech applications can strengthen oversight and increase efficiency, they also create new challenges and risks. As discussed above, increased digitalization of financial services, including through the reliance on third party providers, can cause or exacerbate cyber risks. In the case of SupTech and RegTech, this can heighten the cyber vulnerability of authorities and regulated institutions, possibly increasing financial stability risks. The use of historical data and digital technology (such as artificial intelligence) also risks codifying historical biases and creating "black boxes," as laid out in the *FSDR 2020*.[55] An over reliance on SupTech tools could thus hamper the timely identification of new and emerging financial sector risks and lead to incorrect projections and policies. A lack of transparency in the tools' designs can make it difficult to interpret their outcomes and alerts, and may decrease accountability. SupTech and RegTech applications can also lead to competition barriers, as smaller financial institutions find it harder to implement more complex systems. In addition, these applications may create opportunities for market arbitrage, if regulated institutions learn to game the system by adapting their reporting to the functioning of SupTech systems.[56]

International collaboration can help address these issues and overcome implementation challenges. Most regulatory and supervisory authorities identified resource constraints as their greatest challenge for implementing SupTech strategies, including the need for training of specialized staff. Peer learning and increased collaboration between authorities can help overcome these constraints, while additional support and capacity-building will be needed in many developing countries. International standard-setting bodies can play a role for strengthening data quality and standardization, especially for cross-border reporting purposes, or with regard to data security and localization requirements (e.g., the requirement to store data within the borders of a jurisdiction).[57]

5.2 Digital assets and currencies

Cryptoassets and digital currencies—including so-called "stablecoins" and central bank digital currencies—continued to develop in 2020. Existing cryptoassets, such as bitcoin, continue to see large swings in their valuations, making them unsuited to fulfil the basic functions of a currency (as a store of value, unit of account, and medium of exchange). Their anonymous and decentralized nature has also led to concerns about their use for illicit finance and other fraudulent activities. In June 2019, the Financial Action Task Force (FATF) revised its standards and recommendations regarding cryptoassets, explicitly placing AML/CFT requirements on virtual assets and virtual asset service providers.

Stablecoins have more currency-like features than cryptoassets. While stablecoins are typically based on the same distributed ledger technology that underlies most cryptoassets, they aim to maintain a stable value relative to a specified asset (e.g., a fiat currency like the US dollar) or a pool or basket of assets (e.g., multiple currencies).[58] Currently, existing stablecoins present only limited systemic risk, since they are small in scale and their use cases are mainly limited to facilitating trade in cryptoassets.

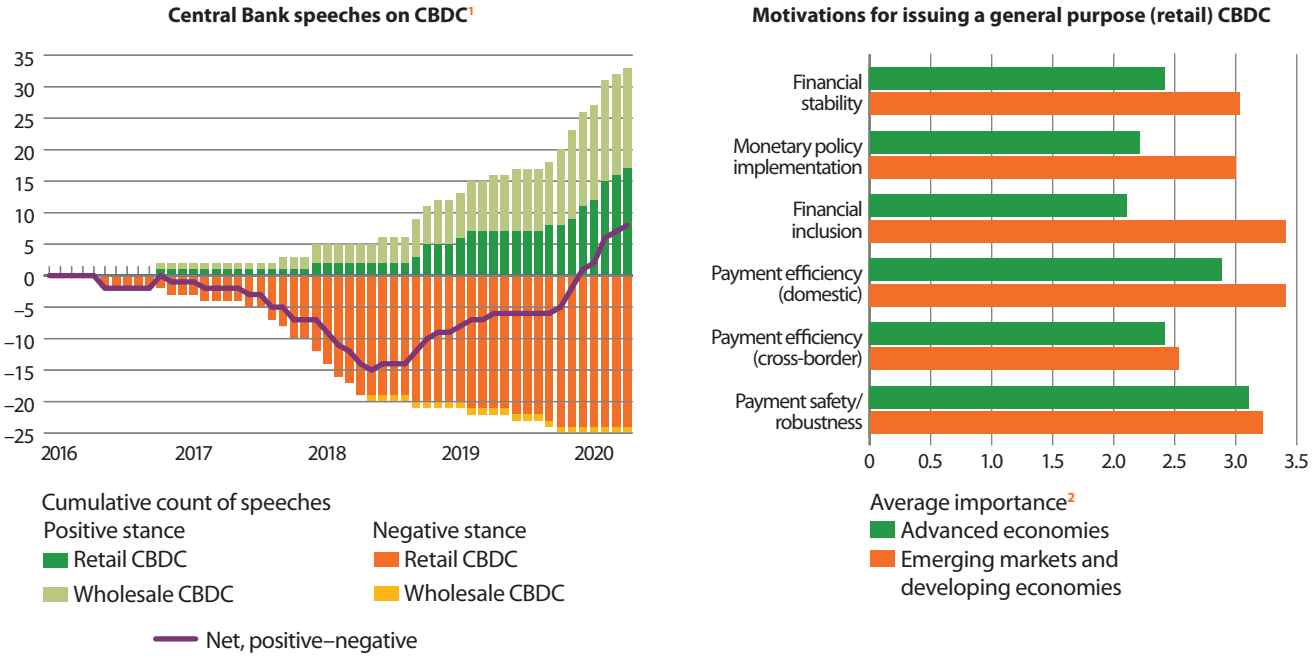
Global stablecoins have been touted for their potential to facilitate and reduce the cost of cross-border payments, but their widespread adoption could pose risks. The expansion of new and emerging stablecoin projects proposed by big tech companies and platforms has the potential to create systemically important private currencies adopted globally by users across jurisdictions.[59] Such global stablecoins (GSCs) risk reducing the effectiveness of national monetary policy if economic actors choose to substitute them for domestic currencies (similar to the cases of dollarization that can sometimes be observed in developing countries). In the extreme, the large-scale adoption of a GSC would mean that countries would be subjected to monetary policy decisions made by a private currency provider—decisions based on business interests of a multinational company rather than the national policy mandates of a monetary authority. It could also increase volatility of capital flows, owing to lower transaction costs, and the possibility of using GSCs to circumvent exchange restrictions and capital flow management measures, among others.[60] Operational failure of the GSC infrastructure could disrupt the global payments market and affect the wider financial system through close linkages and spillovers. Such disruptions could be aggravated by confidence effects that might trigger large-scale redemptions and fire sales of underlying assets.[61]

To address these risks, national authorities need to closely monitor the further development of global stablecoins and ensure comprehensive regulation, supervision and oversight, including by revisiting legal and regulatory frameworks where necessary, and cooperating across jurisdictions and with international organizations and standard-setting bodies. The FSB has developed a set of high-level recommendations for national regulators, supervisors and overseers, urging them to apply comprehensive regulatory requirements and relevant international standards following the principle of "same business, same risk, same rules," and to ensure that GSC arrangements meet all applicable requirements before commencing operations in any particular jurisdiction. They should also communicate and consult with each other in order to facilitate regulation, supervision and oversight of GSC arrangements across borders and sectors.[62] Existing coordination mechanisms may need to be enhanced to strengthen cross-sectoral coordination and develop more detailed international standards to avoid regulatory arbitrage. To protect financial integrity, authorities also need to ensure compliance with the AML/CFT standards developed by the FATF, including its new standards for virtual assets.[63] Operating under an appropriate and effective regulatory, supervisory and oversight framework, GSCs can potentially contribute to enhancing cross-border payments, as one of the building blocks laid out by the FSB roadmap developed for the G20.[64]

Central bank digital currencies

Interest in central bank digital currencies has increased, amidst a decline in the demand for cash in a number of countries—a decline which accelerated due to COVID-19—and rendered more urgent by proposed stablecoin projects by the private sector. At the end of 2020, 86 per cent of surveyed central banks were engaging in research, experimentation or development of central bank digital

Figure III.F.3
Central bank digital currencies, perceptions and motivations, 2016–2020
(Number of speeches; average importance)



Source: Auer, R., G Cornelli and J Frost. 2020. "The rise of central bank digital currencies: drivers, approaches and technologies", BIS Working Papers no 880; Boar, C., A Wehrli. 2021. "Ready, steady, go – 1 Results of the third BIS survey on central bank digital currency", BIS Papers no 114.
Notes: 1 Search on keywords "CBDC", "digital currency" and "digital money". The classification is based on authors' judgment. The score takes a value of –1 if the speech stance was clearly negative or in case it was explicitly stated that there was no specific plan at present to issue digital currencies. It takes a value of +1 if the speech stance was clearly positive or a project/pilot was launched or was in the pipeline. Other speeches (not displayed) have been classified as neutral; 2 1 = not so important; 2 = somewhat important; 3 = important; and 4 = very important.

currencies (CBDCs)—up from 80 per cent in 2019—and around 40 per cent considered it likely or possible that they would issue a retail CBDC (providing general users with direct access to central bank money) within one to six years.[65] Central bank interest in CBDCs has increased steadily since the mid-2010s, although a negative perception, particularly of the systemic risks involved in retail CBDCs, dominated the discourse for several years. While most public speeches of central bank governors and board members still had a negative or dismissive stance towards CBDCs in 2017 and 2018, overall perceptions have turned positive since late 2019. The most frequently cited benefits of retail CBDCs are payment safety and efficiency, and financial inclusion in the case of developing countries (figure III.F.3).[66] The first "live" retail CBDC was launched in October 2020 in the Bahamas, with the explicit goal of facilitating financial inclusion.[67]

Potential benefits of retail CBDCs for national and cross-border payment systems will have to be weighed carefully against risks. Risks to a CBDC depend in part on its design.[68] With CBDCs as an alternative to bank deposits, there is a risk of disintermediation, which could lead to higher funding costs for private banks and affect the availability of capital for productive investment. If depositors were to perceive an increase in bank solvency risk, the option of a safe retail CBDC could increase the risk of bank runs, effectively weakening the stability of the banking system. Disintermediation would also affect traditional transmission mechanisms of monetary policy (although it has also been argued that interest-bearing CBDCs could be a more immediate and effective way to implement monetary policy).[69] Interoperable CBDCs that would be accepted in different jurisdictions could help enhance cross-border payments, but could create similar risks as GSCs in terms of currency substitution and increased capital flow volatility. Competition between CBDCs from different jurisdictions could also impact the currency composition of international foreign exchange reserves. Another important challenge would be the protection of data privacy and security, as well as operational resilience.

The technical design of CBDCs will determine the balance of benefits and risks, depending on the characteristics of each economy and their financial sectors, and should be informed by further research and international peer learning. Careful technical design of CBDCs is needed to mitigate risks and make them a safe, stable and universally accessible alternative alongside the growing offering of private digital payment services, while ensuring competition and avoiding market fragmentation. Based on their respective research and experimental studies, a group of central banks and the Bank for International Settlements (BIS) developed a set of common principles and core features that would allow a CBDC to become a trusted means of payment that supports central banks' public policy objectives. The three common principles call for (i) the safeguarding of monetary and financial stability; (ii) the coexistence of CBDCs with other existing forms of money; and (iii) the promotion of innovation and efficiency. While the specific technical design would continue to differ between jurisdictions, it should be sufficiently interoperable to allow for cross-border transfers.[70] Additional research and experimentation

will be needed before moving to a full implementation, and central banks can benefit greatly from sharing experiences. International institutions like the BIS can support this research and provide platforms for peer learning.

6. Global governance and policy coherence

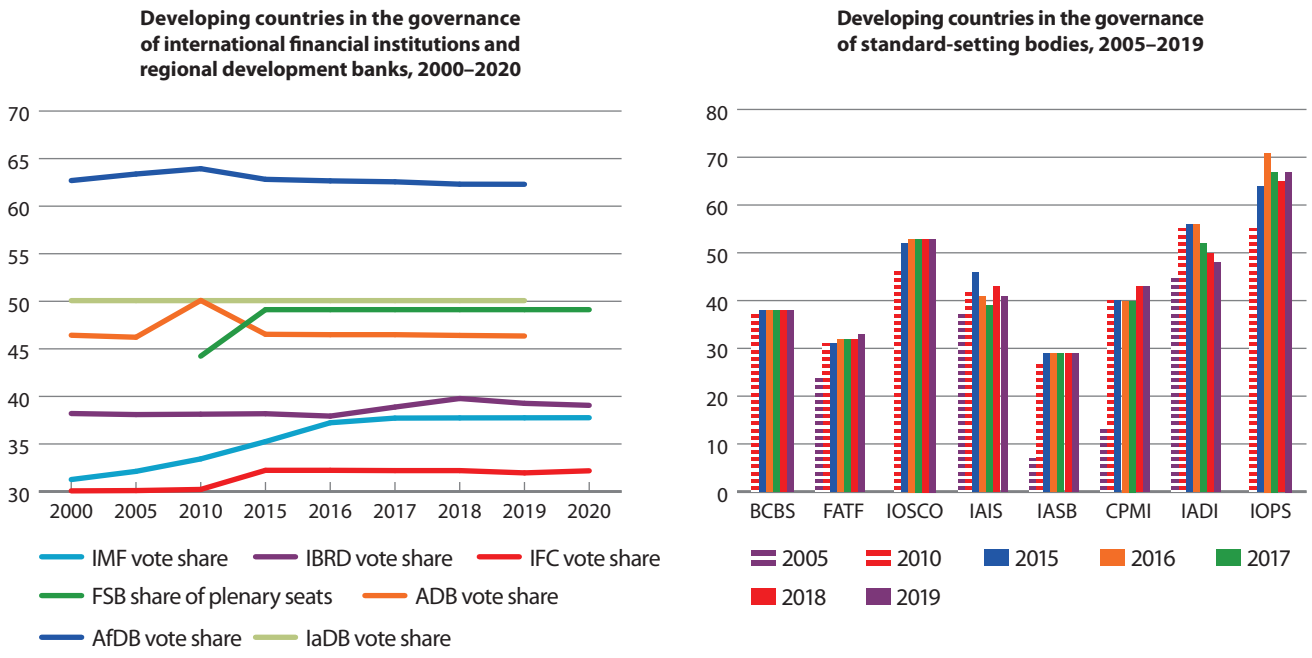
6.1 Governance at international institutions and standard-setting bodies

Despite existing commitments, global economic governance reform remains as urgent as ever. In the Addis Agenda, Member States committed to strengthening the voice and participation of developing countries in international economic decision-making and global economic governance. Despite some progress since 2010, the voting shares of developing countries in major international institutions have hardly changed in recent years (figure III.F.4., left-hand panel).

Quota reviews remain critical to the reallocation of voting shares for a fairer representation of developing countries in international financial institutions and regional development banks. The IMF Fifteenth General Review of Quotas concluded in February 2020, with no increases in quotas. For the Sixteenth Review, to be concluded no later than 15 December 2023, Member States should revisit the adequacy of quotas and continue the process of IMF governance reform, including a new quota formula as a guide, and ensure the primary role of quotas in IMF resources. Any adjustment in quota shares would be expected to result in increases in the quota shares of dynamic economies in line with their relative positions in the world economy and hence likely in the share of emerging market and developing countries as a whole, while protecting the voice and representation of the poorest members.[71] In October 2020, the joint World Bank-IMF Development Committee endorsed a progress report on the voting rights review of the World Bank Group's International Development Association, which aims to protect and, if possible, enhance the voting power of the Association's recipient countries. The Committee requested a completion of the review by October 2021.[72] No other international financial institutions or regional development banks have announced new plans for shareholder reforms in 2020.

International standard-setting bodies have made little progress in strengthening the voice of developing countries. The public and private bodies that set global standards and norms for financial regulation

Figure III.F.4
Representation of developing countries in international institutions and standard-setting bodies, 2000–2020
(Percentages of voting rights or members)



Source: UN DESA.
Notes: International Monetary Fund (IMF), International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), Asian Development Bank (ADB), African Development Bank (AfDB), Inter-American Development Bank (IADB) show percent of voting rights. Financial Stability Board (FSB) does not have voting rights, and thus data shows number of seats at the plenary. All data categorised according to the M49 classification of developed and developing regions.
The main international SSBs include the Basel Committee on Banking Supervision (BCBS) for standards on banking regulation; the Financial Action Task Force (FATF) for standards on combating money laundering, terrorist financing and other related threats to the integrity of the international financial system; the International Organization of Securities Commissions (IOSCO) for standards on securities regulation; the International Association of Insurance Supervisors (IAIS) for standards on insurance industry regulation and supervision; the International Accounting Standards Board (IASB) for accounting standards; the Basel Committee on Payments and Market Infrastructure (CPMI) for standards on payment, clearing, settlement systems and related arrangements; the International Association for Deposit Insurers (IADI) for deposit insurance standards; and the International Organisation of Pensions Supervisors (IOPS) for pension regulation. Basel Committee on Banking Supervision (BCBS) had no developing country members in 2005; and IOSCO and IOPS do not have data before 2010.

and supervision have generally been set up by developed-country regulatory and supervisory authorities. There have been repeated calls, including in the Addis Agenda, to strengthen the voice and participation of developing countries in international norm-setting processes. However, while there has been some improvement in developing countries' board representation in these bodies since 2005, little additional progress has been made since 2015 (figure III.F.4, right-hand panel).

6.2 Improving coordination and policy coherence

Increasing the coherence and consistency of the international monetary, financial and trading systems has long been a central concern in the financing for development process. Building on the Monterrey Consensus, the Addis Agenda calls for coherence across a broader range of policy areas, including investment, development policy, and environment institutions and platforms. The deeper coordination that is now needed covers additional areas, such as tax, competition, and non-economic issues such as climate change, disaster risk, human rights, gender and migration.

The United Nations General Assembly and the United Nations Economic and Social Council serve as the main forums for forging a global consensus around key economic and social policy norms and targets, including the 2030 Agenda for Sustainable Development and the Addis Agenda. The Economic and Social Council Forum on Financing for Development follow-up (FfD Forum) serves as a platform to discuss the full range of policies that could advance the financing of sustainable development. Two virtual sessions of the FfD Forum were held in 2020 to address priority issues, such as liquidity and debt challenges and the mobilization of resources, and work towards a global and coordinated response to tackle the immediate crisis and rebuild better.[73] More recently, the 2020 resolution on the Quadrennial Comprehensive Policy Review of United Nations system operational activities called upon the United Nations development system to develop a joint framework of collaboration with multilateral development banks to foster achievement of the 2030 Agenda, by improving synergies at regional and country levels.[74]

High-level political leadership is key for advancing international policy coherence. The series of high-level events on Financing for Development in the Era of COVID-19 and Beyond brought together all Member States, including those that are not represented in other multilateral forums, such as the G20. Six Member State-led working groups developed a comprehensive menu of policy options on (i) external financial flows and remittances; (ii) recovering better for sustainability; (iii) global liquidity and financial stability; (iv) debt vulnerabilities and the role of private sector creditors; and (v) illicit financial flows (see also box III.F.1).[75] During 2021, the proposed policy options will be further advanced through collaboration within the United Nations system, to develop action-oriented policy proposals.

The seventy-fifth anniversary of the United Nations has galvanized discussions on multilateralism and the role of the United Nations in addressing global challenges. In commemoration of the anniversary, Member States adopted a declaration that recognizes multilateralism as a necessity for a more equal, more resilient, and more sustainable world, and that implementation of the 2030 Agenda is necessary for survival.[76]

The upcoming twenty-sixth session of the Conference of Parties to the United Nations Framework Convention on Climate Change (COP26) is a key milestone for the implementation of the Paris Climate Agreement. Building on a series of preparatory events and initiatives that have been taking place since 2019, all countries will need to come forward with more ambitious nationally determined contributions, and targets that are consistent with a net-zero pathway. While major developed economies and members of the G20 should lead the way, developing countries, particularly LDCs and small island developing States, will need additional support to enhance their climate ambition. Financial, investment, trade and development policies at the global, regional and national levels must also be aligned to avoid a global climate catastrophe, achieve the SDGs, and leave no one behind.

6.3 Strengthening policy coherence and governance at the national level

National policymakers also need to ensure a coherent policy mix to achieve the SDGs. International organizations have proposed frameworks to support these efforts. For instance, the Organization for Economic Cooperation and Development reviewed and amended its recommendations on good institutional practices in 2019, and put forward the Recommendation on Policy Coherence for Sustainable Development.[77] Integrated national financing frameworks, first called for by the Addis Agenda, can help countries strengthen their planning processes and overcome existing impediments to financing sustainable development and the SDGs. They lay out the full range of financing sources (i.e., domestic and international sources of both public and private finance) and allow countries to develop a coherent strategy to increase investment, manage risks and achieve sustainable development priorities, as identified in a country's national sustainable development strategy.[78]

Good governance and inclusive and accountable institutions are key for designing and implementing coherent policies for achieving the SDGs. In the Addis Agenda, Member States recognize the importance of good governance and commit to strengthening national institutions to combat corruption. As part of its support for developing countries' pandemic response, the World Bank created a database of country actions and is providing policy advice on a broad range of issues, including emergency measures for state continuity, measures to safeguard integrity in government response, and institutional mechanisms to ensure whole-of-government coordination.[79] This is based on the ongoing work of the World Bank to combat corruption. A recent report lays out World Bank anticorruption initiatives that broaden its focus to include financial centres; the harnessing of new technologies to understand, address, and prevent corruption; and the integration of behavioural social science insights.[80]

Endnotes

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Science, technology, innovation and capacity-building

Chapter III.G

Science, technology, innovation and capacity-building

1. Key messages and recommendations

Science, technology and innovation (STI) has been instrumental in the global response to the COVID-19 crisis, and can help build more resilient societies. STI has long been recognized for its contributions to sustainable development. In an increasingly complex and interrelated risk landscape, it can help identify and manage risks, and build more resilient societies. From the onset of the pandemic, policymakers have relied on scientific knowledge for guidance. Medical innovations are helping societies cope with the emergency and pave a way towards recovery. New digital technologies are supporting economic activity—including through remote work, education, e-commerce and finance—and accelerating digital trends with potentially lasting consequences for all areas of social and economic life.

At the same time, the acceleration of digitalization has deepened the digital divide and exacerbated other risks of unintended consequences of digital technologies. As more activities are shifting to the digital realm, the digital divide is rapidly becoming a development divide by perpetuating or worsening existing inequalities, including gender inequality. The rapid scaling up of digital services has also aggravated other risks, including new forms of exclusion, the spread of misinformation, and market dominance by large digital platforms.

- *Policymakers should make every effort to build an inclusive digital economy, including by ensuring affordable Internet access for all and increasing digital literacy;*
- *Public and private cooperation can help mobilize the estimated $428 billion needed to achieve universal broadband Internet access by 2030;*
- *National financial inclusion strategies should build on the potential of financial technology (fintech), while addressing inequalities and financial stability risks;*
- *More transparent algorithms, guidelines for the ethical use of artificial intelligence (AI), and the inclusion of more diverse views in the innovation process can help overcome new forms of exclusion;*
- *Content regulation is a complex issue and requires careful consideration of the rights and obligations of platform providers, users, other private and civil society organizations and government institutions;*
- *Regulatory frameworks, including enhanced antitrust regulation, are needed to reduce the market power of large digital platforms—including in fintech—and create a more level playing field.*

Beyond the immediate COVID-19 pandemic, STI can support and advance strategies to reduce the likelihood of shocks and build more resilient societies. Despite progress, including through public-private research cooperation, there is still insufficient understanding of the systemic nature of risk and interdependencies between sectors. Least developed countries (LDCs) and many other developing countries lack the necessary information and resources to manage shocks and build resilience.

- *Enhanced development cooperation, investment and knowledge-sharing are needed, particularly for LDCs, to strengthen their knowledge of risk and help address complex hazards. The recent decline in official development assistance for STI must be reversed;*
- *Mission-oriented innovation can contribute to reducing risk and building resilience, by setting incentives that direct innovation towards specific technological, environmental or social goals;*
- *Policymakers, telecommunications providers, and other stakeholders need to ensure resilient telecommunications infrastructure, to ensure that communications are available during disaster response and recovery.*

Numerous United Nations entities contribute to the strengthening of Member States' STI capacity; they have joined forces to tackle the COVID-19 crisis. Both the Technology Facilitation Mechanism (TFM) and the United Nations Technology Bank for the Least Developed Countries (Technology Bank) are cooperating with the World Health Organization (WHO) and other United Nations entities to strengthen developing countries' response to and recovery from the pandemic, and the United Nations Commission on Science, Technology and Innovation has provided a platform for member countries to discuss how to use STI to close the gap on Sustainable Development Goal (SDG) 3 on good health and well-being.

- *Member States are called upon to step up their contributions to the Access to COVID-19 Tools (ACT) Accelerator to close the remaining funding gap of over $20 billion for 2021;*
- *Continued efforts by Member States are also needed to help the TFM and Technology Bank deliver on their mandates to support developing countries' adaptation of new technologies for sustainable development.*

The next section of this chapter reviews the role of digital technologies in the COVID-19 response and makes recommendations for building an inclusive digital economy; section three lays out how STI can help address complex risks and build resilience; section four highlights how STI is interacting with other action areas of the Addis Ababa Action Agenda; and section five takes stock of the progress on STI for the SDGs—including in combatting COVID-19—across the United Nations system.

2. New and emerging digital technologies in times of COVID-19 and beyond

Digital technologies helped societies respond to COVID-19. Their adoption expanded dramatically, driving lasting changes in all sectors of the economy. Digital trends have accelerated in all areas, including health, labour markets, consumer behaviour, e-commerce and financial services. While throwing a lifeline to many companies and communities, this has also exacerbated existing risks. Digital divides create new challenges and threaten sustainable and inclusive development. Significant efforts are needed from all stakeholders to create inclusive digital economies.

2.1 Acceleration of digital trends

Digital technologies have been critical for both medical and non-medical responses to COVID-19, with lasting consequences around the world. Digital and data science tools have been essential for epidemiological monitoring, maintaining physical distancing and tele-health. Digital technologies have also impacted social and economic behaviours during the crisis, in response to lockdowns and the need for social distancing. Digital tools for remote work have become widespread and are now part of the "new normal". More consumers are shopping online, and more people rely on the Internet for education, interaction with government services, news, information and entertainment. There has also been a big push for digitalization in e-commerce, logistics, and customs systems (see section 4.4). Many changes in the use of digital technologies and online activities are likely to continue after the crisis.

Impacts on labour markets

For many people, digital technologies have made work more mobile, task-based, ever-present and virtually non-stop. These trends are expected to accelerate as a result of the COVID-19 pandemic. The increased availability of smartphones, tablets, laptops and desktop computers has facilitated work outside the employer's premises. The sectors in which the workforce deals primarily with information and data—the so-called knowledge sectors of technology, finance, engineering and media—have felt this most. However, as noted in the *Financing for Sustainable Development Report (FSDR) 2020*, traditional sectors in agriculture, manufacturing and services have also benefited from cheaper, instantaneous, and global data flows.[1]

Before the pandemic, only a fraction of the global workforce was occasionally working from home. For instance, within the European Union (EU), the incidence of regular or occasional teleworking (home-based telework and mobile telework combined) varied from 30 per cent or more in Denmark, the Netherlands and Sweden to 10 per cent or less in the Czech Republic, Greece, Italy and Poland. Depending on the studies, up to 20 per cent of the workforce in the United States of America were regularly or occasionally working from home or another alternative location, 16 per cent in Japan, and just 1.6 per cent in Argentina.[2] At the global level, the International Labour Organization estimates that 7.9 per cent of the world's workforce (approximately 260 million workers) worked from home on a permanent basis before the COVID-19 pandemic.[3]

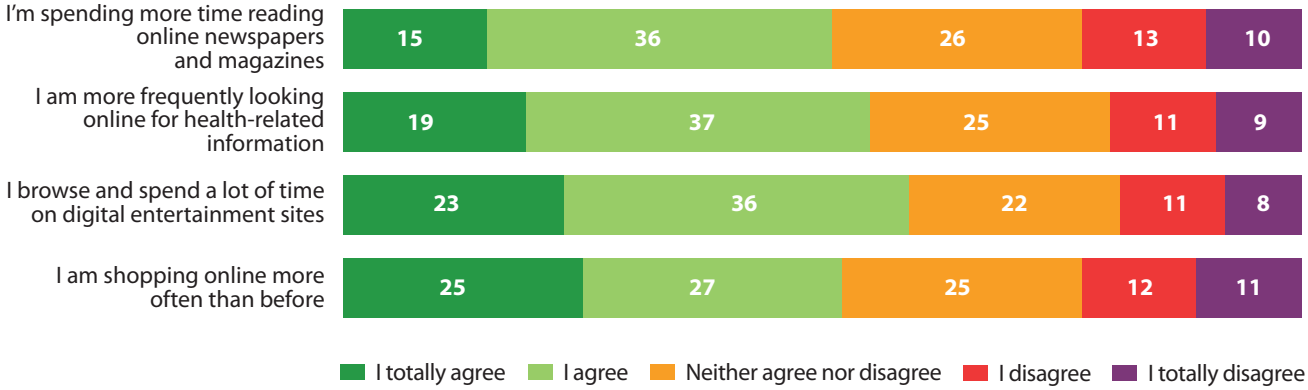
With the COVID-19 pandemic, the share of teleworking has sharply increased, as companies have taken steps to facilitate the practice. A survey of 250 large firms carried out in Argentina in March 2020 found that 93 per cent had adopted a teleworking policy in response to the COVID-19 pandemic.[4] Other studies have estimated the home-based work potential to be from 24 to 31 per cent for different European countries and 34 per cent for the United States.[5]

However, this shift to teleworking has not yet reached most people in low- and lower-middle-income developing countries. Big surges of technological change follow a wave pattern. They start in one or two of the most technologically advanced countries and then begin spreading around the world—first to other advanced economies, then to more complex sectors of emerging economies. Over time, they move towards the more peripheral economies. The spread of new digital technologies in the workplace takes time, as it usually starts in more complex industries in which fewer developing countries are engaged. For example, the finance and manufacturing sectors are early adopters of AI, Internet of Things (IoT), big data, and blockchain. Thus, these sectors will be the first to experience workplace changes.[6] It also requires a digital infrastructure, but only 29 per cent of people in Africa and 19 per cent in the LDCs were using the Internet in 2019, compared with over 80 per cent of people in Europe.[7]

Changing consumer behaviour

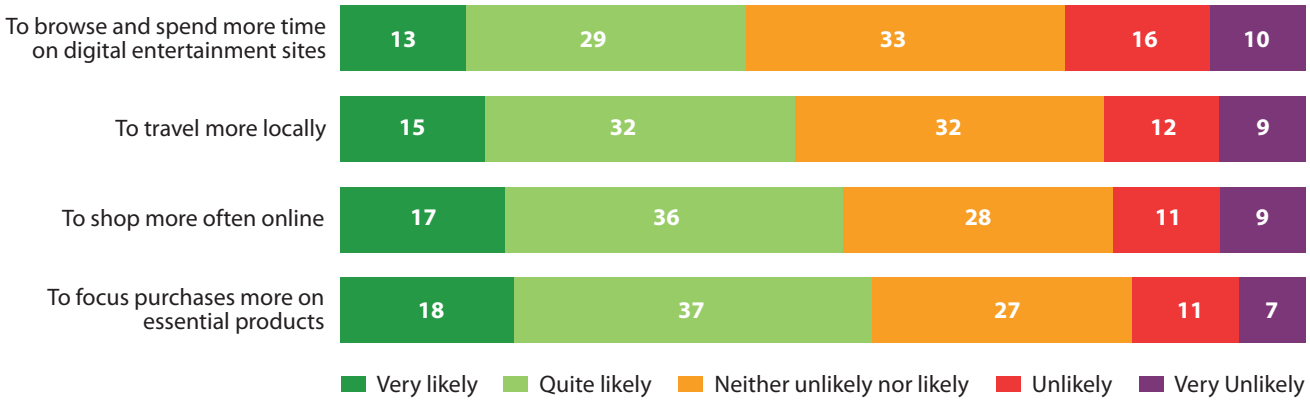
Consumer behaviour has shifted online in multiple ways. A recent survey conducted by the United Nations Conference on Trade and Development (UNCTAD) in collaboration with NetComm Suisse eCommerce

Figure III.G.1
Effects of COVID-19 on the use of digital technologies
(Percentages)



Source: UNCTAD and NetComm Suisse eCommerce Association.
Note: Respondents were asked to indicate how strongly they agreed with the above statements.

Figure III.G.2
Likelihood of continuing newly adopted behaviours beyond the COVID-19 pandemic
(Percentages)



Source: UNCTAD and NetComm Suisse eCommerce Association.
Note: Respondents were asked how likely they were to continue their online habits adopted during the COVID-19 pandemic.

Association examines the effects of COVID-19 on consumer behaviour in the use of digital technologies and e-commerce in nine countries, representing both emerging and developed economies.[8] The results suggest that, for the first time, digital technologies offered an alternative channel for maintaining business activities, social interactions and consumption in times of strict preventive measures such as lockdowns (figure III.G.1). Many consumers expect a continuation of the digital habits adopted during the COVID-19 outbreak, most notably, in terms of online shopping (figure III.G.2).

Rising inequalities and risk of misinformation

The trend to faster digitalization also creates challenges, as many people still lack Internet access and/or digital skills. With half of the world's population still not connected to the Internet, the development divide has translated into a digital divide and vice versa. Existing income, gender, age, education, health and other inequalities affect access to the benefits of new technologies and risk further exacerbating social divides. For instance, in the education sector, 188 countries imposed countrywide school closures during the pandemic, affecting more than 1.6 billion children and youth. The pandemic has increased existing inequalities in children's learning, particularly affecting schoolchildren in poorer countries. Globally, many schools lack the resources to invest in digital learning, and many children from poorer households do not have Internet access. According to the International Children's Emergency Fund (UNICEF), at least one third of the world's schoolchildren—463 million children globally—were unable to access remote learning when COVID-19 shuttered their schools, with large differences between and within countries.[9]

Another challenge is the risk of online mis- and disinformation. COVID-19 is the first pandemic in history in which technology and social media are being used on a massive scale to keep people safe, informed,

productive and connected. At the same time, digital technology is enabling an infodemic[10] that undermines the global response and jeopardizes measures to control the pandemic. This includes the unintentional spread of misinformation and deliberate attempts to disseminate wrong information or to advance alternative agendas of groups or individuals. Mis- and disinformation can be harmful to people's physical and mental health; increase stigmatization; threaten health gains; and undermine compliance with public health measures, thus endangering countries' ability to stop the pandemic.[11]

Voluntary codes of conduct for large digital platform providers have helped combat misinformation. In 2018, Facebook, Google, Twitter and others signed the EU self-regulatory code of practice on disinformation (Microsoft and TikTok joined later). In June 2020, the European Commission asked these platforms to provide monthly reports on their actions to limit disinformation and advertising related to COVID-19. According to these reports, Google blocked or removed over 82.5 million COVID-19 related ads between January and August 2020, suspended more than 1,300 accounts from EU-based advertisers, and took action on over 1,700 URLs with COVID-19 related content. Microsoft Advertising rejected 3,871,425 advertiser submissions related to COVID-19 globally in August 2020. Twitter removed 4,000 tweets and challenged 2.5 million accounts in August. Facebook displayed misinformation warning screens and fact-checks on over 4.1 million pieces of content in the EU in July and 4.6 million in August. In July and August, TikTok applied a COVID-19 sticker to more than 86,000 videos across its four major European markets (Germany, France, Italy and Spain), while removing more than one thousand COVID-19 related videos, owing to medical misinformation and policy violations.[12] Despite their efforts, platform providers have struggled to keep pace with the growth of misinformation. Faced with difficult ethical choices as to what constitutes misinformation, some providers have called for new regulations to help define norms.

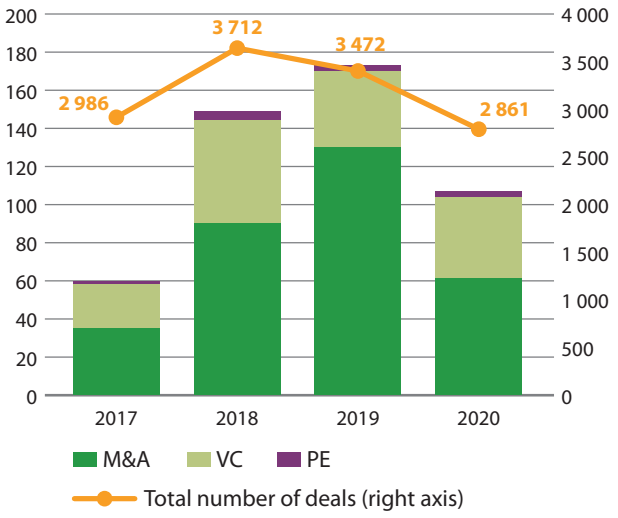
Additional action is needed to combat misinformation and increase big tech companies' responsibilities for content on their platforms. A recent European Commission report found shortcomings in the voluntary code of practice related to: (i) inconsistent and incomplete application across platforms and countries; (ii) a lack of uniform definitions; (iii) coverage gaps; and (iv) limitations of self-regulation.[13] In December 2020, the European Commission announced that it would update the code of practice and propose new legislation on political advertising transparency in 2021.[14]

2.2 Digital financial services during COVID-19 and beyond

Lockdowns and social distancing have boosted the usage of digital financial services, allowing many households and micro, small and medium-sized enterprises to access financial resources and maintain some level of economic activity. A recent joint survey by the Cambridge Centre for Alternative Finance, the World Bank and the World Economic Forum found that, during the first half of 2020, transaction volumes had increased in almost all areas of fintech, compared to the first half of 2019. Digital payment volumes grew by 21 per cent, as consumers and businesses increasingly used digital channels for sending and receiving payments and remittances. Transaction volumes also increased in digital capital raising, digital savings, WealthTech[15] and InsurTech,[16] among others. The only category that witnessed declines was digital lending, reflecting the economic slowdown. Fintech providers in developing countries saw higher growth in transaction volumes and the number of deals than those in developed economies.[17]

Overall, fintech investment fell in 2020, despite a strong recovery during the second half of the year. But venture capital fintech investment recorded positive growth. Total investment in fintech through venture capital (VC), private equity, and mergers and acquisitions fell 39 per cent in 2020, to $105 billion, owing to a steep year-on-year decline in the first half of the year (figure III.G.3). Deal activity picked up during the second half of the year, driven mainly by VC investment—in particular from the corporate VC sector as more financial sector incumbents have made acquisitions and entered partnerships with specialized fintech companies. The decline was steepest in the combined Europe, Western Asia and Africa region, where fintech investment collapsed by 77 per cent. It contracted by 31 per cent in Asia and the Pacific, while the Americas witnessed a more muted decline of 11 per cent. The number of deals focused on the payments sector held up better than in other sectors, reflecting increased investor interest amid the expansion of digital payments during the pandemic.[18]

Figure III.G.3
Global fintech investment activity, 2017–2020
(Billions of United States dollars)



Source: KPMG, The pulse of fintech 2020.
Note: Mergers and Acquisitions (M&A), Venture Capital (VC), and Private Equity (PE).

Government policies contributed to the increased usage of digital financial services, as part of their COVID-19 mitigation strategies. Regulators in many countries reacted quickly to support digital payments, for example, by reducing or waiving transaction fees for remittances, mobile money or other forms of digital payments, and by increasing limits on transactions. Other measures included the temporary weakening of compliance rules related to know-your-customer (KYC) and anti-money laundering (AML) regulations through electronic KYC processes and digital on-boarding.[19] Some of these outcomes could become permanent, although related risks should be carefully monitored and considered in

future regulatory innovation (see chapter III.F). Many Governments also stepped up government-to-person (G2P) transfers through digital channels to provide social assistance in a secure and socially distanced manner.

Countries that had invested in financial inclusion programmes and digital delivery channels during "good times" were able to quickly deploy large-scale digital transfers. For example, India built on its Jan Dhan Yojana programme for financial inclusion to make emergency transfers to over 300 million account holders.[20] Countries without established systems also mobilized digital channels to provide payments, including through the creation of e-wallets or unique-code based payments, although implementation was slower.[21]

The rapid expansion of digital finance can strengthen financial inclusion but may also exacerbate risks. The increased use of digital financial services and rapid onboarding of new customers during the pandemic, and the accompanying changes in policies and regulations, are likely to have lasting effects on the acceptance and usage of digital financial transactions (see chapter III.B). However, the rapid scaling up may also exacerbate existing risks, including in consumer protection and digital exclusion; financial stability and integrity; and competition.[22]

The increasing reliance on digital technologies for financial services can perpetuate gaps in the financial inclusion of women, rural residents and the poor, particularly in LDCs. Where digital technologies become the primary access point for financial inclusion, they risk leaving behind the most vulnerable groups who lack affordable access and the necessary digital and financial skills, and those who are excluded from official identity systems. The increasing use of AI and machine learning—for credit risk assessments, for example—may also create new forms of exclusion, owing to intransparent algorithms and biases in historical data. National financial inclusion strategies, as called for in the Addis Ababa Action Agenda, should address these risks. They can build on the G20 High-level Policy Guidelines on Digital Financial Inclusion for Youth, Women and SMEs .[23]

The rapid scaling up may also increase the susceptibility to cyber-attacks and digital fraud, and pose a threat to financial integrity and financial stability (see chapter III.F).[24] For example, the temporary relaxation of KYC rules to facilitate digital onboarding could increase the risk of money laundering, especially if there is no universal official digital identity system. In the short-term, regulators can instruct financial providers to physically verify the identity of new customers after the immediate health crisis.[25] Going forward, financial regulators will need to cooperate closely with national identity providers and other regulatory entities, to increase the availability and safety of digital onboarding procedures.

There is also a risk of increased market concentration, as big tech companies continue to expand into digital financial services, and some smaller providers may not survive the COVID-19 crisis. As discussed in the *FSDR 2020*, big tech companies could become dominant players in financial markets, owing to their large number of established users, wealth of data, analytical and innovative capacity, and network effects. [26] Their growth has been faster in developing than in developed countries, driven in part by demand from previously underserved customers, and supported by the increased availability of mobile phones.[27] Some smaller providers had difficulty raising funding in 2020. They may also be disproportionately affected by imposed cuts in transaction fees, especially those servicing more remote areas. Meanwhile, big tech companies are continuing to build partnerships and cross-invest in fintech and platform companies, to extend their market reach and service offerings.[28] This rapid expansion, together with their dominant roles in other markets, has raised concerns about competition and financial stability risks (see chapter III.F).

2.3 Towards inclusive digital economies

COVID-19 has highlighted the importance of building inclusive digital economies that can increase resilience while ensuring that no one is left behind. Those without access to the Internet or digital skills have fallen behind, and businesses that had not gone digital have struggled more than those that had. Looking ahead, public and private stakeholders need to work together to build a more equitable and inclusive digital economy (box III.G.1 discusses a measure of digital inclusiveness).

Box III.G.1
Inclusive digital economy scorecard

The inclusive digital economy scorecard (IDES), developed by the United Nations Capital Development Fund, measures the development of a digital economy and its inclusiveness and identifies key market constraints hindering the development of an inclusive digital economy. Governments can use IDES as a tool to help set priorities and work with public and private stakeholders to foster a digital economy that leaves no one behind.

The scorecard has two main components:

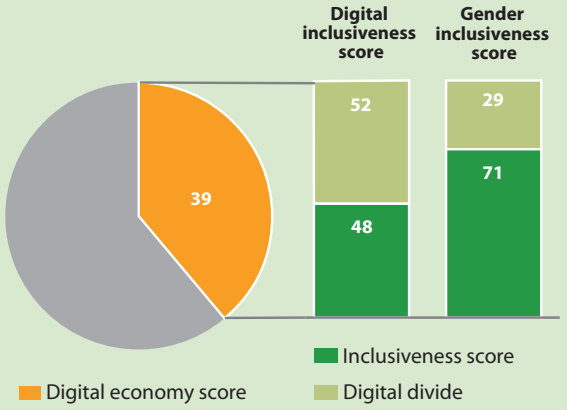
i The digital economy score indicates the status of the overall digital economy and its components (enabling policy environment, digital infrastructure and payments, innovation ecosystem, and digital skills);

ii The digital inclusiveness score measures the level of inclusion in the digital economy for marginalized segments, such as women; youth; elders; refugees and migrants; micro, small and medium-sized enterprises; people with disabilities; and rural inhabitants. The gender inclusiveness score is a subindicator measuring the level of inclusion of women.

The inclusiveness of the digital economy is primarily measured through qualitative assessment of the efforts made by the public and the private sector to include specific segments in the expansion of the digital economy. The digital divide is calculated as the difference between 100 and the digital inclusiveness score, at the aggregate level and for each marginalized segment.

In August 2020, IDES was implemented in Burkina Faso, Nepal, Solomon Islands and Uganda . In the last quarter of 2020, implementation was initiated in 13 additional countries: Democratic Republic of the Congo, Fiji, Guinea, Malaysia, Myanmar, Namibia, Rwanda, Samoa, Senegal, Sierra Leone, Timor-Leste, United Republic of Tanzania and Zambia. In 2021, IDES will be implemented in 30 countries in Africa and Asia and the Pacific.

Figure III.G.1.1
IDES Scores for Solomon Islands, 2020
(Percentages)



Source: United Nations Capital Development Fund.
Note: (i) A 39 per cent digital economy score implies that the digital economy is still in a start-up stage; (ii) the overall level of inclusion of key customer segments is 48 per cent, with a corresponding digital divide of 52 per cent; (iii) the level of inclusion of women is higher than that of other marginalized segments, at 71 per cent, but there is still a gender digital divide of 29 per cent.

Inclusive digital connectivity

"Last mile" connectivity should be a policy priority for Governments, to create inclusive digital economies. Developed countries have seen rapid fixed broadband connectivity increases since 2005, while developing countries on average saw an acceleration after 2014. However, fixed broadband connectivity growth in LDCs was from a very low starting point, causing a new digital divide. In 2020, the average number of subscriptions per 100 inhabitants in LDCs was only 1.3, compared to an average of 11.5 per 100 in developing countries and 33.6 per 100 in developed countries (figure III.G.4). While mobile broadband network coverage now reaches over 95 per cent of the global population, around one quarter of the population in LDCs still does not have access to mobile broadband.[29]

The cost of Internet access remains another source of inequality, which could be addressed through public-private cooperation. According to a recent World Bank report, the monthly price of 1 GB of data—measured as the lowest price for at least 1 GB per month of mobile data usage—represents, on average, over 20 per cent of the gross domestic product per capita per month (or $14.59) in low-income countries, while it accounts for 1.1 per cent (or $23.63) in high-income countries.[30] Where high costs result from difficulties in reaching remote customers, Governments could offer incentives to private service providers, for instance, via subsidies, instalment plans and targeted policies. Combining grants with equity financing for infrastructure deployment could enable Governments to recoup investment once services become profitable. Governments can also help reduce connectivity costs by facilitating the sharing of infrastructure among operators and across sectors. For example, mobile network operators could share antenna sites, and the cost of broadband network deployment could be reduced by coordinating with road construction. This could generate up to 40 per cent savings for capital expenditures that could be passed on to customers.[31]

Digital skills for all

Digital skills are a prerequisite for participation in the digital economy. Targeted government policies are required to ensure inclusivity. For instance, the Government of Bangladesh, which has made digitalization a priority, is prioritizing digital skills development among youth. The Government of Singapore aims to promote lifelong learning and reskilling for adults by offering personal training accounts and through tax incentives that encourage firms to invest more in lower-paid workers.[32] Recognizing the digital gender divide, policies and investments are needed to strengthen women's and girls' digital skills, through education, training and mentorship, in support of their equitable participation and leadership in the creation, development and use of digital technologies.[33]

Inclusive e-commerce

The COVID-19 pandemic has highlighted the role of e-commerce—especially business-to-consumer (B2C)—for providing people with daily necessities. When lockdowns or measures for social distancing were introduced in many countries, e-commerce provided a possible solution. For instance, in Thailand, the rapid adoption of e-money and e-wallets since the beginning of the pandemic, mainly driven by non-bank transactions, suggests a substantial growth of e-commerce.[34] In Lao Peoples Democratic Republic, e-commerce enabled street vendors to sell products through social media platforms during the pandemic.[35] Uganda saw a triple-digit increase in business e-commerce, which amplified the growth of e-payments and local fintech solutions.[36] However, due to a lack of digital access, skills and digital finance, small business owners and street vendors in many countries and regions have not been able to take advantage of these opportunities. And in many countries, the COVID-19 crisis has exacerbated persistent bottlenecks in e-commerce ecosystems (figure III.G.5).

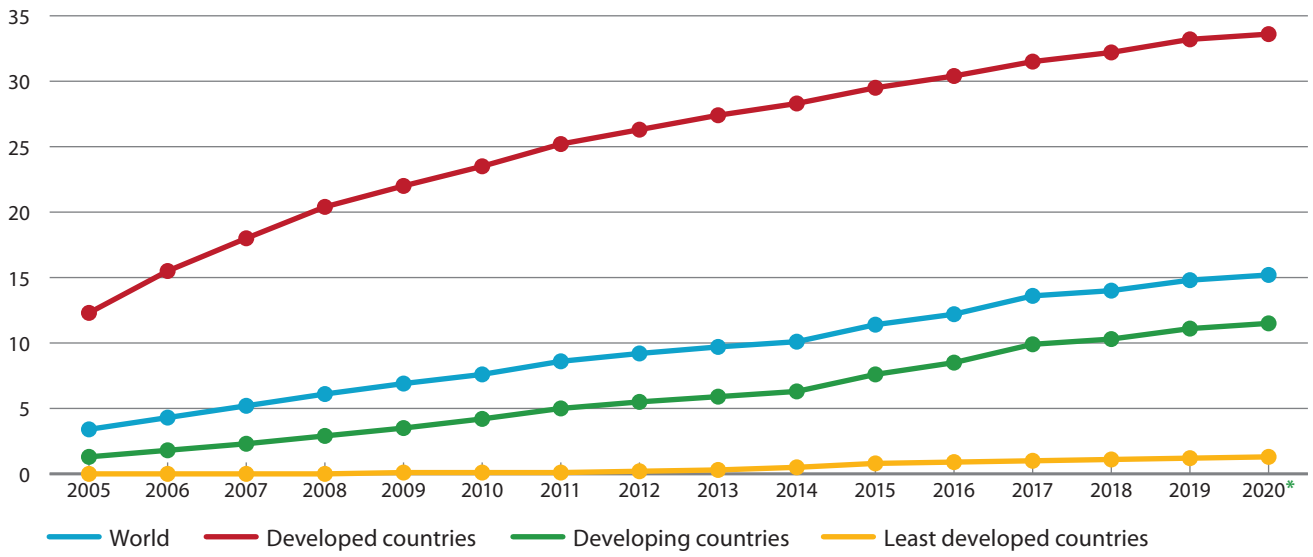
Building on innovative solutions and collaborations that began during the pandemic can help further strengthen e-commerce and ensure that it leaves no one behind. Governments can bolster the momentum of e-commerce by providing supporting frameworks and infrastructure. For example, China is treating e-commerce as an important driver of poverty alleviation amid COVID-19.[37] A recent UNCTAD survey found that the development of a national e-commerce strategy was the most important measure to support e-commerce during the pandemic (23 per cent of respondents). Other important measures include skills training programmes and reduced e-payment costs (20 per cent of respondents each).[38] Facilitating the exchange of experiences and providing access to learning materials for e-commerce entrepreneurs in developing countries—for example through the ecomConnect platform—can also provide valuable support.[39]

2.4 Investing in inclusive science, technology and innovation

Investment in technology

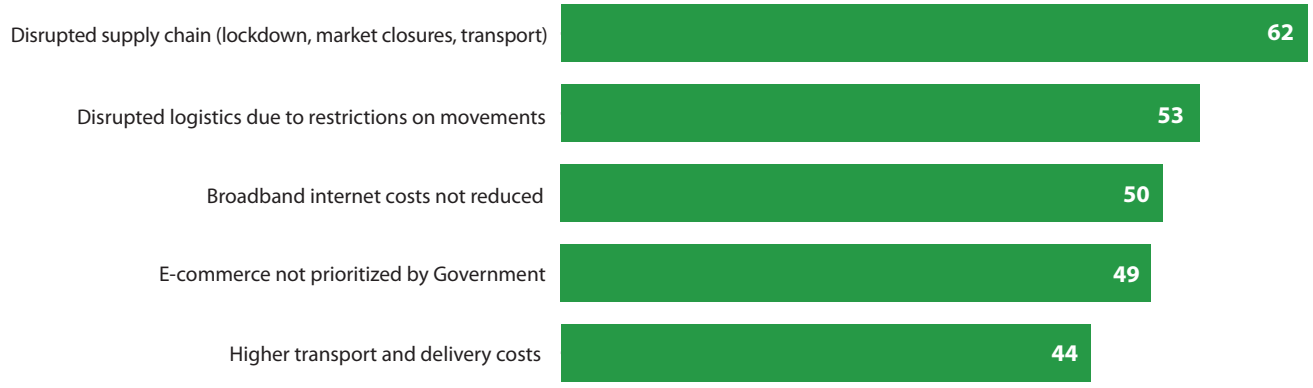
Technology investment has shown some resilience despite the global investment decline in 2020. There are indications that investment in technology, including in research and development (R&D), held up better than overall investment, at least in major developed

Figure III.G.4
Fixed broadband subscriptions by country groups, 2005–2020
(Subscriptions per 100 inhabitants)



Source: ITU World Telecommunication/ICT Indicators database.
Note: *Data for 2020 are estimates.

Figure III.G.5
Key COVID-19 challenges faced by e-commerce businesses in developing countries
(Percentages)



Source: UNCTAD. 2020. COVID-19 and e-commerce impact on businesses and policy responses.
Note: Respondents were asked which challenges most impacted their business since the outbreak of COVID-19. A maximum of 10 choices was allowed (232 responses).

economies (see chapter I). In the United States, investment in intellectual property recorded positive growth, likely owing to increased business opportunities for digital companies during the pandemic. VC investments appear to have been particularly strong: VC investment in European technology start-ups may have grown by over six per cent in 2020,[40] while VC investment in the United States surpassed 2019 levels, with a focus on start-ups aiming for a further digitization of sectors like banking, retail and health care.[41] Global VC investment in fintech has also grown (see section 3.2).

Yet, significant additional resources will need to be mobilized to overcome the digital divide. A recent International Telecommunication Union (ITU) study estimates that achieving universal access to broadband Internet by 2030 will require bringing over three billion people online in the next ten years, at an estimated cost of $428 billion (including $135 billion for South Asia and $97 billion for sub-Saharan Africa). This includes investment needs in infrastructure; the design and implementation of appropriate policy and regulatory frameworks; investments in basic digital

skills; and the creation of locally relevant digital content. Reaching this goal will require both public and private financing. While information and communications technology (ICT) infrastructure investments are often provided mostly by private sources (see section 2.3), public leadership and investments will be needed, including to adjust policy and regulatory frameworks and ensure that people acquire the necessary digital skills.[42]

Financing for innovation

The COVID-19 crisis presents large risks for innovation outside of innovation hotspots and in developing countries. While the pandemic might only have a short- or medium-term impact on innovation in the leading innovation nations or by top corporate innovators, the effect might be more pernicious in developing countries and outside of global innovation and venture capital hotpots. As outlined in the *Global Innovation Index 2020*—co-published by the World Intellectual Property Organization (WIPO)—before the crisis, countries of all world regions had started to embrace innovation expenditure and policies as a new tool for economic and social development. The pandemic risks bringing this process to a halt, owing to the severe negative impact on public finances, particularly in developing countries. Companies in sectors that have seen large falls in revenue—such as travel and leisure (including restaurants), professional services and household goods—will also have a temptation to cut R&D and other innovation expenditures.[43]

Governments need to maintain investment in innovation throughout the COVID-19 crisis and beyond. With the exception of the health sector, many Governments have, so far, not made innovation and R&D a priority in their emergency relief and fiscal stimulus packages. As countries move from containment to recovery, it will be important to reprioritize innovation—for example, by supporting innovation in global public goods (such as climate change mitigation), and by revitalizing international cooperation and knowledge flows.[44] Effective innovation policies—those that facilitate technology absorption and encourage private investment in innovation, for instance—can help developing countries, in particular, to efficiently use scarce public resources.[45]

3. STI for resilient societies

STI development and implementation play an essential role in addressing increasingly complex and unpredictable threats in a globally interdependent world – beyond the immediate COVID-19 pandemic. As highlighted in chapter II, investment in risk management and resilience is critical for achieving the SDGs. STI is needed to better understand and advance strategies to reduce the probability of shocks and build more resilient societies, including by mitigating and adapting to increasing climate risks. It can help policymakers address cascading shocks in a comprehensive and systematic manner, rather than handling one crisis at a time without understanding interlinkages and underlying risk drivers.

3.1 Understanding risk and resilience

Scientific knowledge

Diverse fields of scientific knowledge contribute directly and indirectly to building resilient societies, from scientific discoveries in biology and medicine that uncover new mechanisms of transmission of diseases, to advances in weather forecasting and climate prediction models that increase the reliability of early warning systems.

There is an increasing trend of public-private research cooperation to support resilience building at global, national and local levels. The adoption of open risk modelling principles and frameworks can help countries and cities integrate local knowledge and global research to develop their own view of risk for strategic risk management and operational risk finance.[46] Policymakers also need to cooperate with the financial sector to strengthen disaster risk assessment tools and methodologies. For instance, intelligence on systemic risk can facilitate the inclusion of disaster risk in decisions taken by credit rating agencies and investors.

Since 2015, regional scientific and technical advisory groups for disaster risk reduction have been established or strengthened in Africa, the Asia-Pacific region, Western Asia, Europe, and Latin America and the Caribbean. Guided by the multi-stakeholder Science and Technology Roadmap to Support the Sendai Framework for Disaster Risk Reduction 2015-2030, these advisory groups aim to boost national science and technology capacities to understand disaster risk and improve the dialogue between scientific and technological communities and policymakers. For example, Malaysia has established a Scientific and Technical Panel on Disaster Risk Reduction to support the operational activities of the National Platform for Disaster Risk Reduction. In the Philippines, the National Resilience Council has accelerated science and technology-based public-private partnerships, following a thematic focus of "prepare-adapt-transform" to enhance resiliency leadership and strengthen localization of the Sendai Framework.

However, the COVID-19 pandemic has laid bare the still insufficient understanding of the systemic nature of risk and interdependencies between sectors, and the need for stronger and more comprehensive science-policy coordination. Scientists need to investigate further the direct and indirect linkages between natural, biological, technological and other human-induced hazards to identify and better understand cascading and complex hazards and risks. The International Science Council and United Nations Office for Disaster Risk Reduction (UNDRR) produced a Hazard Definition and Classification, which can support the science-policy interface to strengthen risk-informed policymaking and investment decisions.[47]

LDCs will depend on enhanced development cooperation, investment and partnerships for data and technology to strengthen the generation, management and accessibility of risk knowledge. In these countries, vulnerability and risk levels are often high, while the capacity to respond and recover is limited. Support is needed to collect and analyse disaster loss data, conduct risk assessments, and establish transboundary early warning systems, among others.

Monitoring environmental risks

STI can facilitate the assessment, monitoring and understanding of risks. For instance, low-cost open-source hardware has made it possible to develop ad hoc sensors of environmental risks [48] that can complement existing, but often sparse, monitoring networks in developing countries.[49] Citizens operating these sensors can provide additional

information via smartphones, using time-stamped and geolocated photographs,[50] social media updates,[51] or interviews and feedback to ad hoc hazard mitigation websites.[52]

Environmental monitoring is also conducted via remote sensing using satellites or drones. Satellites transmit images of the Earth's surface in real time, which can populate land-use databases as well as assessments of disasters such as flood or earthquake damage. They can also be used for rapid mapping in case of emergencies, for example, in combination with crowdsourcing platforms that tag live footage from aerial vehicles during disasters.[53] Drones offer another, low-cost, approach to remote sensing.

Identifying hotspots of systemic risk and cascading hazards

Combining scientific information from different sources and sectors can improve the understanding of the systemic nature of risk and the potential for cascading impacts of hazards. For example, the combination of seasonal rain forecasts and confirmed COVID-19 cases has allowed identification of systemic risk hotspots in South Asia (figure III.G.6).

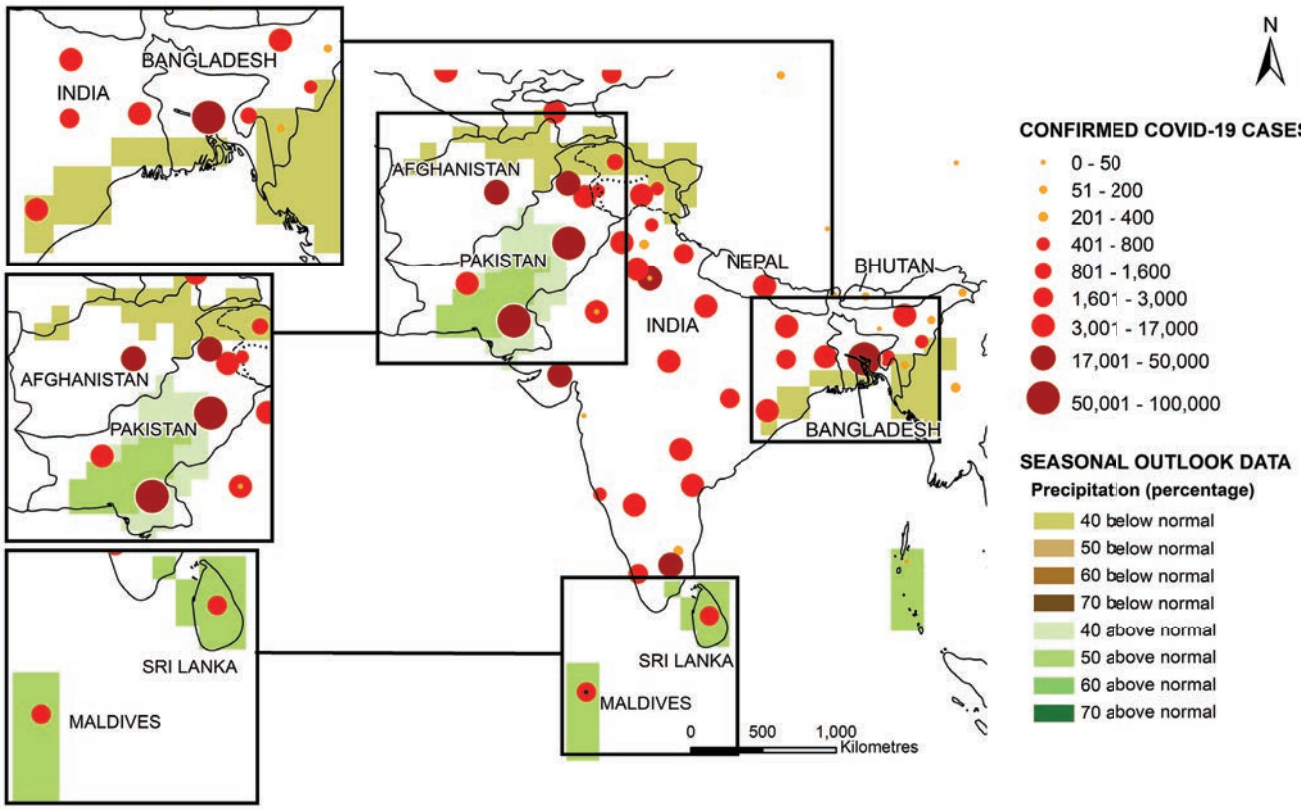
3.2 Risk prevention and reduction

Community empowerment

Communities are at the frontier of disaster impacts, and must be empowered to understand and utilize complex risk and hazard information. Localized interventions should build on community knowledge. Technological advances cannot be operationalized in a meaningful way without the support of communities at all levels. An important challenge is to overcome the digital divide and to harness new technologies for empowering communities (see section 2.3).

For example, the cyclone evacuation programme in Bangladesh takes advantage of the ubiquitous use of mobile phones to empower vulnerable communities to track and prepare for cyclones. People are using real-time cyclone tracker apps to help them understand how long a cyclone would take to reach their villages so that they can evacuate on time. The programme has been developed through iterative feedback loops, helping the Government establish evacuation shelters that meet communities' needs.[54]

Figure III.G.6
Hotspots of high probability of climate-related disasters amid COVID-19, June–September 2020
(Percentage deviation from normal precipitation, number of COVID-19 cases)



Source: ESCAP (2020). *Protecting the most vulnerable to cascading risks from climate extremes and the COVID-19 in South Asia.*
Note: The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

Economic diversification and innovation

For communities to be resilient, they must generate enough and diverse occupations, reduce risk across supply chains, and better adapt to shocks that impact employment and livelihoods. Economic diversification is a commonly pursued strategy for coping and adapting to risks and seasonal cycles of economic activity, particularly in rural, tourism-based, and coastal fishing communities (see chapter II).[55]

Improving health

Modern ICTs can reduce individuals' vulnerability and exposure to shocks and hazards by improving their access to health services, through telemedicine or e-health.[56] These services allow physicians to access, monitor and diagnose patients remotely. For instance, satellite technology has been used to improve care for patients in rural areas,[57] not only in developed regions but also in developing countries in Asia and sub-Saharan Africa.[58] Mobile phone diffusion is facilitating the exchange of texts, photos and videos between local health workers and specialized clinics. COVID-19 has greatly accelerated the global uptake of telemedicine worldwide.[59] Going forward, e-health can be an affordable way to increase the access of vulnerable and remote communities to public health services, by leveraging existing communications technology. However, increased ICT investment will be needed in many developing countries to enhance coverage and affordability (see section 2.3).

Access to information

Educational videos made available through the Internet facilitate e-learning and access to relevant and timely knowledge and information at the community level, improving the capacity to cope with shocks. Mobile phones with video recording capabilities have been used to engage the community in producing mini-documentaries disseminated via social media, showcasing how people can build their capacities and increase their sense of agency.[60] Mobile apps and digital games can also support education efforts for building capacities to prepare, cope and recover from disasters.[61] As in the case of e-health and other digital services, this highlights the urgency of building inclusive digital economies.

Resilient technology infrastructure

Effective disaster management depends on resilient telecommunications infrastructure as well as national strategies, plans and processes that can support and enable the use of telecommunications and ICTs during a disaster and in the recovery phase. Conducting a risk analysis of critical communications infrastructure, reducing vulnerabilities of telecommunication networks, and improving their resilience are key to ensuring that communications will be available in the response phase. In the recovery phase, the rebuilding of more resilient ICT network infrastructure, including digital communication networks, should include potential redundant network deployments—wherever possible—to prepare for future disasters.[62]

3.3 Risk transfer

Satellite imagery can support disaster risk financing tools such as parametric insurance and catastrophe bonds. Parametric insurance makes payments based on an objective index, such as rainfall measures, that can serve as a proxy for losses to crops. In the absence of easily verifiable observations, insurance companies can use satellite imagery and computer models to estimate precipitation, vegetation, or satellite-derived multi-sensor soil moisture.[63] Despite some risks—for instance, that parametric insurance mechanisms may not trigger payouts if the strength of disaster is measured in a different location from its main impact, or because modelled losses are lower than actual losses—well-designed parametric insurances, with parameters relevant to national and subnational contexts, can be an important tool among others for strengthening financial resilience (see chapter III.C). Catastrophe bonds (or catbonds) also typically rely on parametric payout triggers, but they tap into capital markets rather than traditional insurance markets. While they have been used in developed countries, uptake in developing countries has been limited so far.[64]

Improved risk modelling, based on enhanced capacities for the generation and analysis of large amounts of data, can strengthen insurance mechanisms, but may risk excluding the most vulnerable. As more granular information about risks becomes available, insurance providers can better differentiate risk premiums, making them more affordable for lower risks, but, at the same time, less affordable or unavailable for individuals or communities with higher risk scores.[65] This could, for example, affect access to health insurance at the individual level, or crop or property insurance in disaster-prone areas at the community level. Policymakers will need to find solutions to ensure fair and inclusive risk protection, ranging from regulation for private insurers, to public insurance, or construction and land-use regulation for disaster-prone areas.

3.4 Emergency response, adaptation and recovery: rebuilding better

Even as societies and individual actors improve their understanding of existing risks, implement strategies for risk reduction and the prevention of new risks, and build more resilient societies, they will continue to experience economic and non-economic shocks. STI can help communities react to shocks in real time and mobilize emergency responses. During recovery, they can build on the lessons learned to adapt better and recover.

From emergency response to lessons learned

Emergency telecommunications and other ICTs are critical for monitoring developing emergencies and delivering vital information to all stakeholders, including the most vulnerable. Mobile technology offers new possibilities for passing on information during an emergency. Examples include the use of smartphones by rescue and relief workers to form a disjoint peer-to-peer communication network during emergencies,[66] or a mobile wireless local area network through a series of "wearable routers" when pre-existing communication infrastructure is not available.[67] Local agencies also use social media in emergency management to involve community members as first-line informants and as first responders.[68]

Drones can ensure the delivery of emergency supplies in the case of collapsed infrastructure or dangerous situations. Small airborne drones are already being employed for an increasing number of tasks,

including the delivery of high-value items such as vaccines to rural areas in developing countries. For example, in Rwanda, the Government partnered with a robotics company, Zipline, to address maternal mortality by using drones to deliver blood to medical facilities, reducing the time to procure blood from four hours to fifteen minutes.[69] Building on these experiences and on lessons learned from the current pandemic, the use of drones going forward could be enhanced to include the regular delivery of supplies in remote areas.

Beyond the immediate crisis response, innovative technologies can support recovery and strengthen future preparedness. Faced with the unprecedented collision of pandemic and weather events, South Asia has successfully utilized several new technologies to address the impacts of cascading disasters (see section 2.1), which will continue to support recovery and preparedness processes in the future. As biological hazards and concurrent disaster risks continue to intersect, more complex and integrated solutions will be needed, building on these experiences and driven by new technological innovations.

Adapting production and businesses

STI is critical for economies to adapt in times of crises and beyond. Innovation is not limited to new technologies and products, but also includes changes in the way that people organize and carry out their work. One example was the quick move to remote forms of working in many knowledge-intensive sectors during the COVID-19 pandemic. Other examples of COVID-19-induced innovation include the shift of production lines to make protective and health equipment, including ventilators. For instance, the vehicle manufacturer General Motors mobilized hundreds of suppliers worldwide to source 700 parts to help a company that produces ventilators increase its production from about 100 devices per month to over 6,000.[70] Similar efforts have taken place in developing countries. For example, biomedical engineers from the Integrated Polytechnic Regional Centre in Kigali, Rwanda, have worked on the first locally produced ventilators at affordable prices to respond to COVID-19.[71]

3.5 Mission-oriented innovation for building resilience

Mission-oriented innovation can contribute to reducing risk and building resilience. This approach to innovation involves organizing networked research programmes at the national level, as part of national innovation systems,[72] or at the international level. It includes setting incentive structures that direct innovation towards the achievement of specific technological, environmental or social goals, for example, through innovation prizes and advance market commitments.

The recent drive to address and mitigate the impact of COVID-19 is an example of mission-oriented innovation. For instance, XPRIZE has launched two challenges: the Pandemic Response Challenge, a $500,000 four-month challenge, for the development of data-driven AI systems to predict COVID-19 infection rates and prescribe intervention plans that can minimize harm when communities reopen their economies, and the Next-Gen Mask Challenge ($1 million) to reimagine protective face masks.[73] The Joint European Disruptive Initiative (JEDI) has launched the JEDI GrandChallenge to identify molecules, peptides and proteins that can block the spread of the SARS-CoV-2 virus and prevent COVID-19.[74] In the United States, Operation Warp Speed has provided coordinated government support to the most promising treatment and vaccine candidates.[75]

3.6 Unintended consequences of new technologies

STI, especially new technologies – while having the potential to mitigate risks and strengthen resilience – can also be new sources of risk. The externalities of innovation on the environment are a well-known case. For example, blockchain technology can be applied in solutions that contribute to the achievement of the SDGs, thus increasing resilience. At the same time, this technology (particularly in its application to bitcoin) is estimated to use more energy than Argentina, which competes with more essential energy services and also generates CO_2 emissions.[76] The socioeconomic impact of innovation can be even more complex, with some solutions increasing the resilience of some people while also increasing the vulnerability of others. For instance, e-government can ensure the continuity of public services in times of crisis, but if other forms of access are not made available, then people without Internet access are excluded. Big data and AI can also worsen new forms of social exclusion (e.g., through intransparent algorithms and biased historical data); and the platform economy, with its winner-takes-all dynamics, is becoming a threat to competitive markets.

A way to minimize the risks of unintended consequences is to consider diverse views in the process of innovation. This can be achieved, for example, by strengthening the diversity among researchers and by involving end users in the innovation. There is also a clear role for intermediaries—people and institutions that can translate needs and values between producers and users. Examples include community health workers who are at the frontline and who have a close understanding of the community they serve; extension workers helping farmers adopt relevant seed, irrigation, and fertilization techniques; industry-level institutes that help firms find appropriate technologies and assist in technological learning and building innovation capacities; and civil society organizations that can identify and translate communities' needs to the providers of technologies and help direct technological solutions to development problems. Such intermediaries are critical, but they are too often overlooked. Governments and all stakeholders need to engage with such intermediaries and build their capacities.[77]

Appropriate regulations can incentivize increased transparency of new digital tools and innovations. They will also be key in addressing antitrust issues. More transparent algorithms and peer reviews—supported, for example, by guidance on the ethical use of AI—can foster independent assessments of digital tools and innovations (e.g., to address equity implications). Antitrust regulation can help reduce the market power of large digital platforms and create a more level playing field.

4. Opportunities and risks of STI for other action areas of the Addis Ababa Action Agenda

STI cuts across all other action areas of the Addis Agenda. It hassupported rapid crisis responses during the COVID-19 pandemic. In the longer run, it is enhancing the efficiency, effectiveness and resilience of financing, resource mobilization, trade and development cooperation, among others. But it is also creating new risks that policymakers need to address.

4.1 The financial sector

Digital technologies have increased the efficiency and accessibility of financial services, supporting financial inclusion and reducing costs, but have also created new risks. There is increased recognition that policymakers need to carefully balance opportunities and risks—by putting in place basic building blocks for an inclusive digital economy, providing an enabling environment for innovation, and setting an appropriate regulatory framework (see FSDR 2020 and chapter III.F).[78]

Digital finance has also demonstrated its potential to mobilize private financing for the SDGs. The United Nations Secretary-General's Task Force on Digital Financing of the SDGs recently published its final report, highlighting how digital financial innovations can help finance the SDGs. Examples include: (i) the incorporation of SDG-related risks in private lending and investment decisions (see below); and (ii) better opportunities for retail investors to apply such SDG considerations—for example, through the use of specialized AI-based robo-advisors that offer reduced commissions and lower capital thresholds. Digital finance can also help low-income populations access capital-intensive infrastructure services through financing mechanisms, such as product-as-a-service and pay-as-you-go models (e.g., for electricity, water or other utilities).[79] For instance, in Kenya and Nigeria, M-Kopa Solar and Lumos, respectively, are using fintech and mobile technologies for decentralized renewable energy investments (see chapter III.B).

Big data can help incorporate SDG-related risks, or environmental, social and governance factors into lending and investment decisions. Big data and AI can help gather and analyse comprehensive environmental, social and governance (ESG) data from different sources. For example, heat maps of local economic and financial impacts of climate-related risk can help investors and lenders take risk-informed financing decisions (see chapter III.B).[80]

Digitally enabled financial innovation is also driving change in the cross-border payments market. Fintech solutions have been instrumental in reducing the cost of cross-border payments, notably in the case of remittances (see chapter III.B). So-called global "stablecoins" have the potential to greatly increase the speed, transparency and inclusiveness of cross-border payment services, while reducing transaction costs. However, regulators and international standard-setting bodies have voiced concerns about the potential risks they pose to financial stability and integrity, among others (see chapter III.F).

Financial regulatory and supervisory authorities can harness technology for regulatory compliance. The use of new technologies by authorities for their regulatory, supervisory and oversight tasks ("SupTech") and by financial institutions for meeting their regulatory requirements ("RegTech") can strengthen financial stability and efficiency. However, they also create new challenges and risks, for example, by increasing cyber-vulnerabilities, decreasing transparency, and creating potential competition barriers (see chapter III.F).[81]

4.2 Domestic public finance

Technology can strengthen the efficiency and effectiveness of public resource management and service delivery, while improving transparency and government accountability.[82] For instance, the digitalization of G2P transfers helped authorities to quickly scale up social assistance programmes to counter the social and economic impacts of the COVID-19 pandemic (see section 2.2). More broadly, STI can help improve public financial management systems by increasing fiscal transparency and accountability (see chapter III.A).

Digital technologies helped tax administrations provide continuing services during the pandemic, but many countries still lack the necessary capacities. Shifting operations and processes to digital service delivery was easier for tax administrations in developed countries, as many of them could build on more advanced systems and capacities, in comparison to countries with less capacity, particularly LDCs (see chapter III.A).

The accelerated digital transformation of the economy has raised the stakes in the discussions over international taxation standards. Amid increasing concerns about the allocation of taxing rights, both developed and developing countries recognize that, without a consensus-based global solution, proliferation of unilateral tax measures is expected. Multilateral negotiations are currently ongoing at the OECD-housed Inclusive Framework and at the United Nations Committee of Experts on International Cooperation in Tax Matters (see chapter III.A).

4.3 International development cooperation

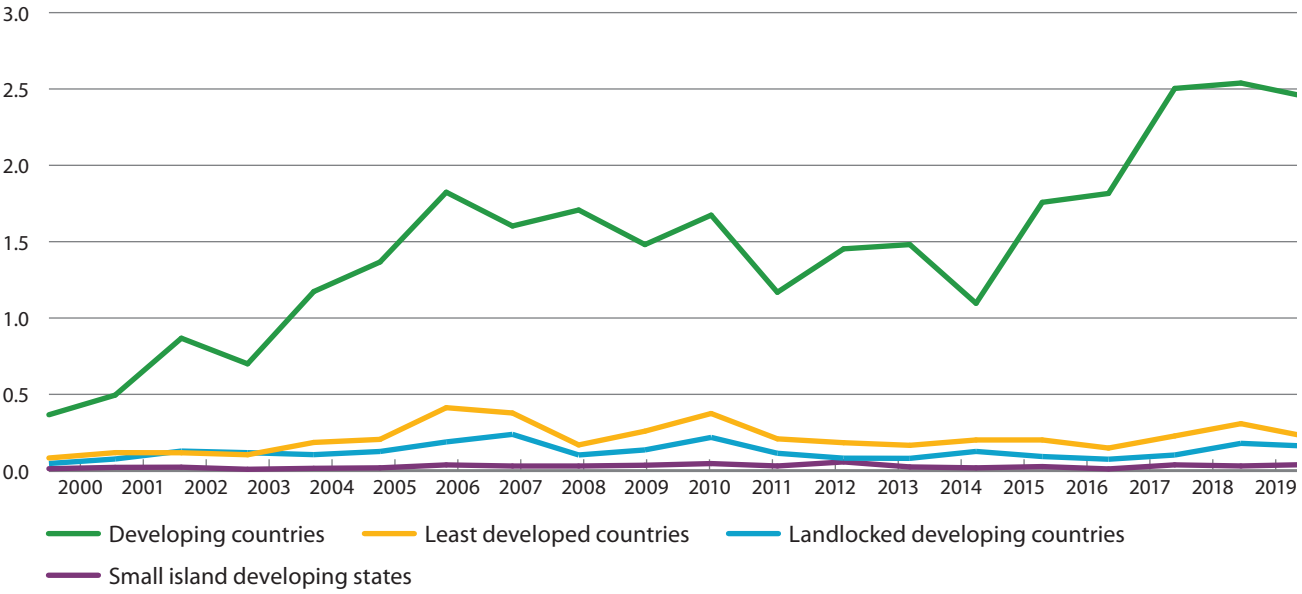
Official Development Assistance (ODA) for STI has outpaced overall ODA trends in recent years, but contracted in 2019. In the Addis Agenda, Member States committed to enhancing international cooperation, including ODA for STI. While there is no internationally agreed measure of ODA for STI, estimates show a sharp increase in such funds, outpacing total ODA growth since 2014 (figure III.G.7).[83] This trend was interrupted in 2019, when ODA for STI fell by 3.6 per cent year on year—more than the 0.5 per cent decrease of total ODA on a cash flow basis (see chapter III.C). Most worryingly, ODA for STI directed to LDCs fell by 27.5 per cent. While disaggregated data for 2020 are not yet available, there may be a revival in ODA for STI in response to COVID-19, as funding for medical research has been one of its main growth drivers in the past.

Sendai Framework monitoring indicates that most donors do not yet effectively track the transfer of technology to reduce disaster risk, and do not adequately integrate disaster risk reduction into technology transfer initiatives. It also finds that ODA in areas such as infrastructure, ICT, and agriculture is often provided without adequate investment in science, technology and knowledge-sharing for disaster risk reduction. UNDRR has developed technical guidance to improve the tracking of technology transfer and ensure that SDG actions are risk-informed and resilient to future shocks.[84] The online platform of the Technology Facilitation Mechanism could also support information on STI solutions for disaster risk reduction and related initiatives (see box III.G.2).

4.4 International trade

Beyond the overall rise in e-commerce, COVID-19 has accelerated the digitalization of supporting services, such as logistics and customs systems. For instance, the UNCTAD Automated System for Customs Data (ASYCUDA) provided the necessary flexibility to reduce face-to-face interactions and facilitate the implementation of COVID-19-related trade policies. In Afghanistan, national experts configured the

Figure III.G.7
ODA flows to developing countries targeting science, technology and innovation activities, 2000–2019
(Billions of United States dollars, 2018 constant prices)



Source: UN DESA, based on OECD/DAC.

system to reflect new customs rules to facilitate the importation of medical supplies and necessary food items. In the Democratic Republic of the Congo, ASYCUDA also helped implement a suspension of delay penalties and tailor the risk management mechanism to expedite shipments and perform fewer inspections.[85]

Anti-competitive cross-border commercial practices by globally dominant digital platforms warrant increased international co-operation. Increased international and regional cooperation between competition and consumer protection authorities will be key to ensuring fairer and more inclusive international trade practices. For instance, many regional economic communities in Africa already have regional competition rules (see chapter III.D).

AI and blockchain have great potential to boost trade, but the impact on sustainable development is not clear. AI and blockchain technologies can improve trade and transport efficiency; reduce trade costs; and improve transparency, traceability and reliability throughout value chains. However, the sustainable development benefits will depend on many other factors, including the productive structure of countries and public policies to harness trade for development. For many LDCs and other low-income countries— where a majority of the population depends on subsistence agriculture, few cash crops, and low-wage, low-tech manufacturing—productivity gains from digitalization are likely to be passed on to foreign clients in the form of lower prices.

5. Overview of United Nations system actions on STI in the areas of the Addis Ababa Action Agenda

There are numerous United Nations entities that contribute to ongoing efforts to enhance Member States' capacity in STI to achieve the SDGs. During the COVID-19 crisis, they have joined forces to tackle the spread of the pandemic and mitigate the impact on economies and societies, and to harness STI to strengthen resilience and rebuild better.

5.1 Progress on STI for the SDGs across the United Nations system

The Addis Ababa Action Agenda and the 2030 Agenda for Sustainable Development help coordinate STI actions across the United Nations system and beyond. Both agendas identify key STI policies and actions for meeting the SDGs. They established the United Nations Technology Facilitation Mechanism (TFM) (box III.G.2), which was later complemented by the establishment of the United Nations Technology Bank for the Least Developed Countries (Technology Bank).

Since 2015, Member States have strengthened the science, technology and innovation pillars of the United Nations, bringing it closer to stakeholders at the centre of technological progress. Several new mechanisms—most notably the TFM, the Technology Bank, the Global Sustainable Development Report, and the High-level Political Forum on Sustainable Development—were created as multi-stakeholder complements to the existing United Nations Commission on Science and

Box III.G.2
United Nations Technology Facilitation Mechanism in support of the Sustainable Development Goals

The Technology Facilitation Mechanism (TFM) comprises four components:

i A United Nations inter-agency task team (IATT) that brings together 43 United Nations entities and their external partners;

ii A 10-Member-Group of High-level Representatives of the Scientific Community, Private Sector and Civil Society (10-Member-Group);

iii An online platform (TFM 2030 Connect) for sharing technology solutions and knowledge resources; and

iv The annual Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals (STI Forum).

IATT comprises 10 work streams, including gender and STI; STI policy frameworks, action plans and road maps; capacity-building on STI for the sustainable development goals (SDGs); and analytical work on emerging science and technologies for the SDGs. In 2019, IATT prepared a guidebook and launched a Global Pilot Programme on STI for SDGs roadmaps. Efforts are underway to facilitate a second phase, through the new joint initiative "Partnership in Action". New IATT work has focused on improving the science-policy-society interface and various responses to and recovery from COVID-19.

TFM 2030 Connect[a] brings together an increasing range of resources, from publications to training opportunities to technology offers and requests, including on specific technology solutions for the SDGs.

The annual STI Forum collects views and ideas from science, engineering, the private sector and government, and reports to the High-level Political Forum on Sustainable Development. It has led to various STI partnerships within and beyond the United Nations system, and fostered key initiatives and conferences, for example, the Global Sustainable Technology and Innovation Community, the Global Solution Summit, and the Global Innovation Exchange.

Source: United Nations Technology Facilitation Mechanism.
a TFM 2030 Connect (https://tfm2030connect.un.org).

Technology for Development (CSTD), which has brought together Ministries of Science and Technology since 1992. The multi-stakeholder TFM and the CSTD discussions on STI for development have proven mutually beneficial, particularly related to the CSTD analysis of critical STI trends, and the work of CSTD on new and emerging technologies. In 2020–2021, CSTD focused on two priority themes: "Using science, technology and innovation to close the gap on Sustainable Development Goal 3, on good health and well-being"; and "Harnessing blockchain for sustainable development: prospects and challenges".

The extent and visibility of work on STI for the SDGs has expanded across the United Nations system. The most recent inter-agency task team (IATT) comprehensive mapping of STI activities in the United Nations system identified 1,600 STI activities across 20 system entities (including the World Bank), encompassing $1 billion annual budget and $120 billion for recipients ($50 billion as grants and $70 billion as loans). Half of these activities were associated with one or more SDGs. The other half had a broader STI focus. Entities with the largest STI budgets were the World Bank, Food and Agriculture Organization (FAO), ITU, WIPO, United Nations Environment Programme, United Nations Educational, Scientific and Cultural Organization, and United Nations Industrial Development Organization (UNIDO), accounting for 15 per cent of budgets and 30 per cent of resources for recipients. Other entities, such as UNCTAD, UNICEF, the World Food Programme (WFP), WHO, the Regional Commissions and the United Nations Office for South-South Cooperation (UNOSSC), have more narrowly focused STI activities.[86]

The Technology Bank is emerging as an important hub for STI capacity-building for LDCs. Based on a call to action in the 2011 Istanbul Programme of Action, which was confirmed in the Addis Ababa Action Agenda and in the 2030 Agenda for Sustainable Development (SDG target 17.8), it was operationalized in 2018 (box III.G.3 presents an update). The Bank is also an active member of IATT.

5.2 United Nations Actions on new and emerging technologies in times of COVID-19

WHO and Member States, with the support of other United Nations entities, have taken coordinated action to tackle the spread of COVID-19, mitigate its impacts on the poorest and most vulnerable, and support vaccine development and delivery.

COVID-19 technology solutions

In early 2020, several United Nations entities issued calls for technology solutions to respond to COVID-19 and its immediate impacts. For example, the United Nations Department of Economic and Social Affairs (DESA) and its IATT partners organized a joint call for such solutions. About 180 technology solutions were accepted and featured on the TFM 2030 Connect online technology sharing platform.[87]

The Technology Bank, WHO, UNCTAD and UNDP launched the United Nations Technology Access Partnership as part of the United Nations coordinated technology approach to COVID-19. [88] Innovations can be submitted to an online platform and are vetted by WHO or an appropriate regulatory authority. Another example for United Nations calls to action was the UNIDO global call to identify and promote innovative ideas for addressing the impacts of COVID-19 in developing countries. Among 1,100 applications from 108 countries, 5 initiatives were selected and awarded with advisory and mentorship services.[89] **TFM partners have set up online portals with technology solutions.** The World Federation of Engineering Organizations set up an online portal on new

Box III.G.3
United Nations Technology Bank for Least Developed Countries (Technology Bank)

Since its operationalization, the Technology Bank has conducted comprehensive technology needs assessments in Bhutan, Guinea, the Gambia, Timor Leste and Uganda, to support demand-driven formulation of national science, technology and information (STI) priorities for national development strategies.

In 2020, the Technology Bank supported Angola, the Central African Republic, the Democratic Republic of the Congo, Chad, Lesotho and Malawi towards establishing academies of science as important sources of STI advice for government and industry.

It provided training on research and data management to over 3,490 participants from 88 countries in 2020, together with the Food and Agriculture Organization and in collaboration with Research4Life. During 2019 and 2020, training workshops were delivered in collaboration with UNITAR-UNOSAT in the Gambia, Uganda and Mozambique with a focus on using satellite data to support decision-making for climate change adaptation, risk management, and natural resources management. As part of a joint programme with United Nations Development Programme (UNDP) Turkey and the Ministry of Foreign Affairs of Turkey, a global call was launched under the SDG Impact Accelerator[a] for enhancing innovation capacity through entrepreneurship promotion. Most recently, the Technology Bank has partnered with the International Centre for Genetic Engineering and Biotechnology to offer fellowships to young researchers from least developed countries (LDCs).

In May 2020, the Technology Bank, jointly with UNDP, the United Nations Conference on Trade and Development and the World Health Organization (WHO), launched the Tech Access Partnership (TAP),[b] to strengthen developing and LDC manufacturing capacities of essential COVID-19-related equipment, medical diagnostic kits, and medical devices. The Partnership is also an implementing partner of the COVID-19 Technology Access Pool (C-TAP), an initiative led by WHO aimed at making vaccines, tests, treatments and health technologies to fight COVID-19 accessible to all.

Resource mobilization from other sources—both public and private—remains a key priority for the Technology Bank, to support LDC STI capacities towards the achievement of the SDGs.

Source: United Nations Technology Bank for Least Developed Countries.
a SDG Impact Accelerator, available at https://www.sdgia.org/.
b Tech Access Partnership, available at https://techaccesspartnership.net/.

engineering solutions for rapid adaptation of industrial production lines, while supporting medical responses. Various United Nations entities, such as the UNOSSC South-South Galaxy Platform and others, posted calls and opportunities encouraging joint projects by experts worldwide. These technology solutions are expected to become available through the TFM online platform as a one-stop-shop to support partners' work and extend its reach.

Various IATT members have used new and emerging technologies in their COVID-19 responses. The Economic and Social Commission for Western Asia, the United Nations High Commissioner for Refugees and the Data Pop Alliance used big data to estimate the impacts of public policies in response to COVID-19 in Lebanon and Jordan. The UNIDO Investment and Technology Promotion Offices (ITPO) organized unmanned vehicles to transport medical supplies, deliver meals for doctors and patients, and complete other emergency tasks in a hospital in Wuhan,[90] and supported technology transfer from Japan and the Republic of Korea. [91] WFP supported Governments in scaling up e-payments and digital registries to extend the coverage of social safety nets.[92]

IATT members have worked together on regulatory responses to strengthen ICT networks. The ITU Global Network Resiliency Platform collected 400 regulatory, policy and industry measures taken by countries and other stakeholders to ensure continued digital network services.[93] The Partnership Dialogue for Connectivity sets out recommendations on "Accelerating Digital Connectivity in the Wake of COVID-19". [94] The "Agenda for Action for Faster and Better Recovery" of the Broadband Commission for Sustainable Development outlines immediate measures to strengthen digital networks, capacity and connectivity of hospitals and transport hubs.[95] ITU, the World Bank, the World Economic Forum and the GSM Association (GSMA) devised a COVID-19 crisis response digital development joint action plan and call for action.[96]

COVID-19 testing, treatments and vaccines

The WHO has led the United Nations system work on COVID-19 tests, treatments and vaccines, with its Access to COVID-19 Tools Accelerator (ACT-Accelerator), but funding gaps remain a key constraint. COVAX, the Vaccines Pillar of the ACT-Accelerator (box III.G.4), has the world's largest and most diverse portfolio of vaccines. Despite new commitments of $4.3 billion from Group of Seven nations in February 2021, the ACT-Accelerator still faces a funding gap of over $20 billion for 2021.[97] If this shortfall is not met, it would delay vaccine access for low- and lower-middle-income countries—resulting in a protracted pandemic with severe economic consequences, not just for these countries but for the global community. More support is also needed for tests, treatments and health systems.

5.3 United Nations system support for harnessing STI for resilience

UNDRR leads the coordination of STI actions for disaster risk reduction. It supports countries in the implementation of the Sendai Framework for Disaster Risk Reduction. Its Scientific and Technical Advisory Group (STAG) provides technical support and facilitates the engagement of scientists, researchers and experts. UNDRR is an active member of IATT and

works closely with the Regional Commissions and other United Nations entities active in STI for disaster risk reduction.

IATT and TFM partners undertake a wide range of activities to mobilize STI for resilience. The United Nations Office for Outer Space Affairs promotes satellite technologies and applications, including for disaster management, telemedicine, precision farming, waste management, efficient transport, agriculture and supply chains, climate change mitigation and adaptation. The WIPO public-private Re:Search consortium addresses neglected tropical diseases, malaria and tuberculosis, which affect over one billion people worldwide. The International Atomic Energy Agency and FAO promote nuclear techniques to improve the resilience of crop varieties to climate change and ensure sustainable food production. They also build capacity for small island developing States on technologies for measuring sea water intrusion and salinity and for the use of crop mutation breeding techniques. ITU resilience-building ICT activities include the joint Policy and Regulation Initiative for Digital Africa (with the African Union and the European Union); [98] guidelines for national emergency telecommunication plans; and reporting on technologies such as AI, IoT, big data, robotics and drones, and their use in disaster risk reduction and management.[99] UN-Habitat and others have identified high-impact technologies for resilient homes and infrastructures and promoted the ethical and transparent uses of AI and big data solutions to improve sanitary and disaster risks management.

Box III.G.4
World Health Organization Access to COVID-19 Tools Accelerator and COVAX.

The Access to COVID-19 Tools Accelerator (ACT-Accelerator) is the only global solution that aims for equitable access to COVID-19 tests, treatments and vaccines. It uses vaccine risk pooling; provides an end-to-end solution across tests, treatments, and vaccines; and focuses on equitable access for all participants.

The ACT-Accelerator works through partnerships with lead agencies, including the Coalition for Epidemic Preparedness Innovations (CEPI), Gavi The Vaccine Alliance, the Global Fund, the Foundation for Innovative New Diagnostics, Unitaid, Wellcome Trust, the World Bank, the World Health Organization (WHO), UNICEF, and the Bill & Melinda Gates Foundation. Its integrated approach to catalyse research and development (e.g., by funding for vaccines, tests and therapeutics), scale up access capacities, and pool procurement is already benefiting people around the world.

Between April 2020 and February 2021, the ACT-Accelerator has transformed the approach to fighting COVID-19 on a global scale: vaccines are rolling out worldwide; low-cost, high-performing antigen rapid diagnostic tests can detect transmission anywhere; affordable therapy for severe disease can save lives in any setting; and health systems are being prepared for the roll-out of tools.

In January 2021, the **Diagnostics pillar** announced that technology transfer, scale up and automation of manufacturing capacity enabled over 250 million high-quality tests to be made available for low- and middle-income-countries, effectively halving the price of tests.

A total of 191 countries have signed up to the **COVAX** Facility to benefit from pooled procurement of vaccines. COVAX has secured hundreds of millions of doses of three promising candidates, including at least 200 million doses for low-income countries. On 24 February 2021, Ghana became the first country outside of India—where the licensed vaccine doses are produced—to receive their vaccine allocation as a participant of the COVAX Facility. By the end of 2021, COVAX aims to secure and deliver at least 2 billion doses of COVID-19 vaccines in what will be the largest global health-care-related supply chain operation in history.

Source: WHO.

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Data, monitoring and follow-up

Chapter IV

Data, monitoring and follow-up

1. Key messages and recommendations

National statistical offices are responding to the COVID-19 pandemic, but many need assistance in filling major existing data gaps. Timely, quality, open, disaggregated and geospatially enabled data and statistics are needed to understand, manage and mitigate the human, social and economic effects of the pandemic and make progress towards achieving the Sustainable Development Goals (SDGs).

- *Governments need to view data as a strategic asset in preparing for future risks and disasters and for achieving sustainable development;*
- *The global data community should accelerate action to implement the Cape Town Global Action Plan for Sustainable Development Data (CTGAP) and the Dubai Declaration to finance the development of more timely, high-quality, disaggregated, geospatially enabled data that is relevant, well-documented, interoperable and open by default while respecting the right to privacy;*
- *Supporting global alliances, such as the Bern Network on Financing Data for Development, can foster innovative funding mechanisms that help to address the main challenges for better financing for data and statistics. These include the need to pool donor resources, align international initiatives with national priorities, and increase domestic financing;*
- *National and international efforts are needed to harmonize company sustainability reporting and increase data availability on private companies' contributions to the SDGs. Governments can use the United Nations intergovernmental platforms, particularly the Financing for Development process, to drive convergence in sustainable reporting metrics that are linked to the global Goals.*

The COVID-19 pandemic has exacerbated global data inequalities. Global efforts should concentrate on the national statistical offices most in need. While many high-income countries were able to conduct operations remotely and resort to new partnerships to bridge data gaps, statistical operations in countries with the least resources are facing the greatest challenges.

- *Low- and lower-income countries need a step-change in financial support, equipment and infrastructure, and technical assistance to strengthen capacities of national statistical offices (NSOs) and to fill data gaps;*
- *Investments in civil registration and vital statistics (CRVS) and geospatial information sources must be a priority to prepare for future disasters and make progress on the SDGs.*

Open data has played an important role in the global response to the COVID-19 pandemic. Updated data governance frameworks are needed to harness their potential. This includes resolving questions of data quality, timeliness, completeness, availability and access, as well as privacy and data security concerns.

- *The international community should set standards; NSOs, together with international support, should update governance frameworks to realize the opportunities of open data for the public good.*

This chapter discusses the impact of COVID-19 on statistical systems. It then highlights the role of CRVS systems and geospatial information systems to combat the pandemic and prepare for future disasters. It also looks at new sources of data and evolving national statistical systems (NSSs). Finally, it addresses funding for data and highlights innovative funding mechanisms for the data needed to fulfil the 2030 Agenda for Sustainable Development.

2. Progress in strengthening data frameworks, measurements and data collection

2.1 The impact of COVID-19 on national statistical systems

The COVID-19 pandemic has caused serious disruptions to the operational activities of national statistical systems, particularly national statistical offices, and has hampered their ability to obtain high-quality, timely and reliable data. Without access to crucial data, Governments cannot respond effectively to the health, economic and social impacts of the COVID-19 pandemic. A recent series of global online surveys among NSOs conducted by the World Bank and the United Nations Statistics Division (UNSD), in coordination with the five United Nations Regional Commissions, reveals the many impacts of the pandemic on NSOs (box IV.1). The surveys found that the pandemic has impacted the operations of the vast majority of NSOs, through office closures, telework and the suspension of face-to-face interviews. In the last year, 65 per cent of NSO headquarters were partially or fully closed, 90 per cent had staff working from home, and 96 per cent stopped face-to-face data collection. This has affected the ability of NSOs to produce short-term statistics and conduct population censuses. At the same time, a large number of NSOs have adapted their production systems to ensure continuity of operations by enabling their staff to work from home, switching from face-to-face interviews to telephone or web-based interviews, establishing new partnerships, and testing new methodologies and tools for data production, processing and dissemination.

The COVID-19 pandemic is exacerbating global data inequalities: statistical agencies in countries with the least resources are facing the greatest challenges. Statistical operations have been hardest hit in low- and lower-middle-income countries, where inadequate information and communications technology (ICT) equipment and infrastructure constrain the ability to conduct operations remotely. To fully resume statistical operations, many NSOs had to develop new data collection protocols and resort to new partnerships to bridge existing data gaps during the COVID-19 pandemic. For example, over half of NSOs have written new fieldwork protocols to mitigate the risks of COVID-19 among respondents and enumerators, including procedures and guidelines for travelling, contacting respondents, conducting interviews, or practicing social distancing. NSOs also established new partnerships, networking arrangements and alliances with national and international public entities to access new data sources, develop and implement new methods for data production, and improve access to and use of digital technology. However, new partnerships to access new data sources are more common among high-income countries compared to low- and lower-middle-income countries, reinforcing data inequalities across countries.

Many NSOs are in need of technical assistance and financial and ICT support to face the challenges generated by the pandemic. Globally, 6 in 10 agencies reported needing additional support to face the challenges associated with the COVID-19 pandemic, with NSOs in sub-Saharan Africa and Latin America and the Caribbean in particular expressing the need for such additional support. Whereas few high-income countries expressed the need for any kind of support, two thirds or more of upper-middle-income countries reported that they required technical assistance, training and financial support. For low- and lower-middle-income countries, most voiced a stronger need for every type of support. Financial support, equipment and infrastructure support, and technical assistance were the most needed types of support in countries in this income group.

Box IV.1
Survey of national statistical offices during COVID-19

The World Bank and the United Nations Statistics Division (UNSD), in coordination with the five United Nations Regional Commissions, are conducting a global online survey to assess the impact of the coronavirus crisis on national statistical offices (NSOs), and to identify needs for financial and technical support. Three rounds of the survey have been conducted so far. The first round in May 2020 focused on shedding light on office closures and the disruptions to data collection as a consequence of the pandemic. The second round, rolled out in July 2020, looked at the extent to which restrictions and disruptions had receded or become more widespread. The third round, carried out in October 2020, focused on how NSOs have adapted to the new reality by implementing new surveys, developing new protocols for face-to-face data collection, and by building new partnerships.[a] (See box IV.2)

Population censuses in times of COVID-19

The United Nations Population Fund (UNFPA) has recently launched the COVID-19 Census Tracker Dashboard to provide real-time monitoring of the impact of COVID-19 on population censuses—a critical effort given the important role of censuses in the monitoring and evaluation of Sustainable Development Goals. The dashboard is updated continuously, based on information received through UNFPA country offices. Tracking these national adjustments to census schedules is crucial for updating global support plans for censuses. The dashboard shows countries that have confirmed census delays, possible delays, disruptions to activities, and identifies those monitoring the situation.

Source: UN DESA and World Bank.

a UN DESA and World Bank, "Survey of National Statistical Offices (NSOs) during COVID-19". Summary available at https://www.worldbank.org/en/research/brief/survey-of-national-statistical-offices-nsos-during-covid-19.

Measuring the impact of the Covid-19 pandemic on the SDGs

Timely, quality, open and disaggregated data and statistics are needed to understand, manage and mitigate the human, social and economic effects of the pandemic and make progress towards achieving the SDGs. Disaggregated data and statistics are essential for designing short-term responses and actions to put countries back on track to achieve the SDGs. However, many of the data challenges encountered during the first five years of SDG implementation are severely limiting evidence-based and targeted COVID-19 responses. An analysis of the indicators in the Global SDG Indicators Database reveals that for 4 of the 17 goals, less than half of 194 countries have internationally comparable data. This lack of country-level data is particularly worrisome for Goal 5 (gender equality), where on average only about 4 in 10 countries have data

available. Country-level data deficits are also significant in areas related to sustainable production and consumption (Goal 12) and to climate action (Goal 13). Even countries with available data have only a small number of observations over time, making it difficult for policymakers to monitor progress and identify trends.[1]

The pandemic has highlighted the need for countries to invest and embrace civil registration and vital statistics systems as a core component of emergency responses. Emergencies such as COVID-19 severely affect the principles, operations and functions of CRVS systems at a time when they are most needed. Weak data infrastructures mean that, in some countries, the most vulnerable are likely not to be counted at all. For example, prior to COVID-19, one billion people worldwide were already unable to prove their legal identity;[2] one quarter of all children under the age of five had no form of birth registration;[3] and, in Africa, only one in three deaths are captured by official registration systems.[4] The spread of the coronavirus has worsened this situation, as countries are forced to close civil registration offices or suspend registration of vital events, and civil registration budgets are repurposed.[5] To help protect civil and human rights, particularly during emergencies, and ensure that government interventions are targeted to the most vulnerable and affected parts of populations, global efforts can help strengthen CRVS systems and ensure that all people have a legal identity (see box IV.3). This includes supporting innovative financing mechanisms, such as the Global Financing Facility, to strengthen the capacities required at different levels of the CRVS system to (i) register births and deaths; (ii) record causes of death; and (iii) digitize records. Technical assistance, capacity-building, and ICT equipment can help countries move from manual registration towards a more technologically advanced and efficient electronic system.[6] In this context, it is important to note that, under the United Nations Legal Identity Agenda, 17 United Nations agencies joined forces to ensure coherence between civil registration and legal identity initiatives within the United Nations system.[7]

Geospatial information provides a foundation for integrating key data sources to respond to multidimensional challenges, such as COVID-19 or achieving the SDGs; yet, many NSOs lack the necessary capabilities to access and analyse geospatial information. The COVID-19 pandemic and its economic and social fallout are urgent reminders of the need for "data which is high-quality, accessible, timely, reliable and disaggregated by income, sex, age, race, ethnicity, migration status, disability and geographic location and other characteristics relevant in the national contexts".[8] Yet, despite the need for data that are high frequency (e.g., weekly, daily or real time) as well as highly disaggregated (e.g., at the level of coordinates, address, building or parcel), only 16 per cent of NSOs reported the use of geospatial information sources, methods and technologies to produce integrated statistical and geospatial information to track COVID-19 cases and hotspots. Since geospatial information has been an integral part of many national public health responses to the pandemic, capacity-building efforts should strengthen NSO capabilities to access geospatial information sources and to improve access to methods and tools for the analysis of geospatial information.[9]

Box IV.2
Innovative household survey data collection approaches and implications for long-term investments in statistical infrastructure

The COVID-19 pandemic has expedited the adoption of innovative approaches to respond to increased data needs in the context of COVID-19. For instance, 96 per cent of NSOs partially or fully stopped face-to-face data collection at the height of the COVID-19 pandemic and many were quick to adopt alternative data sources and modes of data collection to meet the pressing data demands that emerged during the pandemic.[a] For example, as face-to-face interviews were not possible, 175 countries have resorted to telephone or web surveys to measure the impact of COVID-19 on households and individuals.[b]

However, those with a more agile and resilient data and statistical system were better able to adapt and respond to the challenges. For instance, out of the 175 countries that have carried out or planned surveys through telephone interviewing, only 34 per cent could rely on a recent survey or census to obtain respondents' contact information, while the remaining two thirds had to resort to random digital dialling or other non-probability sample designs.[c] To facilitate adoption of innovative approaches—such as telephone and web or mixed-mode data collection at scale—empirical studies can help to identify and validate emerging best practices, as well as target capacity-building.

Source: UN DESA.

a United Nations Statistics Division and the World Bank, "Survey on the Impact of COVID-19 on National Statistical Offices, Round 1, May 2020". Available at https://unstats.un.org/iswghs/task-forces/covid-19-and-household-surveys/national-responses-to-COVID-19/.

b Inter-Secretariat Working Group on Household Surveys, "Compilation of COVID-19 Impact Surveys, last assessed January 2021." Available at https://unstats.un.org/iswghs/task-forces/covid-19-and-household-surveys/COVID-19-impact-surveys/.

c Ibid.

BOX IV.3
The Global Civil Registration and Vital Statistics Scaling Up Investment Plan

In 2015, the World Bank and the World Health Organization, with input from several agencies and countries, developed a Global Civil Registration and Vital Statistics (CRVS) Scaling Up Investment Plan. The Plan covers CRVS activities over a 10-year period from 2015 to 2024 in 73 countries with the aim of achieving universal civil registration of births, deaths, marriages, and other vital events, including reporting cause of death, and providing access to legal proof of registration for all individuals by 2030. The projected total cost of the Plan is $3.82 billion (excluding China and India). The World Bank's costing estimate further noted that, after excluding estimated domestic sources of funds, the Plan would experience a funding gap of $1.99 billion over the 10-year implementation period (i.e., an average financing gap of $199 million per year for 73 countries).[a]

Source: UN DESA.

a World Bank and World Health Organization, "Global Civil Registration and Vital Statistics: A Scaling Up Investment Plan 2015-2024. Available at: https://openknowledge.worldbank.org/handle/10986/18962.

Changes to the global indicator framework

The global indicator framework provides a comprehensive framework of indicators and statistical data to monitor progress, inform policy and ensure accountability of all stakeholders. It was adopted by the United Nations General Assembly on 6 July 2017 and is contained in the Resolution adopted by the General Assembly on Work of the United Nations Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313).

As part of the 2020 comprehensive review, the Statistical Commission agreed to and adopted major changes and minor refinements put forward by the Inter-Agency and Expert Group on SDG Indicators. The changes encompass the replacement of 14 existing indicators, the revision of 8 indicators, the addition of 9 new indicators and deletion of 6 indicators where the methodological work had stalled or not produced the expected results. As a result of the 2020 comprehensive review, the indicator framework was significantly improved, filling critical gaps such as those under Goal 12 on sustainable consumption and production, and Goal 13 on combating climate change. All indicators now have an agreed methodology.

Box IV.4
Making every woman and girl count

Without investing in gender statistics, large data gaps will prevent successful monitoring of progress on the Sustainable Development Goals for women and girls. *Women Count,*[a] the United Nations Entity for Gender Equality and the Empowerment of Women (UN Women) strategy for change on gender data, is creating a radical shift in how gender statistics are planned, created, shared and used. Teaming up with national and international partners, *Women Count* has conducted rapid gender assessment surveys in more than 50 countries to ascertain the effect of COVID-19 on women and girls.[b]

Results overwhelmingly confirm that both women and men have increased their unpaid workloads during the pandemic, but women are still doing the lion's share. Women are also taking on a greater intensity of care-related tasks than men. Meanwhile, parents are getting more help from daughters than sons. Worryingly, more women than men are leaving the workforce, perhaps as a result of these increased workloads.[c] Furthermore, women's mental and emotional health are disproportionately affected.[d]

The surveys also found large data gaps when it comes to support for women and girls experiencing violence during the pandemic. While many people reported being aware of increases in domestic violence, most women did not know where to seek help for this. Towards assessing the impact of COVID-19 on violence against women (VAW) through more and better data, UN Women is conducting rapid gender assessments on VAW in at least 15 countries in 2021—not only to increase availability of reliable, cross-country and nationally representative data on VAW, but also to develop improved measures and guidelines on VAW data collection in the context of COVID-19.

Source: UN DESA.

a See https://data.unwomen.org/women-count

b See https://data.unwomen.org/

c UN WOMEN. "Whose time to care: Unpaid care and domestic work during COVID-19". Available at: https://data.unwomen.org/publications/whose-time-care-unpaid-care-and-domestic-work-during-covid-19

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Progress in the areas of health-related indicators

The COVID-19 pandemic has created an unprecedented demand for high-quality health data, yet many countries lack accessible and reliable data to inform global health-related SDG monitoring. The World Health Organization (WHO) estimates that, in most countries, recent primary data[10] were only available for between half and 80 per cent of the health-related SDGs. For almost one in five countries, however, over half of the indicators have no recent primary or direct underlying data. Thereby, low- and lower-middle-income countries are more likely to lack recent underlying data for comparable estimates, such as cause-of-death registration data.[11] Furthermore, the absence of statistics reflecting the lives of women and girls render many gender inequalities in health invisible. These gaps create serious problems for countries to adequately track the spread of infectious diseases such as COVID-19, while also continuing to track and respond to other health priorities. To support countries in addressing and closing health-related data gaps, in 2020, WHO launched the SCORE for Health Data Technical Package, which provides guidance on the best technical practices to strengthen health information systems using universally accepted tools and standards. SCORE facilitates tracking of progress towards the SDGs, monitors and measures the maturity of health information systems, supports interventions, and provides guidance on best practice measurement methods, standards and tools.[12]

To better support countries in achieving SDG 3 and the other health-related targets, a global action plan was launched in September 2019 by 12 multilateral organizations with significant roles in health, development and humanitarian work. The global action plan identifies "data and digital health" as one of seven accelerator themes and views digital technologies as an important tool in transforming the way health data are collected and used. The plan is intended to support countries in assessing gaps in data disaggregation capabilities, strengthening country capacity in the data cycle, and supporting collective and aligned investment plans for data and digital health.[13]

Update on changes to indicators for SDG 17

The Statistical Commission also agreed to establish a working group to further develop and refine the measurement of development support in line with the 2030 Agenda. The working group has the mandate to consider different components of development support in line with target 17.3 to "mobilize additional financial resources for developing countries from multiple sources" which go beyond traditional official development assistance (ODA).[14] The working group, which consists of 21 countries and several observers, has been meeting throughout 2020. It is working towards submitting an indicator proposal to the Commission in 2022.

2.2 Monitoring the private sector

High-level political support can help close data gaps to better assess the evolution of the economy and overcome remaining challenges for the achievement of the second phase of the Data Gaps Initiative. The COVID-19 pandemic posed significant challenges to the Group of Twenty (G-20) Data Gaps Initiative (DGI) 2020 work programme that have led to an extension of six months to December 2021. The DGI aims to address important data gaps

Box IV.5
Examples of changes to the global indicator framework: replacement of indicators under Goal 12 and Goal 13[a]

Existing indicator in the global indicator framework	*Proposed replacement indicator*
Goal 12. Ensure sustainable consumption and production patterns	
12.a.1 Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies	*12.a.1* Installed renewable energy-generating capacity in developing countries (in watts per capita) *(repeat of the proposed replacement for indicator 7.b.1)*
12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools	*12.b.1* Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability
Goal 13. Take urgent action to combat climate change and its impacts	
13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)	*13.2.1* Number of countries with nationally determined contributions, long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications *(repeated with a slight amendment in the proposed replacement for indicator 13.b.1)*
13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula	*13.3.1* Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment *(repeated in the refinement to be made to indicators 4.7.1 and 12.8.1)*
13.a.1 Mobilized amount of United States dollars per year between 2020 and 2025 accountable towards the $100 billion commitment	*13.a.1* Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the $100 billion commitment through to 2025
13.b.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities	*13.b.1* Number of least developed countries and small island developing States with nationally determined contributions long-term strategies, national adaptation plans, strategies as reported in adaptation communications and national communications *(repeat of the proposed replacement for indicator 13.2.1 above, with a slight amendment)*

Source: UN DESA.
a UN DESA Statistics Division, "Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators" (E/CN.3/2020/2).

in the financial sector that were revealed by the 2008 world financial and economic crisis. The second phase of the Initiative (DGI-2) commenced in 2015 and is focused on (i) monitoring risk in the financial sector; (ii) vulnerabilities, interconnections and spillovers; and (iii) data sharing and communication of official statistics. As DGI-2 is approaching its completion date in 2021, countries have advanced in closing data gaps and moved closer to the goal of implementing regular collection and dissemination of reliable and timely statistics for policy use. Remaining challenges for the timely achievement of all DGI-2 recommendations include the full implementation of international banking statistics; improved periodicity and timeliness of financial stability indicators; and the complete reporting of quarterly general government debt and operations. While progress has been made in data sharing, further efforts are needed to improve it within and across countries.

Continuing efforts are also being made to improve international debt statistics, in order to enhance the transparency of both external and domestic debt and reduce public debt vulnerabilities (see chapter III.E). Accurate and comprehensive debt data and strengthened transparency are critical for borrowers and creditors to take informed decisions on fiscal and debt policies—particularly when public budgets face strong pressures. The World Bank Group has been strengthening its Debtor Reporting System,[15] which captures World Bank borrowers' external public sector debt and private sector debt with a public sector guarantee, as well as other non-guaranteed external private sector debt. International Debt Statistics 2020 provided users for the first time with new data on the borrower composition of external debt obligations of low- and middle-income countries, with information disaggregated by public corporations and guarantees provided by Governments. International Debt Statistics 2021 provides detailed information on lending by creditor countries and multilateral institutions to low- and middle-income countries, in addition to the disaggregation of countries' external debt by type of creditor.[16] Nonetheless, further cooperation of all creditors and debtors is needed to fully disclose all public sector financial commitments, including those arising from state-owned enterprises and other contingent liabilities. Data quality should also be improved.

The COVID-19 pandemic has further exposed data gaps that have prevented real-time monitoring of remittance flows and migratory movements, including of stranded migrants and returning migrants. The World Bank, through the Global Knowledge Partnership on Migration and Development (KNOMAD), is launching an International Working Group on Improving Data on Remittances. The Working Group will

invite NSOs, central banks, the World Bank, and selected international organizations to recommend measures to improve data on remittances and international cooperation in the collection and dissemination of data.[17]

Increasing the data availability on the private sector's contribution to the SDGs is critical to allowing Governments to monitor national progress towards the Goals. Companies have a significant impact (positive and negative) on society and the environment through their operations and the products and services they produce. For example, the carbon emissions of a country depend on the carbon intensity of domestic companies. Similarly, a country cannot increase its water-use efficiency if domestic companies are not improving their practices in this area. Yet, information on company SDG impact is often not available, as most corporate sustainability reporting remains on a voluntary basis, with different companies using very different indicators. Chapter III.B presents concrete actions that Governments can take to address this issue, for instance, by imposing mandatory sustainability disclosures. Furthermore, international cooperation is needed to ensure a globally consistent approach. Governments can use the United Nations intergovernmental platforms, particularly the Financing for Development process, to drive convergence in sustainable reporting practices metrics that are linked to the global goals.

3. New sources of data and evolving national statistical systems

3.1 Opportunities and challenges in new sources of data for public policy

New data solutions for the public good

In combatting the spread of the COVID-19, public health authorities have combined official data with alternative sources, such as mobile phone or satellite data, to better understand the propagation of the virus and inform targeted emergency responses.

According to the survey of NSOs during COVID-19 by the World Bank and the UNSD, a majority of NSOs are increasingly relying on alternative data collection modes and data sources, including phone and online surveys, administrative data, remote sensing, and satellite imagery to address data needs by Governments. Alternate data has played an important role in tracking population movements and obtaining a fine-grained picture of the spread of COVID-19. For example, aggregated and anonymized telecom data helped the Government of Belgium understand human mobility trends in response to lockdown measures and estimate the risk of infection increases in a specific region.[18] Authorities in Nigeria have relied on a combination of available primary data collection, data from national bureaus of statistics, and satellite images to produce hyperlocal heat maps of people at highest risk for life-threatening complications of COVID-19.[19]

Growing data demands and the proliferation of new actors highlight the need for strong governance frameworks and the strengthening of official statistical systems. As the *Financing for Sustainable Development Report (FSDR) 2020* points out, the dramatic increase in data demands has led to a new and evolving data ecosystem that challenges the role of official statistical systems as the predominant producers of statistics and providers of information for policymaking. In this regard, the COVID-19 pandemic also underlines existing concerns around the role and responsibility of new actors, the reliability of new data sources, including ethical issues of data sensitivity and anonymity, representation of vulnerable groups, and considerations around civil rights and privacy—concerns that are particularly heightened for countries with limited statistical capacity and existing structural data deficits.[20] As countries seek to strengthen flows of quality data and statistics to inform pandemic response, support recovery and enhance future resilience, Governments need to view data as a strategic asset for development, and task and capacitate NSSs—in collaboration with other government entities and stakeholders from the broader data community—to actively use and develop this asset (see also *FSDR 2020).*

Box IV.6
Major advancement in ecosystem accounting

At its fifty-second session in March 2021, the United Nations Statistical Commission is expected to adopt the System of Environmental-Economic Accounting—Ecosystem Accounting (SEEA EA) as a statistical standard. SEEA EA is a spatially based, integrated statistical framework for organizing biophysical information about ecosystems, measuring ecosystem services, tracking changes in ecosystem extent and condition, valuing ecosystem services and assets, and linking this information to measures of economic and human activity. It was developed to respond to a range of policy demands and challenges with a focus on making visible the contributions of nature to the economy and people. The SEEA EA complements the measurement of the relationship between the environment and the economy described in the System of Environmental-Economic Accounting Central Framework.

Source: UN DESA. Available at: https://unstats.un.org/unsd/statcom/52nd-session/documents/decisions/Draft-Decisions-Final-5March2021.pdf

Box IV.7
Tracking the COVID-19 crisis with high-resolution transaction data

A research team of the Banco Bilbao Vizcaya Argentaria, S.A. (BBVA) used the universe of transactions mediated by the bank to build a daily expenditure measure to capture the economic dynamics in Spain during the current crisis.[a] The main dataset is built from 1.4 billion individual card transactions since 2019, from either the cards issued via the bank or the point-of-sale terminals it operates. The data showed little shift in expenditure prior to the national lockdown, but immediate, very large, and sustained expenditure reductions thereafter. Transaction metadata also allows for the study of variations in these reductions across geography, sectors and mode of sale (e.g., online/offline). The transaction data captures many salient patterns in how an economy reacts to shocks in real time, allowing businesses and private citizens to adjust their actions and policymakers to devise timely interventions based on evidence. Results from traditional surveys are often delayed and the sparsity of data points often do not allow additional analysis.

Source: UN DESA.

a Carvalho et al.,"Tracking the COVID-19 Crisis with High-Resolution Transaction Data". Available at https://cepr.org/active/publications/discussion_papers/dp.php?dpno=14642.

Opportunities and challenges of "open data for public good" initiatives for public policymaking

Open data has played an important role in the global response to the COVID-19 pandemic. Open data that is publicly accessible, available in multiple formats, free of charge, and unlimited in its use and distribution rights has helped governmental and non-governmental users (e.g., academics and journalists) contribute to our understanding of the pandemic and communicate risk to individuals and the public. For example, Johns Hopkins University's COVID-19 data dashboards synthesize publicly available data to track how the coronavirus is spreading across countries. In the Republic of Korea, private-sector software developers used government data to create mobile applications that inform users about the location of the newly infected and their recent movements.

While these open data–based solutions were invaluable tools for the general public to gain real-time insights into the ongoing public health crisis, their ad hoc and spontaneous emergence also underlined major challenges for an informative and reliable open data environment. These evolve around issues of data quality, timeliness, completeness and availability, as well as privacy and data security concerns arising from the use of granular data and the shortcomings in de-identification techniques. Furthermore, the development of sustainable and professional "data-literate" stakeholders who can both produce and use statistics for results-based management could help strengthen governance further.[21] NSOs can play a key role in addressing these challenges: as important stakeholders in the open data space, they are well placed to execute important control functions across the open data value chain, including quality control validation of open data, implementation of common standards and classifications, and assuming a stronger coordination role across an expanding constellation of data producers.

3.2 Data driven disaster risk preparedness

National statistical systems can play an important role in supporting the measurement of hazardous events and disasters, their impacts and associated risks. Disasters like the COVID-19 pandemic and their impacts on people, the economy and the environment have led to the adoption of global policy frameworks to reduce disaster risk and ensure sustainable development—most importantly, the Sendai Framework for Disaster Risk Reduction 2015-2030, the Paris Agreement on Climate Change, and the United Nations 2030 Agenda for Sustainable Development. However, disaster management and disaster risk reduction on the national level are usually the task of a specialized disaster management agency or ministry, with limited or no involvement of NSOs. The work of disaster risk management agencies can benefit from their data and expertise to effectively respond to disastrous events and contribute to long-term risk reduction. In 2018, the United Nations Economic and Social Commission for Asia and the Pacific issued the Disaster-related Statistics Framework,[23] designed for use by national agencies to produce high-quality, harmonized statistics for planning, analysis and reporting on national and international goals for disaster risk reduction. To improve coordination between agencies and ministries, in 2020, the United Nations Economic Commission for Europe (UNECE) issued several recommendations and identified practical steps for NSOs to increase their engagement in the measurement of hazardous events and disasters.[24] Furthermore, UNECE has launched a platform on COVID-19 and official statistics, which gathers examples on how NSOs are engaging in the COVID-19 response.[25] The combined efforts of the two regions were recognized and supported globally by the Statistical Commission with a decision to establish an Inter-Agency and Expert Group on Disaster-related Statistics that will begin operations in 2021.

4. Funding for data for sustainable development

4.1 Funding needs for statistical systems

The pandemic highlights the urgent need for increased investment in national statistical systems. National data collection programmes and the production of core economic statistics have long been underfunded by national Governments as well as the international development community.[26] Funding to statistics and data from external sources has been stagnant since 2014. Yet demand for data has never been higher. According to estimates, the cost for support for data and statistical systems for the full implementation of the Cape Town Global Action Plan through 2030 is approximately $5.6 billion per year for 75 low- and lower-middle-income countries and 69 upper-middle-income countries. An estimated $4.3 billion (77 per cent) of the total could be covered by domestic resources, leaving a financing gap of $1.3 billion (23 per cent) per year to be filled from external sources. For 2019, total ODA for data and statistics is estimated at $672 million, about half of the amount needed.[27] At the same time, projections from the Organization for Economic Cooperation and Development show that the world risks seeing a significant reduction in the financing resources available to developing economies from donors, due to the global economic recession and declining public revenue. Domestically, many NSOs may also expect

Box IV.8
The Open Data for Resilience Initiative[22]

The Open Data for Resilience Initiative (OpenDRI) brings the philosophies and practices of the global open data movement to the challenges of reducing vulnerability and building resilience to natural hazards and the impacts of climate change across the globe. In a time of economic hardship and unequal globalization, few Governments possess the resources to collate existing data, collect new data, and feed them all into an ecosystem of analysts who can make sense of them so that practitioners can design and implement projects that get ahead of the disaster cycle. This work must be a collective effort, engaging Governments, civil society, industry and individuals.

The OpenDRI is a growing partnership around this core data problem. It offers Governments and their partners a process for cataloguing their existing stock of data without giving up control of those data to third parties. It offers an inexpensive method of engaging at-risk communities in the process of mapping and curating data about their changing exposure to natural hazards. And it offers a guide to building an ecosystem of entrepreneurs, researchers, and international institutions around data that a nation manages for itself.

Source: UN DESA.

significant budget cuts as Governments reallocate financial resources to address urgent needs posed by COVID-19.[28] This is also affecting countries that are undertaking census exercises in 2021. Twenty-six per cent of low- and lower-middle-income countries saw their financial resources for the census being reallocated to other government priorities,[29] underlining the risk of a potential funding gap for censuses in the future.

Response of the global data community to COVID-19

At the virtual United Nations World Data Forum in October 2020, participants representing the global data ecosystem of different data user and producer communities expressed their support for the ongoing evidence-based response to the Covid-19 pandemic. Participants pointed out that necessary data and statistics were frequently lacking, despite being a critical part of getting back on track to realize the 2030 Agenda for Sustainable Development. In its response to COVID-19, the global statistics community called for accelerated action to implement the Cape Town Global Action Plan for Sustainable Development Data (CTGAP) and the Dubai Declaration to finance the development of more timely, high-quality, disaggregated, geospatially enabled data, that are relevant, well-documented, interoperable and open by default while respecting the right to privacy. Furthermore, two reports by the Committee for the Coordination of Statistical Activities (CCSA) published in May and September 2020 provide a snapshot of some of the latest statistical information on how COVID-19 is affecting different aspects of public and private life.[30]

The Cape Town Global Action Plan stresses the need for a country-led framework for planning and implementing statistical capacity-building to achieve the 2030 Agenda. As laid out in *FSDR 2020,* the CTGAP identifies six strategic areas: (i) strengthening national statistical systems and improving coordination; (ii) modernizing statistical systems and embracing new technologies and data sources; (iii) strengthening basic statistical activities covering statistical, administrative and other data sources; (iv) improving dissemination and use of data; (v) developing and strengthening multi-stakeholder partnerships for sustainable development data; and (vi) mobilizing resources and coordinating efforts for statistical capacity-building. However, while the Global Action Plan has been widely agreed to and recognized, financial backing is still missing.

4.2 Innovative funding mechanism for data needs for the 2030 Agenda for Sustainable Development

Sectoral data financing can help increase overall financing for development data, but also risks undermining broader statistical capacity. Sectoral data financing has helped to attract new and highly motivated donors that are interested in specific sectors. This has increased the pool of donors for statistics and helped to draw attention to specific data domains, such as gender-disaggregated, health or macroeconomic data. For example, the Bill & Melinda Gates Foundation is now providing a higher share of total support for development data than all Development Assistance Committee donors.[31] While this has helped countries focus their political attention on specific data domains or data gaps, this is often driven by donor-specific interests and has led to uneven progress across different data sectors and distracted NSSs from building a strong foundation. Furthermore, it risks enhancing competition among donors for the time and attention of national statistical system managers.[32]

The Bern Network on Financing Data for Development seeks to address main challenges for better financing for data and statistics. These fall into three areas: (i) the fragmented and patchwork nature of support to data and statistics; (ii) the squeeze on external and domestic budgets overall; and (iii) the lack of information-sharing and matching mechanisms between donors and countries. Most recently, in the lead up to the 2021 United Nations World Data Forum, to be hosted by the Government of Switzerland, a multi-stakeholder community of data and statistics-focused development practitioners, technical experts, and advocates formed the Bern Network on Financing Data for Development. The Network is currently developing a Clearing House on Financing Development Data that will help with overcoming these challenges. The online platform will provide information and services to match the supply and demand of financing for data, and facilitate coordination among donors and partner countries. To succeed, greater international cooperation, greater alignment with national priorities and greater commitment to data is required.

Furthermore, the World Bank is presently establishing a global umbrella trust fund for data, called the Global Data Facility. The Global Data Facility is created in response to a call by the Statistical Commission's High-level Group for Partnership, Coordination and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development, which emphasized the need for an innovative funding mechanism to strengthen the capacity of national data and statistical systems and help overcome data deprivation across regions. It follows a three-pronged approach: (i) pooling donor resources; (ii) leveraging World Bank International Development Association or International Bank for Reconstruction and Development resources; and (iii) increasing domestic financing. This model is the result of key lessons learned from decades of previous investments in data and statistics and has the potential to enable a step-change in more sustainable financing for data and statistics. This Facility will serve as a mechanism to scale up meaningful support for data across key sectors and statistical systems across countries, while ensuring a country-led, flexible, and adaptive approach to strengthen the capacity of national data and statistical systems.

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