

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT



Crisis-resilient development finance

THE LEAST DEVELOPED COUNTRIES REPORT

2023



**United
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Geneva, 2023

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Explanatory notes

The term “dollars” (\$) refers to United States dollars unless otherwise specified.

The term “billion” signifies 1,000 million.

Annual rates of growth and change refer to compound rates.

Exports are valued “free on board” and imports, on a “cost, insurance, freight” basis, unless otherwise specified.

Use of a dash (–) between dates representing years, e.g. 1981–1990, signifies the full period involved, including the initial and final years. A slash (/) between two years, e.g. 1991/92, signifies a fiscal or crop year.

Throughout the report, the term “least developed country” refers to a country included in the United Nations list of least developed countries (see country classifications below).

The terms “country” and “economy”, as appropriate, also refer to territories or areas.

Tables

Two dots (..) indicate that the data are not available or are not separately reported.

One dot (.) indicates that the data are not applicable.

A dash (–) indicates that the amount is nil or negligible.

Percentages do not necessarily add up to totals, because of rounding.

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Classifications

► LEAST DEVELOPED COUNTRIES

Unless otherwise specified, in this report the least developed countries are classified according to a combination of geographical and structural criteria. The small island least developed countries that are geographically in Africa or Asia are thus grouped with Pacific islands to form the island least developed countries group, given their structural similarities. Haiti and Madagascar, which are regarded as large island States, are grouped together with the African least developed countries.

The resulting groups are as follows:

African least developed countries and Haiti:

Angola, Benin, Burkina Faso, Burundi, the Central African Republic, Chad, the Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, the Niger, Rwanda, Senegal, Sierra Leone, Somalia, South Sudan, the Sudan, Togo, Uganda, the United Republic of Tanzania, Zambia.

Asian least developed countries:

Afghanistan, Bangladesh, Bhutan, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal, Yemen.

Island least developed countries:

The Comoros, Kiribati, Sao Tome and Principe, Solomon Islands, Timor-Leste, Tuvalu.

► OTHER GROUPS OF COUNTRIES AND TERRITORIES

Developed countries and territories:

Albania, Andorra, Australia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Montenegro, Kingdom of the Netherlands, New Zealand, North Macedonia, Norway, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom of Great Britain and Northern Ireland, United States of America, Holy See, Bermuda, Gibraltar, Greenland.

Other developing countries:

For analytical purposes and statistical convenience throughout this report, including in the overview, main text, annexes, references, tables, figures, boxes, maps and infographics, the use of "other developing countries", abbreviated "ODCs", refers to countries, territories and areas that are classified as developing economies by UNCTAD (see: <https://unctadstat.unctad.org/EN/Classifications.html>) and are not least developed countries.

► PRODUCT CLASSIFICATION

Goods: The figures provided below are the codes of the Standard International Trade Classification (SITC), revision 3.

Primary commodities: Sections 0, 1, 2, 3, 4, division 68 and groups 667 and 971.

Agriculture and food: Sections 0, 1, 2, and 4, excluding divisions 27 and 28.

Minerals: Divisions 27, 28, 68, and groups 667 and 971.

Fuels: Section 3.

Manufactures: Sections 5, 6 (excluding division 68 and group 667), 7 and 8. Section 9 (commodities and transactions not classified elsewhere in the SITC) has been included only in the total of exports of goods and services, but not in the goods classification above, except for group 971 (gold, non-monetary – excluding gold ores and concentrates), which has been included in minerals.

Services: Total services cover the following main categories: transport, travel, communications, construction, insurance, financial services, computer and information services, royalties and licence fees, other business services, personal, cultural, recreational and government services.

What are the least developed countries?

► 46 countries

As of 2021, 46 countries are designated by the United Nations as least developed countries (LDCs). These are: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, the Central African Republic, Chad, the Comoros, the Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, the Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, the Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, the Sudan, Timor-Leste, Togo, Tuvalu, Uganda, the United Republic of Tanzania, Yemen and Zambia.

► Status reviewed every 3 years

The list of LDCs is reviewed every three years by the Committee for Development Policy (CDP), a group of independent experts that reports to the Economic and Social Council (ECOSOC) of the United Nations. Following the review, the CDP may recommend, in its report to ECOSOC, countries for addition to the list or graduation of existing LDCs from LDC status. Between 2017 and 2020, the CDP undertook a comprehensive review of the LDC criteria, which were further refined in 2023. The resulting revised criteria are scheduled to be first applied at the triennial review scheduled to take place in March 2024.

The following criteria and thresholds for inclusion in the LDC category or for graduation from the category will be applied in the 2024 review:

- (a) An **income criterion**, based on a three-year average estimate of the gross national income (GNI) per capita in United States dollars, using conversion factors based on the World Bank Atlas methodology. The threshold for inclusion and graduation is based on the thresholds of the World Bank's low-income category. For the 2024 triennial review, the threshold for *inclusion* is set at \$1,088 or less; the threshold for *graduation* is set at \$1,306 or more.
- (b) A **human assets index (HAI)**, comprising a health sub-index and an education sub-index. The health sub-index has three indicators: (i) under-five mortality rate; (ii) maternal mortality ratio; and (iii) prevalence of stunting. The education sub-index has three indicators: (i) lower secondary school completion rate; (ii) adult literacy rate; and (iii) gender parity index for lower secondary school completion. All six indicators are converted into indices using established methodologies with an equal weight. The thresholds for inclusion and graduation have been set at 60 or below and 66 or above, respectively, for the 2024 triennial review.
- (c) An **economic and environmental vulnerability index (EVI)**, consisting of two sub-indices: economic vulnerability and environmental vulnerability. The economic vulnerability sub-index has four indicators: (i) share of agriculture, forestry and fishing in gross domestic product; (ii) remoteness and landlockedness; (iii) merchandise export concentration; and (iv) instability of exports of goods and services. The environmental vulnerability sub-index has four indicators: (i) share of population in low elevated coastal zones; (ii) share of the population living in drylands; (iii) instability of agricultural production; and (iv) victims of disasters. All eight indicators are converted into indices using established methodologies with an equal weight. The thresholds for inclusion and graduation have been set at 36 or above and 32 or below, respectively, for the 2024 triennial review.

At each triennial review, all countries in developing regions are reviewed against the criteria. If a non-LDC meets the established inclusion thresholds for all three criteria in a single review, it can become eligible for inclusion. Inclusion requires the consent of the country concerned, and becomes effective immediately after the General Assembly takes note of the Committee's recommendation. No recommendations were made for inclusion at the CDP's 2021 triennial review.

To graduate from the LDC category, a country must meet the established graduation thresholds of at least two of the criteria for two consecutive triennial reviews. Countries that are highly vulnerable, or have very low human assets, are eligible for graduation only if they meet the other two criteria by a sufficiently high margin. As an exception, a country whose per capita income is sustainably above the “income-only” graduation threshold, set at three times the graduation threshold (\$3,918 for the 2024 triennial review), becomes eligible for graduation, even if it fails to meet the other two criteria.

► LDC graduation

Six countries have graduated from least developed country status:

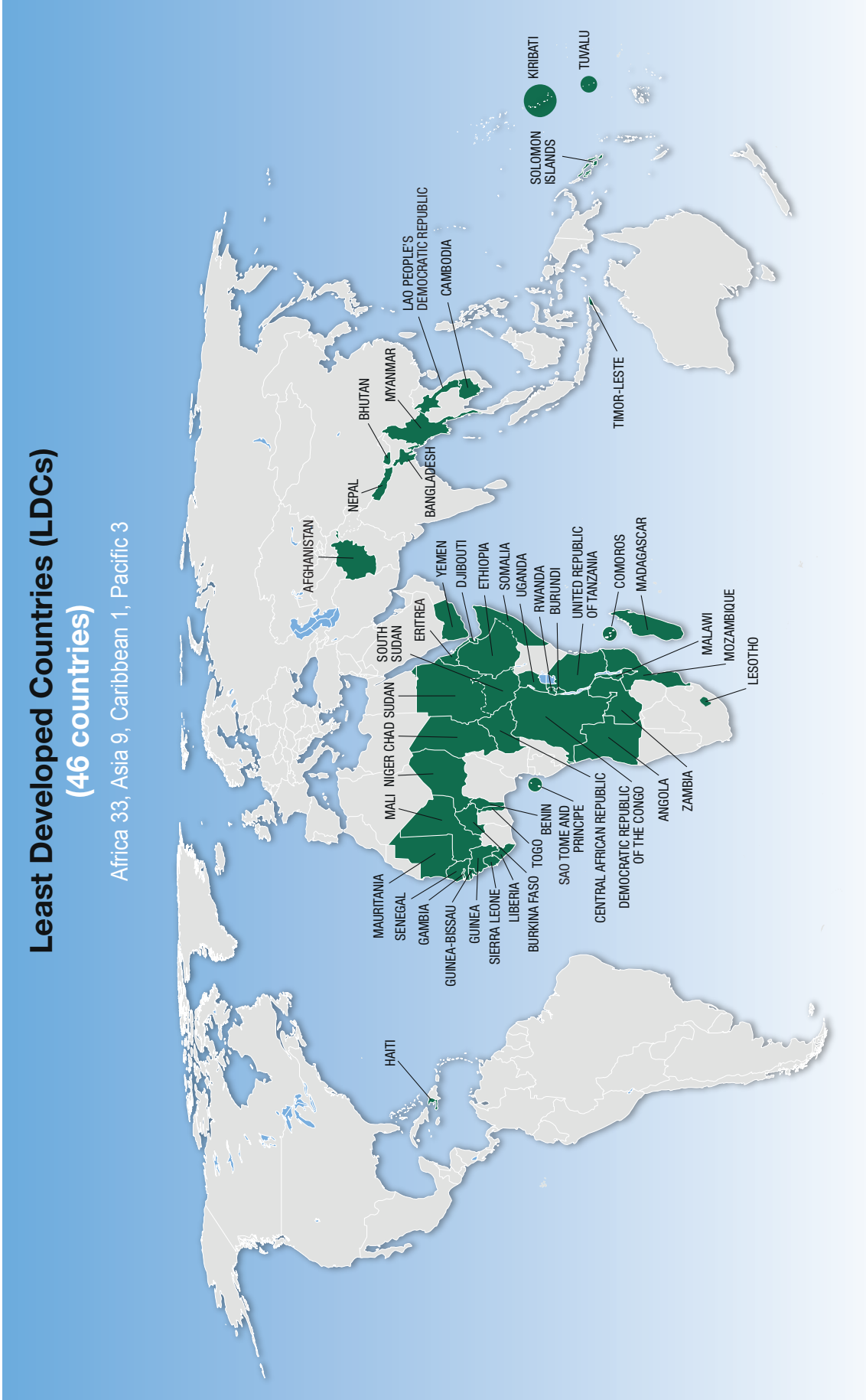
- **Botswana** in December 1994
- **Cabo Verde** in December 2007
- **Maldives** in January 2011
- **Samoa** in January 2014
- **Equatorial Guinea** in June 2017
- **Vanuatu** in December 2020

The CDP has recommended graduation from the LDC category for several countries in the past. Among them **Bhutan** is scheduled for graduation in 2023, while **Sao Tome and Principe** and **Solomon Islands** are slated for graduation in 2024. **Bangladesh, the Lao People’s Democratic Republic** and **Nepal** are scheduled for graduation in 2026.

In the 2021 review of the list of LDCs, the following countries were found to have met the graduation thresholds for the first time: **Cambodia, the Comoros, Djibouti, Senegal** and **Zambia**. Djibouti met the “income-only” criterion; the Comoros, Senegal and Zambia met the graduation thresholds for two of the three criteria, namely income and human assets; and Cambodia met all three graduation criteria (income, human assets, and economic and environmental vulnerability). These countries are scheduled to be reviewed again in 2024 and, if they meet the criteria for a second time, could be recommended for graduation.

Kiribati and **Tuvalu** were recommended for graduation in 2018 and 2012, respectively, but ECOSOC deferred a decision on their graduation. In resolution 2021/11, ECOSOC, recalling its 2018 decision to defer the consideration of the graduation of Kiribati and Tuvalu to no later than 2021, recognized the unprecedented socioeconomic impacts of the COVID-19 global pandemic, and decided to defer the consideration of their graduation until 2024.

During the triennial review of 2021, the CDP decided to defer its decision on the cases of **Myanmar** and **Timor-Leste** to the 2024 review.



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

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

October 2023

Abbreviations and acronyms

AfDB	African Development Bank	L&D	loss and damage
CO₂	carbon dioxide	LDC	least developed country
COP	Conference of the Parties (to the United Nations Framework Convention on Climate Change – UNFCCC)	LDF	Loss and Damage Fund
COVID-19	coronavirus disease 2019	MDB	multilateral development bank
DAC	Development Assistance Committee	MDRI	Multilateral Debt Relief Initiative
DESA	United Nations Department of Economic and Social Affairs	NDC	nationally determined contribution
DPoA	Doha Programme of Action for the Least Developed Countries for the Decade 2022–2031	ND-GAIN	Notre Dame’s <i>Global Adaptation Initiative</i>
DSSI	Debt Service Suspension Initiative	NGFS	Network of Central Banks and Supervisors for Greening the Financial System
ECB	European Central Bank	NGO	non-governmental organization
FDI	foreign direct investment	ODA	official development assistance
GDP	gross domestic product	ODCs	other developing countries
GEF	Global Environment Facility	OECD	Organisation for Economic Co-operation and Development
GHG	greenhouse gas	PPG	public and publicly guaranteed (debt)
GNI	gross national income	RDB	regional development bank
HIPC	Heavily Indebted Poor Countries (Initiative)	SDRs	Special Drawing Rights
IDA	International Development Association	SIDS	small island developing States
IFA	international financial architecture	UNCDF	United Nations Capital Development Fund
IFFs	illicit financial flows	UNFCCC	United Nations Framework Convention on Climate Change
IFI	International financial institution	UNCTAD	United Nations Conference on Trade and Development
IMF	International Monetary Fund	WAEMU	West African Economic and Monetary Union

Foreword

In a world characterized by abundant wealth and technological advancements, the least developed countries (LDCs) continue to face unique financial challenges that hinder their quest for sustainable development. Disparities in the international financial structure, unfulfilled promises on climate finance, and the oft-neglected voices of LDCs in financial decision-making underscore a systemic dissonance. *The Least Developed Countries Report 2023* delves deep into the intricacies of these challenges, and, more importantly, sheds light on potential solutions. At its core, the report is a clarion call for inclusivity, urging for reforms that not only acknowledge the specific needs of LDCs, but also proactively respond to them. The principle of leaving no one behind is not just a moral imperative; it is also a pragmatic one. Indeed, the success of the 2030 Agenda for Sustainable Development is inextricably linked to the progress of these nations.

Time is running out for LDCs to achieve the Sustainable Development Goals as they are confronted with enormous financial gaps. Multiple crises have caused serious development setbacks, rising interest rates, growing debt burdens and declining foreign direct investment flows into LDCs (down 16 per cent in 2022), exacerbating their already alarming conditions. According to a recent UNCTAD Sustainable Development Goal transitions costing exercise, for example, LDCs face the highest per capita cost of meeting their Goals relative to the base of their economies. Furthermore, they have narrow fiscal space, and therefore their access to external finance is particularly critical for their development. Without the requisite policy space, LDCs will be forced into making impossible choices (pay their debts, feed their people, or build climate-resilient infrastructure) where all options will necessitate some form of sacrifice.

The existing international financial architecture does not offer appropriate, tailored or targeted financial mechanisms for these countries. The problem is systemic and so must be the solution. The promises or commitments made with respect to international climate finance and official development assistance (ODA) targets have largely failed to materialize.

In recent debates, the LDCs have voiced a vital interest in reforming the international financial architecture. However, the main decision-making processes concerning the institutions, rules and procedures that govern international finance generally do not sufficiently take into account the interests of the LDCs, as these countries have limited economic weight and political influence in these processes. The 46 LDCs combined account for only 4 per cent of the voting rights of the World Bank. Similarly, due to their small quotas of the International Monetary Fund, LDCs received less than 2.5 per cent of the general allocation of special drawing rights (SDRs) that was implemented in 2021 in response to the global economic crisis.

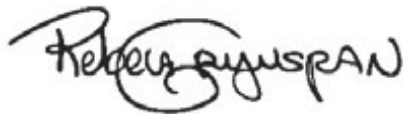
The Least Developed Countries Report 2023 draws attention to these issues and calls for actions to resolve them. It acknowledges the important role that domestic agents can play in expanding the mobilization of national resources, including through better governance of natural resources, such as minerals critical to the energy transition, of which some LDCs have significant reserves.

The unique contribution of this report is its specific analysis of the role that LDCs' central banks could play in channelling financial flows to green structural transformation in these countries. It suggests that their central bank tools could be best deployed to this end if accompanied by other fiscal, industrial and social policies that ensure that the target of reducing emissions does not undermine social and developmental targets.

The international financial system has the capacity to respond to the challenge of providing development and climate finance to LDCs, provided it adequately takes account of the specific needs and conditions of these countries. LDC leadership and political will can also contribute to making this possible. This report calls on the international community to make available significantly higher volumes of grants and low-cost loans to LDCs under highly concessional conditions. To that end, bilateral donors need to meet their long-standing commitments, by increasing their ODA to the levels targeted in the 2030 Agenda, the Doha Programme of Action and the United Nations Framework Convention on Climate Change. Multilateral financial institutions can considerably increase their financing to LDCs by raising significantly higher amounts of funds in international capital markets at sustainable and long-term interest rates, and by reforming the rules of distribution of the SDRs. There also needs to be more transparency in terms of the amounts, additionality and mechanisms of climate finance. Here again, the grant component is critical to prevent LDCs from falling into a climate debt trap. The upcoming Loss and Damage Fund could be a game-changer for LDCs if it responds to their specific

needs and conditions. Additionally, a lasting solution to the debt crisis is a precondition for rebuilding fiscal space and regaining economic momentum in LDCs. Such a solution includes improved debt management and debt contracts, as well as establishing a debt workout mechanism.

If reforms of the international financial architecture fail to materialize, or if they do not adequately address the specific conditions of LDCs, these countries are unlikely to reach the Sustainable Development Goals. UNCTAD argues that this would jeopardize the 2030 Agenda because the LDCs are the litmus test for the success or failure of those Goals. The international community is called upon to take effective actions to finance the sustainable development of LDCs, thereby respecting the 2030 Agenda's plea to leave no one behind.

A handwritten signature in black ink, reading "Rebeca Grynspan". The signature is fluid and cursive, with the first name "Rebeca" and last name "Grynspan" clearly legible.

Rebeca Grynspan
Secretary-General of the United Nations
Conference on Trade and Development

Overview

Getting the least developed countries back on track towards the Sustainable Development Goals

The world is facing multiple crises of climate change, growing human conflicts, geoeconomic fragmentation and a cost-of-living crunch, all of which weigh heavily on least developed countries (LDCs) as they try to relaunch their economies in the aftermath of the COVID-19 pandemic. The impacts of these crises have led to a reversal of years of growth and development progress in LDCs, including in key areas of the Sustainable Development Goals, such as poverty eradication, nutrition, health, education and gender equality.

LDCs as a group experienced a sharp slowdown in economic growth in 2020 and 2021. In 2023, their combined gross domestic product (GDP) was 10 per cent lower than the level it would have reached if the pre-pandemic (2010–2019) growth trend had been sustained. GDP per capita would have been 16 per cent higher in 2023 than current estimates if growth had reached the 7 per cent target set in LDC programmes of action. As a consequence of the economic slowdown, the total number of extremely poor in the LDCs is estimated to have risen, with at least 15 million more people living in extreme poverty than prior to the pandemic.

To get back on track to achieving the Sustainable Development Goals, the LDCs need an international financial architecture that is inclusive, innovative and adapted to their specific needs and challenges. This is critical at a time when the world needs to move from commitments to implementation of the Doha Programme of Action for the Least Developed Countries for the Decade 2022–2031. At present, there is a renewed recognition of the crucial role of finance and debt in boosting the development prospects of LDCs and other developing countries, as evidenced by the United Nations Secretary-General's SDG Stimulus to Deliver Agenda 2030 and the United Nations Policy Brief on Reforms to the International Financial Architecture prepared for the Summit of the Future (scheduled to take place in 2024). Other examples include the Bridgetown Initiative, efforts to reform the multilateral development banks and implementation of the recommendations of the Capital Adequacy Framework (CAF) Review by the Group of 20. These initiatives, along with deliberations in other multilateral forums, are further evidence that the restoration of fiscal space in LDCs through a lasting resolution of the debt crisis, reform of the international financial architecture, and mobilization of climate finance are issues at the centre of global efforts to safeguard the Goals from the impacts of the multiple crises plaguing the world today.

The year 2023 is key for global climate finance. A major agenda item at the twenty-eighth session of the Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC) due to take place towards the end of the year refers to the operationalization of the Loss and Damage Fund agreed at COP27. With LDCs falling behind on the path towards the Goals, and as the world approaches midpoint in implementation of the 2030 Agenda for Sustainable Development, the messages and recommendations presented in this report are as timely as they are urgent.

The prevailing international financial architecture is ill-suited to dealing with systemic shocks and more fundamentally, to mobilizing resources for LDCs at the required scale. The period of multiple crises since the outbreak of the COVID-19 pandemic has not only highlighted the shortcomings of the present international financial architecture; it has also prompted several initiatives and proposals to improve it. These range from short-term stopgap measures, such as the Group of 20 Debt Service Suspension Initiative, to discussions on longer-term solutions, such as the Group of 20 Common Framework for Debt Treatments, as well as the push for reform of the multilateral development banks (MDBs).

Major discussions and negotiations are taking place in parallel in various forums such as the United Nations, the Group of Seven, the Group of 20 and the governing bodies of international financial institutions. These processes directly affect LDCs, given their dependence on external financing and on integration into the global economy through trade and financial flows. And yet the LDCs exert little, if any, influence on the decision-making processes that shape the international financial architecture. One reason for this is that the LDCs are not so-called “systemically critical”, as they carry very little weight in the global economy, international trade and financial flows. Moreover, their voice in international financial institutions, such as the International Monetary Fund (IMF), the World Bank and regional development banks, is marginal at best. For instance, at the World Bank, the LDCs jointly account for only 4 per cent of the voting rights. And they are not part of the Group of Seven or the Group

of 20. Such power imbalances result in the LDCs being frequently mentioned in the international discourse on issues essential for their development prospects – such as financing for development and climate finance – but the subsequent outcomes and decisions do not align with their specific needs and characteristics. This untenable situation calls for urgent action by the international community to move beyond rhetoric and implement solutions that cater to the financing needs of these countries.

Large and growing financing needs of least developed countries

The Sustainable Development Goals were underfunded in the LDCs well before the recent setbacks in the 2020s. *The Least Developed Countries Report 2021* estimated that, to achieve a GDP growth rate of 7 per cent (Goal target 8.1), LDCs would need to invest \$462 billion annually, which implies a 55 per cent increase in investments relative to actual investments in 2019 (prior to the COVID-19 pandemic). To achieve a more ambitious development goal – structural transformation, proxied by the doubling of the share of manufacturing in GDP (Goal target 9.2) – LDCs would have to spend an estimated \$1,051 billion annually, which would require their economies to grow at an unlikely annual rate of 20 per cent during the 2020s. UNCTAD estimates that the gap in financing for the Sustainable Development Goals alone in all developing countries, including LDCs, is now about \$4 trillion per year – up from \$2.5 trillion in 2015 when the Goals were adopted.

Moreover, LDCs' financing needs have further expanded as a result of the multiple crises. In particular, their climate finance needs are growing as the world is lagging far behind in meeting the targets of the Paris Agreement. According to the UNFCCC's Standing Committee on Finance, the cost of implementing the nationally determined contributions (NDCs) of developing countries amounts to \$6 trillion through 2030, a far cry from the \$100 billion annual climate finance target of the Copenhagen Accord and the \$21 billion–\$83 billion of actual climate finance flows in 2020. The LDCs have made ambitious plans to address climate change in their NDCs, but implementation depends on external finance, technology transfer and capacity-building. As these countries are particularly vulnerable to the impacts of climate change, they urgently need more finance for adaptation. Such finance should take the form of grants rather than loans, if LDCs are to avoid a climate debt trap. However, more than a third of climate-related financial flows to the LDCs is delivered through loans, which adds to their mounting debt burdens.

The growing complexity of the international financial aid architecture poses a challenge to the weak institutional capacities of least developed countries

In addition to their requirements for greater financing to compensate for crisis-related setbacks in development, the external financing conditions for LDCs have become more challenging.

The international financial aid architecture is becoming increasingly complex. The number of actors has increased to include philanthropists, development finance institutions, the private sector and non-governmental organizations (NGOs), alongside traditional donors. Other developing countries have emerged as new sources of public development finance, the number of international vertical funds has been expanding rapidly, and there has been fragmentation and a proliferation of institutions and entities in the international climate finance architecture.

The emergence of new partners and funding vehicles no doubt broadens the development finance landscape. However, the many different sources of funding have their own specific and varying selection criteria, application processes and reporting requirements. This results in high transactions costs and a heavy administrative burden for recipient countries, many of which have limited resources and institutional capacities. Consequently, it effectively limits their access to such finance, and affects the overall performance of the international financial aid architecture.

Moreover, the proliferation of actors within the international aid architecture makes alignment with national priorities and coordination between donors more burdensome and maintaining overall debt sustainability more complex.

At the same time, the scope of official financing has increasingly widened to include an array of goals and objectives that often compete for resources. These goals include “traditional” development finance objectives, climate finance and humanitarian aid in a context of extreme weather events that are increasing in frequency, and geopolitical tensions that have intensified refugee and migratory flows. In this regard, there has been a blurring of the distinctions between different sources and objectives of development financing, as well as between public and private financial flows, including towards LDCs, especially in the context of blended finance. In addition, donor countries are spending an increasing share of official development assistance (ODA) in-country on refugee assistance, without triggering direct financial flows to LDCs.

LDCs also face challenges in terms of their agency over decisions that shape international financial flows, in particular ODA, private credit, portfolio flows and FDI. Such decisions are typically taken in the main financial centres by private agents or donor Governments, where LDCs are conspicuously absent. As a result, external financial flows are not always aligned with LDCs' national development goals and objectives. This means that LDC Governments have difficulty in retaining ownership of their development agendas and coordinating financial flows that have major impacts on their economies.

Moreover, growing geopolitical tensions compound the difficulties for LDCs to create synergies between different development partners and different sources of external finance.

While new initiatives have been taken by the international community that go in the right direction in terms of improving external financing for LDC development, they lag behind the level of ambition needed to address the acute financing challenges confronting these countries. As a result, the international community has so far failed to adequately respond to the looming financing crisis in LDCs.

Managing fiscal space in the context of multiple crises

Expanding fiscal space is critical for structural transformation

Fiscal space is the extent to which a Government can increase its spending or sustain a reduction in revenues without compromising its long-term fiscal sustainability. A lack of fiscal space can be particularly damaging at times of heightened economic stress, when Governments need to respond quickly to crises such as the COVID-19 pandemic, global food and energy price shocks such as those caused by the war in Ukraine, and climate-related loss and damage. Multiple crises have led to an erosion of fiscal space in LDCs. The median ratio of general government debt to GDP in LDCs increased from 48.5 per cent in 2019 to 55.4 per cent in 2022 – its highest level since 2005. Rising import bills due to commodity price hikes contributed to this trend. In 2021, the value of net imports of basic food items to the LDCs as a group amounted to \$5.4 billion, representing an increase of 26 per cent on a year-on-year basis. Other indicators of fiscal space, such as fiscal balances and the share of concessional loans in total external public debt, have also worsened for LDCs as a group. As a result of these developments, LDCs risk falling even further behind on their path towards the Sustainable Development Goals. Consequently, they urgently need greater support to enhance their fiscal space.

External financial flows remain a critical factor for their fiscal space, although, over the medium term, domestic resource mobilization needs to play a growing and more sustainable role. There is scope for improving domestic resource mobilization through various channels. In particular, LDCs as a group lag behind other country groups in terms of tax revenues collected as a share of GDP. In 2020, the median tax-to-GDP ratio in LDCs was 11.6 per cent, compared with 16.3 per cent in other developing countries and 23.2 per cent in developed countries. Domestic resource mobilization could be improved by broadening the tax base, combating illicit financial outflows, enhancing tax compliance, strengthening international tax cooperation and improving the management of natural resources, including minerals critical for the global energy transition. Domestic resource mobilization in LDCs needs to grow in parallel with more effective implementation of their structural transformation agendas and with efforts to improve their productive capacities, strengthen governance, improve their tax systems and enhance their institutional capacity at both the national and international levels.

There remains a wide gap in official development assistance

Gross disbursements of ODA to the 46 LDCs as a group amounted to \$66.9 billion in 2021, down from a record \$72.9 billion in 2020, the year the COVID-19 pandemic started. During the period 2019–2021, ODA flows to LDCs totalled \$202 billion, of which the five largest recipients – Bangladesh, Ethiopia, Afghanistan, Yemen and the Democratic Republic of the Congo – received 35 per cent. Despite the crucial role of external finance, ODA flows to LDCs are substantially lower than the commitments made by developed countries. In 2021, those flows accounted for a mere 0.09 per cent of the gross national income (GNI) of Development Assistance Committee (DAC) members, significantly short of the target of 0.15–0.2 per cent of GNI enshrined in Sustainable Development Goal 17 and in the Doha Programme of Action. The gap between commitments and disbursements amounted to \$35 billion–\$63 billion in 2021. Thus, increasing ODA disbursements to the committed levels is needed in order to boost growth and resilience in the LDCs.

With regard to the composition of ODA, an important consideration is whether it takes the form of grants or loans. Both grants and loans can help fill funding gaps in critical areas of the Sustainable Development Goals, and help to push forward implementation of the structural transformation agenda in LDCs. However, loans have the downside of adding to the debt burden of LDCs, and can thus fuel a problem in one area of sustainable development while aiming to solve a problem in another area. As a lack of adequate fiscal space is a key concern for LDCs, debt-generating ODA constitutes a trade-off for LDCs. In the period 2012–2021, the share of grants in total ODA to LDCs was 76 per cent, significantly lower than the preceding decade (2002–2011), when their share was 85 per cent. In 2020, the year the COVID-19 pandemic brought the global economy to a grinding halt, the share of grants was 67 per cent, its lowest point since the start of the data series in the *Creditor Reporting System* of the Organisation for Economic Co-operation and Development (OECD). Thus, although total ODA to LDCs increased in response to the COVID-19 pandemic, there was a pronounced fall in the share of grants in ODA – 6 percentage points vis-à-vis 2019. Yet grants should be the primary means through which ODA flows are scaled up to committed levels in order to counteract the shrinking fiscal space in LDCs without fuelling the risk of debt distress.

There is a rising trend in blended finance flows to LDCs. However, the high level of country and sectoral concentration among and within LDCs warrants caution when considering the potential for blended finance to contribute to the achievement of the Sustainable Development Goals. In particular, donors that aim at mobilizing increasing volumes of blended finance to LDCs should also seek to align those flows with the recipient country's priorities and national development plans. For their part, LDCs need to ensure that private investments contribute to sustainable development without causing negative side effects by establishing rules and regulations that mitigate potential environmental and social risks, promote transparency and protect local communities.

Climate finance poses additional challenges

LDCs have contributed only marginally to the climate crisis but are the most vulnerable to the impacts of climate change. In 2021, there were 17 LDCs among the 20 countries with the highest level of vulnerability and lowest level of readiness to tackle the effects of climate change. They are also the country group least able to leverage investments in adaptation actions. Consequently, LDCs require more fiscal space for investments in adaptation and financing to cover the costs of loss and damage resulting from extreme weather events. In this context, climate finance for LDCs needs to improve along each of its main dimensions: quantity, quality and access.

There are often delays of several years between the initial submission of project proposals and the disbursement of climate funds. Despite the large number of such dedicated funds, the bulk of climate finance continues to be delivered through non-climate-specific channels. This gives rise to a lack of transparency and difficulties in establishing a unified and clear accounting framework for climate finance. The quantity of climate finance flows to LDCs has fallen short of international commitments and even shorter of actual needs in LDCs. In spite of their disproportionate vulnerability, LDCs received a share of total climate finance flows in 2016–2020 that roughly corresponds to their population share in the group of developing countries – equivalent to an annual average of \$12.6 billion. In the same period, more than a third of climate finance flows to the LDCs was in the form of loans. Climate change adaptation – a key priority for LDCs – accounted for only 45 per cent of total climate finance. This points to the need for significantly scaling up climate finance flows to LDCs, but also for enhancing the impact of existing funding by increasing the share of grants and contributing more to adaptation. Grants, as opposed to loans, are essential for avoiding a climate debt trap.

The Loss and Damage Fund, currently in the making within the UNFCCC, could play an important role if its design and operationalization take into account the specific needs of the LDCs, as suggested in this report. Indeed, if its implementation does take LDC specificities into account, the Fund has the potential to significantly boost the resilience of LDCs as they strive to achieve the Sustainable Development Goals while standing at the forefront of the impacts of climate change.

Debt vulnerabilities of the least developed countries

LDCs need assistance to achieve long-term debt sustainability in line with Sustainable Development Goal target 17.4, and to foster much-needed structural transformation of their economies. Debt finance is necessary for countries to cope with the increased fiscal spending required in times of crisis, and to accelerate structural transformation. However, a looming debt crisis of the magnitude witnessed in the 1990s, before the Heavily Indebted Poor

Countries (HIPC) Initiative was implemented, threatens to hamper their progress. The total external debt stock of the LDCs reached \$570 billion in 2022, with the public and publicly guaranteed (PPG) component spiralling to \$353 billion from just over \$100 billion in 2006. In 2022, all indicators of external debt sustainability deteriorated: the ratio of total debt service to exports of goods and services rose to 18.9 per cent from 18.3 per cent in 2021, and the share of government revenue spent on servicing debt reached 17 per cent from 15.6 per cent in 2021.

Structural factors result in lingering debt vulnerabilities

Structural factors are the main causes of the debt vulnerabilities of LDCs. Their high level of dependence on primary commodities for export and fiscal revenues increases their exposure to external shocks. As these countries strived to recover from the COVID-19 pandemic, disasters linked to climate change and other global shocks intensified in 2020–2023, further eroding their already constrained fiscal spaces. Strong export performance, coupled with sustained long-term economic growth, improves the capacity of countries to absorb and utilize debt and withstand shocks. However, the lack of fiscal space to bolster government expenditure during crises, and their inability to mobilize private investments, are hurting these countries' development prospects.

Structurally, the largest component of the PPG debt stock of LDCs is multilateral (42 per cent in 2021), but that share is declining. Bilateral debt in the PPG portfolio also declined, from 39 per cent in 2006 to 35 per cent in 2021. In contrast, commercial banks' debt and bonds increased from 7 per cent and nil in 2006, to 14 per cent and 7 per cent, respectively. Individual country debt structures also show a substantial increase in private sector debts, including bonds. Compared to 2006–2009, concessional debt in total external debt fell by an average of 20 percentage points in 2017–2021. This affected 36 LDCs, and 26 of them saw concessional debt decline by 10 to 57 percentage points.

Debt service costs have been rising

The debt service costs of LDCs have surged, as their debt structures have become more complex since the beginning of the twenty-first century, with suboptimal maturity schedules. Since 2018, LDCs have spent more on servicing their external debt than on education. Moreover, their expenditure on external debt service rose from a value corresponding to one third of their health spending in 2009–2011 to three quarters in 2018–2020. During this more recent period, 11 LDCs spent more on debt service than on education and health combined, a development that did not occur for any LDC during the earlier period.

Additionally, LDCs generally pay a higher premium on bonds. Since 2014, debt service to private creditors has exceeded debt service to official creditors. The bond component of debt service more than doubled in 2019–2022 compared to 2016–2018. The average PPG debt-to-GDP ratio for LDCs reached 30 per cent in 2019 and 34 per cent in 2020, before contracting slightly to 32 per cent in 2021. Between the periods 2009–2011 and 2019–2021, PPG debt service as a percentage of exports of goods and services increased in 25 LDCs. The existence of unbalanced debt portfolios between long-term and short-term debts, as well as among different categories of creditors with different risk appetites, has become challenging in the current global economic environment.

Addressing debt vulnerabilities

LDCs at risk of debt distress require an immediate injection of liquidity to prevent the crisis from degenerating into a socioeconomic catastrophe. Bilateral partners could help increase aid flows to the stricken countries by providing broad debt relief to enable them to deal with debt overhang situations and to free up resources for greater social spending.

LDCs and their partners should implement measures that respond to the structural characteristics of LDC debts. The Doha Programme of Action underscores the urgent need to develop mechanisms to mobilize public and private investments towards achieving the Sustainable Development Goals. Granting all LDCs access to loans from the International Development Association (IDA) would ease the financing pressure and help create conditions for balancing debt portfolios between long-term and short-term debts, as well as among different categories of creditors. This would spread interest rate risks and dampen the effect of speculative investors, particularly in the prevailing global economic outlook of high interest rates and inflationary pressures.

A multilateral debt workout mechanism remains critical, since a large share of LDC debts is owed to countries that do not participate in the Group of 20 Common Framework for Debt Treatments. Emergency lending on

concessional and affordable terms, and converting maturing short-term loans into long-term loans on softer terms, could assist LDCs that face liquidity constraints. Critically, an increase in multilateral debt and other official flows – especially grants – as well as long-term financing for investments would go a long way towards enhancing the development prospects of LDCs.

The role of central banks in supporting green structural transformation in least developed countries

Aligning financial systems with climate goals

Article 2.i.c of the 2015 Paris Agreement set out the goal of “making finance flows consistent with a pathway towards low greenhouse gas (GHG) emissions and climate-resilient development”. While COP26 boosted momentum for the mandatory alignment of global financial flows with climate goals, there is growing concern that global investment behaviour continues to significantly finance carbon-emitting production and its further expansion. Delivering a global transformation to a low-carbon economy will require a transformation of the financial system and its structures and processes, and engaging Governments, central banks, commercial banks, institutional investors and other financial actors in that transformation effort.

Reform of the global financial system to contribute to the low-carbon transition is the subject of an ongoing debate. The conventional view takes a static, risk-based approach to aligning financial flows to net-zero commitments. It largely focuses on the role of central banks acting independently and within narrowly defined mandates of price and financial stability. However, the isolated use of central banks’ climate mitigation tools is not recommended in LDCs, because they do not have the same types and levels of development of institutions (including financial systems) or productive capacities as other developing countries or developed countries. Therefore, central bank tools can be used only if they are accompanied by other fiscal, industrial and social policies which can ensure that the target of reducing emissions will not undermine social and developmental targets.

For LDCs, the global low-carbon transition may have important negative implications emanating from both domestic and international actions that elevate the risk of an “unjust” transition. Weak domestic institutional capacities combine with low levels of financial development to limit the transmission of climate central banking policies through monetary policy. This can be exacerbated by competing monetary policy objectives. At the international level, long-standing imbalances in the international financial and development finance architecture introduce higher probabilities of unleashing unintended negative consequences, including making it more difficult for LDC Governments and private sectors to invest in climate adaptation and cover climate-related losses. While trade-offs from climate action are not exclusive to LDCs, they are amplified in these countries, where attendant redistributive impacts of climate central banking choices are potentially harsher and larger. Consequently, climate central banking tends to be more contentious in LDCs. In this context, while finance plays an essential role, certain responsibilities cannot be shifted to the financial sector or delegated to central banks acting on their own.

Central bank policies should be coherent with development and industrial policies

In order to achieve a just transition in LDCs, their financial sectors should take the lead in contributing to the green transition and climate adaptation within the overall context of achieving fundamental progress on structural transformation. This means that financial alignment in LDCs is best achieved by a green transition-oriented approach, underpinned by industrial policy and a closer alignment of central banking with government policies on development. Such an approach has the highest probability of simultaneously fostering green structural transformation and developmental progress in these countries.

Across all economies, climate mitigation and adaptation require even greater policy synergy than traditional economic policy targets. Historically, central banks coordinated with ministries of finance and other government agencies to proactively steer credit and support major structural change of the type required for tackling the climate crisis, while complementing active fiscal and industrial policy regimes. Such coordination with central banks still exists in many LDCs, and several of them also have a mandate to support development despite the lack of direct mandates on sustainability. The institutional environment in many LDCs is thus more conducive than in countries where central banks act independently of other public authorities. Nevertheless, a significant challenge for LDCs is to ensure that their central banks’ climate tools are used to achieve more than one target. A

Careful design of policy tools is therefore necessary to ensure that multiple targets can be achieved and trade-offs minimized.

Employing the green transition-based approach to financial alignment will help LDCs mitigate and resolve trade-offs from climate action, because it sets an ambitious agenda centred on the use of quantitative and qualitative credit allocation policies that are coordinated with fiscal and green industrial policies. An added advantage is that it expands the focus of financial alignment to encompass adaptation. It thus incorporates a more proactive and dynamic alignment of financial systems. Furthermore, it tailors alignment to country-specific scenarios and operationalizes developmental central banking.

Climate central banking represents uncharted territory for central banks of all countries. Consequently, many of them have resorted to peer learning and exchange of good practices to develop banking expertise and know-how in this area. The emergence of regional peer learning initiatives alongside global ones led by developed countries is indicative of the substantial variation in vulnerability of economies and ecosystems to climate change among and within regions. Overall, developing countries face greater physical risks, including more frequent and severe weather events associated with climate change. Thus, central banks and financial systems in those countries are potentially more exposed to climate-related risks and may have more at stake in climate central banking. This translates into a strong incentive for developing countries to join global financial efforts to align their financial systems with climate goals.

Globally, the financial architecture for climate central banking remains a work in progress, with specific disclosure, assessment and governance tools still under development. In this process, mutually reinforcing and collaborative actions across a variety of ecosystem role players is needed to disincentivize greenwashing, encourage consistency and standardization, provide additional layers of transparency and reduce the costs of regulatory compliance. Ecosystems for climate central banking are the least mature in LDCs; few of their microenterprises and small and medium-sized enterprises are able to respond to pressures from various stakeholders to prove their accountability and commitment through disclosures on their sustainability practices. The time frame to avert a climate disaster implied by scientific evidence means that central banks in developing countries, especially in LDCs, face the Herculean task of simultaneously converging towards global best practices and developing climate change-adapted technical capabilities (human and capital). Unfortunately, progress on climate central banking around the world is not proceeding at the same pace.

Governments of LDCs may wish to consider modifying the mandates of their central banks to make them support climate-aligned development. However, the existence of a specific climate mandate is a necessary, but not sufficient, condition for using certain types of climate central banking tools. Once potential climate policy tools have been identified, central banks need to examine a range of other issues before they can decide if it makes sense for them to use a specific tool. For example, central bank authorities should be mindful that, to be effective, climate central banking tools need to fit the structure of the local economy. Given the risk of unintended negative impacts, climate central banking tools that are not suited to the conditions of the local economy, or that have the potential to undermine other developmental targets, should not be used. Most importantly, in the case of climate mitigation and climate adaptation, central banks run the risk of having too many targets and too few tools. The best way to address this challenge and limit undesirable trade-offs would be to design central banking tools in ways that do not undermine more traditional targets.

Central banks of LDCs may contemplate adopting climate mitigation and adaptation tools only if the following conditions are met: (a) sustainable development or a strong macroprudential approach are part of their mandates, and (b) their financial systems are sufficiently developed and used by a sufficiently large proportion of the population and the non-financial corporate sector. It is essential for such tools to be aligned with the targets of industrial policy and the fiscal authorities.

Advancing reform of development finance for the least developed countries

Moving from crisis to reform

LDCs today face a number of interlocked challenges. A leading challenge is their lack of the fiscal space needed to ensure the continuity and adequate reach of social safety nets, enable investment in human capital and infrastructure to promote structural transformation, and shoulder the rising costs of climate change.

The increase in revenues required to cover rising costs and expenditure needs has not yet materialized, because the underlying and preceding fiscal and financing shortfalls have been compounded by the discretionary fiscal policy effects of the COVID-19 pandemic. As a result, many LDCs are facing a vicious cycle of debt and crisis, even as their fiscal space is rapidly shrinking.

Existing mechanisms and sources of finance are inadequate to meet the needs of the LDCs to finance their sustainable development. Recent changes in the international aid architecture, pledges to increase public financing for development and/or to respond to climate change, plans to tackle the present external debt crisis, initiatives to raise global levels of liquidity, negotiations to reorient multilateral financial institutions, efforts to woo private investors into LDCs, and other initiatives or proposals have failed to overcome the challenge of financing for the development of these countries. These initiatives have not gone far enough, or not been fully implemented; neither have they addressed the root causes of systemic problems, or adequately considered the specificities of LDCs.

Comprehensive reforms in the international financial architecture, coupled with increased commitments and innovative approaches, are necessary to support LDCs' financial needs for sustainable development and help build their resilience in the face of global challenges. Debt distress is not solely a financial issue; it is also an acute development dilemma for LDCs. Added to this, climate change poses existential threats to vulnerable populations in these countries. The role of multilateralism in tackling the financial, fiscal and climate challenges of LDCs and encouraging their greater participation in global governance of these matters is clear. Multilateralism implies international cooperation to attempt to find solutions to transnational problems. Concrete actions need to be taken urgently for LDCs to be able to overcome the interlocked challenges they face.

The following sections underline some priority actions that should be undertaken by LDC Governments along with development partners, international financial institutions and the international community at large if these countries are to escape from their current development impasse.

Strengthening aid effectiveness for the least developed countries

The three key dimensions of finance for development in the LDCs are quantity, quality and access. In other words, finance needs to be available at the required scale, delivered through appropriate instruments, and underpinned by an international financial architecture that is adapted to the specific needs of these countries.

It is important that ODA flows to LDCs be increased, as a first step, to the levels committed by developed countries. For DAC members this would mean increasing ODA flows to LDCs to 0.2 per cent of their GNI – the upper level specified in the Sustainable Development Goal target 17.2 – by 2025. Moreover, the increase should be exclusively in the form of grants. Beyond the quantitative increase, it is important that the international development community seeks to simplify access modalities and lower the transaction costs of ODA by reducing associated administrative burdens, harmonizing processes and using recipients countries' own administrative systems and structures. Given the growing complexity of the international aid architecture, ODA would have a greater impact if it adhered to the five principles for smart aid: ownership, alignment, harmonization, managing for results and mutual accountability.

“Green” fiscal reforms could unlock financing for climate and other development areas. This would involve redirecting some financing away from subsidies given to activities that generate greenhouse gases in donor countries and channelling it to fund development and climate resilience in LDCs, thereby serving a double purpose. Political will is key to unlocking this large source of new liquidity.

LDCs need a clear path out of unsustainable debt patterns through a series of lifelines such as grants, concessional loans and a debt treatment mechanism that is responsive, transparent and efficient in resolving unsustainable debt situations. It is therefore critical for developed-country partners not to substitute debt relief for official development flows, including ODA. Similarly, emergency lending during crises should be sparingly used as a complement to debt relief efforts, rather than treated as an opportunity to inflate debt stocks of multilateral development banks.

Climate finance

There is also a need to enhance the quantity, quality and delivery modes of climate finance for LDCs. Even the most optimistic estimates of climate finance flows to the LDCs show that they are insufficient to meet their growing needs for investments in adaptation and to cover the costs of loss and damage from catastrophic

weather events. Therefore, the international community should consider complementing the existing ODA target with a specific target for climate finance for LDCs. Developed countries need to commit to a substantial increase in the overall volume of climate finance flows to LDCs, including providing a larger proportion of grants to avoid creating a debt trap. Such flows should also focus more on adaptation to climate change, which is a priority for LDCs. They should also commit to rechannelling \$100 billion worth of Special Drawing Rights (SDRs) in 2024 to support efforts to resolve the debt crisis in LDCs and enable them to get back on track to meeting their Sustainable Development Goals.

The international climate finance architecture is complex and fragmented, which constitutes a roadblock for countries with limited institutional capacities, including the LDCs. Thus, priority should be given to simplifying and accelerating access to available funds, both to existing climate funds and those provided through newly established climate finance vehicles such as the Loss and Damage Fund.

Moreover, there is a growing need for reforms and commitments to greater levels of transparency, possibly by taking steps towards a unified accounting framework for climate finance. Reforms should also include focusing on climate finance flows that are channelled through dedicated climate funds such as the Green Climate Fund. Since funds disbursed by designated climate finance vehicles are undoubtedly climate finance, double counting between development finance and climate finance would not be an issue. Given the close interlinkages between climate and development, climate change considerations need to be included in development planning and in the programming of ODA. However, accounting of development finance and climate finance should and can be separated.

LDCs, being among the most vulnerable countries to climate change, should receive priority access to financing for climate-related loss and damage, as should small island developing States (SIDS) for a similar reason. The international community should ensure that the Loss and Damage Fund becomes operational rapidly, with the first disbursements made in 2024.

Natural disasters should trigger debt write-offs commensurate with the losses and damages incurred, in addition to a pause in debt repayments. An arrangement should be made for the international community to write off the debts of affected countries in cases of large natural disasters where available funds are insufficient to cover the full grant amount of compensation for losses resulting from the disasters.

In considering climate-related loss and damage, the new Loss and Damage Fund (LDF) could play a pivotal role for LDCs if certain conditions are met. The following conditions would enhance the impact of the LDF:

- An adequate volume of additional funds, commensurate with actual loss and damage, should be made available. If existing funds are simply diverted to the LDF, the latter will not have the desired impact. In this regard, developed countries need to guarantee a minimum floor for annual inflows to the LDF, and underpin it with a credible and robust resource mobilization strategy.
- Efforts should be made for rapid operationalization of the LDF, so that it can start disbursing funds quickly, including setting a target for releasing the first disbursement in 2024.
- Access to the LDF should be direct and simple, and transaction costs kept low.
- Access to the LDF should not result in higher debt burdens. Therefore, the funds should take the form of grants to cover costs of loss and damage caused by the impacts of climate change.
- In the likely scenario that claims exceed available resources, decisions on the allocation of funds should be based on economic and climate-related vulnerabilities. This would enhance the impact of the fund for LDCs that face multidimensional vulnerabilities but lack fiscal space.
- The LDF should cover both extreme weather events as well as slow onset loss and damage (e.g. from rising sea levels, saltwater intrusion and land degradation), as both can impose significant costs on affected countries. There could be separate funding windows for these two types of loss and damage to reflect differences in financing and process requirements (emergency funding versus project funding).
- Additional costs, such as fees or insurance premiums, should be avoided. Designing the fund like an insurance scheme would limit access by the most vulnerable countries, including LDCs.

If these conditions are met, the Loss and Damage Fund has the potential to significantly boost the resilience of LDCs as they strive to achieve the Sustainable Development Goals while being the most vulnerable to the impacts of climate change.

Reforming the international financial architecture

Improvements in financing for development of LDCs should be part of broader reforms of the international financial architecture. In this sense, recent proposals by the United Nations for an ambitious programme of reforms need to be implemented. And due consideration should be given to UNCTAD's call for the adoption of an "even-handed" approach between debtors and creditors, including paying greater attention to the role played by institutions and policies in creditor countries in triggering international financial crises.

Another long-standing plea has been the implementation of a comprehensive debt workout system. At a minimum, debt repayments should be put on hold once debtors enter into negotiations on debt resolution. In addition, a multilateral debt workout mechanism could help broker negotiations between creditors and debtors. At present, such negotiations are characterized by stark power imbalances, in particular when they concern LDCs. Coordination should involve all key players, including private creditors and relevant non-DAC bilateral creditors, such as China. Indeed, China has become a major lender to LDCs and has extended substantial rescue liquidity to developing countries in debt distress, including LDCs, on a bilateral basis.

In view of the key role of MDBs as providers of concessionary finance to LDCs, a surge in funding through these institutions needs to be part of any meaningful reform of the development finance system. In order to be able to provide more liquidity, and on highly concessionary terms, MDBs themselves would need to borrow more on capital markets. This could be facilitated by including callable capital in their risk frameworks in line with the recommendations of the Group of 20 Independent Review of MDBs' Capital Adequacy Frameworks. They would then be able to increase lending at highly concessional terms by hundreds of billions of dollars. LDCs and other developing countries that face higher borrowing costs on capital markets would benefit from such an expansion, particularly in view of a further tightening of global financing conditions. Additionally, all MDBs – not just the World Bank – should include disaster clauses in new loan agreements with LDCs, and evaluate options to retroactively include such clauses in existing loan agreements with these countries. Finally, developed countries need to ensure that the 21st replenishment of the International Development Association (IDA21) is ambitious and commensurate with the growing needs of LDCs.

Reform of the rules for the distribution of SDRs is needed so that SDRs can be used to help respond to the pressing financial needs of the LDCs. Accordingly, due consideration should be given to economic and climate-change vulnerabilities in the distribution of SDRs. Another, practical way of unlocking liquidity for development finance is by "rechannelling" the SDRs allocated to developed countries. In other words, developed countries that do not need their entire SDR allocation could transfer some of their SDRs to the IMF or to other entities that are allowed to hold them. The latter could then use the SDRs to increase highly concessionary lending to countries in need. In practice this is often already done through the Poverty Reduction and Growth Trust (PRGT) or the Resilience and Sustainability Trust (RST) at the IMF. MDBs could be another important avenue for leveraging rechannelled SDRs. LDCs need a regular, continuous flow of rechannelled SDRs, as their financing needs for achieving the Sustainable Development Goals and for covering climate change costs are also long term in nature.

Potential impacts of international standards and guidelines on access to finance by LDCs need to be considered. Ongoing reforms in global financial markets include the global push to implement uniform climate standards in the financial sector. These are at odds with the principle of common but differentiated responsibilities, which is a cornerstone of the global climate regime, and should therefore be revised. Such a revision should ensure that incorporating physical risks into the credit models used by credit rating agencies and financial institutions does not lead to downgrading LDCs, which would reduce their access to finance.

Debt management

Coordination and cooperation between MDBs, Paris Club creditors and non-Paris Club creditors should be strengthened to ensure efficient and swift solutions for LDCs in need of debt treatment, and establish a flexible and efficient mechanism for debt treatment, including an immediate standstill on debt payments once a debtor country enters into negotiations. It should also include improved international tax cooperation to strengthen international tax norms, combat illicit financial flows and facilitate revenue collection in LDCs.

Development partners need to scale up capacity-building in LDCs in critical areas such as debt management, tax administration (including resource taxation), climate negotiations and assessment of climate-related loss and damage.

Improving domestic resource mobilization to build resilience

LDCs need to strengthen domestic resource mobilization by broadening their tax base, reviewing tax exemptions and other fiscal incentives, avoiding race-to-the-bottom tax competition, reducing tax evasion and aggressive tax avoidance as well as other illicit financial flows, improving their tax administration and enhancing tax compliance. International tax cooperation can also help boost domestic revenues. Furthermore, financial sector development can promote domestic retention of resources.

Improved management of natural resources through transparent and accountable governance frameworks and ensuring that extractive industries contribute a fair share to public revenue through taxes, levies and royalties can also help increase domestic revenues. Resource-rich LDCs should carefully negotiate contracts with mining businesses, strengthen governance and review existing tax and other fiscal incentives with a view to maximizing revenue from their extractive industries. In particular, LDCs with reserves of critical minerals for the global energy transition need to ensure that extraction of these reserves contributes to sustainable development by promoting domestic value addition and securing a fair share of revenue and profits.

The above-mentioned measures to improve domestic resource mobilization would ideally strengthen their ability to negotiate for better financing costs (lower interest rates) and tenures (more longer-term debt) that reduces the more short-term urgency financing cycles. To safeguard growth and progress towards meeting the Sustainable Development Goals, the policy focus should be redirected towards implementing climate-proofing structural transformation agendas.

Some LDCs could also foster domestic financial deepening to augment domestic resources and attract savings from their diaspora. Financial deepening could enable the mobilization and use of diaspora savings, for example through diaspora bonds, foreign-currency-denominated deposits and syndicated loans using remittances as collateral.

Climate central banking

The central banks of LDCs need to consider the use of central banking climate mitigation and adaptation tools on condition that sustainable development and a strong macroprudential approach are part of their mandates, and only if their financial systems are sufficiently developed and used by a sufficiently large proportion of the population and the non-financial corporate sector. If climate central banking tools are introduced by central banks of LDCs, it is essential for them to be aligned with industrial and fiscal policy targets. For example, if the central bank of an LDC decides to use such tools, it needs to ensure that the financial system will continue to support the priority sectors that have been identified in national industrial policy. Central banks should never be viewed as “fixers” of the climate crisis and substitutes for interventions that need to be made by a Government, public authorities and international organizations. They can only play a supportive role in the fight against climate change, and they should always act in coordination with Governments and other public authorities.

LDCs’ central banks need to develop analytical frameworks that allow them to identify the extent of exposure of their financial system and macroeconomies to risks that might stem from the implementation of climate policies in other countries (especially their export partners) and from climate-related physical events. The international community is called upon to step up assistance in this regard.

South–South and regional initiatives

The diversification of the architecture of official financial flows to LDCs has also seen the emergence of other developing countries as important sources of official external finance. Some of these other countries have proved to be important sources of long-term finance, in some cases providing funding for infrastructure projects. LDCs need to further exploit the potential of these sources of finance while ensuring against them becoming additional sources of overindebtedness. Developing-country partners can also serve as intermediaries for long-term investments.

South–South cooperation can also assist LDCs in mobilizing and managing development finance by adopting concerted strategies at regional and subregional levels to bolster access to development finance, and develop common negotiating positions to raise funding and renegotiate debt.

A collage of images including a person's profile, a car, and a building, with a large green number 1 overlaid.

1

Making the international financial
architecture work for
the least developed countries

CHAPTER 1

Making the international financial architecture work for the least developed countries

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A. Getting the least developed countries back on track towards achieving the Sustainable Development Goals

The world is facing multiple crises, including climate change, geopolitical tensions and a cost-of-living crunch, which are taking a particularly heavy toll on least developed countries (LDCs) as they try to relaunch their economies in the aftermath of the coronavirus pandemic of 2019 (COVID-19 pandemic). The impacts of these crises have resulted in a reversal of years of growth and development progress in LDCs (box 1.1), including in key areas of the Sustainable Development Goals such as poverty eradication, nutrition, health, education and gender equality (DESA, 2022; United Nations, 2023d).

Multiple global crises have increased the financing needs of LDCs



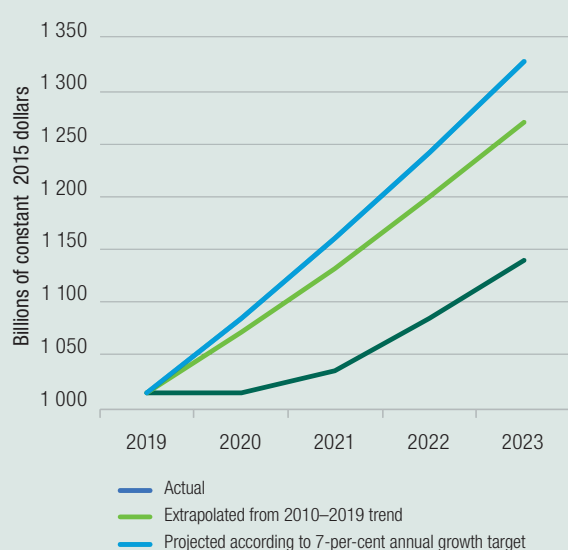
Box 1.1 Multiple crises have undone development progress in the least developed countries

LDCs as a group experienced a sharp slowdown in economic growth in 2020 and 2021. To illustrate the lasting impact of the crisis-ridden environment since 2020, box figure 1.1 shows a projection of what the GDP of LDCs would have been if the growth trend of the 2010s had continued without interruption, and, alternatively, if growth had reached the 7 per cent target set in LDC programmes of action. The estimates indicate that in 2023, the combined GDP of the LDCs was 10 per cent below the level it would have reached if their pre-pandemic (2010–2019) growth trend had been sustained. This gap is wider – 14 per cent – if compared with the level that would have been attained if the 7-per-cent growth target had been realized (box figure 1.1, A). Per capita figures show an even larger setback. After decreasing in 2020 and 2021, GDP per capita in LDCs returned to its pre-pandemic level only in 2023. By contrast, if the 7-per-cent target had been reached from 2020 onwards, GDP per capita would have been 16 per cent higher in 2023 than current estimates (box figure 1.1, B).

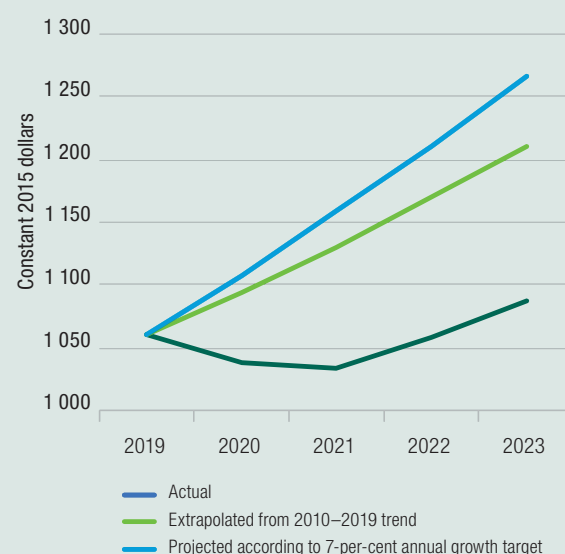
Box figure 1.1

Actual and projected gross domestic product (total and per capita) of least developed countries, 2020–2023

A. Gross domestic product



B. Gross domestic product per capita



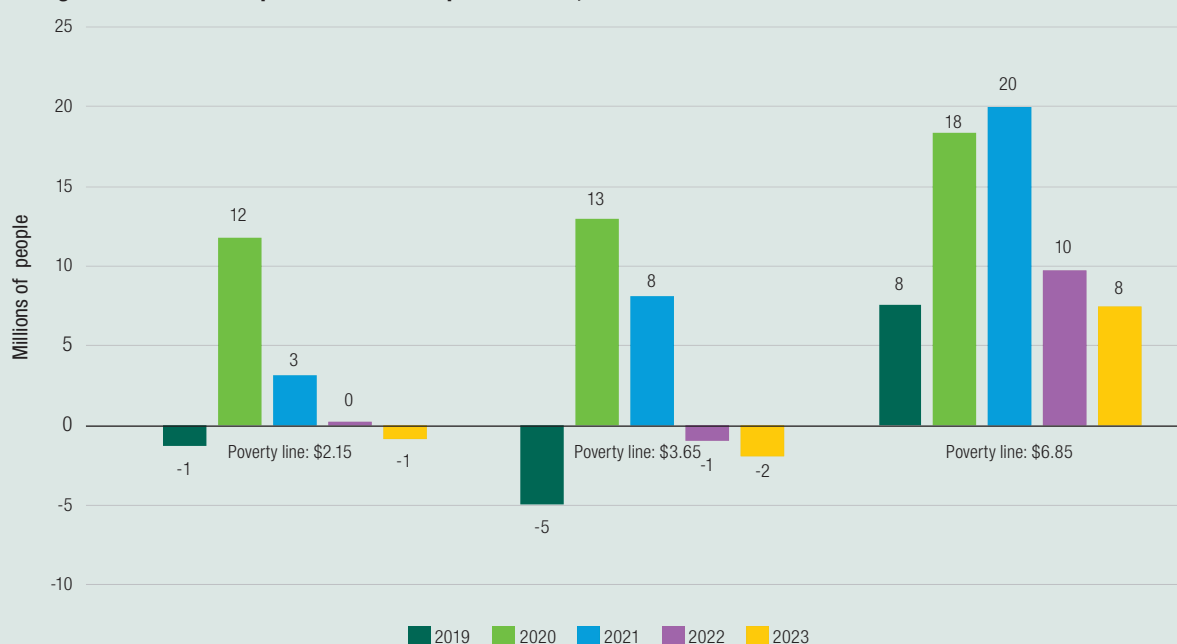
Source: UNCTAD calculations, based on data from UNCTAD, UNCTADStat database and IMF, *World Economic Outlook* database (both accessed April 2023).
Notes: Figures are estimates for the 2021–2023 period. Data do not include Afghanistan, Somalia, South Sudan and the Sudan.

Box 1.1 Multiple crises have undone development progress in the least developed countries (cont.)

As a consequence of the economic slowdown, the total number of extremely poor in LDCs is estimated to have risen. Estimates suggest that in 2023, almost 15 million more people in LDCs were living in extreme poverty than in 2019 (box figure 1.2). Estimates of poverty measured against higher income thresholds underline this trend: between 2018 and 2023, the total number of people living below \$6.85 per day increased by 56 million. These estimates are likely to be on the lower side in terms of actual impacts, as the methodology considers only growth. Crucially, it assumes that income distribution within LDCs remained unchanged since 2019. However, the successive crises are likely to have hit the poor disproportionately, especially through employment, income and health effects related to the pandemic, and to the steep rise in food and energy prices between mid-2020 and mid-2022.^a Furthermore, due to the lack of data for LDCs with high poverty rates or where conflict has aggravated poverty, many of them are not included in the estimates, including Afghanistan, Eritrea, Somalia, South Sudan, the Sudan and Yemen.

Box figure 1.2

Changes in the number of poor in least developed countries, 2019–2023



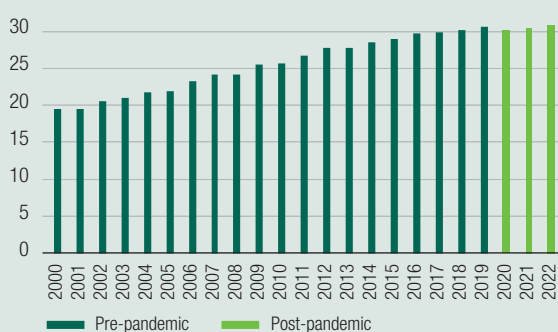
Source: UNCTAD secretariat estimates following the methodology used in UNCTAD (2020) and based on data from World Bank (2023), *Poverty and Inequality Platform* (version 20230328_2017_01_02 PROD), at pip.worldbank.org (accessed April 2023), and IMF (2023) (for 2017, PPP GDP per capita growth).
 Notes: GDP growth rates applied to the most recent poverty value. In cases where the most recently available data for poverty value were after 2018, values before 2018 were based on linear interpolation between the most recent poverty value and the second most recent poverty value. Data do not include Afghanistan, Cambodia, Eritrea, Somalia, South Sudan, the Sudan, Tuvalu and Yemen.

Multiple crises caused a drop in UNCTAD's Productive Capacities Index (PCI) for the LDCs in 2020, followed by two years of slow progress (box figure 1.3). In terms of PCI subindices, information and communication technology (ICT) experienced the largest fall in 2020, followed by structural change and energy. Uganda, the Niger and Burkina Faso were the LDCs with the largest declines in PCI in 2020, each experiencing a fall of more than 4 points relative to 2019. For 22 LDCs, the PCI in 2022 remained below its pre-pandemic level in 2019.

^a Food inflation affects the poor disproportionately because they tend to spend a much higher share of their income on food than people at higher income levels. Similarly, higher energy prices affect them more, though to a lesser degree.

Box figure 1.3

Productive Capacities Index (PCI) in the least developed countries, 2000–2022



Source: UNCTAD secretariat calculations, based on data from UNCTAD's, UNCTADStat database (accessed June 2023).

To get back on track to achieving the Goals, the LDCs need an international financial architecture (IFA)¹ that is at once effective, flexible and adapted to their specific challenges and needs. In this spirit, how to make the IFA work for the LDCs in a crisis-ridden and volatile environment is the focus of this report. The report is timely as it is now that the world needs to move from concepts and commitments to the implementation of the Doha Programme of Action for the Least Developed Countries for the Decade 2022–2031 (United Nations, 2022). Moreover, recently there has been a renewed emphasis on the role of finance and debt in improving the development prospects of LDCs and other developing countries (ODCs), with numerous initiatives under way. Examples include the United Nations SDG Stimulus package (United Nations, 2023c) and the Policy Brief on Reforms to the International Financial Architecture prepared for the Summit of the Future (scheduled to take place in 2024) (United Nations, 2023a), the Bridgetown Initiative, as well as efforts by the international community to reform the multilateral development banks and implement the recommendations of the Group of 20 Capital Adequacy Framework (CAF) Review. These initiatives, along with deliberations at other multilateral forums,² are further evidence that the restoration of fiscal space in LDCs through a lasting resolution of the debt crisis, reform of the IFA and mobilization of climate finance are issues at the centre of global efforts to safeguard the realization of the Sustainable Development Goals from the impacts of multiple crises. In addition, 2023 is a crucial year for global climate finance, given that a key agenda item of the twenty-eighth session of the Conference of the Parties (COP28) of the United Nations Framework Convention on Climate Change (UNFCCC) to be held towards the end of the year is the operationalization of the Loss and Damage Fund agreed at COP27. With LDCs falling behind on the path towards the Goals, and as the world approaches the mid-point of the implementation of the 2030 Agenda for Sustainable Development, the messages and recommendations

presented in this report are as opportune as they are urgent.

There is a growing realization that the prevailing IFA is ill-suited both to dealing with systemic shocks and, more fundamentally, to mobilizing resources for the LDCs at the required scale. The period of successive crises since the outbreak of the COVID-19 pandemic has highlighted the shortcomings of the present IFA, and prompted several initiatives and proposals to improve it. These range from short-term, stopgap measures, such as the Debt Services Suspension Initiative, to discussions on longer-term solutions (United Nations, 2023b). The latter include debt restructuring rules and mechanisms, as well as the functioning, governance and resources of multilateral development banks (United Nations, 2023a).

The existing international financial architecture is unable to mobilize sufficient finance for sustainable development in LDCs



¹ The IFA can be defined as the governance arrangements that safeguard the stability and functioning of the global monetary and financial systems (United Nations, 2023a). It denotes a framework of institutions, rules, policies and practices that govern the global financial system. The IFA comprises an intricate structure of international organizations, including the World Bank and the International Monetary Fund (IMF), regional development banks, international, multinational and national financial institutions, as well as regulatory bodies.

² For example, the IMF and World Bank Spring Meetings, April 2023; the 13th UNCTAD Debt Management Conference, December 2022; and the 30th Global Forum on Public Debt Management, OECD, May 2023.

Major discussions and negotiations on these issues are taking place in parallel in various forums, such as the United Nations, the Group of Seven, the Group of Twenty and the governing bodies of international financial institutions. These deliberations directly affect LDCs, given their dependence on external financing and their need for integration into the global economy through trade and financial flows. However, the LDCs exert little, if any, influence on the decision-making processes that shape the IFA. One reason for this

is that the LDCs are not considered systemically critical, as they have only marginal weight in the world economy, international trade and financial flows. They jointly accounted for only 1–2 per cent of global gross domestic product (GDP), international trade, and foreign direct investment (FDI) inflows in 2021–2022. In addition to their minor weight in the global economy, the voice of LDCs in international financial institutions, such as the International Monetary Fund (IMF) and the World Bank, is very limited. For instance, due to their small share of quotas in the IMF, the 46 LDCs jointly received only just over 2 per cent of the general allocation of 456 billion Special Drawing Rights (SDRs) (equivalent to about \$650 billion) agreed in August 2021 to provide additional liquidity in response to the global economic crisis.³ At the World Bank, the LDCs jointly account for only 4 per cent of the voting rights.⁴ The picture in regional development banks is not significantly better. For example, LDCs account for more than 60 per cent of regional members of the African Development Bank (AfDB), but jointly hold only 13 per cent of voting rights – less than those of the United States, Japan and Germany combined.⁵ Needless to mention, the LDCs are not part of the Group of Seven or the Group of 20. Such power imbalances lead to a situation where the LDCs are frequently mentioned in international discussions on issues essential for their development prospects – such as financing for development and climate finance – but the subsequent outcomes and

decisions often do not take into account their specific needs and situations. Therefore, there is an urgent need for the international community to move beyond rhetoric and implement solutions that cater to the financing needs of LDCs.

B. Larger financing needs of the least developed countries in the context of an increasingly complex international financial architecture

1. Growing financing needs of the least developed countries

There was a huge gap in funding for enabling LDCs to realize their SDGs well before the onset of the recent setback since 2020. In a study predating the COVID-19 pandemic, Kharas and McArthur (2019) show that the financing needs for the SDGs exceed the spending projected for 2025 in the vast majority of LDCs (figure 1.1). *The Least Developed Countries Report 2021* (UNCTAD, 2021) employed an innovative methodology to estimate the SDG financing needs of the LDCs. The report estimated that, in order to achieve a GDP growth rate of 7 per cent (SDG target 8.1), these countries would need to invest \$462 billion annually. Eradicating extreme poverty (SDG target 1.1) would require annual investments of \$485 billion until 2030. These estimates assume a 50–60 per cent increase in investment relative to actual investments in 2019 (prior to the COVID-19 pandemic). Achieving a more ambitious development goal – structural transformation – would require even larger investments. The LDCs would have to spend an estimated \$1,051 billion annually to double the share of manufacturing in GDP (SDG target 9.2), used as a proxy for structural transformation. This would require their economies to grow at an unrealistic annual rate of 20 per cent during the 2020s (UNCTAD, 2021).

SDG investment and spending needs that have also been estimated by some national governments highlight the enormous challenges ahead. For instance, the Government of Bangladesh projected the annual average costs of achieving the SDGs to be \$66.3 billion at 2015 constant prices (Bangladesh Planning Commission, 2017). A study on Cambodia estimated that the country would need to invest 5.4 per cent of its GDP annually to end poverty (Alisjahbana, 2019). The Government of Nepal estimated an annual spending need of Rs.2,025 billion (\$18 billion) to achieve the SDGs by 2030 (National Planning

Structural transformation in LDCs requires significantly expanded fiscal space

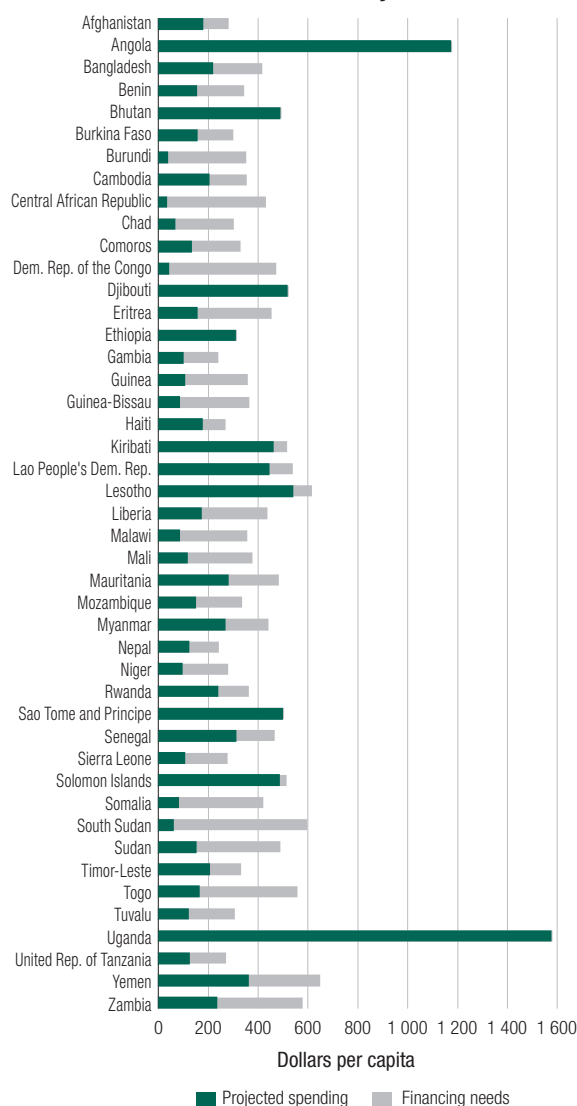


³ Based on IMF data, available at <https://www.imf.org/en/Topics/special-drawing-right/2021-SDR-Allocation> (accessed 27 June 2023).

⁴ Voting rights as of 15 June 2023, see: <https://thedocs.worldbank.org/en/doc/a16374a6cee037e274c5e932bf9f88c6-0330032021/original/IBRDCountryVotingTable.pdf> (accessed 23 June 2023).

⁵ Voting rights as of 22 December 2023, see: <https://www.afdb.org/en/documents/afdb-statement-subscription-and-voting-powers-31-december-2022> (accessed 23 June 2023).

Figure 1.1
Projected actual 2025 spending on Sustainable Development Goals and needs to reach those Goals by 2030



Source: UNCTAD secretariat calculations, based on Kharas and McArthur (2019).

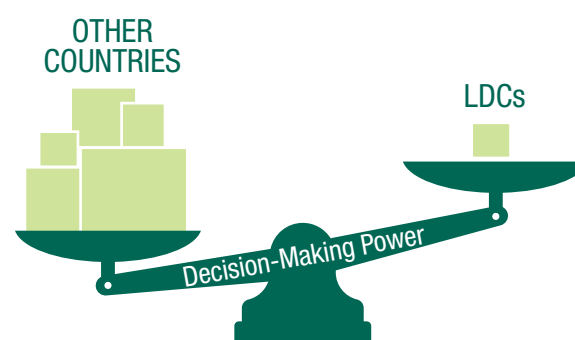
Note: When the financing needs bar does not appear, it means that their value is the same as that of the projected spending.

Commission – Nepal, 2018), which corresponds to an average of 48 per cent of its GDP. The costs of achieving the 49 SDG targets prioritized by Benin have been estimated at more than \$74.5 billion, equivalent to \$5.7 billion, on average, per year, or 60.8 per cent of its GDP in 2017 (DGCS-ODD, 2018). With annual domestic fiscal resources of about \$1.66 billion, or 18 per cent of GDP in 2017, Benin depends largely on external sources of financing. Other country-level assessments are currently being prepared as part of the Integrated National Financing Frameworks initiative in which 28 LDCs participate.

LDCs’ financing needs have further expanded as a result of the multiple crises. The OECD (2022)

estimates that in 2020, the SDG financing gap in all developing countries increased by 56 per cent, to reach \$3.9 trillion, due to a pandemic-related increase in government spending and loss of public revenue. The *World Investment Report 2023* estimates that the gap is now about \$4 trillion per year – up from \$2.5 trillion in 2015 when the SDGs were adopted (UNCTAD, 2023).

LDCs have a marginal influence on decisions over the international financial system



The climate finance needs of LDCs are also growing as countries’ commitments fall far short of the Paris Agreement targets. According to the UNFCCC’s Standing Committee on Finance (2021), the cost of implementing the nationally determined contributions (NDCs) of developing countries amounts to \$6 trillion through 2030, a far cry from the \$100 billion annual climate finance target of the Copenhagen Accord and the \$21 billion–\$83 billion of actual climate finance flows in 2020 (see chapter 2). The LDCs have made ambitious plans to address climate change in their NDCs, but implementation depends on external finance, technology transfer and capacity-building (UNCTAD, 2022). As the LDCs are particularly vulnerable to the impacts of climate change, they urgently need more finance for adaptation. However, more climate finance is directed towards mitigation instead, because it focuses on reducing greenhouse gas (GHG) emissions which is easier to define and fund.⁶ On the other hand, most adaptation initiatives

⁶ See OECD (2022), *Aggregate Trends of Climate Finance Provided and Mobilised by Developed Countries in 2013–2020*, at <https://www.oecd.org/climate-change/finance-usd-100-billion-goal/aggregate-trends-of-climate-finance-provided-and-mobilised-by-developed-countries-in-2013-2020.pdf>.

As the LDCs are particularly vulnerable to the impacts of climate change, they urgently need more finance for adaptation

focus on building long-term resilience. Adaptation projects are often public goods, characterized by high upfront costs, long investment timelines, the lack of a clearly identifiable revenue stream or unattractive risk and return profiles (e.g. climate-resilient bridges or roads). In contrast, mitigation projects attract international private investors typically in energy transition. For example, technology related to many types of renewable energy (e.g. solar and wind power, electric vehicle manufacturing etc.) is already mature, and costs and returns on investment are relatively stable and predictable.⁷ Furthermore, carbon markets which incentivize investment in mitigation do not exist for adaptation.

The contribution of LDCs, as a group, to the climate crisis is and has been negligible. Yet they are likely to suffer the most from the impacts of climate change. Therefore they need support to cover climate-related loss and damage (see chapter 2). However, more than a third of climate finance flows to these countries is delivered through loans, and thus adds to their mounting debt burdens. In order to avoid a climate debt trap, LDCs need grants, rather than loans, to finance climate action. In this context, the new Loss and Damage Fund could play a pivotal role, but only if its design takes into account the specific needs and challenges of the countries most vulnerable to extreme weather events and in particular the least resilient among them. This includes especially the LDCs and the small island developing States (SIDS) (see chapter 2). Seven of the LDCs are SIDS.

2. An increasingly complex international financial architecture

In addition to higher financing requirements to compensate crisis-related development losses, the external financing conditions for LDCs have become more challenging.

A major concern for LDCs is that the international aid architecture is becoming increasingly complex (UNCTAD, 2019). The number of actors has multiplied to include philanthropists, development finance

institutions, the private sector and non-governmental organizations (NGOs), alongside traditional donors. Furthermore, other developing countries such as Brazil, China, India and Türkiye have emerged as new sources of public development finance. Also, the number of international vertical funds⁸ has been expanding rapidly. In addition, there has been fragmentation and proliferation in the international climate finance architecture (see chapter 2).

While the emergence of new partners and funding vehicles broadens the landscape of development finance, it also raises the associated transaction costs, and exerts further pressure on LDCs' limited institutional capacities. Each fund and development partner has its own administrative and bureaucratic requirements, including access to financing, disbursement modalities, and systems of monitoring and reporting. Such high administrative burdens and transaction costs limit the LDCs' ability to access financing by the various institutions, and thus the overall performance of the international financial architecture. In addition to the rise in transaction costs, the proliferation of the international aid architecture makes alignment with national priorities and coordination between donors more burdensome, while maintaining overall debt sustainability has become more complex.

Furthermore, the target space of official financing has increasingly widened to include an array of additional goals and objectives, which often compete with the "traditional" ones for resources. These expanded goals include "traditional" development finance objectives, climate finance and humanitarian aid in a context of extreme weather events that increase in frequency, along with geopolitical tensions that have intensified refugee and migratory flows. In this regard, there has been a blurring of the boundaries between different sources and objectives of development financing, and between public and private financial flows, including towards LDCs. This blurring of boundaries is especially blatant in the context of blended finance. There it is often difficult to distinguish between development finance and purely commercial private investments that are backed by official support (UNCTAD, 2019). Also, the distinction between development finance and climate finance, which is critical for purposes of monitoring and ensuring additionality (box 1.2), is becoming

⁷ See: https://unctad.org/system/files/official-document/ciimem4d25_en_0.pdf.

⁸ Vertical fund refers to a specialized development finance vehicle that focuses on a specific sector or thematic area such as climate change, health or education. Examples include the Green Climate Fund, the Global Fund to Fight AIDS, Tuberculosis and Malaria, and the recently established Financial Intermediary Fund for Pandemic Prevention, Preparedness and Response.

Box 1.2 Development finance or climate finance?

Development finance and climate finance are closely linked. Both aim to promote sustainable development, address global challenges and improve the well-being of people and the planet. While development finance focuses on broad-based objectives, such as poverty reduction and eradicating hunger, climate finance specifically targets activities related to climate change mitigation and adaptation, including the expectation that it will eventually address loss and damage.

However, there are some conceptual, programmatic and institutional overlaps between these two forms of finance. Since climate change poses a major threat to the achievement of the Sustainable Development Goals, in development planning it is important to take an integrated and holistic view that includes climate change. In other words, development plans need to be “climate-proofed”. In tandem, climate policies need to take into consideration potential co-benefits and negative side effects across traditional development areas. This interrelationship is reflected in the framework of the Goals, which includes Goal 13 – the climate change Goal – that calls for “urgent action to combat climate change and its impacts”. Another common feature is that developed countries have made quantitative commitments for both ODA and climate finance. Furthermore, both development finance and climate finance can be provided through grants, loans and technical assistance. The same bilateral donors and international financial institutions fund development projects with and without climate objectives. There can also be overlaps at the project level. For instance, a renewable energy project can simultaneously expand access to energy for the previously unserved, while also contributing to climate change mitigation.

There are also differences, as not all development projects target climate change objectives, and not all climate change projects serve broader development objectives. Accordingly, a share of climate finance is delivered through specialized climate funds that mobilize resources specifically for climate-related projects and technologies (see chapter 2). In this regard, it is crucial that the close links between climate change and development do not lead to the double counting of financial flows. In addition, a critical factor for climate finance is that it should constitute new, dedicated financial resources to address the unique and additional challenges posed by climate change in line with the principle of additionality. Accordingly, climate finance should not divert resources from existing development financing efforts. By adhering to the principle of additionality, climate finance can ensure that resources are channeled towards climate-related activities that would not be covered by traditional development finance, as stressed throughout this report.

increasingly blurred. In addition, an increasing share of official development assistance (ODA) by donor countries is spent on refugees in-country, without triggering any financial flows to developing countries. Preliminary ODA figures suggest that this represents a diversion of ODA flows away from developing countries, including LDCs (see chapter 2).

LDCs also face challenges in terms of their agency over decisions shaping international financial flows, in particular ODA, private credit, portfolio flows and FDI. Such decisions are typically taken in the main financial centres by private agents or donor governments, where a strong LDC voice is conspicuous by its absence. This leads to difficulties for LDC governments to retain ownership of their development agendas and coordinate financial flows that have major impacts on their economies. Therefore, external financial flows are not always aligned with national development goals and objectives.

Furthermore, decisions taken in developed countries can have ripple effects on the ability of LDCs to meet their development finance needs. A case in point may be the implementation of net-zero requirements in the banking sectors of developed countries (chapter 4). Also, the costs of external borrowing for LDCs have

been impacted by measures implemented by developed countries since early 2022 to tame inflation (see chapter 3).

In addition, rising geopolitical tensions make it difficult for LDCs to create synergies between the activities of different development partners and different sources of external finance. The importance of this consideration is illustrated by paragraph 14 of the Doha Programme of Action for the Least Developed Countries for the Decade 2022–2031 (DPoA), which underscores both the ambition of this new Programme of Action, as well as the need for “a reinvigorated global partnership for sustainable development based on scaled-up and ambitious means of implementation and diverse support for the least developed countries in forging the widest possible coalition of multi-stakeholder partnerships” (United Nations, 2022: para.14).

Recent individual initiatives, such as the Summit for a New Global Financing Compact in Paris, signify progress in some areas but remain below the level of ambition needed to address the acute financing challenges LDCs face (chapter 5). For instance, the World Bank announced its intention to introduce clauses in loan agreements that allow for a pause in debt repayments for the most vulnerable countries in

The international financial architecture needs urgent reforms to provide a global safety net and foster development in LDCs

times of crisis.⁹ Although a step in the right direction, these clauses will only apply to new loans, and thus do not help to address the existing, unsustainable debt burdens of many LDCs. Similarly, the announcement by the IMF that the target of making \$100 billion available to vulnerable countries by rechanneling SDRs had been achieved¹⁰ is good news, but it should be seen as a first, rather than the final, step. In this sense, as the following chapters of this report highlight, the international community has so far failed to adequately respond to the looming financing crisis in LDCs. Hence, this report reinforces calls for progress on the reform of the international financial architecture, including across the development financing landscape, which encompasses ODA, climate finance and the international debt architecture. It has become a matter of urgency for the international financial architecture to act as a global safety net and development enabler for LDCs.

C. Structure of this report

The remainder of this report is structured as follows.

Chapter 2 highlights the critical need for fiscal space to boost growth and resilience in the LDCs. It shows that in the short to medium term, ODA grants are a major factor for enhancing fiscal space in LDCs, while, over the medium term, domestic resource mobilization can play a larger role. Recent trends in ODA flows to the LDCs are presented, pointing to the crucial need to bring ODA flows to the LDCs up to levels committed by developed countries as fast as possible in order to provide them with the resources

⁹ See https://www.worldbank.org/en/news/factsheet/2023/06/22/comprehensive-toolkit-to-support-countries-after-natural-disasters?intcid=ecr_hp_headerY_en_ext.

¹⁰ See <https://www.reuters.com/markets/imf-has-hit-100-blm-target-sdrs-vulnerable-countries-georgieva-2023-06-22/>.

needed for achieving the Sustainable Development Goals. The chapter presents the latest figures on climate vulnerability and climate finance flows to the LDCs, which demonstrate the inadequacy of currently available funds.

Chapter 3 considers the evolving and worsening dynamics of the external debt of LDCs. It also assesses several initiatives that have been implemented or proposed by the international community, including debt relief initiatives and debt restructuring proposals to provide relief to indebted countries. It highlights the insufficiencies and inefficiencies of such initiatives to systematically deal with the vulnerabilities of indebted LDCs. The chapter also reviews financing instruments that have the potential to unlock sustainable financing for LDCs.

Chapter 4 examines the role that central banks could play in supporting green structural transformation in LDCs. While the underlying mechanics and the ecosystem imperatives for central banks to successfully fulfil a net zero mandate in developed-country contexts have been discussed for some time, the chapter presents the first-ever discussion of these issues in the context of LDCs. Crucially, it considers the implications of climate central banking for the availability of financing for broad-based structural transformation in their countries. It highlights the constraints on central banks' climate action due to their typically limited reach in domestic financial sectors, and how the underdeveloped financial sectors, in turn, affect the ability of central banks to perform the function of climate central banking in LDCs. Critically, it discusses potential conflicts between climate central banking with their existing legal mandates. It concludes by proposing a framework to guide the central banks of LDCs in engaging in climate central banking with the view of prioritizing their actions that are developmental and support low-carbon structural transformation in LDCs in their quest to fulfil the UNFCCC's goals on financial alignment.

Chapter 5 draws on the analysis and conclusions of the preceding chapters, and presents policy options and recommendations for consideration at different levels (multilateral, regional, domestic) by different actors, including LDC governments, development partners and international financial institutions.

References

- Alisjahbana AS (2019). Sustainable development by 2030: achievable in Cambodia and Asia and the Pacific. ESCAP Op-Ed. Available at <https://www.unescap.org/op-ed/sustainable-development-2030-achievable-cambodia-and-asia-and-pacific>.
- Bangladesh Planning Commission (2017). SDGs Financing Strategy: Bangladesh perspective. SDGs Publications No. 7. Government of the People's Republic of Bangladesh. Dhaka.
- DESA (2022). *The Sustainable Development Goals Report 2022*. United Nations Department of Economic and Social Affairs (DESA). New York.
- DGCS-ODD (2018). Plan biennal 2017–2018 de la mise en œuvre des Objectifs de développement durable (ODD) au Bénin. Direction Générale de la Coordination et du Suivi des ODD (DGCS-ODD). Cotonou.
- IMF (2023). *World Economic Outlook: A Rocky Recovery*. International Monetary Fund (IMF). Washington, D.C.
- Kharas H and McArthur J (2019). Building the SDG economy: Needs, spending, and financing for universal achievement of the Sustainable Development Goals. Global Economy & Development Working Paper No. 131. Brookings Institution. Washington, D.C.
- National Planning Commission – Nepal (2018). Needs Assessment, Costing and Financing Strategy for Nepal's Sustainable Development Goals. Government of Nepal. Kathmandu.
- OECD (2022). *Global Outlook on Financing for Sustainable Development 2023: No Sustainability Without Equity*. Organisation for Economic Cooperation and Development (OECD). Paris.
- UNCTAD (2019). *The Least Developed Countries Report 2019: The Present and Future of External Development Finance – Old Dependence, New Challenges*. United Nations publication. Sales No. E.20.II.D.2. Geneva.
- UNCTAD (2020). *The Least Developed Countries Report 2020: Productive Capacities for the New Decade*. United Nations publication. Sales No. E.21.II.D.2. New York and Geneva.
- UNCTAD (2021). *The Least Developed Countries Report 2021: The Least Developed Countries in the Post-COVID World: Learning from 50 Years of Experience*. United Nations publication. Sales No. E.21.II.D.4. New York and Geneva.
- UNCTAD (2022). *The Least Developed Countries Report 2022: The Low Carbon Transition and Its Daunting Implications for Structural Transformation*. United Nations publication. Sales No. E.22.II.D.40. Geneva.
- UNCTAD (2023). *World Investment Report 2023: Investing in Sustainable Energy for All*. United Nations publication. Sales No. E.23.II.D.17. Geneva.
- UNFCCC Standing Committee on Finance (2021). First report on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement. Technical Report. UNFCCC.
- United Nations (2022). *Doha Programme of Action for the Least Developed Countries*. No. A/RES/76/258. United Nations. New York.
- United Nations (2023a). *Reforms to the International Financial Architecture. Our Common Agenda No. 6*. United Nations. New York.
- United Nations (2023b). *Financing for Sustainable Development Report 2023: Financing Sustainable Transformations*. United Nations, Inter-agency Task Force on Financing for Development. New York.
- United Nations (2023c). United Nations Secretary General's SDG Stimulus to deliver Agenda 2030. United Nations. New York.
- United Nations (2023d). Progress towards the Sustainable Development Goals: Towards a Rescue Plan for People and Planet – Report of the Secretary-General (Special Edition) [Advanced unedited version]. General Assembly Seventy-eighth session No. A/78/XX-E/2023/XX. United Nations. New York.



2

Managing fiscal space amidst multiple
crises

CHAPTER 2

Managing fiscal space amidst multiple crises

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A. Introduction

Fiscal space refers to the extent to which a government can increase its spending or sustain a reduction in revenues without compromising its long-term fiscal or financial stability. In other words, it concerns the capacity of a government to implement its fiscal policy objectives while ensuring that its debt remains at a manageable level and its economy remains stable. In this sense, fiscal space is a crucial factor determining the resilience of the growth and development paths of the least developed countries (LDCs) in an increasingly complex and volatile global environment. This chapter highlights recent trends in key indicators of fiscal space, such as debt volumes and composition, as well as LDC governments' fiscal balances, and takes stock of the ability of LDCs to meet their development finance needs at a time when they are suffering from the impacts of numerous crises worldwide. It shows that external financial flows remain a critical factor for fiscal space in LDCs, while, over the medium term, domestic resource mobilization may play a larger role in some of these countries. Despite the critical role of external finance, official development assistance (ODA) flows to LDCs are substantially lower than commitments made by developed countries. In this regard, the chapter presents and discusses recent trends in ODA flows to the LDCs, including their volume, composition and target sectors.

The Least Developed Countries Report 2022 (UNCTAD, 2022a) documented that, although the LDCs have contributed only marginally to the climate crisis, they are among the worst affected by climate change. They require more fiscal space for investments in adaptation and for expenditures to address climate-related loss and damage (L&D). This chapter reinforces this assessment by presenting the latest data on greenhouse gas (GHG) emissions and climate vulnerability. As countries' commitments fall far short of the target of the Paris Agreement to limit the rise in global temperatures to 1.5–2 degrees Celsius above pre-industrial levels (IPCC, 2022; WMO, 2023), LDCs need a surge in non-debt-generating climate finance. In this context, the chapter discusses recent trends in climate finance flows and the importance of the new Loss and Damage Fund for Vulnerable Countries agreed in 2022 at the twenty-seventh Conference of the Parties (COP27) to the United Nations Framework Convention on Climate Change (UNFCCC).

The analyses presented in this chapter all point in the same direction and illustrate a central message of this report: LDCs urgently need support to enhance their fiscal space. Without an increase in “fiscal breathing

LDCs need greater support to reduce vulnerability to external shocks, enhance green transformation and achieve SDG progress



space”, their mounting debt burdens and widening fiscal deficits threaten to divert their policy focus from their structural transformation agendas and undermine progress towards achieving the Sustainable Development Goals (SDGs). In this regard, the large gap between ODA flows to LDCs and SDG target 17.2 needs to be closed as quickly as possible,¹ largely in the form of an increase in grants, while ensuring that these are better aligned with national priorities. Non-debt-generating funding is what LDCs need now more than ever in order to safeguard their growth and development prospects. Furthermore, climate finance flows, including through the new Loss and Damage Fund, need to be scaled up substantially without adding to LDCs' debt burdens, increasing their transaction costs or posing a challenge to their institutional capacities.

B. The need for fiscal space in least developed countries in the context of multiple crises

Fiscal space is an important factor in determining the growth and development prospects of LDCs. It is particularly important for LDCs in times of heightened economic stress, when governments need to respond quickly to crises or cope with a sudden shortfall in revenues. Economic downturns or recessions and

¹ Under Target 17.2, ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to LDCs.

natural disasters are examples of when fiscal space is necessary to provide fiscal stimulus, expand social spending to protect the well-being of the poor and vulnerable, fund humanitarian relief and undertake reconstruction of infrastructure. Furthermore, for LDCs that depend on commodity exports, a slump in commodity prices can cause a revenue shortfall that needs to be compensated. Similarly, for net-commodity-importing LDCs, price hikes for food, fuels and other essential commodities – as experienced in the context of the COVID-19 pandemic

and the war in Ukraine – can lead to mounting import bills (box 2.1), for which fiscal space can act as a buffer. LDCs also require fiscal space to enable their implementation of structural reforms and long-term investments aimed at building productive capacities.

There are various approaches to measuring fiscal space, each with its own data requirements, advantages and drawbacks (IMF, 2016; Cheng and Pitterle, 2018). However, ultimately, the fiscal space of LDC governments can be enhanced by generating

Box 2.1 How commodity prices have affected fiscal space in the least developed countries

In the period 2019–2021, 35 of 46 LDCs were classified as commodity-dependent by UNCTAD, meaning that commodities accounted for more than 60 per cent of their merchandise export revenue (UNCTAD, 2023a). At the same time, the majority of LDCs are also net importers of basic commodities. For instance, in the period 2019–2021, 37 LDCs were net importers of fuels, 39 of basic food items and 44 of fertilizers;^a and 31 LDCs were net importers of all three commodity groups. As a consequence, commodity price shocks and volatility can have an impact on fiscal space in LDCs through various channels. For net commodity exporters, particularly oil exporters, higher prices typically contribute to increased government revenue through taxes and royalties. However, commodity windfalls can also create pressure to increase government spending through subsidies, transfers and higher public sector wages. As a consequence, fiscal policy tends to be procyclical in oil-exporting developing countries (Erbil, 2011; Villafuerte and Lopez-Murphy, 2010), which can undermine long-term fiscal sustainability. For net importers of commodities, commodity price hikes can fuel inflation and increase the costs of social programmes and safety nets designed to protect the poor and vulnerable from rising prices, as they spend a disproportionately high share of their incomes on food and other basic goods.

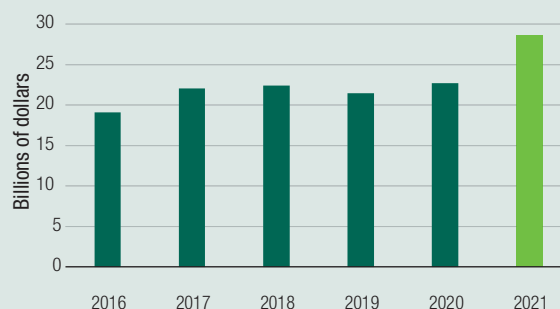
Commodity prices started on a broad-based upward trajectory in May 2020 following the initial COVID-19 shock that had caused a sudden drop in their prices. The rising trend persisted through mid-2022, with prices of several commodities, such as wheat and sunflower oil, reaching historic peak levels after the start of the war in Ukraine. As a consequence, net-commodity-importing LDCs saw a rise in their import bills for basic commodities. For instance, in 2021, the value of net imports of basic food to the LDCs as a group increased by 26 per cent on a year-on-year basis, equivalent to \$5.4 billion (box figure 2.1). This increase was equivalent to about 8 per cent of gross ODA disbursements to LDCs in 2021 (see section C.2). While food and fuel prices have moderated from their peak levels in 2022, they remain well above their pre-pandemic (2015–2019) average. In response to food and fuel price hikes, many governments, including in LDCs, announced new measures, in addition to existing subsidy schemes, to shield households and firms from the higher prices (Amaglobeli et al., 2023). For example, the IMF's Database of Energy and Food Price Actions (DEFFPA)^b lists 97 measures announced in 27 LDCs. Of these, 41 implied increased government spending, such as for subsidies and in-kind or cash transfers; 38 measures affected government revenue, such as through the reduction of value-added taxes, excises or customs duties; and the remaining 18 measures aimed primarily to limit pass-through from international prices to domestic prices, such as price freezes and price caps.

A further source of fiscal stress for many net-commodity-importing LDCs was a depreciation of their currencies against the United States dollar. As the dollar is the main invoicing currency in international trade (Boz et al., 2022), in particular for commodities, this led to an increase in LDCs' import bills expressed in local currency, thereby exacerbating the effect of nominal price increases (UNCTAD, 2022b).

^a UNCTAD secretariat calculations, based on UNCTADStat database. Fuels corresponds to Standard International Trade Classification (SITC) section 3; basic food to SITC sections 0 and 4 less division 07 and including division 22; and fertilizers to SITC group 562.

^b Available at <https://www.imf.org/-/media/Files/Publications/WP/2023/Datasets/wp2374.ashx> [accessed 16 June 2023].

Box figure 2.1
Net food import bill of the least developed countries, 2016–2021



Source: UNCTAD secretariat calculations, based on data from UNCTADStat (accessed 10 May 2023).

Notes: Food refers to basic food items excluding tea, coffee and spices.

higher revenue, increasing debt or receiving additional external grants.² As there are limits to scaling up domestic resource mobilization in the short run (see section C.1), LDCs, when faced with economic shocks or natural disasters, can effectively only rely on an increase in flows of external grants, over which they have no control, or resort to borrowing more. In this sense, key determinants of fiscal space in LDCs include the level and composition of debt, as well as the government's fiscal balance. Clearly, the higher the level of debt, the smaller the fiscal space, as the government will have limited capacity to borrow more without increasing its borrowing costs or risking a sovereign debt crisis. Also, a higher share of non-concessional debt on the government's balance sheet means higher costs for debt service, and thus less fiscal space going forward. Moreover, negative government fiscal balances can compromise debt sustainability, and thus limit their fiscal space over the medium term.

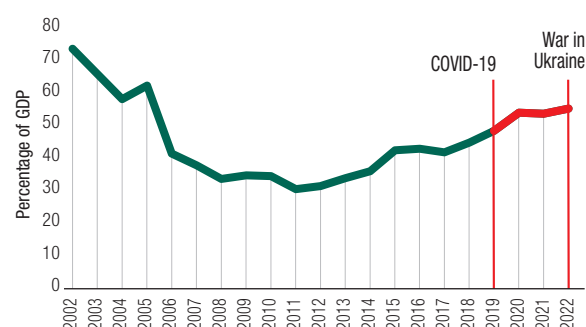
The COVID-19 pandemic triggered a deep economic crisis, which impacted global economic activity, international trade and financial conditions (IMF, 2020; United Nations, 2021). The LDCs have been particularly vulnerable to the global economic slowdown and widespread uncertainty, as they depend to a large extent on external financial flows to fund their development needs and structural transformation. The start of the war in Ukraine in early 2022 and the climate crisis have also negatively impacted fiscal and macroeconomic conditions in LDCs. As a consequence, the period 2020–2022 witnessed deterioration in the key indicators of their fiscal space. For instance, the median ratio of general government debt to gross domestic product (GDP) in LDCs increased from 48.5 per cent in 2019 to 55.4 per cent in 2022 (figure 2.1).³ This is the highest level since 2005, after which these countries benefited from major debt relief through the Multilateral Debt Relief Initiative (MDRI) and the Heavily Indebted Poor Countries (HIPC) Initiative. In parallel, LDCs experienced a period of fast GDP growth, which lowered their median general government debt-to-GDP ratio to 30.6 per cent in 2011. The rise in government debt in the context of recent crises clearly points to a shrinking of LDCs' fiscal space. In this context, it is interesting to note that in 2021, the year between the initial shock of the COVID-19 pandemic in 2020 and the start of the war in Ukraine in 2022,

² In theory, also lowering expenditure can improve fiscal space, but in LDCs, the scope for spending cuts is limited given that the SDGs are underfunded as it is (UNCTAD, 2021) and the structural transformation agenda requires large investments.

³ Also other debt sustainability indicators have worsened in the LDCs as demonstrated in chapter 3.

Figure 2.1

General government debt in the least developed countries, 2002–2022



Source: UNCTAD secretariat calculations, based on data from Kose et al., 2022.

Note: Median of 37 LDCs for which data were available for all the years during the period 2002–2022.

the median government debt-to-GDP ratio fell slightly, though it was still high. This suggests that LDCs are truly facing multiple crises, each with its own negative effects on their fiscal space.

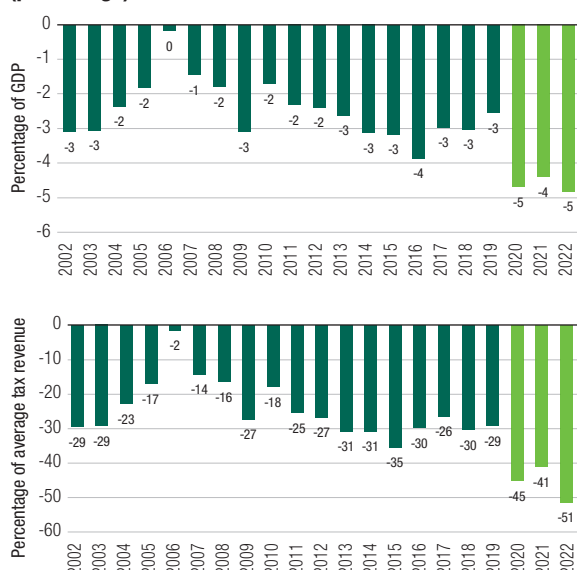
The impact of multiple crises has been particularly severe on LDCs' fiscal balances (figure 2.2) as they have faced pressure in particular on the expenditure side of government budgets. For instance, the average real government expenditure increased by 10 per cent from 2019 to 2020, while the median real government expenditure rose by 7 per cent.⁴ High health spending due to the COVID-19 pandemic was a key driver of rising expenditures in LDCs, with average real central government health expenditure increasing by 27 per cent from 2019 to 2020 (or 23 per cent in the median LDC).⁵ Also, the steep rise in commodity prices, including those of food and fuels, from mid-2020 to mid-2022 put an added strain on government budgets (box 2.1). As a result, during the period 2020–2022, the median LDC ran a fiscal deficit equivalent to 5 per cent of GDP and 46 per cent of tax revenues. This represents a major increase vis-à-vis the decade preceding the pandemic (2009–2019), when median deficits averaged 3 per cent of GDP and 28 per cent of tax revenue. Similar to government debt-to-GDP ratios, fiscal balances improved somewhat in 2021, but worsened markedly in 2022.

⁴ UNCTAD secretariat calculations based on 42 LDCs for which data on government expenditure and GDP deflators were available in the IMF *World Economic Outlook* database (April 2023), available at <https://www.imf.org/en/Publications/WEO/weo-database/2023/April>. [accessed 1 June 2023].

⁵ UNCTAD secretariat calculations, based on 40 LDCs for which data on central government health expenditure were available in the dataset provided in Kurowski et al., (2023); data for GDP deflators were available in the IMF *World Economic Outlook* database (April 2023).

Figure 2.2

Fiscal balances in the least developed countries, 2002–2022 (percentage)



Source: UNCTAD secretariat calculations, based on data from Kose et al., 2022.

Note: Median of 41 LDCs for which data were available for all the years during the period 2002–2022.

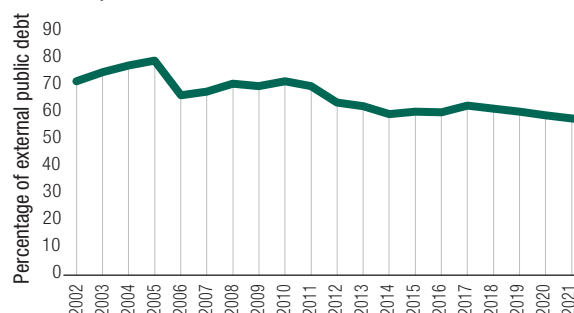
The composition of debt in the median LDC has followed an unfavourable trend since 2010 (figure 2.3), including during the period 2020–2021,⁶ when LDCs needed more, not less, fiscal space. In 2021, the share of concessional loans in total external public debt was 57 per cent in the median LDC, which represented a 2 percentage point decline from 2019 and a staggering 14 percentage point decline from 2010. As a consequence of the lower shares of concessional debt, borrowing costs for LDCs have increased (DESA, 2021). Also, the evolution in the composition of their external debt points to a shrinking fiscal space in the LDCs, as do trends in other indicators linked to fiscal space, such as debt service payments (see chapter 3).

In conclusion, the evolution of key fiscal indicators shows that fiscal space in many LDCs had been shrinking even before the COVID-19 crisis. The pandemic increased the pressure on government spending and public debt, leaving LDCs with the prospect of weak domestic recovery and greater scarring effects on the economy (UNCTAD, 2021). Going forward, geopolitical risks and uncertainties continue to weigh heavily on global growth, which is expected to decelerate to 2.1 per cent in 2023 (UNCTAD, 2023b; World Bank, 2023). Hence, it is important that, over the medium term, fiscal policy

⁶ Data for 2022 were not available at the time of writing this report.

Figure 2.3

Concessional external debt stocks in the least developed countries, 2002–2021



Source: UNCTAD secretariat calculations, based on data from Kose et al., 2022.

Note: Median of 41 LDCs for which data were available for all the years in the period 2002–2021.

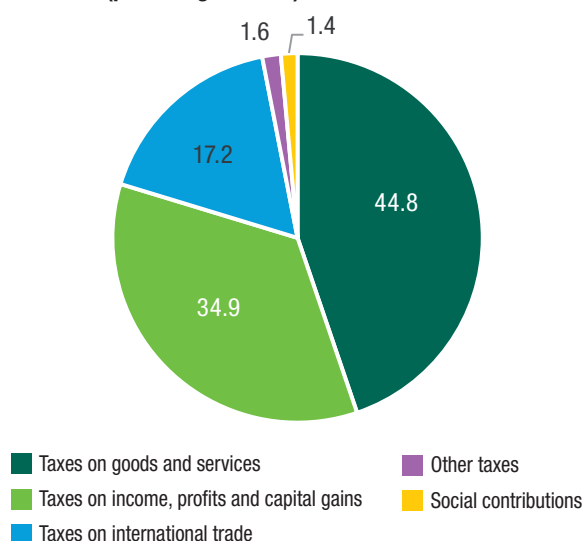
frameworks in LDCs become more resilient to shocks and volatility emanating from global economic conditions, geopolitical crises and commodity price fluctuations. However, in the short to medium term, LDCs need the support of their development partners to enlarge their fiscal space, as discussed in the next section.

C. The development finance landscape in the least developed countries

1. The role of domestic resource mobilization

Domestic resource mobilization (i.e. the ability of a government to generate financial resources from within its own economy), is a vital factor for maintaining fiscal space and overall economic resilience. While external finance plays a major role in financing the SDGs, it is crucial for a country to increase its own domestic resources by strengthening the scope and efficiency of domestic resource mobilization. In particular, an effective and equitable tax system can generate stable and sustainable revenue flows. Taxes on goods and services, which include value added taxes, account for the largest share of domestic revenue in total government revenue in LDCs, with an average share of 44.8 per cent, followed by taxes on incomes, profits and capital gains (34.9 per cent) and taxes on international trade (17.2 per cent) (figure 2.4). For some LDCs, trade taxes are the largest source of domestic revenue. Among the 27 LDCs for which data since 2015 were available, these include Solomon Islands and Somalia. Taxes on income, profits and capital gains accounted for

Figure 2.4
Composition of government revenue in least developed countries (percentage of total)

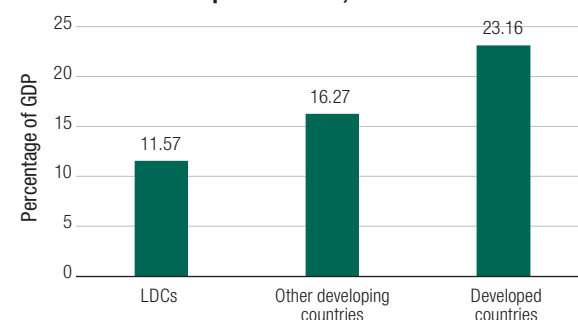


Source: UNCTAD secretariat calculations, based on data for 27 LDCs from the World Bank's *World Development Indicators* database (accessed 28 June 2023).
Note: Data reflect group averages for the latest year available since 2015.

the largest share of government revenue in Angola, Bhutan, Malawi, Timor-Leste and Zambia.

LDCs as a group lag behind other country groups in terms of tax revenues collected as a share of GDP (figure 2.5). However, there are some LDCs where tax revenue-to-GDP ratios are comparable to those of more advanced countries. These include resource-rich economies, such as Angola and Mozambique, and

Figure 2.5
Tax revenues as a percentage of gross domestic product in least developed countries, compared with other developing countries and developed countries, 2020

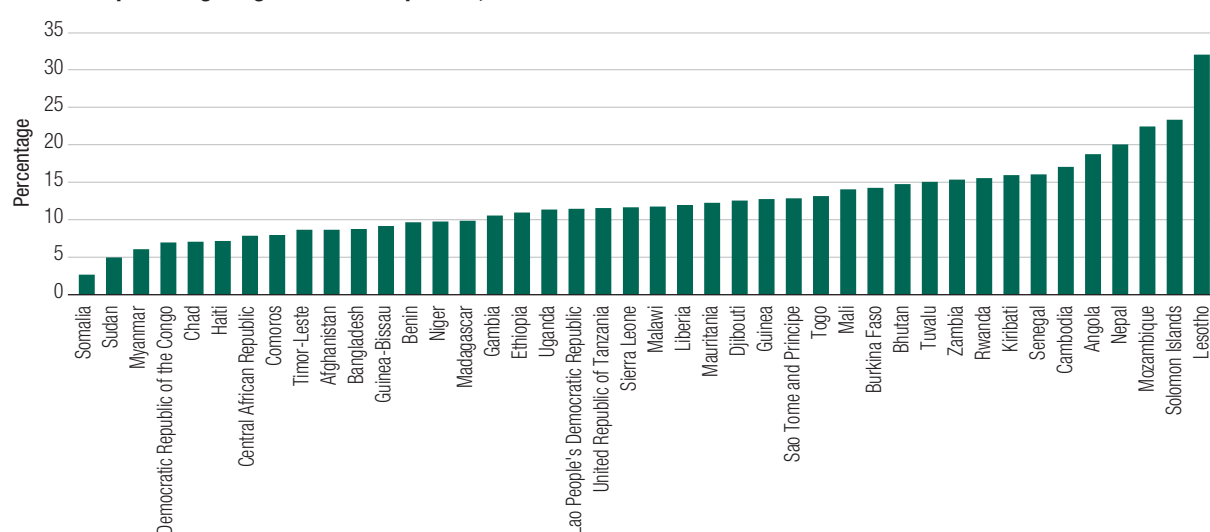


Source: UNCTAD secretariat calculations, based on data from UNU-WIDER, 2022.
Note: Tax revenues exclude social contributions. The figure shows group medians. Data for 31 LDCs were available for 2020. Data for the Central African Republic was sourced from the World Bank, *World Development Indicators* database (accessed 10 May 2023).

small island developing States (SIDS) such as Kiribati and Solomon Islands (figure 2.6). In Lesotho, where the average tax revenue-to-GDP ratio in 2016–2020 was largest among the LDCs for which data were available, transfers from the Southern African Customs Union (SACU) played an important but volatile and declining role (IMF, 2022).

There are several means to improving domestic resource mobilization in LDCs, through policy, institutional and capacity-building measures. While the specific priorities may vary based on the unique circumstances and challenges faced by each LDC, there is generally

Figure 2.6
Taxes as a percentage of gross domestic product, 2016–2021



Source: UNCTAD secretariat calculations, based on data from UNU-WIDER, 2022.
Note: The data for taxes excludes social contributions, and represent averages of all available years for the period 2016–2021. Data for the Central African Republic were sourced from the World Bank, *World Development Indicators* database (accessed 10 May 2023). No data for the period 2016–2020 were available for Burundi, Eritrea, South Sudan and Yemen.

Domestic resource mobilization is vital for increasing the fiscal space and overall economic resilience of LDCs

scope for strengthening the domestic tax system by broadening the tax base, reducing tax evasion and aggressive tax avoidance, improving tax administration and enhancing tax compliance.

For example, many LDCs have large informal sectors that operate outside the reach of the tax system. The informal economy in LDCs accounted for an estimated average share of 35–40 per cent of GDP in 2018,⁷ and for 86 per cent of total employment during the period 2019–2021.⁸ Pervasive informality has been shown to be associated with both lower government revenues and expenditures (Ohnsorge and Yu, 2022). As reported in *The Least Developed Countries Report 2018* (UNCTAD, 2018), a large proportion of informal entrepreneurs in LDCs would like to register their businesses but fail to do so due to administrative obstacles, costs or a lack of information. Therefore, encouraging informal businesses to register and become part of the formal economy could help broaden the tax base. This could be achieved through simplified business registration and tax payment procedures, providing incentives for formalization and offering support services to informal businesses.

Also, reviewing and reducing tax exemptions or preferential treatment for specific sectors or entities could broaden the tax base and ensure a more equitable distribution of the tax burden in LDCs. Exemptions that are not justified by public interest objectives should be phased out. Furthermore, introducing or expanding the coverage of a value added tax could help broaden the tax base by capturing revenue from a broader base of economic activities. Additionally, implementing progressive income taxes and enforcing compliance among high-income earners could contribute to broadening the tax base and ensuring a fairer tax system. In an effort to attract foreign direct investment (FDI) and businesses, many LDCs have lowered their tax rates and provided a range of tax incentives such as tax holidays or incentives to firms operating in special

economic zones (UNCTAD, 2022c). For instance, the average corporate income tax rate in LDCs fell from 35 per cent in 2000 to 28 per cent in 2022.⁹

Domestic resources in LDCs could also be increased by clamping down on illicit financial flows (IFFs). Such flows drain many LDC economies of scarce financial resources, and therefore constitute an obstacle to the achievement of the SDGs. For example, illicit capital flight from Africa was estimated at \$89 billion annually, on average, during the period 2013–2015 (UNCTAD, 2020); and during the period 2002–2018, estimated capital flight from the 15 African LDCs for which data were available amounted to \$521 billion (Ndikumana and Boyce, 2021).¹⁰ Tax evasion and aggressive tax avoidance practices include the manipulation of transfer prices (i.e. the mispricing of goods, services and intellectual property between related business entities). In particular, multinational enterprises (MNEs) often resort to transfer mispricing of cross-border transactions among their entities in order to reduce their tax base by artificially shifting profits from high-tax jurisdictions to low-tax jurisdictions. Also, some MNEs use financial mechanisms, such as loans from offshore-based entities and associated debt service payments, to reduce their tax bills (UNCTAD, 2015a). Therefore, strengthening transfer pricing regulations and enforcement mechanisms could prevent profit shifting and ensure that MNEs operating in LDCs pay their fair share of taxes.

In this regard, international cooperation plays a crucial role. For example, the Organisation for Economic Co-operation and Development (OECD)/Group of 20 project on Base Erosion and Profit Shifting (BEPS) aims at improving international tax coordination to combat tax avoidance by MNEs. By 9 June 2023, there were 12 LDCs among the 143 Members of the OECD/Group of 20 Inclusive Framework on BEPS.¹¹ International cooperation also plays a key role in combating tax avoidance and evasion by fostering information exchange and transparency. Existing initiatives include the Global Forum on Transparency and Exchange of Information for Tax Purposes, which counted 20 LDCs among its 167 members

⁷ UNCTAD secretariat calculations, based on data for 38 LDCs for which data were available in the World Bank's Informal Economy database (Elgin et al., 2021).

⁸ UNCTAD secretariat calculations, based on data for 17 LDCs for which data were available for SDG indicator 8.3.1 in the United Nations *SDG Indicators* database (average of latest available year).

⁹ UNCTAD secretariat calculations, based on data from the Tax Foundation, available at: <https://taxfoundation.org/publications/corporate-tax-rates-around-the-world/> (accessed 28 June 2023).

¹⁰ UNCTAD secretariat calculations, based on constant 2018 dollars in the Excel file accompanying Ndikumana and Boyce, 2021. Available at https://peri.umass.edu/images/Capital_flight_from_African_countries_1970-2018_-_May_2021.xlsx (accessed 21 June 2023).

¹¹ The BEPS membership list is available at <https://www.oecd.org/tax/beps/inclusive-framework-on-beps-composition.pdf> (accessed 15 June 2023).

as of May 2023.¹² Development partners can also strengthen domestic resource mobilization in LDCs by supporting efforts to combat IFFs through capacity-building and technical assistance, in line with SDG target 16.4.¹³ For instance, the Addis Tax Initiative (ATI), a multistakeholder partnership that supports domestic resource mobilization in developing countries, also includes many LDCs.¹⁴ Ongoing work to strengthen the methodological basis for measuring IFFs and building statistical capacity is also an important element in the fight against IFFs.¹⁵

There may also be scope for green tax reforms in some LDCs, including by reducing harmful fossil fuel subsidies, which can be costly, distortive and regressive (Coady et al., 2015). For instance, in 2020, energy subsidies alone were in the range of \$7.8 billion–\$11.6 billion in LDCs.^{16,17} However, reforming inefficient fossil fuel subsidies in line with SDG 12 requires a gradual approach, broad consideration of socioeconomic effects and the careful design of targeted measures to ensure that poor and vulnerable groups are not made worse off. In particular, the design of fossil fuel subsidy reforms should include targeted safeguards that protect progress towards SDG 7 (ensuring access to affordable, reliable, sustainable and modern energy for all).

In resource-rich LDCs, better management of natural resources through transparent and accountable governance frameworks and favourable contracts with enterprises in the extractive industries could further contribute to domestic resource mobilization. In particular, imposing appropriate taxes, royalties and fees on resource extraction is critical. In this context, the global energy transition presents an opportunity for LDCs that have reserves of critical minerals

The global energy transition presents an opportunity for LDCs that have reserves of critical minerals

used in the production of low-carbon technologies, such as bauxite, cobalt, copper, graphite and rare earth elements (UNCTAD, 2022a). For instance, the Democratic Republic of the Congo has the world's largest reserves of cobalt, accounting for an estimated 68 per cent of global mine output in 2022 (United States Geological Survey, 2023). Guinea has the world's largest reserves of bauxite and was the second largest mine producer in 2022 (United States Geological Survey, 2023). Madagascar and Mozambique jointly account for 15 per cent of global natural graphite reserves, and produced 22 per cent of global mine output in 2022 (United States Geological Survey, 2023). Rare earth reserves exist in Burundi, Madagascar, Myanmar and the United Republic of Tanzania (United States Geological Survey, 2023). Furthermore, the Democratic Republic of the Congo and Zambia hold large copper reserves (United States Geological Survey, 2023).

Global demand for these critical minerals is bound to significantly increase with the rising demand for electric vehicles and renewable energy generation. For example, the International Energy Agency estimates that the energy transition needed in order to reach the goals of the Paris Agreement would increase demand for cobalt and graphite by factors of 21 and 25, respectively, from 2020 to 2040 (IEA, 2022). Large-scale support schemes to promote green technologies in developed countries, such as under the Inflation Reduction Act in the United States, which includes tax breaks and subsidies worth \$369 billion (United States Department of the Treasury, 2022), and the European Green Deal Industrial Plan for the Net-Zero Age (European Commission, 2023), are likely to drive significant demand growth for critical minerals in the short term. In this context, domestic financial resources in LDCs can be increased by promoting local value addition in the extractive industry. The recent announcement of collaboration between the Democratic Republic of the Congo and Zambia to jointly develop an industry for producing battery precursor materials is a promising initiative in this regard.¹⁸

¹² See <https://www.oecd.org/tax/transparency/who-we-are/members/> (accessed 22 June 2023).

¹³ SDG target 16.4 aims to “significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime”.

¹⁴ See <https://www.addistaxinitiative.net/> (accessed 24 July 2023).

¹⁵ See, for example, recent UNCTAD-supported progress in producing official statistics on IFFs, at: <https://unctad.org/news/first-ever-official-data-illicit-financial-flows-now-available> (accessed 21 June 2023).

¹⁶ UNCTAD secretariat calculations, based on UNEP, retrieved from *SDG Indicators* database (lower bound) and the IMF, Energy Subsidy Template, available at <https://www.imf.org/en/Topics/climate-change/energy-subsidies>, (upper bound of estimate) (both accessed 23 May 2023).

¹⁷ Explicit subsidies reflect undercharging for supply costs and producer subsidies. However, the bulk of energy subsidies are implicit, which reflect undercharging for environmental costs and general consumption taxes. There are different ways of calculating explicit subsidies (see UNEP, 2019 and Parry et al., 2021) for methodological notes).

¹⁸ See <https://www.un.org/africarenewal/magazine/may-2022/trade-ties-zambia-and-drc-sign-cooperation-agreement-manufacture-electric>.

Official development assistance remains the largest source of external finance for LDCs

Combating corruption and improving governance are also crucial for creating an enabling environment for domestic resource mobilization. Strengthening institutions, promoting transparency, and implementing effective anti-corruption measures can help to ensure that resources are used for public benefit. The Extractive Industry Transparency Initiative (EITI) is an example of an international initiative that can help promote transparency and accountability in the oil, gas and mining sector, and thereby ensure a more equitable distribution of revenues from the exploitation of countries' natural resources. As of June 2023, 24 LDCs were members of the EITI, and five LDCs were classified as making high or very high progress in meeting EITI standards for validation.¹⁹ Furthermore, effective public financial management systems can help optimize the allocation and utilization of public resources. Strengthening budgetary processes, implementing transparent procurement systems, and enhancing financial reporting and auditing mechanisms could improve the efficiency and effectiveness of resource mobilization and expenditure.

Many LDCs have underdeveloped financial systems, resulting in low savings rates and limited access to capital. Development of their financial sector could play a crucial role in facilitating domestic resource mobilization. A well-functioning financial sector promotes savings and investment by providing efficient and inclusive financial services, such as savings accounts, insurance and pension schemes. This encourages individuals and businesses to save and invest their incomes, thereby creating a pool of funds that can be put to productive use within the country. Importantly, it facilitates access to credit. In many LDCs, access to affordable and formal credit sources is often lacking, which inhibits entrepreneurial activities and productive investments. By establishing robust banking systems, microfinance institutions and credit guarantee schemes, LDCs can enable businesses, especially small and medium-sized enterprises (SMEs), to access credit for expansion and innovation, leading to increased domestic resource

mobilization. Furthermore, a well-developed financial sector can promote the development of capital markets; stock exchanges, bond markets and venture capital networks allow businesses to raise funds from domestic investors. This reduces reliance on external sources of financing and promotes the retention of domestic resources within the country. Finally, financial sector development enhances financial inclusion by reaching and empowering marginalized populations. By facilitating access to financial services, LDCs can bring the unbanked population into the formal financial system, enabling them to save, invest and participate in economic activities. This inclusion leads to a broader resource base and more robust domestic resource mobilization. Chapter 4 provides an analysis of the state of financial sector development in LDCs, and of the role that net-zero banking could play in their sustainable development.

Overall, the role of domestic resource mobilization in LDCs can only grow in parallel with the implementation of LDCs' structural transformation agendas, the build-up of productive capacities and increased efforts to strengthen governance, improve tax systems and enhance institutional capacity at both national and international levels. The impact of domestic resource mobilization and allocation can be improved by better aligning the focus of ODA flows with domestic priorities and processes in LDCs (see next section). In this context, LDC governments and ODA providers should seek to maximize complementarity and create synergies between aid and domestic resource allocation, while reducing overlaps and wasteful spending through parallel processes. This includes using national systems and processes to deliver ODA wherever it is most needed or where it would have the most beneficial effects in line with national priorities.

2. The role of external financial flows to least developed countries

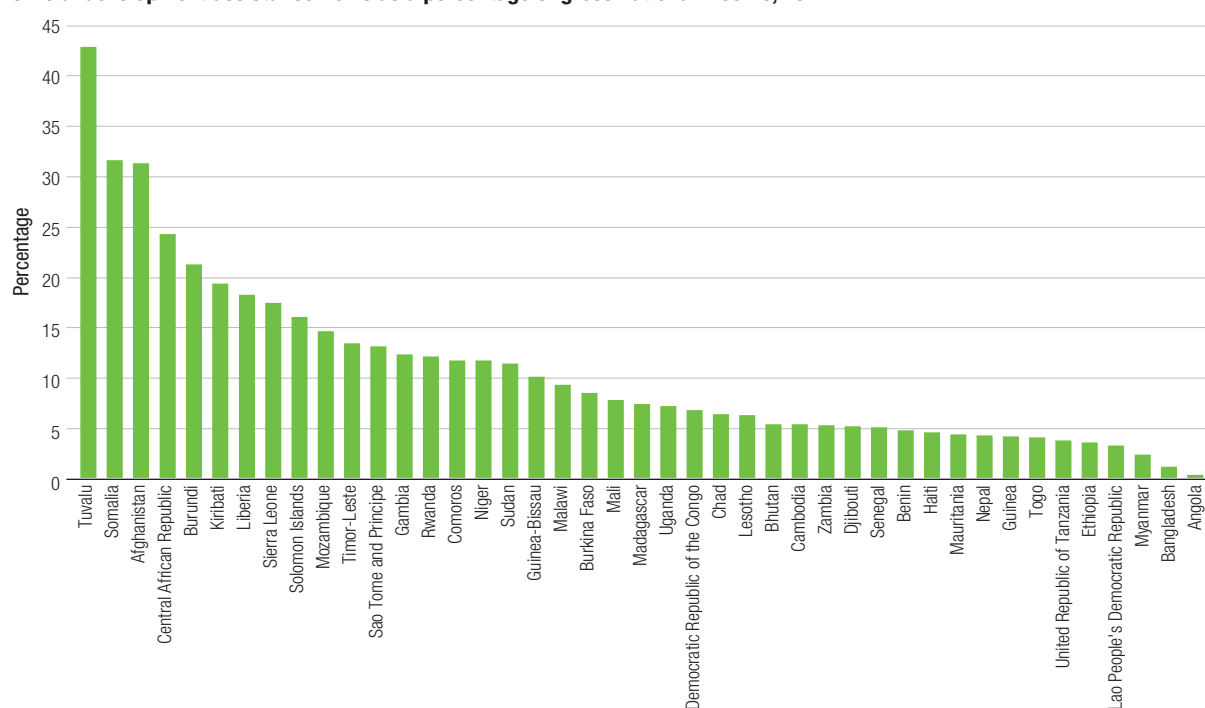
The landscape of external financial flows for development in LDCs is complex and multifaceted, involving a variety of different actors and funding sources. Overall, ODA continues to be the largest source of external finance to LDCs, ahead of remittances, FDI and other official flows (OOF) (see chapter 1). For LDCs as a group, ODA inflows relative to key macroeconomic variables declined in 2021 after marked increases in 2020, when development partners scaled up their support in response to the COVID-19 pandemic (figure 2.7). Net ODA received as a share of LDCs' gross national income (GNI) in 2021 stood at 4.8 per cent, down from 5.5 per cent in 2020 and close to its pre-pandemic level of 4.6 per cent in 2019. Similarly, net ODA received as a share

¹⁹ See EITI website at: <https://eiti.org/countries> (accessed 16 June 2023). The five countries classified as making high or very high progress are the Democratic Republic of the Congo, Guinea, Senegal, Sierra Leone and Zambia.

of imported goods, services and primary income fell from 19.6 per cent in 2020 to 14.3 per cent in 2021, slightly below the 14.5 per cent registered in 2019. Net ODA received as a share of gross capital formation also fell in 2021, but remained slightly above its 2019 level. Per capita ODA in current dollars reached an all-time high of \$60 in 2020, but fell to \$55 in 2021. Overall, the weight of ODA relative to GNI, imports and investment, as well as per capita ODA flows to LDCs, increased from 2017 to 2021. In other words, the dependence on ODA by LDCs as a group is on the rise. However, aggregate figures mask huge disparities of ODA dependence across LDCs (figure 2.8). At the upper end of the spectrum is Tuvalu, where the share of ODA in GNI was 42.8 per cent in 2021, while at the lower end, Angola received only a 0.4 per cent share in GNI.

Figure 2.8

Official development assistance flows as a percentage of gross national income, 2021



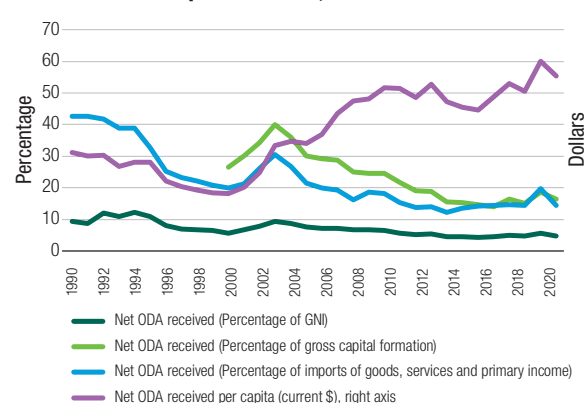
Source: UNCTAD secretariat calculations, based on data from the World Bank, *World Development Indicators* database (accessed 8 May 2023).
Note: Data were not available for Eritrea, South Sudan or Yemen.

The 46 LDCs jointly received \$73.7 billion in gross disbursements of total official flows in 2021, of which the bulk (\$66.9 billion, or 90.7 per cent) was ODA and a minor but growing share (\$6.8 billion, or 9.3 per cent) was OOF (figure 2.9).²⁰ ODA flows to LDCs reached a record high of \$72.9 billion in 2020, the year the COVID-19 pandemic

²⁰ Data for ODA in figure 2.9 differ somewhat from figure 2.7 because the amounts in figure 2.7 are expressed in current dollars.

Figure 2.7

Selected indicators of official development assistance flows to the least developed countries, 1990–2021



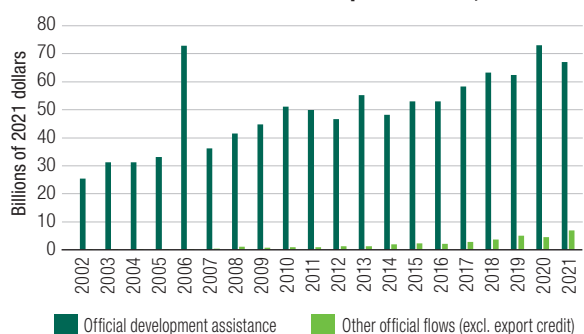
Source: UNCTAD secretariat calculations, based on data from the World Bank, *World Development Indicators* database (accessed 8 May 2023).

started. In the period 2019–2021, ODA flows to LDCs totalled \$202 billion, of which the five largest recipients – Bangladesh, Ethiopia, Afghanistan, Yemen and the Democratic Republic of the Congo – received 35 per cent (figure 2.10).

Bilateral flows from member countries of the OECD Development Assistance Committee (DAC) and multilateral flows constitute the bulk of ODA flows to LDCs (figure 2.11). Non-DAC official bilateral ODA flows accounted for 3.8 per cent of total ODA

Figure 2.9

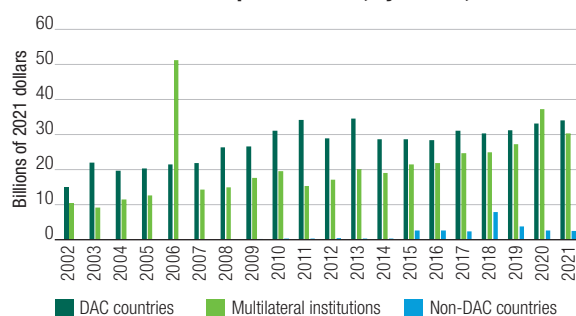
Gross disbursements of official development assistance and other official flows to the least developed countries, 2002–2021



Source: UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System* database (accessed 23 May 2023).

Figure 2.11

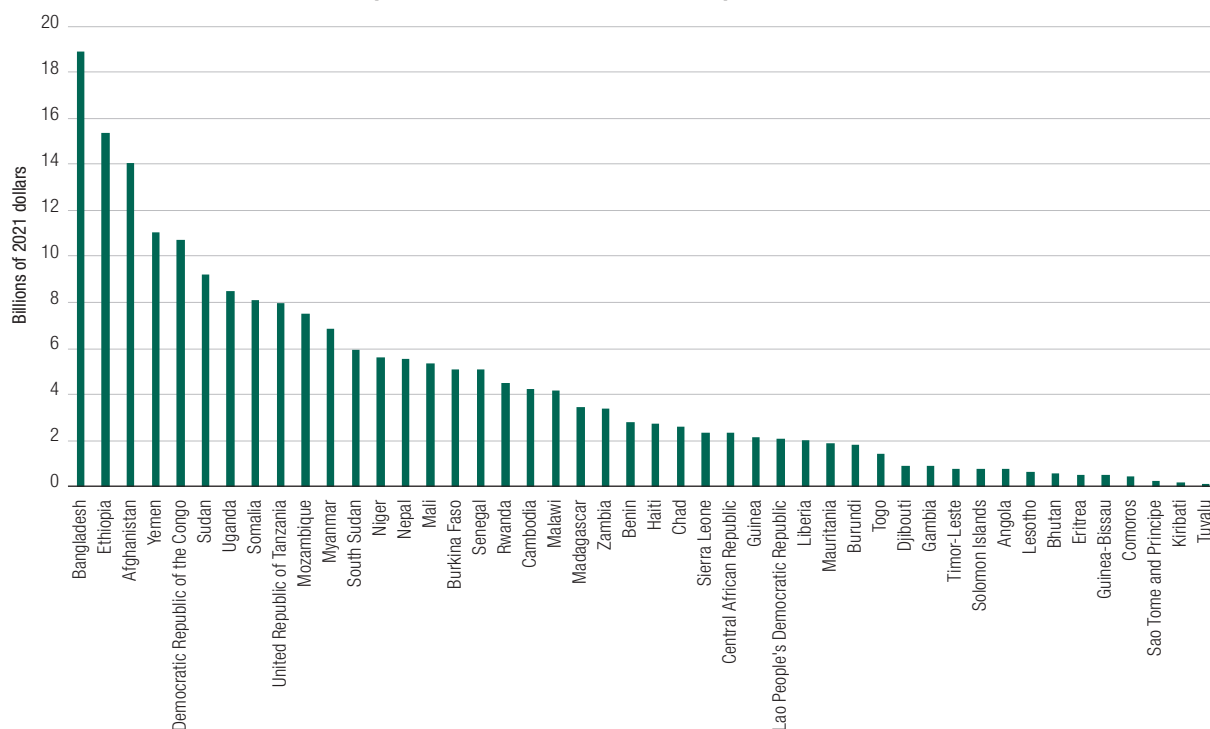
Gross disbursements of official development assistance flows to the least developed countries, by source, 2002–2021



Source: UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System* database (accessed 23 May 2023).

Figure 2.10

Gross disbursements of official development assistance to the least developed countries, 2019–2021



Source: UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System* database (accessed 23 May 2023).

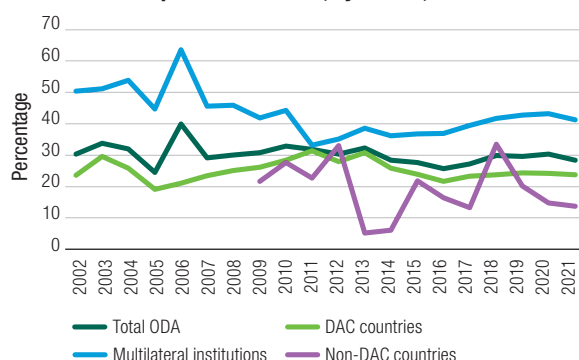
in 2021. However, since not all countries report to the OECD *Creditor Reporting System*, notably China and India, non-DAC bilateral flows to LDCs are likely underestimated by a significant margin.²¹ In 2020,

multilateral ODA flows exceeded bilateral flows for the first time since 2006 when major multilateral debt cancellations took place within the framework of the Multilateral Debt Relief Initiative.

The share of LDCs in total ODA flows to developing countries was 28 per cent in 2021, down 2 percentage points from 2020 (figure 2.12). There was a significant gap between the share of LDCs in ODA provided bilaterally by DAC countries and multilaterally during the period 2002–2021. In 2021 that share was 24 per cent from DAC countries and 41 per cent from multilateral institutions.

²¹ For instance, estimates of China's bilateral official flows differ, as varying definitions are used in the literature. The Japan International Cooperation Agency estimates Chinese flows in 2019 to have been \$5.9 billion, which would make China the sixth largest source of bilateral flows in that year (Kitano and Miyabayashi, 2020). And the OECD estimates that bilateral flows from India amounted to \$1.01 billion in 2020 (OECD, 2023a).

Figure 2.12
Share of the least developed countries in gross disbursements of official development assistance, by source, 2002–2021

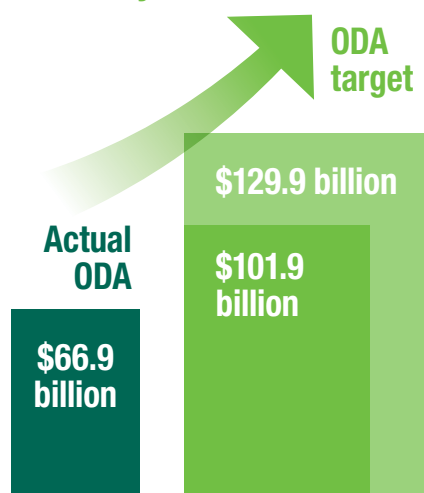


Source: UNCTAD secretariat calculations, based on data from the OECD Creditor Reporting System database (accessed 13 June 2023).

3. How do official development assistance disbursements compare with commitments?

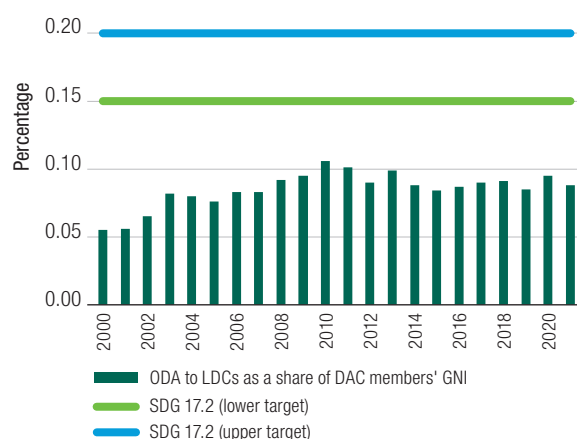
SDG Target 17.2 calls on developed countries to “Implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries.” The target of 0.15–0.20 per cent of GNI was subsequently also included in the Doha Programme of Action (DPoA) (United Nations, 2022: para.250).

Meeting the ODA target would boost aid to LDCs by \$35 billion–\$63 billion



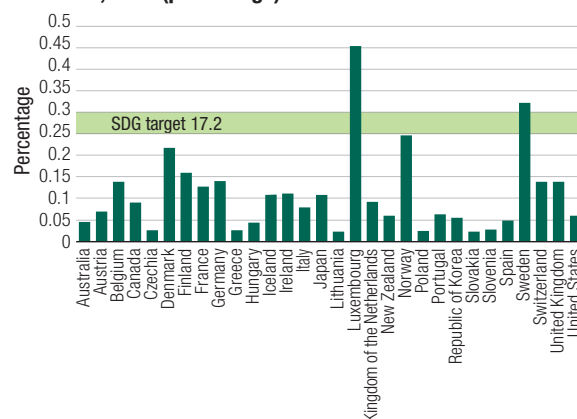
ODA flows to LDCs have been consistently lower than the commitments made by the developed countries. Latest figures show that in 2021, ODA to LDCs accounted for only 0.09 per cent of DAC members’ GNI (figure 2.13), which is significantly lower than the SDG 17 targets. This gap between flows and commitments is a key contributor to underfunding of the SDGs in LDCs, particularly with regard to their structural transformation. If DAC member countries had met the 0.15–0.20 per cent target in 2021, ODA flows to LDCs would have amounted to an estimated \$35 billion–\$63 billion larger than what they actually disbursed. In 2021, only five DAC members – Denmark, Finland, Luxembourg, Norway and Sweden – reached the target of 0.15–0.2 per cent of GNI (figure 2.14).

Figure 2.13
Sustainable Development Goal 17.2 targets vs. actual official development assistance disbursements by Development Assistance Committee members, 2002–2021



Source: UNCTAD secretariat calculations, based on data from (OECD, 2023b).

Figure 2.14
Net official development assistance disbursements as a share of gross national income of Development Assistance Committee member countries to the least developed countries, 2021 (percentage)



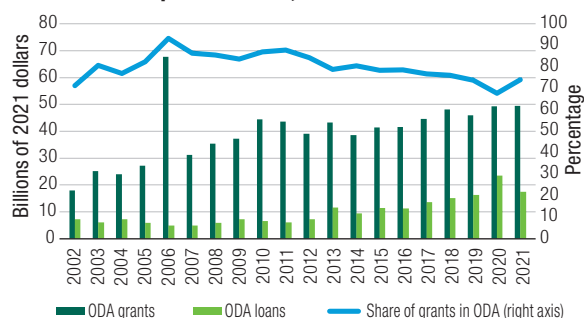
Source: UNCTAD secretariat calculations, based on data from United Nations, SDG Indicators database (accessed 23 May 2023).

4. Composition of official development assistance flows to the least developed countries

An important issue relating to ODA is whether it takes the form of grants or loans. Both grants and loans can fill funding gaps in critical areas of the SDGs, and help advance implementation of the structural transformation agenda in LDCs. However, loans add to the debt burden of LDCs, and can thus fuel a problem in one area of sustainable development while aiming at solving a problem in another area. However, as a lack of adequate fiscal space is a key concern for LDCs (section B), debt-generating ODA in the form of loans constitutes a trade-off for these countries.

In the period 2012–2021, the share of grants in total ODA to LDCs was 76 per cent, a significant decline from the preceding decade (2002–2011), when they accounted for 85 per cent (figure 2.15). Disregarding the exceptional year 2006, when major debt relief caused a spike in the share of grants, would only slightly change the picture by reducing the share of grants to 83 per cent in 2002–2011. In 2020, the year the COVID-19 pandemic brought the global economy to a grinding halt, the share of grants reached its lowest point since 2002 (the start of the data series in the OECD *Creditor Reporting System*) at 67 per cent. Hence, while total ODA to LDCs increased in response

Figure 2.15
Grants vs. loans in official development assistance flows to the least developed countries, 2002–2021



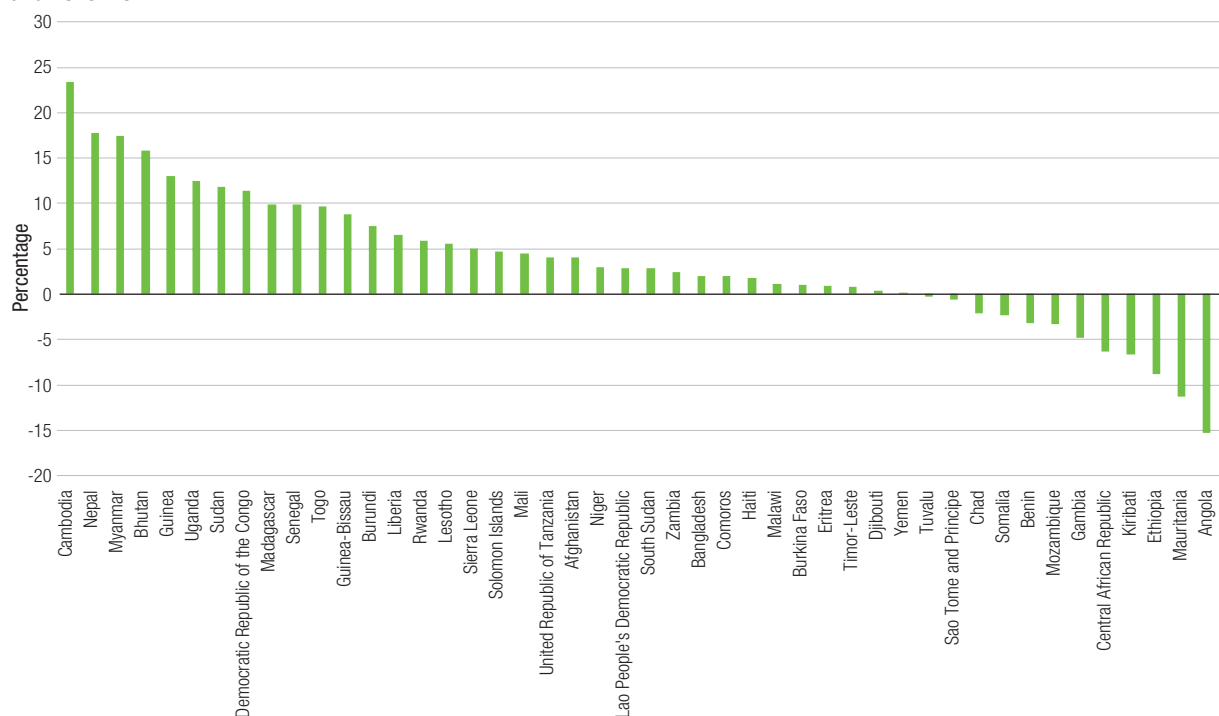
Source: UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System* database (accessed 24 May 2023).

Note: Equity investments are not presented, as they account for less than 1 per cent of total ODA flows to LDCs.

to the COVID-19 pandemic, the increase in flows was accompanied by a sudden and pronounced fall in the share of grants in ODA (down 6 percentage points from the previous year) and a corresponding rise in the share of loans.

The share of loans in total ODA flows increased for 28 out of 46 LDCs from the period 2016–2018 to 2019–2021, while it decreased for only 10 LDCs (figure 2.16). For eight LDCs, the share of loans was roughly stable in both periods, registering a change in the range of -1 to 1 percentage points. Cambodia

Figure 2.16
Change in the share of loans in total official development assistance flows to least developed countries between 2016–2018 and 2019–2021



Source: UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System* database (accessed 5 May 2023).

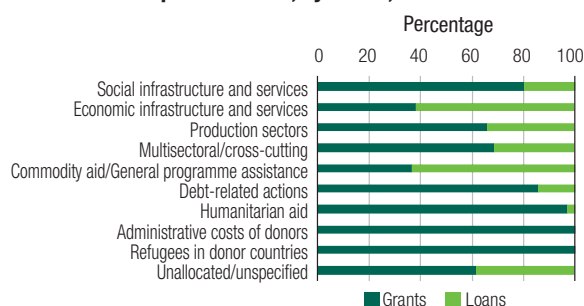
experienced the largest change, with an increase of 23 percentage points, which brought its share of loans to 57 per cent in the period 2019–2021.

The share of grants and loans in ODA differs substantially across sectors (figure 2.17). For instance, in the social infrastructure and services sector, which accounts for the largest share of ODA flows to LDCs, the share of grants was 80 per cent in the period 2019–2021. However, the shares of grants in production sectors and economic infrastructure and services – two key areas for structural transformation in LDCs – were much lower, at 66 and 38 per cent respectively. The relatively low shares of grants in these two latter areas are problematic as it means that LDCs need to trade off investments in crucial areas of structural transformation funded through ODA against an increase in debt burdens, which shrinks their fiscal space. At best, this constitutes an obstacle to their structural transformation; at worst, the lower share of grants in these sectors hampers critical, forward-looking investments that could shape the growth and development prospects of LDCs and their attainment of the SDGs by 2030.

Mobilizing private financing can be an important option for LDCs, given their limited domestic resources and insufficient ODA inflows. In this context, the growth of private finance, mobilized by official development finance interventions – so-called blended finance – has given rise to a debate about its potential benefits for LDCs.

While the bulk of blended finance continues to go to other developing countries, LDCs have been receiving an increasing share in the 2010s (figure 2.18). For instance, in the period 2019–2021, LDCs received a cumulative amount of \$21.7 billion in blended finance, corresponding to 16 per

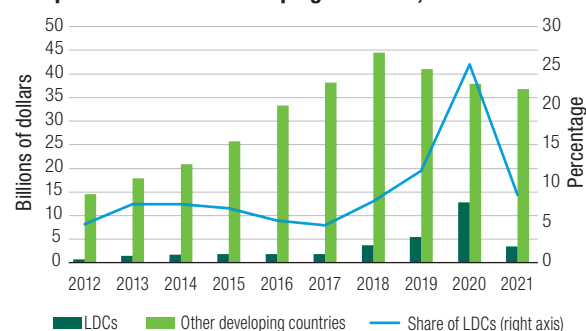
Figure 2.17
Grants vs. loans in official development assistance flows to the least developed countries, by sector, 2019–2021



Source: UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System* database (accessed 25 May 2023).

Note: Equity investments are not presented and are not included in the calculation of grant and loan shares as they account for less than 1 per cent of total ODA and are absent in several sectors.

Figure 2.18
Flows of blended finance to the least developed countries compared with other developing countries, 2012–2021



Source: UNCTAD secretariat calculations, based on data from OECDStat database (accessed 25 May 2023).

cent of total flows to developing countries.²² This represents a substantial increase from the period 2016–2018, when cumulative flows amounted to \$7.6 billion, or 6 per cent of total flows to developing countries. However, it must be noted that flows of blended finance are highly unequal across LDCs. The five largest recipients in the period 2019–2021 – Bangladesh, Ethiopia, Guinea, Mozambique and Rwanda – received a share of 70 per cent of the LDC total (compared with 50 per cent in 2016–2018). In the period 2017–2021, multilateral institutions were the largest mobilizers of blended finance, accounting for 71 per cent of total flows to LDCs, while 29 per cent of the total was mobilized by DAC countries.²³

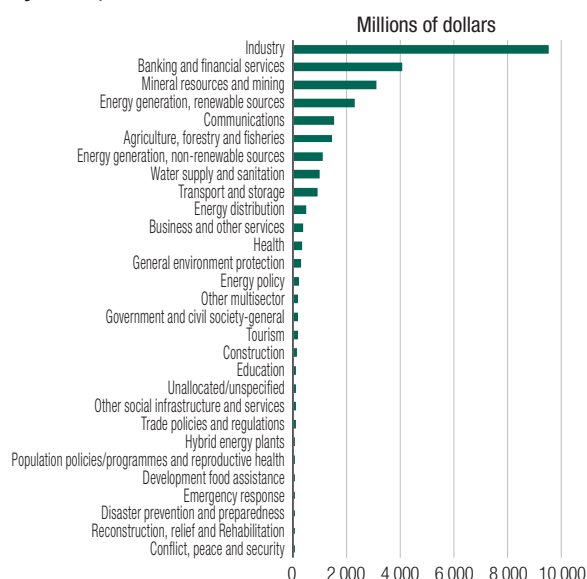
While flows of blended finance to LDCs tended to be concentrated in sectors that generate revenue, such as energy, and banking and financial services (OECD and UNCDF, 2020; UNCTAD, 2019), more recent data show an increase in such flows to the industrial sector. Indeed, it became the largest target sector for target finance in the period 2017–2021, receiving a total of \$9.5 billion (figure 2.19). On the other hand, barely any blended finance went to important sectors for LDCs, such as disaster prevention and preparedness or conflict, peace and security – a critical area for fragile and conflict-affected LDCs.

Overall, recent data show a rising trend in flows of blended finance to LDCs. However, the high level of country and sectoral concentration of blended finance among and within LDCs warrants caution in assessing its potential contribution to the achievement of the SDGs (UNCTAD, 2019). With this in mind, bilateral ODA providers and multilateral agencies that seek to mobilize increasing volumes of blended finance for LDCs should

²² UNCTAD secretariat calculations, based on data from OECDStat database (accessed 25 May 2023).

²³ UNCTAD secretariat calculations, based on data from OECDStat database (accessed 25 May 2023).

Figure 2.19
Flows of blended finance to the least developed countries, by sector, 2017–2021



Source: UNCTAD secretariat calculations, based on data from OECDStat database (accessed 5 May 2023).

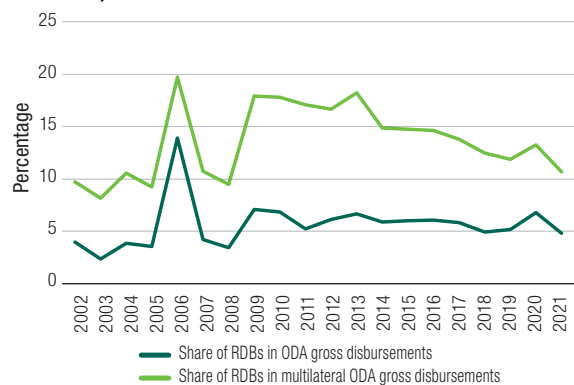
ensure that such flows align with LDC priorities, national development plans and national investment plans. Finally, LDCs need to ensure that private investments contribute to sustainable development without causing negative side effects. In this regard, it is important for them to devise rules and regulations that mitigate potential environmental and social risks, promote transparency and protect local communities.

5. The role of regional and subregional development banks

Regional development banks (RDBs) play a significant role in the development finance space of LDCs. In 2021, they accounted for 5 per cent of total gross ODA disbursements and 11 per cent of gross disbursements from multilateral institutions to LDCs (figure 2.20). However, there are large differences between and within regions. In Asia, RDBs play a much more important role for LDCs than in Africa. In the period 2017–2021, RDBs accounted for 10 per cent of total gross ODA disbursements to the median Asian LDC, whereas their share was only 4 per cent in the median African LDC (figure 2.21). In the same period, RDBs accounted for 11 and 25 per cent of total and multilateral ODA gross disbursements to Haiti, respectively.

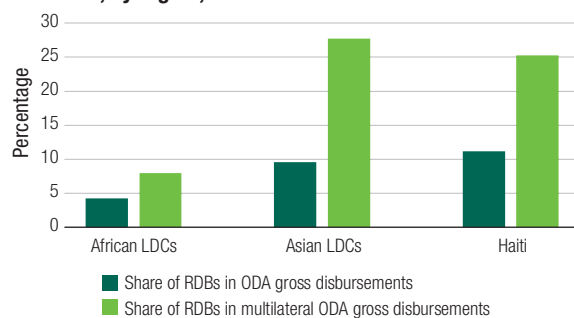
At country level, the largest shares of RDBs in total ODA flows to LDCs go to Bhutan followed by Nepal, Cambodia and the Lao People's Democratic Republic (table 2.1), thus underscoring the relatively larger role of RDBs in Asian LDCs. At the other end of

Figure 2.20
Shares of regional development banks in total official development assistance flows and multilateral official development assistance flows to the least developed countries, 2002–2021



Source: UNCTAD secretariat calculations, based on data from the OECD Creditor Reporting System database (accessed 5 May 2023).

Figure 2.21
Shares of regional development banks in total official development assistance flows and multilateral official development assistance flows to the least developed countries, by region, 2017–2021



Source: UNCTAD secretariat calculations, based on data from the OECD Creditor Reporting System database (accessed 14 May 2023).

Note: Data reflect median shares of countries in groups.

the spectrum are fragile and conflict-affected LDCs, including the Central African Republic, Somalia, South Sudan and Yemen. Overall, there are only two African LDCs (the Comoros and Sao Tome and Principe) where RDBs accounted for more than 10 per cent of ODA gross disbursements in the period 2017–2021. This suggests that there could be scope for an expansion of RDB activity in African LDCs.

RDBs already play a significant role in bond markets in Africa (see chapter 3). For example, the African Development Bank (AfDB) has established bond programmes and issued bonds, including in the currencies of the African LDCs.²⁴ Subregional financial entities can also help countries raise capital. For

²⁴ See, for example, <https://www.afdb.org/fr/news-and-events/afdb-returns-to-the-ugandan-capital-market-with-its-second-shilling-bond-11822> (accessed 28 June 2023).

Table 2.1

Shares of regional development banks in official development assistance flows and multilateral official development assistance flows to the least developed countries, by country, 2017–2021 (percentage)

Country	Share of RDBs in ODA gross disbursements	Share of RDBs in multilateral ODA gross disbursements
Bhutan	36.7	47.0
Nepal	19.6	30.5
Cambodia	17.5	46.9
Lao People's Democratic Republic	15.8	37.7
Tuvalu	15.4	29.9
Sao Tome and Principe	12.3	17.2
Comoros	12.2	23.8
Haiti	11.2	25.2
Bangladesh	10.4	21.7
Gambia	9.9	13.6
Kiribati	8.8	30.7
Djibouti	7.6	14.6
Guinea-Bissau	6.8	8.9
Guinea	6.6	10.0
Democratic Republic of the Congo	6.2	12.0
Rwanda	6.1	10.9
Solomon Islands	6.1	25.6
Liberia	6.0	12.9
Togo	5.9	8.1
Timor-Leste	5.9	24.8
United Republic of Tanzania	5.8	11.9
Chad	5.6	8.8
Niger	4.9	8.1
Afghanistan	4.9	16.5
Madagascar	4.7	7.1
Benin	4.5	7.9
Sierra Leone	4.5	7.5
Sudan	4.3	9.5
Myanmar	4.2	13.4
Uganda	4.1	8.8
Ethiopia	4.0	7.8
Mali	3.9	8.5
Lesotho	3.9	6.9
Burkina Faso	3.9	6.7
Malawi	3.6	7.3
Burundi	3.4	5.7
Angola	3.3	5.9
Mozambique	2.9	6.9
Eritrea	2.9	7.5
Mauritania	2.8	4.3
Senegal	2.6	5.6
Zambia	2.6	6.6
Central African Republic	2.5	4.6
Somalia	2.0	7.1
South Sudan	1.1	5.0
Yemen	0.1	0.6

Source: UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System*.

Note: Figures reflect median shares of countries in groups.

instance, UEMOA-Titres help member-States of the West African Economic and Monetary Union (WAEMU) – among them Benin, Burkina Faso, Guinea-Bissau, Mali, the Niger, Senegal and Togo – to issue government securities (Soumaré et al., 2021; AfDB, 2016). Within the East African Community (EAC), the East African Development Bank is committed to developing capital markets in the region, and has successfully facilitated cross listings within the EAC member States.

In addition to RDBs, regional standard-setting bodies can play a role in supporting the development of sustainable financial systems and initiatives on sustainable financing in LDCs (box 2.2).

Overall, the RDBs play an important role in financing the development efforts of LDCs, but not all LDCs benefit from RDB financing to the same degree. This suggests that there is scope for RDBs to have a stronger impact in LDCs, particularly African LDC where RDBs have a relatively small footprint in the development finance landscape. In this regard, increasing the capitalization of RDBs would make them better prepared to respond to future crises that require the fast deployment of financial resources in LDCs. In this context, channelling Special Drawing Rights (SDRs) through RDBs could play a catalytic role (UNCTAD, 2023c).

Box 2.2 Regional standard-setting bodies for sustainable finance

Standard-setting bodies for sustainable finance play a crucial role in promoting this form of finance by developing and implementing relevant standards and guidelines. Their standards and guidelines help to promote greater harmonization of regulations across countries and regions, and ensure that sustainable finance is conducted in a transparent and consistent manner. This can boost investor confidence in the market and build trust among stakeholders. Additionally, standard-setting can help to promote innovation and competition in financial markets by providing a level playing field for market participants.

In Asia, the Capital Markets Forum of the Association of Southeast Asian Nations (ASEAN) is at the forefront of promoting sustainable finance in the region through its different initiatives, including developing standards for various types of bonds issued in the region. It developed the ASEAN Green Bond Standards in 2017, as well as the ASEAN Social Bond Standards and the ASEAN Sustainability Bond Standards in 2018 (ACMF, 2019). The standards complement each other, and are aimed at enhancing consistency and transparency in the region's bond issuances, supporting the development of new instruments, reducing due diligence costs and facilitating decision-making by investors.

Within Africa, however, countries adhere to standards issued by international organizations, such as the International Organization of Securities Commission and the International Capital Markets Association. It is important to note that some of the standards issued are voluntary, and therefore do not require strict adherence. Individually, some countries in the region have sought to develop appropriate policies to regulate and promulgate guidelines and standards for capital markets in general. However, there are fewer attempts to establish standards at the regional and subregional levels. This is partly due to the small and underdeveloped nature of regional bond markets in Africa, but also because bond markets are dominated by sovereign issuances.

As regional integration takes root in Africa, it would be important to establish regional standard-setting bodies for sustainable finance. Before this can happen, there should be a clear understanding of the need for such bodies and the benefits that they could bring to the region.

Establishing standard-setting bodies for sustainable finance in Africa at the regional or subregional level would require the collaboration of different stakeholders, particularly governments and financial institutions, as well as their commitment to establishing such bodies. Such collaboration and commitment would pave the way for ownership of and engagement with the regional bodies once they are created. The process would also involve identifying the key issues and challenges facing the region, with regard to bond markets, and developing a framework for addressing them. Such a framework would include formulating the appropriate standards, guidelines, policies and regulations that promote sustainable finance, and encouraging investment in sustainable projects. Finally, an appropriate institutional and governance structure would need to be put in place to oversee the development and implementation of the standards. It is important to have LDC representation within the institutional structure of standard-setting bodies, to ensure that these countries' concerns are voiced and given due consideration.

Source: UNCTAD secretariat.

D. Climate finance in the least developed countries

1. The least developed countries and climate change

While the LDCs contribute only marginally to global GHG emissions, they stand at the forefront of climate change impacts (UNCTAD, 2022a). Both historical and contemporaneous GHG emissions of LDCs are dwarfed by those of other country groups. In 2021, the 46 LDCs jointly accounted for 1.7 gigatons of carbon dioxide (CO₂)-equivalent GHG emissions, which constitutes a mere 3.4 per cent of global GHG emissions (figure 2.22). In contrast, other developing countries and developed countries emitted 30.8 gigatons (63.3 per cent of global emissions) and 16.2 gigatons of CO₂-equivalent GHGs (33.3 per cent of global emissions), respectively, in the same

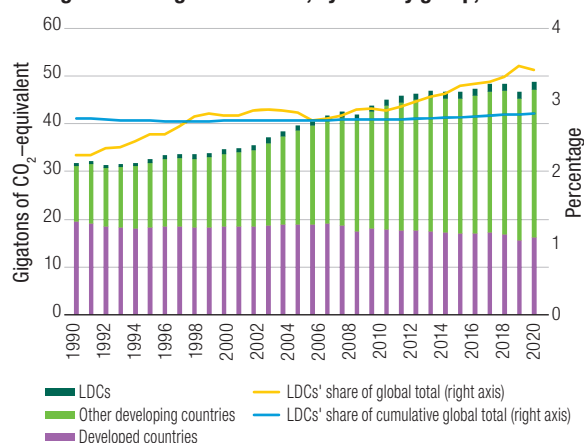
year. The share of LDCs in cumulative global GHG emissions in the period 1850–2021 was even smaller, at 2.8 per cent, in 2021. Thus, the LDCs' contribution to the current climate crisis has been insignificant, and yet that crisis poses a major threat to their development prospects.

Per capita emissions show a similar pattern (figure 2.23). In LDCs, per capita emissions have essentially remained flat since 1990 and were 1.5 tons of CO₂-equivalent in 2021. By contrast, the average person in other developing countries and developed countries was responsible for more than three times (5.6 tons of CO₂-equivalent) and more than eight times more GHG emissions (12.2 tons of CO₂-equivalent), respectively, in 2021.

However, the picture changes drastically when vulnerability to the impacts of climate change is considered. According to the University of Notre Dame's *Global Adaptation Initiative* (ND-GAIN)

Figure 2.22

Total greenhouse gas emissions, by country group, 1990–2021

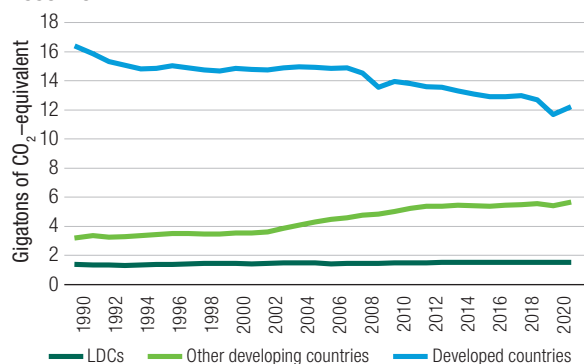


Source: UNCTAD secretariat calculations, based on data from the Potsdam Institute for Climate Impact Research *PRIMAP-hist* dataset, obtained through the Climate Watch data portal (accessed 14 May 2023).

Note: Data include total CO₂-equivalent emissions of the gases covered by the Kyoto Protocol (i.e. carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and the so-called F-gases) from all sources, excluding land use, land-use change and forestry.

Figure 2.23

Greenhouse gas emissions per capita, by country group, 1990–2021



Source: UNCTAD secretariat calculations, based on data from the Potsdam Institute for Climate Impact Research *PRIMAP-hist* dataset, obtained through the Climate Watch data portal; and DESA (2022) for population data (both accessed 14 May 2023).

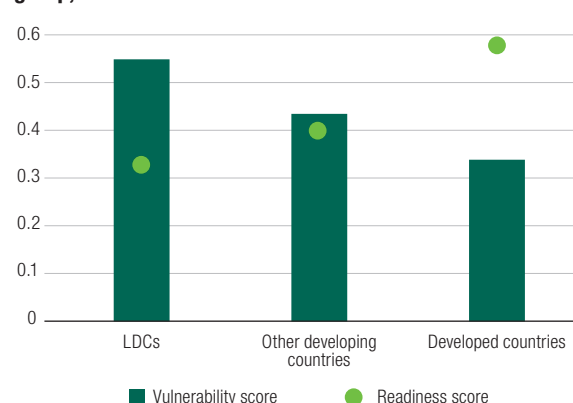
Notes: Data refer to population-weighted group averages. They include total CO₂-equivalent emissions of the gases covered by the Kyoto Protocol (see note to figure 2.23); per capita figures were calculated using population figures from the World Bank, *World Development Indicators* database, as individual datapoints are missing in the per capita figures provided through the Climate Watch data portal.

Index,²⁵ the LDC group of countries is the most vulnerable to the impacts of climate change (figure 2.24), but it also has the lowest readiness score. This score measures a country's ability to leverage investments to adaptation actions. In 2021, there were 17 LDCs among the 20 countries with the lowest ND-GAIN score, which combines measures of vulnerability and readiness (table 2.2).

²⁵ See <https://gain.nd.edu/our-work/country-index> for the ND-GAIN Index and its components.

Figure 2.24

Vulnerability to the impacts of climate change, by country group, 2021



Source: UNCTAD secretariat calculations, based on data from the University of Notre Dame's *Global Adaptation Initiative* (ND-GAIN) dataset (accessed 12 October 2023).

Note: Data for Kiribati, South Sudan and Tuvalu were not available.

Table 2.2

Countries with the lowest Notre Dame Global Adaptation Initiative score in 2021

Country (LDCs are listed in bold)	ND-GAIN score
Chad	27.0
Central African Republic	27.7
Eritrea	30.8
Democratic Republic of the Congo	32.4
Guinea-Bissau	32.5
Afghanistan	32.8
Sudan	32.8
Somalia	33.8
Liberia	34.1
Mali	34.6
Congo	35.0
Yemen	35.0
Uganda	35.1
Madagascar	35.3
Niger	35.5
Burundi	35.5
Haiti	35.5
Zimbabwe	35.6
Papua New Guinea	36.8
Sierra Leone	37.0

Source: UNCTAD secretariat calculations, based on data from the University of Notre Dame's *Global Adaptation Initiative* (ND-GAIN) dataset.

Note: Data for Kiribati, South Sudan and Tuvalu were not available.

2. Climate finance flows to the least developed countries

Since the adoption of the UNFCCC in 1992, climate finance has been one of the key issues discussed, and is also a major source of friction between developing and developed countries. Developed countries agreed to financially support developing countries in

meeting the costs of climate change mitigation and adaptation. And Article 4, paragraph 9 of the UNFCCC recognizes the specific needs of the LDCs.²⁶ These commitments were reiterated and further specified in subsequent Conferences of the Parties (COPs) to the UNFCCC in parallel with the development of a global climate finance architecture (box 2.3).

A landmark in the history of climate finance negotiations within the UNFCCC was the Copenhagen Accord reached at COP15 in 2009,²⁷ which included a climate finance target of \$100 billion annually for

developing countries, to be mobilized by Annex-II countries by 2020.²⁸ The \$100 billion target was later also included in the SDG framework (Target 13.a), and became the first benchmark against which global climate finance flows are measured. However, this figure represents a political consensus rather than the actual needs of developing countries. Latest estimates show that developing countries' finance needs for adaptation alone are in the range of \$160 billion–\$340 billion per year by 2030 and \$315 billion–\$565 billion per year by 2050 (UNEP, 2022). The Glasgow Climate Pact signed

Box 2.3 The global climate finance architecture: A complex and fragmented landscape

Article 21.3 of the UNFCCC laid the foundation of the global climate finance architecture, designating the Global Environment Facility (GEF), co-administered by the World Bank, the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP), as the operating entity of its financial mechanism on an interim basis. Since then, numerous climate funds have been established, including bilateral funds, multilateral funds – both under the aegis of and external to the UNFCCC – regional and national funds.

Multilateral funds under the UNFCCC include the Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF), both established in 2001 and made operational in 2002, and the Adaptation Fund (AF), also established in 2001 but only becoming operational in 2009. These three funds are administered by the GEF, with the World Bank as interim trustee. Funds independent of the UNFCCC include the Forest Carbon Partnership Facility (FCPF), a multi-donor trust fund administered by the World Bank that provides finance for reducing emissions from deforestation and forest degradation, among others; and the Climate Investment Funds (CIFs), also administered by the World Bank, which comprise the Clean Technology Fund (CTF), which focuses on low-carbon technologies, and the Strategic Climate Fund (SCF). The latter provides funding for the Forest Investment Program (FIP), the Pilot Program for Climate Resilience (PPCR) and the Scaling Up Renewable Energy in Low Income Countries program (SREP).

Bilateral climate funds include the International Climate Initiative (IKI) established by the Government of Germany in 2008, which approved €5 billion for more than 950 projects engaged in mitigation, adaptation and biodiversity protection in its first 15 years of operation (IKI, 2023); Norway's International Climate and Forest Initiative (NICFI), also established in 2008, which has a focus on REDD+ projects;^a and the United Kingdom's International Climate Finance (ICF), which approved £5.8 billion in climate funding in the period 2016–2021 and increased the commitment to spend £11.6 billion between April 2021 and March 2026 (United Kingdom, Foreign, Commonwealth and Development Office, 2021).

The decision to establish the Green Climate Fund (GCF) as the second operating entity of the Financial Mechanism under the UNFCCC was taken at COP16 in Cancún, Mexico. After the GCF was officially launched in 2011 during COP17 in Durban, South Africa, it became operational in 2014. The GCF is now the largest dedicated climate fund with combined pledges and contributions amounting to \$19.2 billion by 30 April 2023 (\$9.3 billion during the initial resource mobilization phase and \$9.9 billion during the first replenishment round) (GCF, 2023).

The result of this proliferation of funding sources and channels for international climate finance is a complex and fragmented landscape (box figure 2.2) with decentralized governance that can be difficult to navigate, especially for LDCs with limited institutional capacities. Selection criteria, application processes and reporting requirements differ from fund to fund, which increases transaction costs and creates heavy administrative burdens for LDCs. Moreover, there are often delays of several years between initial submission of project proposals and disbursement of funds. Finally, it should be noted that, in spite of the profusion of dedicated climate funds, the bulk of climate finance flows continues to be delivered through non-climate-specific ODA channels. This gives rise to a lack of transparency, and difficulty in establishing a unified and clear accounting framework for climate finance flows.

^a REDD+ stands for Reducing Emissions from Deforestation and Forest Degradation, plus sustainable management of forests and the conservation and enhancement of forest carbon stocks.

²⁶ For instance, Article 4, paragraph 9 of the UNFCCC states that “The Parties shall take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology.”

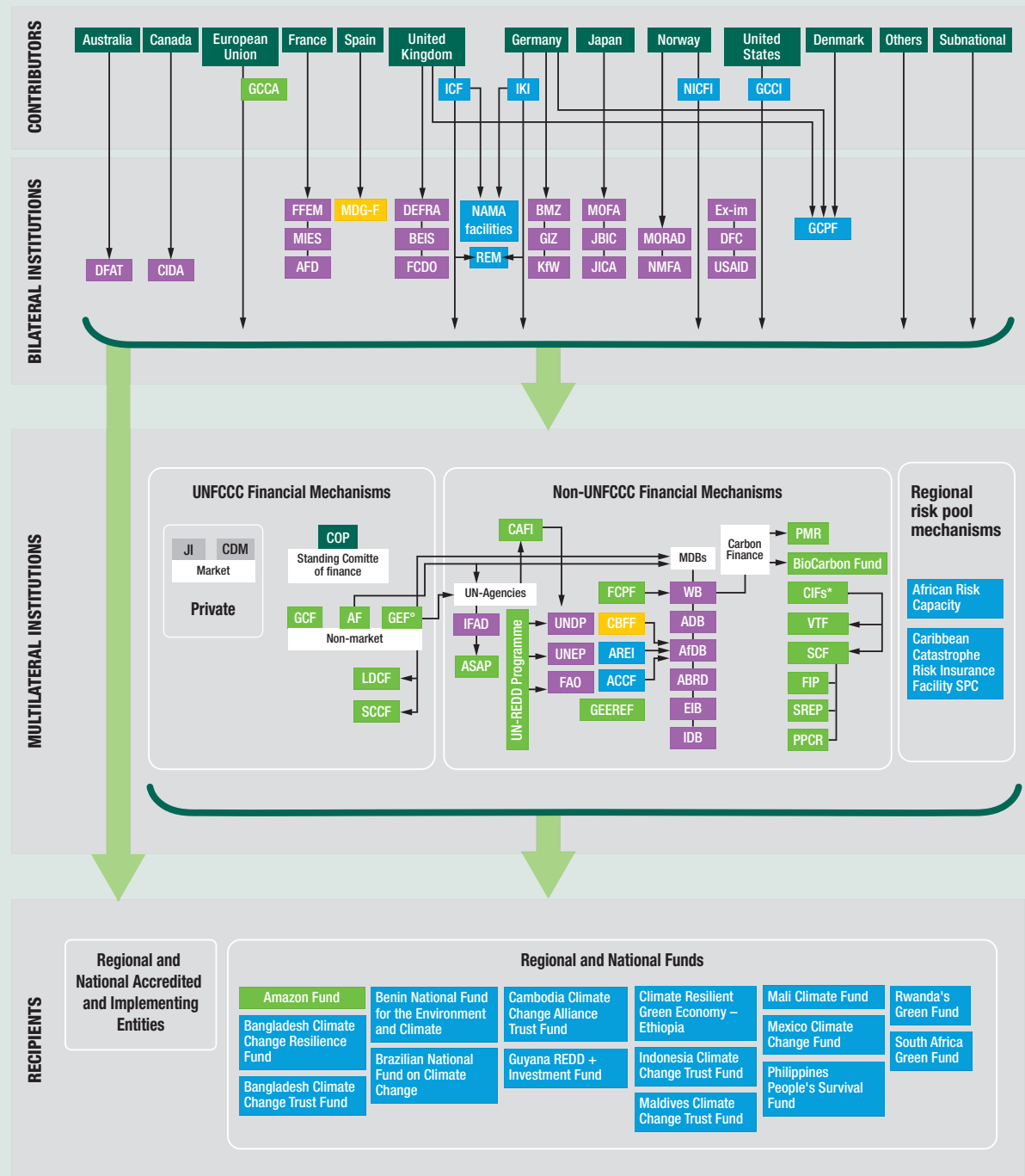
²⁷ UNFCCC (2009). Copenhagen Accord. Decision 2/CP.15.

²⁸ The so-called Annex-II countries are those required under the UNFCCC to provide climate finance to developing countries. The Annex-II countries comprise 23 OECD member States and the European Union.

Box 2.3 The global climate finance architecture: A complex and fragmented landscape (cont.)

Box figure 2.2

The global climate finance architecture



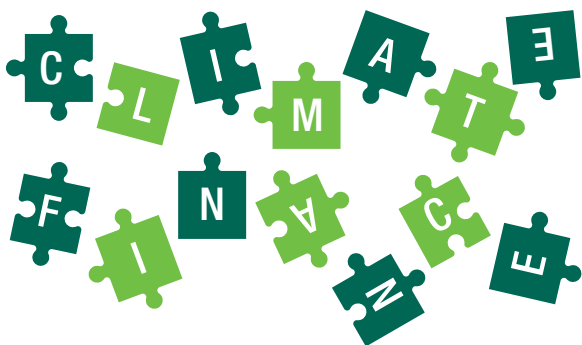
Note: The schematic is indicative of public climate finance flows and does not capture all climate finance funds and initiatives

- Dedicated climate finance funds and initiatives on CFU
- Implementing agencies
- Dedicated climate finance funds and initiatives not monitoring on CFU
- Closed dedicated climate funds previously tracked by CFU

* The CIFs are administered by the World Bank
 ° GEF serves as secretariat for all the non-market UNFCCC funds except the GCF

Source: Watson et al., 2023.

Climate finance is inadequate in terms of quantity and quality, and its complex structure hinders access

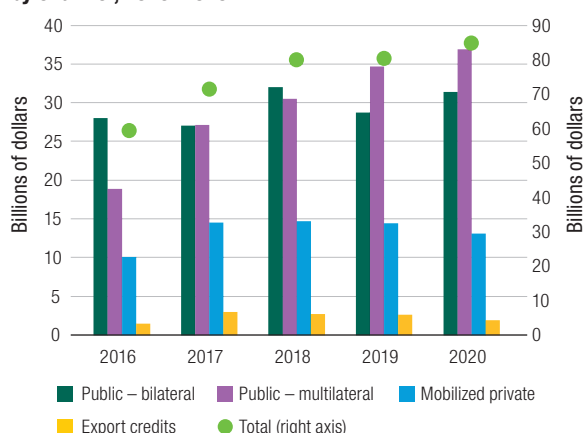


at COP26 in 2021 agreed to set a collective new climate finance target, with \$100 billion as the floor,²⁹ but to date no new global target has been agreed upon.

In spite of the enormous gap between the \$100 billion target and real needs, even this target has not been reached. Latest figures show a rising trend in climate finance flows to developing countries, but the OECD estimates that in 2020 – the target year specified in the Copenhagen Accord – total flows were \$83.3 billion, leaving a gap of \$16.7 billion (figure 2.25).

Despite repeated calls to balance adaptation and mitigation finance as envisaged by Article 9 of the Paris

Figure 2.25
Climate finance flows to developing countries, by channel, 2016–2020



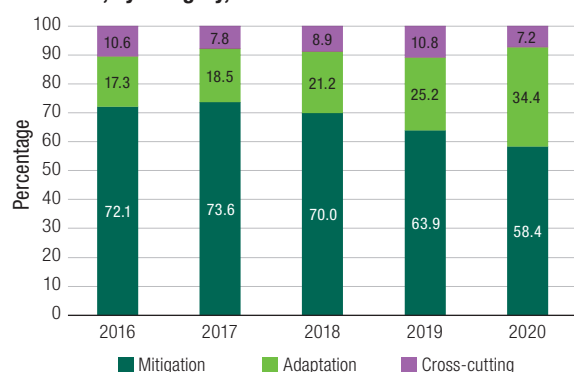
Source: UNCTAD secretariat calculations, based on data from OECD, 2022a.

²⁹ UNFCCC (2021). Glasgow Climate Pact. Decision 1/CMA.3.

Agreement,³⁰ and which constitutes a long-standing concern for developing countries – mitigation accounted for the majority (58.4 per cent) of total climate flows in 2020 (figure 2.26). Furthermore, the bulk of public climate finance continues to be delivered through loans (figure 2.27). In 2020, 71.4 per cent of total climate finance flows were in the form of loans, while only 26.3 per cent were in the form of grants, and equity accounted for a minor share of 2.3 per cent.

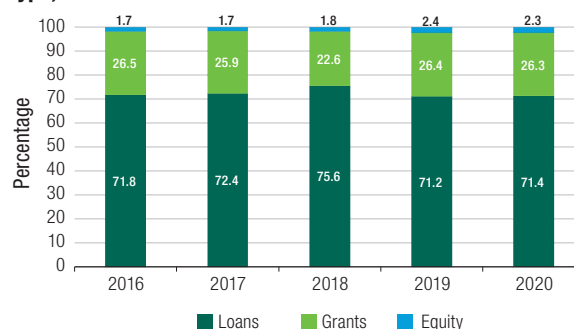
LDCs received an annual average of \$12.6 billion, or 17 per cent, of total climate finance provided and mobilized in the period 2016–2020 (OECD, 2022b). This share corresponded approximately to their share of the population of developing countries, which was 16.5 per cent in 2020.³¹ It suggests that vulnerability and the capacity to cope with the negative impacts of climate change were not

Figure 2.26
Climate finance to developing countries, provided and mobilized, by category, 2016–2020



Source: UNCTAD secretariat calculations, based on data from OECD, 2022a.
Note: The category “unspecified” is not included in the graph as its share is close to zero.

Figure 2.27
Public climate finance flows to developing countries, by type, 2016–2020



Source: UNCTAD secretariat calculations, based on data from OECD, 2022a.

³⁰ UNFCCC (2015). Paris Agreement. Decision 1/CP.21.

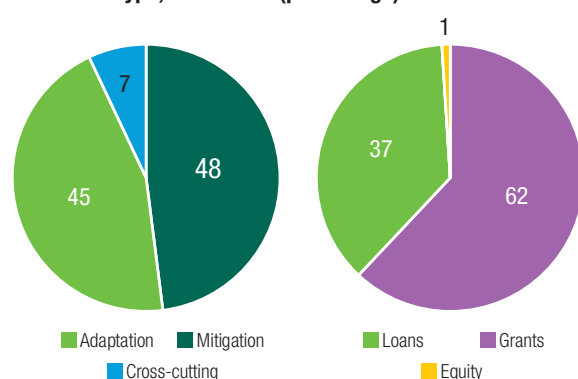
³¹ According to data from DESA, 2022.

significant factors for climate finance flows to LDCs. Looking to the future, it is crucial that the LDCs receive climate finance flows that are commensurate with their high vulnerability to the impacts of climate change, low resilience to economic shocks, limited ability to mobilize domestic finance and enormous financing needs.

The LDCs received a larger share of climate finance flows for mitigation than for adaptation during the period 2016–2020: 48 per cent of flows for mitigation compared with 45 per cent for adaptation and 7 per cent for cross-cutting measures (figure 2.28, left panel). Furthermore, the funds for adaptation were not evenly spread across countries – more than 40 per cent went to the five largest LDCs (OECD, 2022b). Also, adaptation finance flows to LDCs were concentrated in terms of source, with public sources accounting for 93 per cent. The share of grants in climate finance flows to LDCs was higher than the average for all recipients, at 62 per cent during the period (figure 2.28, right panel).

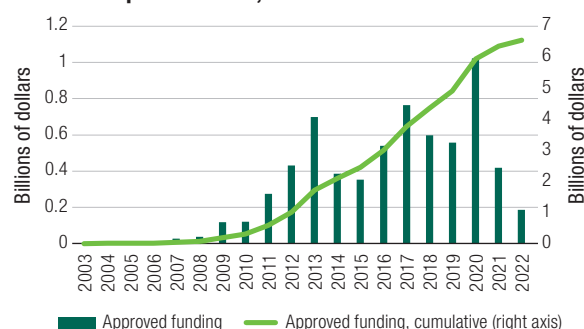
Cumulative approved climate flows to the LDCs that were channelled through climate funds amounted to \$6.5 billion in the period 2003–2021 (figure 2.29). This suggests that, despite their proliferation, dedicated climate funds only provide a small share of climate finance to the LDCs. The bulk of climate finance continues to be provided by bilateral donors and multilateral development banks through non-climate-specific channels, which does not contribute to transparency. In this context, a recent analysis of official data by the Overseas Development Institute (ODI) shows increases in some sectoral climate finance flows, even as the total volumes of official flows to these sectors remain unchanged, which points to “rebadging” of funds (Miller et al., 2023).

Figure 2.28
Climate finance flows to the least developed countries, by sector and type, 2016–2020 (percentage)



Source: UNCTAD secretariat calculations, based on data from OECD, 2022b.

Figure 2.29
Climate finance channelled through climate funds to the least developed countries, 2003–2021



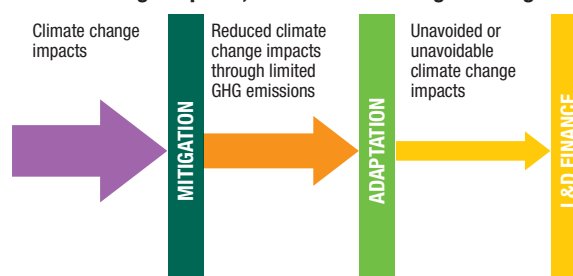
Source: UNCTAD secretariat calculations, based on data from climatefundsupdate.org (accessed 1 June 2023).

Note: The data exclude \$9.6 million worth of funding for two projects of the Congo Basin Forest Fund (CBFF), as the year of approval was not specified; included are regional adaptation projects in the Pacific Islands jointly worth \$33.96 million, which are funded by the Least Developed Country Fund and include Vanuatu as a beneficiary.

3. The Loss and Damage Fund: A game changer for least developed countries?

Even if the objectives of the Paris Agreement are met, climate change will continue to cause loss and damage (L&D) around the world. Developing countries have long called for a financing mechanism that would compensate them for climate-related L&D. Indeed, L&D financing can be characterized as the last line of defence to safeguard progress towards the SDGs against the impacts of climate change in the most vulnerable countries (figure 2.30). As previously noted, since LDCs are among the most vulnerable countries to the impacts of climate change (section D.1), they are directly affected by the outcomes of negotiations on L&D funding.

Figure 2.30
Climate change impacts, and loss and damage funding



Source: UNCTAD secretariat.

The first mention of means to address loss and damage in COP decisions can be found in the Bali Action Plan, emanating from COP13 in 2007.³² Other

³² UNFCCC (2007). Bali Action Plan. Decision 1/CP.13.

L&D financing to LDCs is critical to safeguard their progress towards the Sustainable Development Goals while dealing with the impacts of climate change

milestones include the launch of an L&D workstream at COP16 in Cancún, Mexico, in 2010, and the establishment of the Warsaw International Mechanism (WIM) and its executive committee at COP19 in 2013. The WIM subsequently became the main entity within the UNFCCC to address climate-related L&D in developing countries. The Paris Agreement of 2015 includes an important step forward to “enhance understanding, action and support...with respect to L&D associated with the adverse effects of climate change” by mandating the WIM to create a clearing house for climate risk transfer and establishing a task force on climate-change-related displacement. The Fiji Clearing House for Risk Transfer, a repository for information on insurance and risk transfer aiming at facilitating the development and implementation of risk management strategies, was launched two years later at COP23 in 2017. Another milestone was reached at COP25 in Madrid in 2019, when the Santiago Network on Loss and Damage was created for “averting, minimizing and addressing loss and damage associated with the adverse effects of climate change”. This network aims to connect developing countries with providers of technical assistance, knowledge and resources, which they need for addressing climate risks. At COP26 in Glasgow, United Kingdom in 2021, developing countries called for the establishment of an L&D finance facility, but the Glasgow Climate Pact fell short of developing countries’ expectations by only including a call to developed countries “to provide enhanced and additional support for activities addressing loss and damage” from climate change.³³

Finally, at COP27 in Sharm el-Sheikh, Egypt in 2022, a breakthrough was achieved when countries decided to establish a dedicated Loss and Damage Fund (LDF) (UNFCCC, 2022), and agreed on arrangements for its operationalization. In particular, a transitional committee was established and tasked with developing, inter alia, institutional arrangements, governance and terms of reference of the new fund, as well as ensuring coordination and complementarity with existing

funding arrangements.³⁴ The transitional committee’s deadline for the delivery of recommendations on the operationalization of the LDF is COP28, scheduled to take place in Dubai, United Arab Emirates from 30 November to 12 December 2023.

As a cross-cutting global phenomenon impacting all areas of human, animal and plant life, climate change is causing L&D across several areas. This includes both impacts of slow-onset phenomena related to climate change (e.g. higher average temperatures, rising sea levels and desertification), and extreme weather events (e.g. droughts, floods and tropical cyclones), which are likely to become more frequent and more severe with global warming (IPCC, 2022). Loss and damage caused by climate-related phenomena can be economic (e.g. damages to infrastructure or loss of income) or non-economic (e.g. loss of life, negative health effects, deterioration of ecosystems or loss of cultural heritage). While it is methodologically challenging to measure L&D, in particular non-economic damage, existing estimates suggest significant costs. For example, the Vulnerable Twenty Group (V20) estimated losses attributable to climate change in member countries for the period 2000–2019 at 0.92 per cent of GDP growth per year or 20 per cent of GDP in 2019 (V20, 2022).³⁵ Another estimate puts L&D financing needs in developing countries at \$290 billion–\$580 billion in 2030, \$551 billion–\$1,016 billion in 2040 and \$1,132 billion–\$1,741 billion in 2050 (Markandya and González-Eguino, 2019). Recent disasters illustrate the scale of funding needed for effective actions to address L&D. For instance, estimates of the costs of the damage from floods in Pakistan in 2022 amount to \$14.9 billion, and economic loss is estimated to be \$15.2 billion ((Pakistan, Ministry of Planning Development & Special Initiatives, 2022).

³⁴ The 24-member transitional committee comprises 10 members from developed countries and 14 members from developing countries, 3 each from Africa, Asia and the Pacific, and Latin America and the Caribbean, 2 each from SIDS and LDCs, and 1 from a developing country not included in the listed categories. Currently (as of 10 May 2023), the transitional committee has 3 LDC members representing Bhutan, the Sudan and Timor-Leste (included under the regional quota for Africa).

³⁵ The Vulnerable Twenty Group (V20) Group of Ministers of Finance has its roots in the Climate Vulnerable Forum (CVF), a global partnership of countries that are particularly vulnerable to the impacts of climate change, which was created ahead of COP15 in 2009. In 2015, 20 countries of the CVF formed the V20, which has since grown to 55 members, among them 26 LDCs. The main objectives of the V20 are to raise funds for climate finance, share best practices on economic aspects of climate action and engage in joint advocacy (see <https://www.v-20.org/about>, accessed 24 May 2023).

³³ UNFCCC (2021). Glasgow Climate Pact. Decision 1/CMA.3.

Key issues for the operationalization of the LDF include mobilization of finance, and how to ensure complementarity and additionality with existing climate finance mechanisms. Proposals made include new taxes and levies, such as an aviation levy, a global wealth tax, an international shipping levy, and a windfall profit tax to be imposed on the fossil fuel industry (Richards et al., 2023). At COP27, United Nations Secretary-General, called for a windfall profit tax on fossil fuel companies, and for some of their proceeds to be directed towards support for L&D.³⁶ Chapter 5 spells out the criteria that need to be met in order to enhance the impact of the LDF in LDCs.

E. Summary and policy considerations

As a consequence of multiple global crises, LDCs are facing an erosion of their fiscal space, which increases their vulnerability to future shocks and volatility. This threatens their growth and development prospects. Thus they are in urgent need of the kind of support that would enable them to expand their fiscal space so that they can invest in green structural transformation, develop resilience and bolster their efforts towards achieving the SDGs.

ODA remains the bedrock of external financing for sustainable development in LDCs. However, ODA flows to LDCs remain substantially lower than the commitments made by developed countries, as well as the targets set in SDG 17 and the DPoA. It is necessary to increase ODA disbursements to the committed levels in order to boost growth and resilience in the LDCs. Supporting these countries in their efforts to achieve the SDGs should be considered a high priority. At the very least, the emergence of new and additional funding instruments should not lead to a reduction of ODA flows to LDCs. However, preliminary figures for 2022 suggest that ODA flows from DAC countries to LDCs are declining.³⁷ A reversal of this trend is critical for the LDCs to pursue their development agendas.

Scaling up grants should be a priority in order to counteract LDCs' shrinking fiscal space. While loans can also play an important role in financing for sustainable development, they add to the mounting

The shrinking fiscal space of LDCs increases their vulnerability to future shocks and volatility

debt burdens of LDCs, and therefore further reduce their fiscal space and increase the risk of debt distress. Increasing financing for sustainable development and better aligning it with recipients' priorities is crucial to ensure that the LDCs do not fall further behind in their efforts to achieve the SDGs. The bulk of ODA grants goes to social services, such as education and health, which are, no doubt, of major importance for the SDGs, but more funding is also needed to support other sectors that are critical for structural transformation, such as infrastructure and industrial development. Also, ODA grants targeting the agriculture sector, which plays a key role in food security (box 2.1 and UNCTAD, 2015b), as well as in employment and rural development in LDCs, need to be increased. Instead, they declined by 12 per cent in the period 2016–2021, and accounted for only a minor share of 5 per cent of total ODA grants to LDCs in 2021.³⁸

Climate finance for LDCs needs to improve in each of its main dimensions: quantity, quality and the global climate finance architecture. The amount of climate finance flows to LDCs has fallen short of international commitments, let alone for meeting their actual needs. Countries failed to reach the target of \$100 billion by 2020, as stipulated in the Copenhagen Accord of 2009, and, although it could be reached in 2023, it represents only a fraction of developing countries' needs. Moreover, as 14 years have passed since the target was set, the real value of \$100 billion has significantly eroded: taking the United States Consumer Price Index as a measure of inflation, \$100 billion at December 2009 prices (the month the Copenhagen Accord was signed) would correspond to \$141 billion in May 2023 dollars.³⁹ Furthermore, improving transparency and standardizing accounting rules for climate finance flows is crucial to ensure additionality (rather than the diversion) of funds and accountability vis-à-vis commitments.

While the specific needs of LDCs have been recognized since the very inception of the UNFCCC in 1992, and

³⁶ See <https://news.un.org/en/story/2022/11/1130247> (accessed 24 May 2023).

³⁷ OECD, 2023, ODA Levels in 2022 – preliminary data. Detailed summary note. Available at <https://www.oecd.org/dac/financing-sustainable-development/ODA-2022-summary.pdf>.

³⁸ UNCTAD secretariat calculations, based on data from the OECD *Creditor Reporting System* database (accessed 28 June 2023).

³⁹ Based on the United States Bureau of Labor Statistics CPI Inflation Calculator, available at https://www.bls.gov/data/inflation_calculator.htm (accessed 22 June 2023).

Increasing the funding for adaptation and the share of grants could enhance the impact of climate finance in LDCs

reiterated in subsequent policy documents, such as the Paris Agreement, no LDC-specific funding targets have been stipulated within the framework of the UNFCCC, the SDG framework or the DPoA,⁴⁰ and recognition of the special needs and climate-related vulnerabilities of LDCs has not translated into larger-than-average climate finance flows to these countries. Given the vulnerabilities of many LDCs to the impacts of climate change, setting a climate finance target specific to these countries could help reduce the immense funding gap that they face for climate-related investments, in particular for adaptation. In this context, it should be stressed that adaptation investments are not only defensive expenditures; they can also generate economic, environmental and social benefits (Global Commission on Adaptation, 2019).

In addition to significantly scaling up climate finance flows to LDCs, the impact of existing funding could be enhanced by better targeting, in particular by increasing the share of adaptation and the share of grants in total flows. The latter is key to avoiding a climate debt trap.

⁴⁰ The Least Developed Countries Fund (LDCF) under the UNFCCC aims at funding adaptation in LDCs, but it is based on voluntary contributions, and available funds are inadequate to address climate change adaptation in LDCs in a systematic manner. As on 31 March, 2022 (about 20 years after the fund became operational in 2002), cumulative pledges to the LDCF amounted to only \$2 billion (GEF, 2022).

The LDF, which is currently in the making, could play an important role if sufficient additional funds were to be made available to LDCs in the form of grants, and if the LDF, once established, is able to make disbursements rapidly. Furthermore, it is critical that transaction costs and institutional requirements for LDC governments to access the funds are kept to a minimum, and that allocation takes multidimensional vulnerabilities into account. If these criteria are met, the LDF has the potential to significantly boost the resilience of LDCs as they strive to achieve the SDGs while also dealing with the impacts of climate change.

Finally, in order to address the systemic and interconnected challenges related to fiscal space, debt (see chapter 3) and climate change in LDCs, bold and lasting solutions are needed. Proposals for deep reform include those made by the United Nations in the context of the Secretary-General's *Our Common Agenda* report, which outlines a broad-based programme, including an overhaul of the international financial architecture and the mobilization of climate finance flows (United Nations, 2023). Also the Bridgetown initiative, presented at COP27, includes proposals for fundamental reforms in these areas. In this context, it is vital that the LDCs' needs, in terms of quantity, quality and access to finance, are reflected not only in the political discourse, but also in negotiation outcomes and their implementation. Announcements made at the Summit for a New Global Financial Pact in June 2023 address key elements of reform of the international financial architecture, including disaster clauses in the World Bank's debt agreements and the rechanneling of SDRs to expand access to finance for the most vulnerable countries. However, these do not go far enough (chapter 5) to break the vicious cycle of shrinking fiscal space, debt build-up and climate disasters in which many LDCs are trapped.

References

- ACMF (2019). Development of a sustainable asset class in ASEAN. ASEAN Capital Markets Forum. Available at <https://www.theacmf.org/sustainable-finance/publications/development-of-a-sustainable-asset-class-in-asean>.
- AfDB (2016). Stylized facts and lessons from West Africa's Eurobonds. Available at <https://blogs.afdb.org/fr/measuring-the-pulse-of-economic-transformation-in-west-africa/post/stylized-facts-and-lessons-from-west-africas-eurobonds-15276>.
- Amaglobeli D, Gu M, Hanedar, E, Gee HH and Thévenot C (2023). Policy responses to high energy and food prices. IMF Working Paper No. WP/23/74. International Monetary Fund. Washington, D.C.
- Boz E, Casas C, Georgiadis G, Gopinath G, Le Mezo H, Mehl A and Nguyen T (2022). Patterns of invoicing currency in global trade: New evidence. *Journal of International Economics*. Vol. 136: 103604.
- Cheng HWJ and Pitterle I (2018). Towards a more comprehensive assessment of fiscal space. DESA Working Paper No. 153. Department for Economic and Social Affairs. United Nations. New York.
- Coady D, Flamini V and Sears L (2015). The unequal benefits of fuel subsidies revisited: Evidence for developing countries. IMF Working Paper WP/15/250. International Monetary Fund. Washington, D.C.
- DESA (2021). *Financing for Sustainable Development Report 2021*. Report of the Inter-Agency Task Force on Financing for Development. United Nations. New York.
- DESA (2022). *2022 Revision of World Population Prospects*. United Nations. New York.
- Elgin C, Kose MA, Ohnsorge F and Yu S (2021). Understanding informality. CEPR Discussion Paper 16497. Centre for Economic Policy Research. London.
- Erbil N (2011). Is fiscal policy procyclical in developing oil-producing countries? IMF Working Paper WP/11/171. International Monetary Fund. Washington, D.C.
- European Commission (2023). A Green Deal Industrial Plan for the Net-Zero Age. Communication from the Commission to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions: No. COM(2023) 62 final. Brussels.
- Garschagen M and Doshi D (2022). Does funds-based adaptation finance reach the most vulnerable countries? *Global Environmental Change*. Vol. 73: 102450.
- GCF (2023). Status of pledges and contributions. Green Climate Fund.
- GEF (2022). Progress report on the Least Developed Countries Fund and the Special Climate Change Fund. No. GEF/LDCF.SCCF.32/06. Global Environment Facility Washington, D.C.
- Global Commission on Adaptation and World Resources Institute (2019). Adapt now: A global call for leadership on climate resilience.
- IEA (2022). The role of critical minerals in clean energy transitions. International Energy Agency. Paris.
- IKI (2023). A reason to celebrate: The IKI turns 15! Available at <https://www.international-climate-initiative.com/en/topics/iki-anniversary-year/> (accessed 24 May 2023).
- IMF (2016). Assessing fiscal space – An initial consistent set of considerations. IMF Staff Paper. International Monetary Fund. Washington, D.C.
- IMF (2020). *World Economic Update, June 2020: A Crisis Like No Other, An Uncertain Recovery*. International Monetary Fund. Washington, D.C.
- IMF (2022). IMF Country Report No. 22/161, Kingdom of Lesotho. Washington, D.C.
- IPCC (2022). Summary for Policymakers. *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. Cambridge, United Kingdom, and New York.
- Kitano N and Miyabayashi Y (2020). Estimating China's foreign aid: 2019–2020 preliminary figures. JICA Ogata Sadako Research Institute for Peace and Development. Tokyo.
- Kose MA, Kurlat S, Ohnsorge F and Sugawara N (2022). A cross-country database of fiscal space. *Journal of International Money and Finance*. Vol 128: 102682.
- Kurowski C, Kumar A, Mieses Ramirez JC, Schmidt M and Sifverberg DV (2023). *Health Financing in a Time of Global Shocks: Strong Advance, Early Retreat*. World Bank. Washington, D.C.
- Markandya A and González-Eguino M (2019). Integrated assessment for identifying climate finance needs for loss and damage: A critical review. In: Mechler R, Bouwer LM, Schinko T, Surminski S and Linnerooth-Bayer J, eds. *Loss and Damage from Climate Change: Concepts, Methods and Policy Options*. Springer International Publishing. Cham, Switzerland: 343–362.
- Miller M, Roger L, Cao Y and Prizzon A (2023). Where has the money come from to finance rising climate ambition? ODI Emerging Analysis. ODI. London.
- Ndikumana L and Boyce JK (2021). Capital flight from Africa 1970–2018: New estimates with updated trade misinvoicing methodology. Political Economy Research Institute, University of Massachusetts. Amherst, United States.

- OECD (2022a). *Aggregate Trends of Climate Finance Provided and Mobilised by Developed Countries in 2013–2020*. Climate Finance and the USD 100 Billion Goal. OECD Publishing, Paris.
- OECD (2022b). *Climate Finance Provided and Mobilised by Developed Countries in 2016–2020: Insights from Disaggregated Analysis*. Climate Finance and the USD 100 Billion Goal. OECD Publishing, Paris.
- OECD (2023a). Other official providers not reporting to the OECD. Available at <https://www.oecd-ilibrary.org/sites/18b00a44-en/index.html?itemId=/content/component/18b00a44-en>.
- OECD (2023b). *Development Co-operation Report 2023: Debating the Aid System*. OECD Publishing, Paris.
- OECD and UNCDF (2020). *Blended Finance in the Least Developed Countries: Supporting a Resilient COVID-19 Recovery*. Paris.
- Ohnsorge F and Yu S, eds. (2022). *The Long Shadow of Informality: Challenges and Policies*. World Bank, Washington, D.C.
- Pakistan, Ministry of Planning Development & Special Initiatives (Government of Pakistan) (2022). Pakistan floods 2022: Post-disaster needs assessment.
- Parry I, Black S and Vernon N (2021). Still not getting energy prices right: A global and country update of fossil fuel subsidies. IMF Working Paper No. WP/21/236. International Monetary Fund, Washington, D.C.
- Richards J-A, Schalatek L, Achampong L and White H (2023). The loss and damage finance landscape. Heinrich-Böll-Stiftung, Washington, D.C.
- Soumaré I, Kanga D, Tyson J and Raga S (2021). Capital market development in sub-Saharan Africa: Progress, challenges and innovations. ODI Working Paper 2. A joint FSD Africa-ODI Research Programme for Financial Sector Development in Africa. ODI, London.
- UNCTAD (2015a). *World Investment Report 2015: Reforming International Investment Governance*. (United Nations publication. Sales No. E.15.II.D.5. New York and Geneva).
- UNCTAD (2015b). *The Least Developed Countries Report 2015: Transforming Rural Economies*. (United Nations publication. Sales No. E.15.II.D.7. New York and Geneva).
- UNCTAD (2018). *The Least Developed Countries Report 2018: Entrepreneurship for Structural Transformation: Beyond Business as Usual*. (United Nations publication. Sales No. E.18.II.D.6. New York and Geneva).
- UNCTAD (2019). *The Least Developed Countries Report 2019: The Present and Future of External Development Finance – Old Dependence, New Challenges*. (United Nations publication. Sales No. E.20.II.D.2. New York and Geneva).
- UNCTAD (2020). *Economic Development in Africa Report 2020: Tackling Illicit Financial Flows for Sustainable Development in Africa*. (United Nations publication. Sales No. E.20.II.D.21. New York and Geneva).
- UNCTAD (2021). *The Least Developed Countries Report 2021: The Least Developed Countries in the Post-COVID World – Learning from 50 Years of Experience*. (United Nations publication. Sales No. E.21.II.D.4. New York and Geneva).
- UNCTAD (2022a). *The Least Developed Countries Report 2022: The Low Carbon Transition and its Daunting Implications for Structural Transformation*. (United Nations publication. Sales No. E.22.II.D.40. New York and Geneva).
- UNCTAD (2022b). A Double Burden: The Effects of Food price Increases and Currency Depreciations on Food Import Bills. Geneva.
- UNCTAD (2022c). *World Investment Report 2022: International Tax Reforms and Sustainable Investment*. (United Nations publication. Sales No. E.22.II.D.20. New York and Geneva).
- UNCTAD (2023a). *The State of Commodity Dependence 2023*. (United Nations publication. Sales No. 23.II.D.15. New York and Geneva).
- UNCTAD (2023b). *Trade and Development Report Update: Global Trends and Prospects* (April). New York and Geneva.
- UNCTAD (2023c). *Trade and Development Report 2022: Development Prospects in a Fractured World – Global Disorder and Regional Responses*. (United Nations publication. Sales No. E.22.II.D.44. New York and Geneva).
- UNEP (2019). *Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals*. United Nations Environment Programme, Nairobi.
- UNEP (2022). *Adaptation Gap Report 2022: Too Little, Too Slow – Climate Adaptation Failure Puts World at Risk*. United Nations Environment Programme, Nairobi.
- UNFCCC (2022). *Report of the Conference of the Parties on its Twenty-Seventh Session*. Held in Sharm el-Sheikh, Egypt, 6–20 November 2022. Addendum. United Kingdom, Foreign, Commonwealth and Development Office (2021). United Kingdom international climate finance. London.
- United Nations (2021). *World Economic Situation and Prospects 2021*. New York.
- United Nations (2022). *Doha Programme of Action for the Least Developed Countries*. No. A/Res/76/258. New York.
- United Nations (2023). *Reforms to the International Financial Architecture. Our Common Agenda No. 6*. New York.
- UNU-WIDER (2022). Government Revenue Database. Available at <https://doi.org/10.35188/UNU-WIDER/GRD-2022>.
- United States Department of the Treasury (2022). Four ways the Inflation Reduction Act's tax incentives will

- support building an equitable clean energy economy. Fact Sheet. Washington, D.C.
- United States Geological Survey (2023). Mineral commodity summaries 2023. United States Geological Survey. Reston, United States.
- V20 (2022). Climate vulnerable economies loss report. Vulnerable Twenty Group. Geneva.
- Villafuerte M and Lopez-Murphy P (2010). Fiscal policy in oil producing countries during the recent oil price cycle. IMF Working Paper WP/10/28. International Monetary Fund. Washington, D.C.
- Watson C, Schalatek L and Evéquoz A (2023). The global climate finance architecture. Available at <https://climatefundsupdate.org/wp-content/uploads/2023/03/CFF2-2023-ENG-Global-Architecture.pdf>.
- WMO (2023). *WMO Global Annual to Decadal Climate Update*. World Meteorological Organization. Geneva.
- World Bank (2023). *Global Economic Prospects* (June). World Bank. Washington, D.C.

A collage of images including a woman's face, a building, and a person, overlaid with a large green number 3.

3

Addressing debt vulnerabilities of the least developed countries

CHAPTER 3

Addressing debt vulnerabilities of the least developed countries

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A. Introduction

Debt crises in least developed countries (LDCs) were a possibility long before the COVID-19 pandemic and the emergence of the polycrisis. External debt stocks have reverted to levels last seen in the 1990s prompting the launch of the Heavily Indebted Poor Countries (HIPC) initiative by the International Monetary Fund (IMF) and the World Bank in 1996. Debt service on public and publicly guaranteed debt (PPG) in LDCs in 2022 was three times higher than in 2011. Moreover the number of LDCs in debt distress or at high risk of distress has increased. In 2019, total external debt service in LDCs exceeded government expenditure on social sectors such as health and education (UNCTAD, 2022a), and these same sectors also faced enormous challenges during the pandemic. In 2021, LDCs spent 4 or 5 times more on PPG debt service and total debt service, respectively, than in 2009, which points to their deteriorating and unsustainable debt situations.

Most LDCs are facing structural current account deficits that are either widening or failing to improve. The risk of debt crisis has increased due to the low capacity of these countries to generate additional domestic resources. Their lack of sufficient fiscal space to bolster government expenditure during crises, and their inability to mobilize private investment also hurt their development prospects (UNCTAD, 2021 and 2022b, United Nations Global Crisis Response Group, 2023). Disasters linked to climate change intensified in some LDCs during the period 2021–2023, further eroding their already constrained fiscal space. As highlighted in chapter 1, a subdued global outlook did not dissuade monetary authorities in both developing and developed countries from aggressively hiking interest rates (or delaying policy rate revisions) to tackle inflation (UNCTAD, 2023a; United Nations, 2023a). Tighter monetary policy stances and a prolonged risk of recession in developed economies may exacerbate the risk of sovereign debt crises, particularly for LDCs that were already at high risk of debt distress prior to the COVID-19 pandemic. In April 2023, 6 LDCs were in debt distress (Malawi, Mozambique, Sao Tome and Principe, Somalia, the Sudan and Zambia), while 17 others (Afghanistan, Burundi, the Central African Republic, Chad, the Comoros, Djibouti, Ethiopia, the Gambia, Guinea-Bissau, Haiti, Kiribati, the Lao People's Democratic Republic, Liberia, Sierra Leone, South Sudan, Togo and Tuvalu) were at high risk of debt distress (IMF, 2023a).

This chapter seeks to examine the extent of the debt crisis among LDCs, understand its causes, and propose policy recommendations that could contribute to achieving Sustainable Development

The number of LDCs in or at high risk of debt distress has increased since the global financial crisis of 2008–2009

Goal 17.4 (i.e. “assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress”). The rest of the chapter is organized as follows. Section B analyses public debt trends in the LDCs from 2000 to the present. The focus is on the composition of and structural changes in public debt, as well as the underlying factors contributing to debt vulnerabilities of the LDCs. Section C discusses bilateral and multilateral debt relief initiatives, and international cooperation on debt treatment. Section D highlights some initiatives that have the potential to unlock additional finance for the LDCs. Section E summarizes the chapter.

B. Debt vulnerabilities of the least developed countries

The LDCs will need resilient growth in order to achieve structural transformation and reduce their dependence on official development assistance (ODA) for financing their development. In this regard, chapter 2 explored the extent to which LDCs are managing their fiscal space in the context of multiple crises. The present chapter views their debt build-up as a problem for fiscal policy in the face of multiple crises, and as a consequence of long-standing structural problems. Debt financing is necessary for the LDCs to expand fiscal spending during crises, and to meet their long-term development goals. However, this poses two challenges, both of which risk increasing their debt: (i) a temporary increase in public spending during crises is generally impossible without incurring greater debt because tax revenues are inadequate, and (ii) their level of economic development suggests inadequate public investments, which must be ramped up either through increased taxation or increased borrowing (Battaglini and Coate, 2008; UNCTAD, 2019, 2020a, 2021). Section B.1 highlights the trends in LDC debt, and why it is important to address the structural nature of the problem. It presents the debt positions of the LDCs and how their debt vulnerabilities have evolved since 2009. In some of the analyses, the trend is extended to 2005–2006, which coincides with the launch of the Multilateral Debt Relief

Initiative (MDRI) by the International Monetary Fund (IMF). The section also examines the impact of trade shocks on public debts. Section B.2 presents debt sustainability indicators, and highlights factors driving debt accumulation in LDCs.

1. External debt and trends

Structural imbalances fuelling least developed countries debts

Rapid growth in national income boosts the ability of a country to absorb and utilize debt and withstand economic shocks. Strong export performance, coupled with sustained long-term economic growth, improves the capacity of the countries to leverage debt financing when they are experiencing balance-of-payments constraints (UNCTAD, 2014a). During the period 2009–2021, the total gross domestic product (GDP) of LDCs grew at an average annual rate of 6.4 per cent, doubling from \$599 billion to \$1.2 trillion, but the share of their exports in GDP declined by an average annual rate of 1.7 per cent as the nominal value of their exports rose by a substantially lower margin than their GDP. In contrast, the external debt stock of the LDCs grew at an average annual rate of 9.6 per cent, with the external public debt component growing at an average annual rate of 8.1 per cent during the period.

The build-up of external debts in LDCs is a consequence of structural weaknesses that keep these countries trapped in a low growth pattern, and

increase their vulnerability to external shocks. Most LDCs are dependent on primary commodities for the bulk of their exports and fiscal revenues. However, in order to accelerate diversification from primary production they run the risk of rapidly accumulating debt, especially if debt financing and fiscal outlays are not synchronized with long-term policies to support their structural transformation (UNCTAD, 2019 and 2021). A rapid growth in exports is associated with the capacity, especially among the resource-rich LDCs, to attract external financial resources, mainly foreign direct investment (FDI) and loans (Ampofo et al., 2021); but there is also a positive and direct link between public capital expenditure and public debt (UNCTAD, 2019).

According to the World Bank’s *International Debt Statistics*, the total external debt stock of LDCs reached \$569.5 billion in 2022 – a record, considering that it grew very little during the period 1990–2005, from \$122.6 billion to \$162.9 billion. In the aftermath of the global financial crisis, LDCs rapidly accumulated external debts, as interest rates and bond yields tumbled in developed countries, while commodity exports strongly rallied between 2010–2014 and 2016–2018. The PPG component of external debt surged during the period 2006–2021, at an average annual growth rate of 8 per cent, but as a share of total external debt stock, it declined from 82 per cent in 2005 to 62 per cent in 2021. However, in nominal terms, the PPG debt stock more than tripled, from \$106 billion in 2006 to \$353.4 billion in 2022 (figure 3.1).

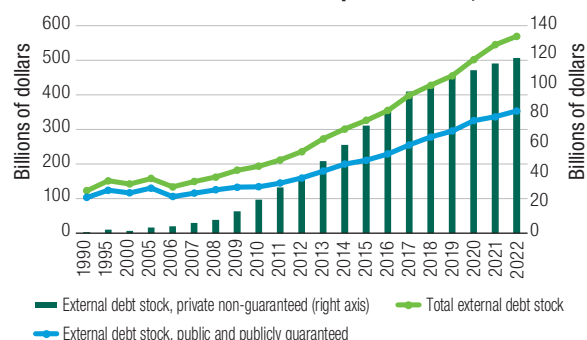
More than half of the total PPG debt stock owed by LDCs in 2021 was due to Bangladesh (18.6 per cent), Angola (13.9 per cent), Ethiopia (8.4 per cent), and the United Republic of Tanzania (5.6 per cent) (figure 3.2). These countries, together with the Sudan, Senegal, Zambia, Uganda, Myanmar, Mozambique, the

LDCs’ dependence on commodities for exports and fiscal revenues leads to debt accumulation and jeopardizes structural transformation



Figure 3.1

External debt stock of least developed countries, 1990–2022

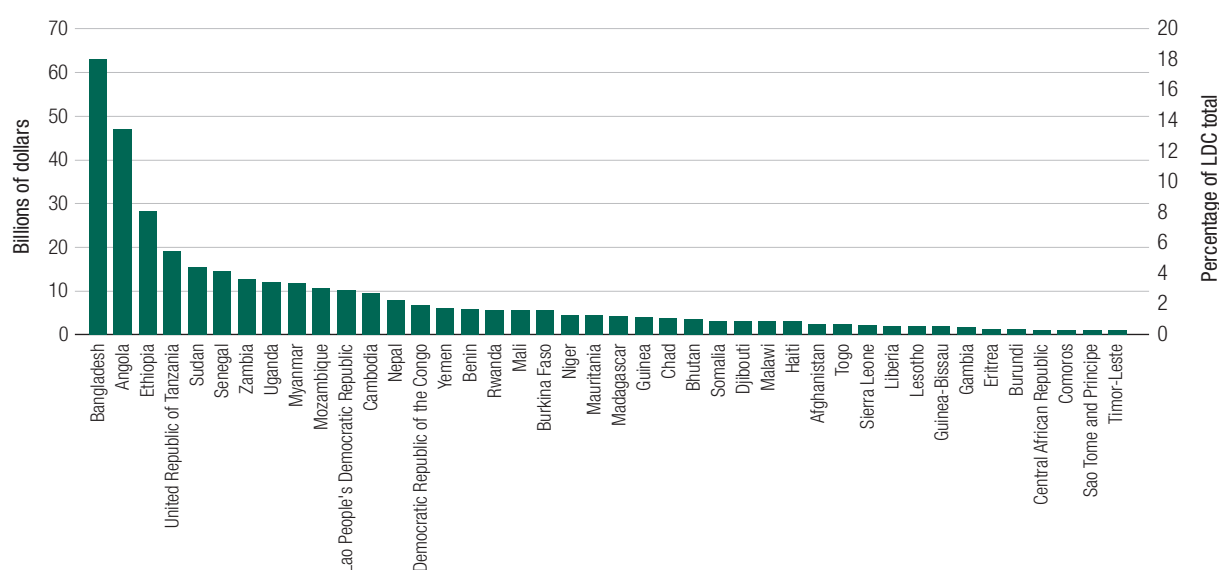


Source: UNCTAD secretariat calculations based on World Bank, *International Debt Statistics* (accessed March 2023).

Note: Data for 2022 are from UNCTAD, 2023b.

Figure 3.2

Public and publicly guaranteed debt stock and share of total least developed countries debt stock in 2021



Source: UNCTAD secretariat calculations based on World Bank, *International Debt Statistics* (accessed March 2023).

Lao People's Democratic Republic and Cambodia, in that order, accounted for 75 per cent of the total PPG debt stock of LDCs in 2021.

External debt complements domestic savings in fostering economic growth by plugging the external resource gap (defined as the difference between domestic savings and gross fixed capital formation), and has a positive impact on economic growth in capital constrained countries (UNCTAD, 2019). Some countries experience debt distress or are at high risk of distress for long periods, leading to assertions that the factors contributing to high debt accumulation are long-standing and structural in nature, and that debt relief efforts have a marginal effect unless they are complemented by reforms of domestic policies and institutions, and by economic structuring (UNCTAD, 2014b; Calcagno et al., 2015; UNCTAD, 2021). Weak macroeconomic policies and the political economy of the countries also reduce the effectiveness of development finance on economic growth, poverty reduction and structural change. Pervasive debt accumulation that follows debt relief or debt restructuring is therefore a feature of an economy that is suffering systemic challenges that affect debt sustainability. The fact that both official and multilateral flows are highly correlated with total debt service also points to an imperfect use of the international mechanisms for debt relief (UNCTAD, 2000; Easterly, 2002; Mustapha and Prizzon, 2015; UNCTAD, 2019). Further, the shift in the financing landscape following the global financial crisis, a growing share of loans from official bilateral lenders that are not members of the Paris Club,

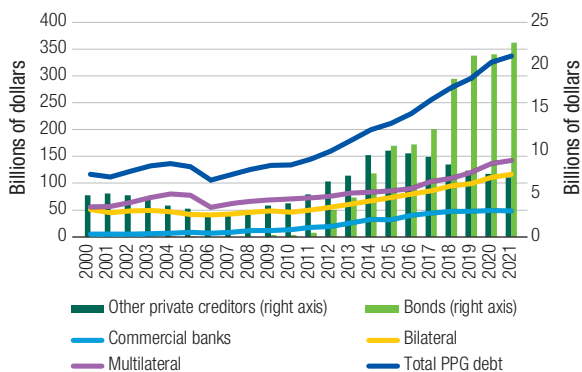
such as China, Kuwait and the Bolivarian Republic of Venezuela, and those of private creditors, have all contributed to the increasing complexity of LDC debt structures and debts issued at commercial rates and with shorter maturities (UNCTAD, 2019; Berensmann, 2019).

A substantial share of private credit with shorter maturities characterizes the debt structure of least developed countries

Debt owed by LDCs to private lenders and commercial banks has been on the rise since 2012. PPG debt stock in bonds grew rapidly, from \$0.5 billion in 2011 to \$22.6 billion in 2021. The amount owed to commercial banks increased from \$5 billion in 2000 to \$48 billion in 2021. The share of other private creditors increased during the period 2010–2015 from \$4 billion to \$10 billion, though it fell slightly to \$7 billion in 2021 from a previous high of \$10 billion in 2015 (figure 3.3).

Structurally, the largest component of PPG debt stock was held by multilateral creditors, at 42 per cent in 2021, down from 52 per cent in 2006, while the bilateral share in the PPG debt portfolio also declined slightly, from 39 per cent to 35 per cent. During this period, the shares owed to commercial banks and private creditors through bonds increased from 7 per cent and nil, respectively, to 14 per cent and 7 per cent, respectively. The debt structure remains predominantly multilateral, but the decline in the multilateral component of PPG loans in 2021 was quite sharp for 23 LDCs compared to 2009 (figure 3.4). The International Development

Figure 3.3
Public and publicly guaranteed external debt stock of least developed countries, 2000–2021



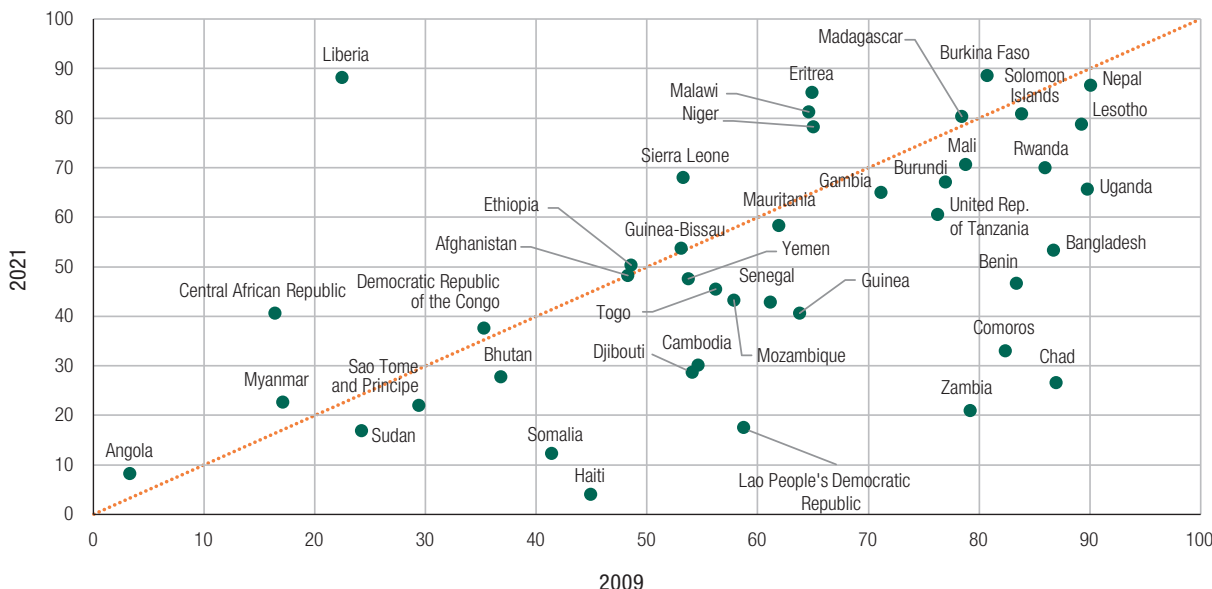
Source: UNCTAD secretariat calculations, based on World Bank, *International Debt Statistics* database (accessed March 2023).

the share of bonds declined from 4.2 per cent in 2014 to 2.7 per cent of PPG debt stock in 2021, despite the country’s ability to borrow on blend credit terms.¹

Export concentration adds to debt challenges

Primary commodities, which constitute the bulk of LDC exports, face volatile prices and terms-of-trade shocks, contributing to the weak capacity of the LDCs to carry external debt sustainability (Coulibaly et al., 2019; UNCTAD, 2020b, 2022b). Negative price shocks tend to have devastating impacts on incomes, as experienced by fuel-exporting LDCs during the global financial crisis and by many LDCs at the peak of the COVID-19 pandemic in 2020. Since virtually all external debts of LDCs are denominated in foreign currencies, a slump in the price of their

Figure 3.4
Share of multilateral debt in least developed countries’ public and publicly guaranteed debt stock



Source: UNCTAD secretariat calculations, based on World Bank, *International Debt Statistics* database (accessed March 2023).
 Note: The 23 LDCs are those below the 45-degree line and to the right of the 50 per cent point on the horizontal axis.

Association’s (IDA) loan eligibility and creditworthiness criteria for loans extended by the International Bank for Reconstruction and Development (IBRD) also played a role, particularly for countries that were ineligible for IDA loans. For instance, in Angola, the share of bonds increased from 3 per cent of its PPG debt stock in 2014 to 17 per cent in 2021, and debt owed to commercial banks accounted for an average of 62 per cent of PPG debt stock in 2014–2021. Since Angola is not an IDA-eligible country, the multilateral component in its PPG debt stock only grew from 3 per cent in 2009 to 8 per cent in 2021. By contrast, an average of two thirds of Bangladesh’s PPG debt stock was from multilateral sources, and

exports delivers a direct shock to their economies, which not only reduces their export earnings but also exposes these countries to foreign exchange risks (UNCTAD, 2022c). Angola, Chad, the Democratic

¹ Eligibility for IDA loans depend primary on an income criterion, defined as GNI per capita below an established threshold and updated annually (\$1,315 in the fiscal year 2024). However, countries that are above the threshold but assessed to lack creditworthiness to borrow from the International Bank for Reconstruction and Development (IBRD) may also access IDA loans. Typically, there are countries that are IDA-eligible based on per capita income levels and also creditworthy for some IBRD loans, and these are countries that can blend, i.e., borrow from both IDA and IBRD (World Bank, 2023).

Republic of the Congo, Ethiopia, Guinea, the Lao People's Democratic Republic, Mali, Mozambique, Myanmar, Senegal, the Sudan, Uganda, the United Republic of Tanzania and Zambia experienced the greatest volatility in the value of their merchandise exports during the period 2009–2021 (UNCTADStat database).

During the period 2000–2007, merchandise exports were growing faster than debt in several LDCs, but trade shocks experienced in 2012, 2016 and 2018 reversed the gains made by some countries since the turn of the century (figure A3.1 to A3.6). The COVID-19 pandemic and its ramifications further deepened the crisis. For example, Angola's debt stock exceeded its exports for the first time in 2016, although both were rising until 2018. Due to the unique importance of fuel exports to that country's economy, the series of trade shocks were immediately transmitted throughout the economy, resulting in a massive increase in its PPG debt-to-GDP ratio, from 39 per cent in 2015 to 84 per cent in 2016 as output contracted (table A3.1). Thereafter, during the period 2017–2021 the debt-to-GDP ratio remained above 60 per cent (88 per cent in 2020 and 69 per cent in 2021) after a further shock in 2018. On the other hand, the debt-to-GDP ratios in 2021 remained below 50 per cent for several countries including Bangladesh, Chad, Liberia, Madagascar and Sierra Leone (table A3.1). For these countries, exports grew roughly at the same pace as debt stocks in 2006–2021, but trade shocks in 2012, 2016 and 2018 posed challenges for all LDCs (figure A3.1).

The indicator that more closely reflects the capacity of a country to retire international debt is the growth rate of its exports-to-debt ratio or more commonly, debt service-to-exports ratio. Some LDCs' exports either stagnated or declined after the global financial crisis (figure A3.2). For these countries, the rise in debt service cost marks a significant shift in their exposure to debt-related risks, as their export structures compounded their weak external positions. Zambia's exports exceeded its debt stock in 2006–2014, before sliding in 2015 as its debts soared (figure A3.3). In Mozambique, Nepal, the Niger, Rwanda and Sao Tome and Principe exports grew at a lower rate than their debt stocks after 2009. In the Comoros, Ethiopia, Haiti and Malawi, exports fell sharply or stagnated compared to the trend in their PPG debt stock in 2009–2021 (figure A3.2 to A3.4).

Cambodia, the Democratic Republic of the Congo, the Gambia, Lesotho and Solomon Islands consistently had more exports than debt during

The debt vulnerability of LDCs worsens due to the shrinking share of commodities in world trade

the period 2006–2021 (figure A3.5). Togo's exports were higher than its debt stock in 2010–2015, while Timor-Leste's exports grew more quickly than its external PPG debt in 2019 in a turnaround despite COVID-19 (figure A3.6). Contrary to the common trend, Solomon Islands marginally increased its debt stock to \$140 million in 2021 from \$118 million in 2011, while merchandise exports soared, from \$215 million in 2010 to over \$400 million per year in 2011–2019, and remained above \$350 million in 2020–2021. The GDP of Solomon Islands in 2021 was \$1.6 billion, with merchandise exports at \$413.7 million, exceeding its debt stock which amounted to \$141 million.

2. Debt sustainability indicators for the least developed countries

Although debt levels increased across all country groups following the 2008–2009 global financial crisis, the period after the crisis marked a critical phase for the LDCs. As explained in chapter 2, changes to the international financial architecture have increased the vulnerability of low-income countries to debt. A major concern for the LDCs is their shrinking capacity to repay debt. In 2022, all indicators of external sustainability of the LDCs deteriorated: the ratio of total debt service to exports of goods and services rose to 18.9 per cent from 18.3 per cent in 2021, and the share of government revenue spent on servicing their debt rose to 17 per cent from 15.6 per cent in 2021. Meanwhile, the tightening of monetary policies in developed economies portends even higher borrowing costs for the LDCs in the short to medium term.

Most LDCs experienced a general trend of divergence between debt stocks and exports during the period 2009–2021, signalling high debt risk for countries with chronic current account deficits and high debt-to-GDP ratios. A sustained increase in merchandise exports was needed to maintain external sustainability, but they were adversely affected by a series of trade shocks. As explained in chapter 1, the COVID-19 pandemic and the multiple crises negatively affected their debt sustainability. This section provides a snapshot of debt sustainability trends, and the factors that have contributed to the rapidly deteriorating situation.

a. Sustainability indicators show mounting debt burdens

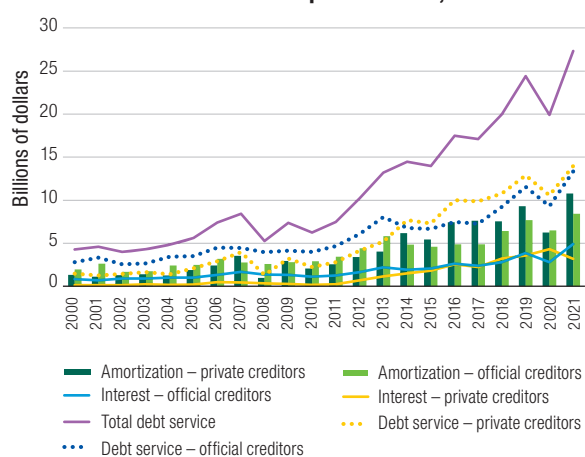
Rising debt-to-gross domestic product ratios

The pace of economic growth in LDCs was significantly affected by trade shocks and weaker global outlooks for the period 2009–2021. Lower interest rates following the global financial crisis created conducive conditions for LDCs to accumulate debts as borrowing costs tumbled. The soft terms did not last, however, and as growth of commodity exports and gross national income (GNI) per capita income faltered, LDCs fell deeper into a low growth pattern, weak investment and steadily rising costs of debt financing. As a result, PPG debt-to-GDP ratios in 2021 were up by more than 10 percentage points in 16 LDCs, and by more than 20 percentage points in 11 LDCs, compared to 2011 ratios. The average PPG debt-to-GDP ratio for LDCs reached 30 per cent in 2019 and 34 per cent in 2020, before contracting slightly to 32 per cent in 2021. Only Sao Tome and Principe, and Guinea achieved lower debt-to-GDP ratios in 2021 (table A3.1).

Increasing total debt and debt service ratios

In nominal terms, the debt service on PPG debt increased from \$4.3 billion in 2000 to \$27.3 billion in 2021 (figure 3.5). This is consistent with the change in the composition of LDCs' external debt since the global financial crisis. The increase in the share of private creditors in PPG debt has pushed up debt service to private creditors, which has surpassed debt service to official creditors since 2014. The bond component of debt service more than doubled during the period 2019–2022 compared to 2016–2018. Prior to the COVID-19 pandemic, debt service costs increased idiosyncratically, driven by higher interest and amortization obligations on an expanding debt

Figure 3.5
Debt service of the least developed countries, 2000–2021

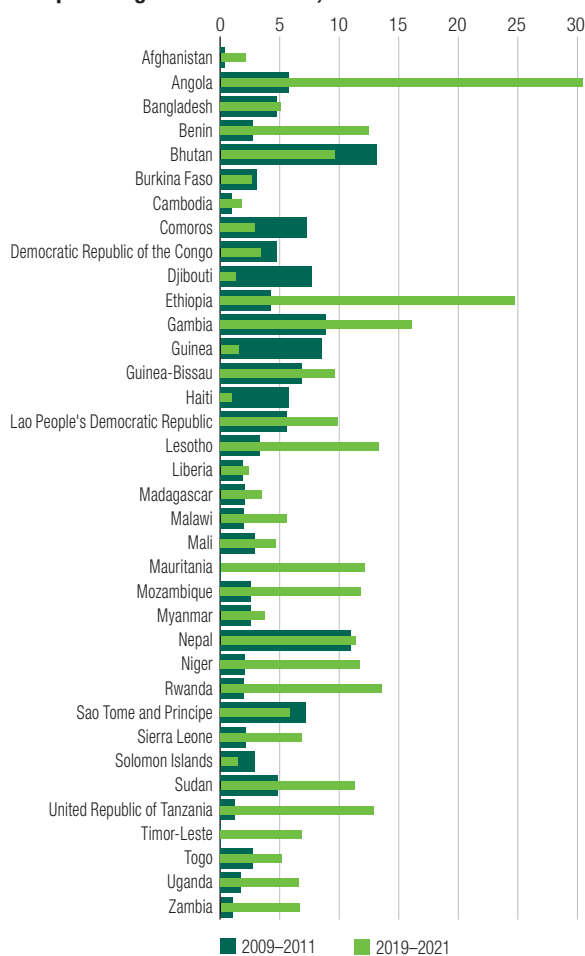


Source: UNCTAD secretariat calculations, based on World Bank, *International Debt Statistics* database (accessed March 2023).

stock, but after 2018 debt service costs surged as debts became more complex, with suboptimal maturity schedules and a rising share of private creditors, but also because LDCs generally pay a higher premium on bonds and other private loans.

PPG debt service as a percentage of exports of goods and services increased in 25 LDCs in 2019–2021 compared to 2009–2011. In the former period, 11 LDCs (Angola, Benin, Ethiopia, the Gambia, Lesotho, Mozambique, Nepal, the Niger, Rwanda, the Sudan and the United Republic of Tanzania) incurred PPG debt service costs equivalent to at least 10 per cent of their exports of goods and services (figure 3.6). Since most LDCs face structural balance-of-payments deficits, it may also be useful to consider PPG debt service as a percentage of exports of goods, services as well as primary income. This indicator shows that their debt service averaged 17 per cent of exports of goods, services

Figure 3.6
Public and publicly guaranteed debt service as a percentage of exports of goods and services, 2009–2011 and 2019–2021



Source: UNCTAD secretariat calculations, based on World Bank, *International Debt Statistics* database (accessed March 2023).

Note: Only countries shown for which data were available.

and primary income in 2021, up from 11 per cent in 2020 and 9.6 per cent in 2005. The LDCs incurring high debt service costs as a percentage of exports of goods, services and primary income in 2021 were Guinea-Bissau (36 per cent), Rwanda (30 per cent), the Sudan (27 per cent), Angola (26 per cent), Senegal (23 per cent), the Gambia (22 per cent), Ethiopia (21 per cent), Lesotho (18 per cent), Benin (18 per cent), Myanmar (17 per cent), the United Republic of Tanzania (15 per cent), Bhutan (15 per cent) and the Niger (13 per cent).

In 2019–2021, interest payments on external debt as a percentage of exports of goods, service and primary income exceeded 5 per cent: for Angola (8 per cent), Ethiopia (7 per cent) and Lesotho (9 per cent). In general, 18 of the 34 LDCs with complete data paid more interest on PPG debt, on average, as a percentage of exports of goods and services in 2019–2021 than in 2009–2011, and the rise in debt service costs was quite significant for Angola, Benin, Ethiopia, the Gambia, Lesotho, the Niger, Rwanda, the Sudan, Togo, Uganda, the United Republic of Tanzania, and Zambia (figure 3.7). It is a matter of concern if the uptick in interest payments is not transitory, particularly for countries where interest payments averaged more than 10 per cent of government expenditure in 2019–2021, as in Angola (33 per cent), Bangladesh (22 per cent), the Lao People’s Democratic Republic (14 per cent),

LDC debt has been shifting from mostly public to private lenders, thus raising borrowing costs and endangering debt sustainability

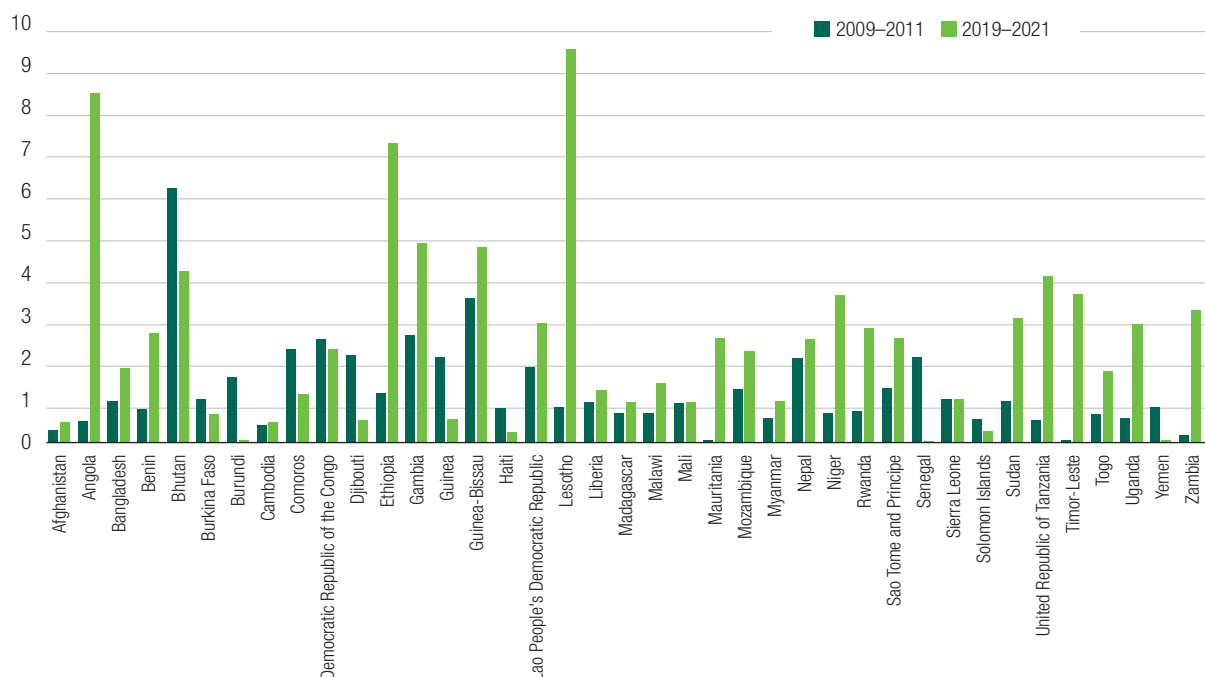


Malawi (19 per cent), Mozambique (14 per cent), Myanmar (14 per cent), Senegal (10 per cent), Togo (16 per cent), Uganda (16 per cent) and Zambia (34 per cent). Further, in Bangladesh and Malawi, government expenditure on interest outstripped capital expenditure in 2017–2021; and in Angola, Bangladesh, the Gambia, Madagascar and Zambia, government expenditure on goods and services was lower than their interest payments in 2017–2021.

These unsustainable trends show unbalanced debt portfolios, due partly to the rise in debts that are

Figure 3.7

Interest payments on public and publicly guaranteed debt as a share of exports of goods and services



Source: UNCTAD secretariat calculations, based on World Bank, *International Debt Statistics database* (accessed March 2023).

Note: Interest payments are just a fraction of debt service cost.

A sustained increase in high-value merchandise exports is needed to maintain debt sustainability in LDCs

contracted on unfavourable terms despite debt relief efforts through initiatives such as the HIPC and MDRI, and in the aftermath of the global financial crisis (Coulibaly et al., 2019). They also show that LDCs face a higher exchange rate risk, as their external debts are still predominantly issued in foreign currencies, which are stronger than domestic currencies. As a result, resources tend to be pooled in a few major currencies, leaving indebted LDCs with limited choices over currencies and credit terms for borrowing. Exchange depreciation accounted for some of the substantially greater debt vulnerabilities of LDCs as the dollar appreciated against major currencies and currencies of emerging markets and developing economies during the period 2018–2021 (Obstfeld and Zhou, 2023; UNCTAD, 2023c). The dollar appreciation affected 32 LDCs, which reported that at least 50 per cent of their PPG debt was denominated in United States dollars during 2019–2021. In only five LDCs, at least one tenth of their PPG debt was valued in Special Drawing Right (SDR) units in 2019–2021, while in 25 LDCs at least one fifth of their PPG debt was denominated in currencies other than the dollar, euro, Swiss franc and SDR units (World Bank, *International Debt Statistics* database, accessed March 2023). Currency compositions of debt, unbalanced debt portfolios between long-term and short-term debts, as well as among different categories of creditors with different risk appetites, can become challenging in a macroeconomic environment that has prevailed since 2021 to the present. In the current macroeconomic environment, domestic fiscal policy space is therefore important, as it determines the capacity of the LDCs to leverage all sources of financing, including debt, as well as their potential to build the economic depth needed to retire debts in the future.

b. Misalignment of official development assistance architecture with least developing countries' development needs

Grants and concessional finance were traditionally associated with ODA, but since the global financial crisis, the share of debt in ODA flows to LDCs has increased, and so too has private credit on commercial terms (UNCTAD, 2019 and 2021). Private investment flows and portfolio investments normally fill the financing gap in other developing countries, but

for the LDCs, private flows are concentrated in a few economies, and in any case are not adequate.

As noted in chapter 2, domestic savings, and hence investments, remain low, thus increasing the pressure to fill the external resource gap with debt. There is a growing urgency in the LDCs to achieve the Sustainable Development Goals and other international agendas, including the Paris Agreement, as well as to implement the Doha Programme of Action. Investment is key to delivering a vibrant manufacturing sector and a sustainable economy driven by innovation and a well-developed infrastructure. For the LDCs, priorities also include ending hunger and eradicating poverty, as well as providing clean energy, and water and sanitation, among others. Domestic resources are simply not enough to meet all the investment requirements to fulfil these many goals, but delaying implementation may also mean paying a higher cost in the future.

Although grants constitute the largest share of ODA, the current architecture is debt creating, compared with traditional aid which is associated with grants. Since 2013, the loan component of ODA to LDCs had averaged 9 per cent, but it climbed to 15 per cent in 2020 as borrowing increased during the COVID-19 pandemic. Equities, which constitute a negligible share of ODA, increased from \$48 million in 2010 to \$106 million in 2013, but a year later they declined to \$52 million, and remained procyclical and volatile throughout the period 2015–2021. Also, like FDI, equity financing was concentrated in a few LDCs, with 12 LDCs (Angola, Bangladesh, Cambodia, the Democratic Republic of the Congo, Ethiopia, Mozambique, Myanmar, Nepal, Senegal, Uganda, the United Republic of Tanzania and Zambia) accounting for 85.7 per cent of the investments in 2009–2021. ODA equity investments also pale in comparison to FDI receipts by LDCs which averaged \$21.4 billion in 2017–2021, although in aggregate terms, FDI receipts were less than ODA and remittances, respectively, in 2000–2021.

Total FDI receipts peaked at \$38.6 billion in 2015, before plunging to \$18.3 billion in 2018.² Total FDI receipts of LDCs were consistently lower than net inflows of personal remittances in 2000–2021, and in 2021 they were lower than the average for the period 2016–2018 in 19 LDCs (Afghanistan, Bangladesh, Burkina Faso, the Comoros, Guinea, Haiti, the Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Myanmar, Rwanda, Sierra Leone, Solomon Islands, the Sudan, Tuvalu, the

² The data is from World Bank, *World Development Indicators* database, accessed March 2023.

Making LDC debt financially sustainable requires:



United Republic of Tanzania and Zambia). However, FDI receipts in LDCs recovered in 2019–2021, despite low investor confidence associated with the COVID-19 pandemic. Although total FDI receipts reached \$25.2 billion in 2021, they remain insignificant compared with personal remittances that have been rising steadily since 2017 and reached \$55 billion in 2021. The top five recipients of FDI among LDCs in 2021 (Mozambique, Ethiopia, Cambodia, Senegal, and Myanmar, in that order) accounted for 68.7 per cent of total net receipts, while Angola and Zambia saw net FDI outflows. The low volume aside, receipts fluctuated considerably, reflecting the marginalization of LDCs in global financial markets, the nature of investments they attract – which mostly target minerals, fossil fuels, power generation and other selected sectors – and the inability of some LDCs that have weak productive capacities to stimulate further investments and domestic linkages.

Leveraging private capital towards national development priorities is a challenge for many LDCs because the domestic policy environment alone is not adequate to attract private capital flows, even when deliberate policies are put in place to target the private sector. Capital flows to markets with low risk, but the investment risk ratings for LDCs are often unfavourable, and are often affected by credit rating downgrades. Apart from the business environment created by competent and quality government institutions and the civil service,

investors are also attracted by growth prospects offered by natural resources, security guarantees for their investments and liquidity in the financial system. As a result, financing models for attracting blended finance, whether from ODA, equities or FDI, tend to overburden the public purse with credit guarantees, tax waivers, subsidies, and other concessional terms. Given that private sector investors are rational and tend to take calculated risks, the low private investment in the sector may imply a capital market problem rather than a public finance problem. Where commercial banks or private lenders can effectively serve investors and absorb the associated investment risk in the productive sector, it is inefficient and counterproductive for the government to offer unlimited external credit guarantees to investors (UNCTAD, 2019; Delevic, 2020).

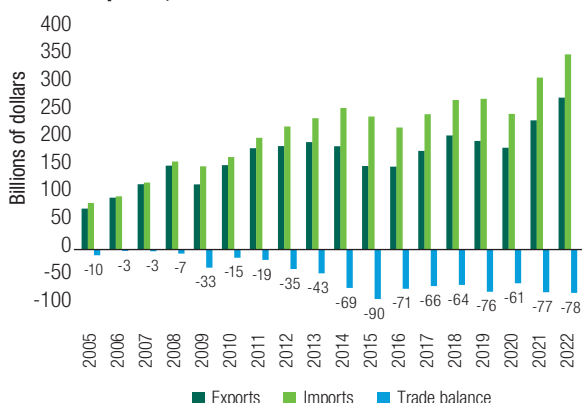
c. Increasing frequency of trade shocks and widening trade gaps

The external solvency of LDCs mainly depends on their export earnings. Fluctuations in export earnings, which are linked to commodity price movements, supply-side bottlenecks and exogenous shocks, are a major source of balance-of-payments imbalances in these countries. Volatile export earnings exert pressure on government revenues, foreign currency reserves, exchange rates and domestic prices of tradeable goods.

Primary commodities have endured a sustained deterioration in terms of trade, as evidenced by their declining share in world trade. In 2022, 65 per cent of LDC exports were primary commodities (including fuels), and their value was a mere 0.7 per cent of total world exports. Put differently, LDCs contributed just 2.2 per cent to world exports of primary commodities, including fuels. The trade deficit of LDCs widened from \$43 billion in 2013 to \$90 billion in 2015, and slightly recovered in 2016–2020, before slipping again in 2021 as well as 2022 as world trade normalized (figure 3.8). This was largely driven by a growing merchandise trade deficit with the rest of the world. Specifically, LDCs were net importers of all food items (SITC 0 + 1 + 22 + 4) and manufactured goods (SITC 5 to 8 less 667 and 68) in 2016–2021, and their trade surplus in fuels (SITC 3) has declined since 2018. Discounting the net trade impact of fuels, imports of LDCs would have fallen by 11.5 per cent, but exports would have contracted by 23.4 per cent during the period 2016–2021. Thus fuels have contributed significantly to narrowing current account deficits for LDCs as a group, but they also worsen the deficit among non-oil exporters when the price of oil remains inflated as it has been since the onset of the recovery from COVID-19.

Figure 3.8

Least developed countries' total trade in goods and services at current prices, 2005–2021



Source: UNCTAD secretariat calculations, based on UNCTADStat database (accessed March 2023).

World merchandise trade reached \$24.8 trillion in 2022, up from \$17.5 trillion in 2020, with manufactured goods accounting for 64 per cent of total merchandise exports.³ The value of world exports of primary commodities (excluding fuels), precious stones and non-monetary gold increased from \$3.1 trillion in 2020 to \$4.2 trillion in 2022, but as a share of world exports, it declined marginally from 17.9 to 16.9 per cent. World exports of manufactured goods rose by \$3.5 trillion (28.1 per cent growth) in 2022 compared to 2020. For LDCs, merchandise exports reached \$275 billion in 2022 compared to \$184.5 billion in 2020, as world trade recovered from pandemic-related shocks. However, LDCs' export structure is undesirably concentrated in commodities, with the share of primary commodities, including fuels, amounting to 64.7 per cent of exports in 2022 compared to 63.8 per cent in 2020, as the share of fuels recovered from 16.9 to 23.8 per cent of LDC exports in 2020–2021. The share of manufactured goods shrank from 35.4 per cent in 2020 to 34.4 per cent in 2022, while the share of ores, metals, precious stones and non-monetary gold fell by 2.9 percentage point in 2022 compared to 2020, even though their export value rose from \$55.1 billion to \$74.2 billion in 2020–2022. It will be important for LDCs to increase the share of manufacturing in their exports if they are to play a significant role in world trade, and for trade to contribute to narrowing their balance-of-payments deficits. This can only be achieved by accelerating structural change, expanding into relatively higher productivity activities, and reversing decades of specialization patterns that have skewed production and trade towards primary

³ UNCTAD calculations based on UNCTADStat, accessed June 2023.

The growth rate of debt stocks outpaced that of export earnings, implying elevated debt risks

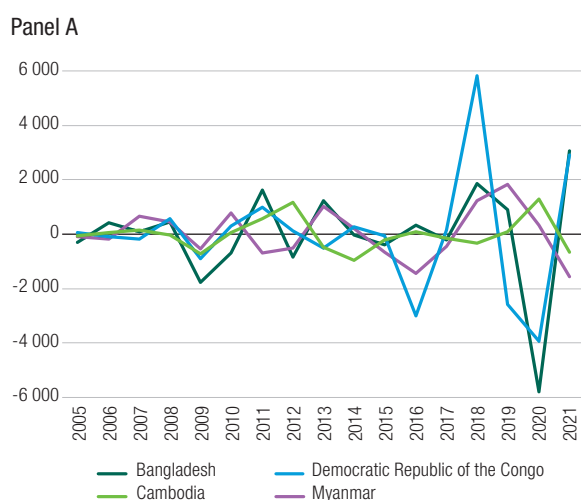
Growth rates, 2013–2021 (percentage)



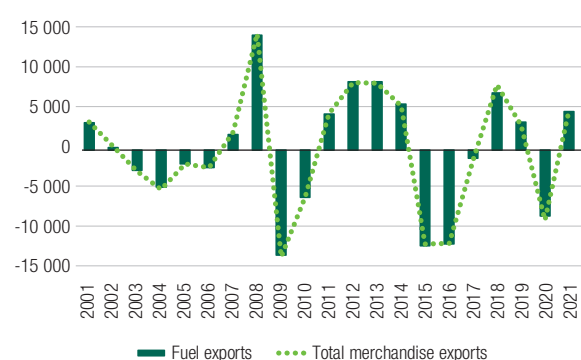
commodities, with limited domestic value addition in manufactures (UNCTAD, 2019, 2021 and 2022b).

Primary commodity exports also expose LDCs to price fluctuations and market instability. To illustrate the vulnerability of commodity exporters to trade-related systemic shocks, consider the trend of the top five LDCs ranked by merchandise export value in 2021: Bangladesh, Angola, the Democratic Republic of the Congo, Cambodia and Myanmar. The cyclical pattern of exports shows that there were at least four negative shocks to their exports in 2005–2021, particularly in 2009, 2014, 2018 and 2020. Their exports either fell or rose as the shocks played out in subsequent years (figure 3.9). Angola's exports suffered major trend digressions in 2009, 2015, 2016 and 2020, with huge slumps in its fuel exports as oil prices crashed. And in the Democratic Republic of the Congo and Bangladesh, supply chain shocks suffered during the COVID-19 pandemic inflicted a larger negative impact to exports compared with the relative gains by both countries from positive price shocks in 2016–2019, especially by the Democratic

Figure 3.9
Cyclical component⁴ of exports, selected countries,
2005–2021



Panel B – Cyclical component of Angola's exports, 2005–2021



Source: UNCTAD secretariat calculations, based on UNCTADStat database (accessed March 2023).

Republic of the Congo. Cambodia's exports performed better during the pandemic, bolstered by its strategic geographic location and proximity to major trade routes in South-East Asia.

The cyclical pattern of exports also shows that recent trade shocks have been more pronounced, resulting in LDCs suffering major setbacks in exports. This made them more vulnerable to debt, as the shocks eroded export revenues and slowed economic growth. It is critical for the LDCs to break this cyclical pattern of exports because of its adverse impact on

their economic growth and balance of payments. Building productive capacities, diversifying the export base, and structurally transforming their economies could contribute to reducing the impacts of trade shock due to an excessive concentration of exports (UNCTAD, 2020b; 2022b). The lack of diversification of exports is also associated with larger swings in the cyclical component of export trends, and lowers the mean trend growth rates of exports and GDP respectively.

d. Domestic debt and recourse to foreign sovereign bonds

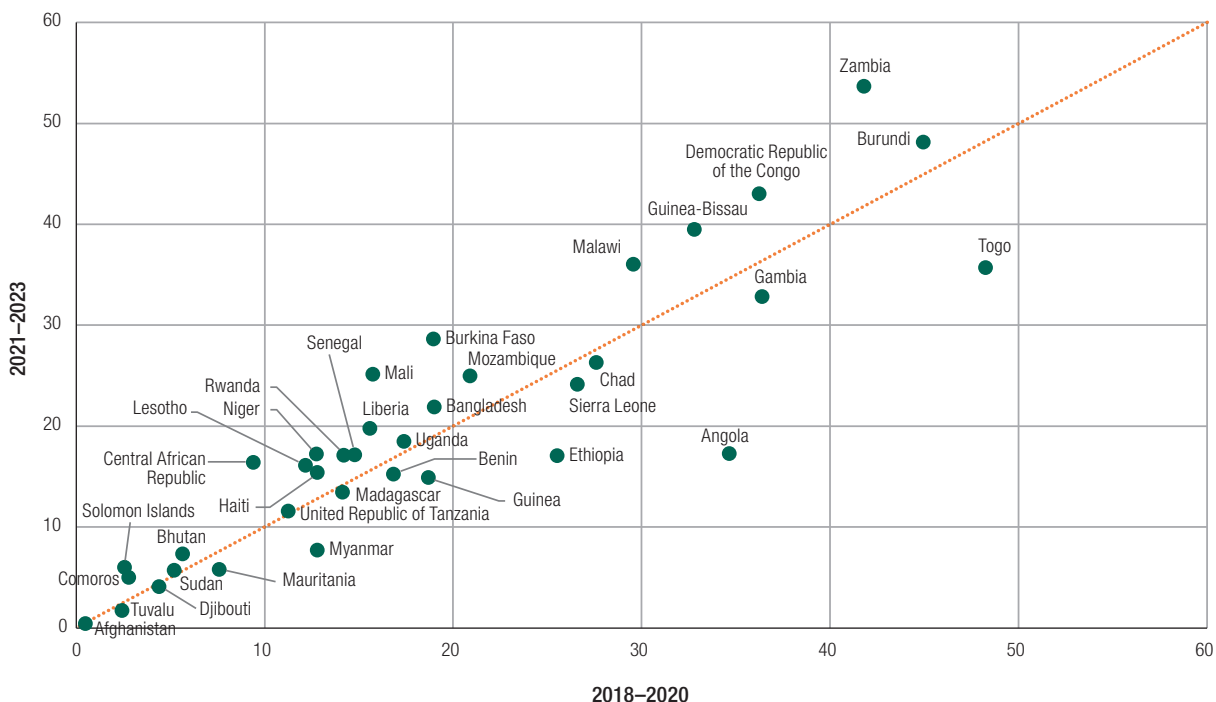
An increase in claims on central governments, which includes loans to central governments net of deposits, may signal a growing debt problem, especially if government domestic debt consistently dominates credit issued by the financial sector. Credit to the private sector increased slightly, from an average of 21 per cent of GDP in 2015 to 24 per cent in 2020, while claims on central governments declined by almost a similar margin, from 26 per cent in 2015 to 24 per cent in 2020. The private sector's demand for credit is often driven by requirements for investment capital and cash flow to cover operating costs and business operations. When the government dominates the domestic credit market, liquidity constraints on the private sector may push up borrowing costs and demand for short-term credit by firms, as investors prefer short-term projects over longer term investment projects that offer lower returns (Fosu and Abass, 2019).

Among LDCs for which data were available, domestic credit provided by the financial sector as a share of GDP averaged 32.3 per cent in 2020, compared to 15.5 per cent in 2015. During the same period, domestic credit to their governments increased slightly, from an average of 5.1 per cent of GDP to 7.7 per cent, while domestic credit to the private sector increased from 20.9 per cent to 23.9 per cent of GDP. Domestic debt in local currency is considered safer because it entails lower exchange rate risk when the issue is traded locally and held predominantly by residents. For 22 of 36 LDCs for which data were available, domestic debt as a share of GDP rose during the period 2021–2023 compared to 2018–2020, and remained above 30 per cent in five countries: Malawi (36 per cent), Guinea-Bissau (40 per cent), the Democratic Republic of the Congo (43 per cent), Burundi (48 per cent) and Zambia (54 per cent) (figure 3.10). The ratio of domestic debt to GDP declined in 2021–2023 for the Gambia (33 per cent) and Togo (36 per cent) compared to 2018–2020, but nevertheless remained above 30 per cent, while in Angola it fell significantly, from 35 per cent to 17 per cent over the same period.

⁴ The Hodrick and Prescott (HP) filter is a procedure for decomposing a time series, x_t , $i = 1, \dots, n$ into a trend component, t_t and a cyclical component, c_t , which measure the deviation from the long-term growth of the variable (i.e., $c_t = (x_t - t_t)$). The trend component is estimated from solving a constrained minimization problem of the squared digression from trend: $\min \sum_{t=1}^n (x_t - t_t)^2 + \lambda \sum_{t=2}^{n-1} (t_{t+1} - 2t_t + t_{t-1})^2$, for $\lambda > 0$. For more details, see Cornea-Madeira, 2017 and de Jong and Sakarya, 2016).

Figure 3.10

Domestic debt as a share of gross domestic product, 2018–2020 and 2021–2023



Source: UNCTAD secretariat calculations, based on various IMF Staff Country reports (accessed June 2023).
 Note: Data for 2023 are projections.

In general, domestic public debt backed by tax revenue and other domestic resources mobilized by the government may slash resource gaps at lower cost when fiscal discipline is complemented by central bank independence in domestic credit allocation. A trade-off between external debt and domestic debt may arise due to costs associated with currency and maturity mismatches, as well as from a desire to lower the risk of international exposure (Panizza, 2008; United Nations, 2023b). However, maintaining credibility in government financing and spending decisions is crucial, as repressive financial policies may reduce the creditworthiness of debt denominated in domestic currency, especially in contexts of high inflation and low growth (Amstad et al., 2020). As noted earlier, interest rate hikes in 2021–2023 impacted liquidity and balance sheets amidst inflationary pressures, which saw the consumer price index almost quadruple in LDCs, from an average of 390 in 2018 to 1,489 in 2021. The ongoing adjustment to interest rates in 2023 has raised domestic debt costs and piled pressure on already constrained fiscal spaces.

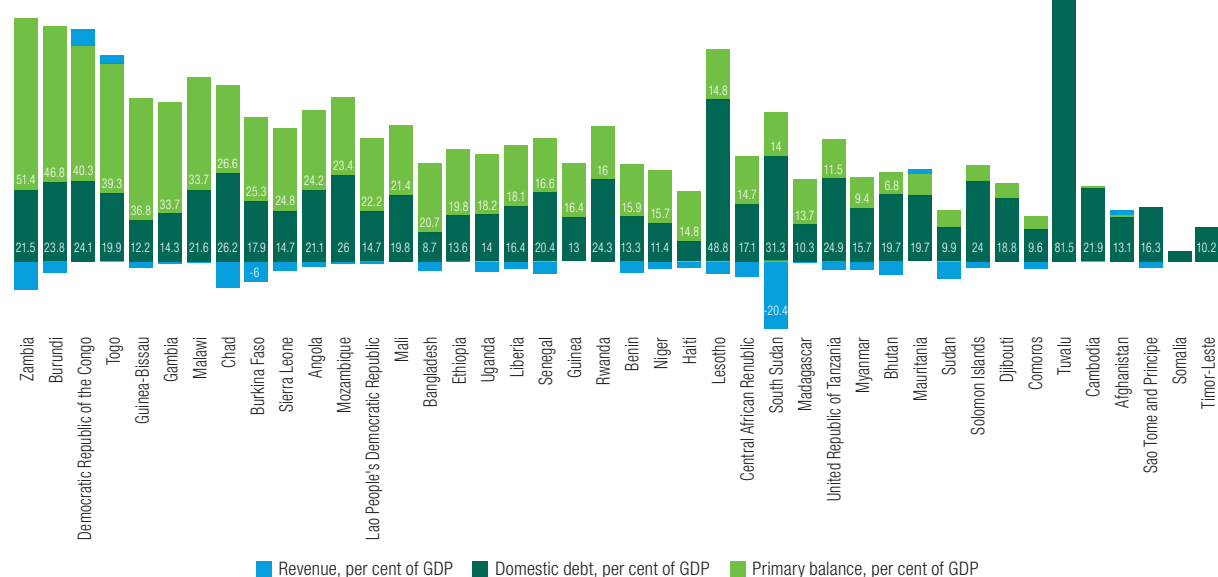
The vulnerability of the domestic financial system to domestic credit risk may be low for LDCs in which tax revenue exceeded domestic credit to government relative to GDP. However, claims on central government net of deposits were significantly

higher than tax revenue as a percentage of GDP in some LDCs, including Angola, Bangladesh, the Central African Republic, Myanmar and the Sudan, and only marginally higher in Zambia. In 2019–2023, domestic debt as a share of GDP exceeded tax revenue in 24 of 39 LDCs, including Zambia, Burundi, the Democratic Republic of the Congo, Togo, Guinea-Bissau, the Gambia, Malawi, Chad, Burkina Faso and Sierra-Leone (figure 3.11). Critically, claims on central government as a percentage of broad money grew at average rates of more than 10 per cent in 2016–2020 compared to 2011–2015 in Angola, Burundi, Liberia, Sierra Leone, South Sudan, the Sudan and Zambia. In South Sudan and the Sudan the growth rates were high in both periods. The credibility of the financial sector in these countries could deteriorate if their fiscal positions are left unchecked. Thus the onus is on both central governments and monetary authorities to commit to viable inflation targets, and to maintaining prudence in spending policies.

In the context of a fragmented external financing landscape and liquidity constraints in LDCs' domestic financial markets, some of these countries have resorted to issuing foreign bonds abetted by commodity windfalls and sizeable foreign reserves. Between 2009 and 2022, African LDCs issued a combined total of \$23.1 billion worth of Eurobonds,

Figure 3.11

Share of least developed countries' public financial positions in gross domestic product, 2019–2023 (percentage)



Source: UNCTAD secretariat calculations, based on various IMF Staff Country reports (accessed June 2023).

Note: Only countries shown for which data were available. Data for 2023 are projections.

denominated mostly in United States dollars. The interest rates on these instruments are quite high, for example LDCs paid between 5 and 10 per cent on 10-year bonds, compared to almost zero, and in some cases negative, rates in the United States and Europe in 2019. This is in part due to LDCs' poor credit ratings, and a mismatch between the instrument's duration and its use (Mureithi, 2021). An

analysis of the issued Eurobonds shows that they have been used to finance maturing debt obligations, fiscal budget deficits and large infrastructure projects (Mureithi, 2021; *The East African*, 2023; and Smith, 2023). Benin is the first African LDC to have issued an SDG Eurobond dedicated exclusively to financing high impact projects aimed at achieving the Sustainable Development Goals (box 3.1).

Box 3.1 Benin's inaugural Sustainable Development Goals bond issue

In July 2021, Benin issued its inaugural Eurobond to finance projects related to the Sustainable Development Goals. The Government prioritizes the most urgent Goal targets, and projects are selected based on their "SDG sensitivity". A total of 57 projects are eligible, grouped into 12 categories based on a comprehensive set of criteria that define the context of the intervention and the scope of expenditures. The projects are further classified into four pillars of the Goals, namely population (with an allocation of 72.2 per cent of the funding), prosperity (11.1 per cent), planet (14.9 per cent) and partnerships (1.8 per cent) (Benin, Presidency, 2022).

A steering committee selects eligible projects according to a set of criteria. Certain activities are excluded from funding, such as expenditures on fossil fuels, tobacco, alcohol, gambling, production and trade in arms, or defence and security equipment. By July 2022, the following goals had been achieved:

- Reached 2.6 million beneficiaries of an extended vaccination programme (1.1 million of whom are children younger than 1 year).
- Provided free malaria treatment to almost 700,000 poor people.
- Extended and densified drinking water distribution networks from 321 km (2017) to 859 km.
- Opened 16 programmes as part of the creation of the City of Innovation and Knowledge project, benefiting 1,647 people.
- Increased coverage to 25 municipalities (approximately 5.7 million people) of the PANA Energy Project, which seeks to improve the resilience of the energy sector to the impacts of climate change.
- Installed 13 climate resilient solar PV mini power plants in some off-grid locations in Benin.
- Set up and operationalized an interoperability platform for all government ministries of Benin.
- Restored 150 hectares of the coastal zone.

Box 3.2 The African regional bond market: Growth potential but inflated borrowing costs

African LDCs are tapping into the regional bond market, which is supported by the African Development Bank (AfDB) and other subregional development banks. The AfDB bond portfolio is denominated in various foreign currencies. It includes social bonds (AfDB, 2017), green bonds, and environment, social and governance (ESG) bonds (AfDB, 2022). In 2022 alone, the AfDB issued a 1 billion euro 5-year social bond and a 1.25 billion euro 7-year social bond, a 1.5 billion Swedish krona 5-year green bond and 19 billion Ugandan shillings ESG bond (approximately \$5 billion) (AfDB, 2022). As at 30 June 2022, the AfDB had committed \$3.8 billion to 45 eligible green projects and \$6 billion to eligible social projects across Africa.

Subregional development banks too have engaged in issuing bonds to finance some projects in their portfolios. The ECOWAS Bank for Investment and Development issued a 240 billion West African CFA Franc (XOF) bond programme on the financial market of the West African Economic and Monetary Union (WAEMU) in 2021 (EBID, 2021). The Eastern and Southern African Trade and Development Bank issued a 7-year unsecured Eurobond valued at \$650 million, and it is in the process of developing a regional local bond issuance programme as a way to diversify its bond issuances (TDB, 2021). The West African Development Bank (BOAD) successfully issued a €750 million sustainability bond in 2021 aimed at increasing funding for projects intended to have strong social and environmental impacts in WAEMU countries. The bond has a 12-year maturity, and debuted with an interest rate of 2.75 per cent (BOAD, 2021).

Compared to the Eurobond market, the regional and subregional development banks focus on high-impact projects that have an environmental sustainability component. However, bonds in this segment still attract higher interest rates than bonds issued in developed economies. Boosting capitalization of the regional bond market could unlock financing, particularly for corporate sector borrowers seeking growth markets in the African Continental Free Trade Area. Market capitalization of corporate bonds as a percentage of GDP in sub-Saharan Africa was only 1.8 per cent, while market capitalization of government securities averaged 14.8 per cent in 2010 (Mu et al., 2013). The size of the economy and its level of development along with the size and level of development of the banking sector, are critical considerations for investors. At the same time, investor confidence in the market is strongly influenced by trade openness, the quality of institutions, investment profiles, and macroeconomic conditions (including fiscal balances, interest and exchange rates), as well as the presence or absence of capital controls (Mu et al., 2013; Essers et al., 2014; Eichengreen and Luengnaruemitchai, 2004; Berensmann et al., 2015). The fact that bond issuances by African LDCs are oversubscribed demonstrates strong investor interest in the African market. However, the scope for expanding the issuance of bonds will continue to be constrained by exorbitant costs, market risks and higher premiums on rollover risks. Recourse to foreign bond issuances is therefore contributing to undue debt accumulation in African LDCs.

The projects aim to provide important social and human development benefits, but very few of them have revenue-generating potential, and therefore do not necessarily help reduce the country's indebtedness. Rwanda recently issued a \$620 million foreign bond to boost strategic projects in productive sectors, and to retire its debut \$400 million Eurobond that matured in May 2023 (*The East African*, 2023). The matured 10-year bond issued in 2013 debuted at an interest rate of 6.62 per cent, while the new bond was listed at 5.5 per cent, with 84.5 per cent of existing bond holders from previous bond issues retained. Investor confidence lends credibility to government policies, and could improve the viability of public projects on which the debt resources are spent (Smith, 2023; Rwanda, Ministry of Finance and Economic Planning, 2023).

C. Multilateral and bilateral debt relief initiatives

LDCs require urgent support to prevent their debt situation from turning into a wider systemic crisis. Global efforts by the international community need

to focus on reducing the debt burdens of these low-income countries. However, the fragmentation in the international financial assistance architecture, as discussed in chapter 2, particularly among Paris Club and non-Paris Club official creditors, along with other shortcomings, will continue to enhance the debt vulnerabilities of the LDCs. The Global Sovereign Debt Roundtable launched in December 2022 by the World Bank, IMF and the Group of 20 (CDP, 2023) reconvened in April 2023 in Washington, D.C., during which parties showed a greater willingness to address sticky issues. These include guarantees to protect the interests of multilateral development banks (MDBs) and common treatment of sovereign creditors. The MDBs are expected to offer more grants and concessionary lending which, in the case of the World Bank, would require expanding the pool of resources available to low-income countries, including the IDA/World Bank Fund for the Poorest (Gold and Saldinger, 2023; IMF, 2023b).

Debt relief may be offered in various ways, including through debt cancellation, restructuring, reduction of stock or debt service obligations, and debt service

suspension. It should be noted, however, that the Group of 20 Common Framework, discussed below, seeks to broaden debt relief from official and private creditors on comparable terms, and to facilitate faster debt rescheduling through maturity extensions and interest rate reduction rather than through outright debt cancellations (UNCTAD, 2023b). Official bilateral creditors may find it easier to offer debt cancellations when they are the main debt partner, but other incentives, such as trade and investment linkages, may also play a role. On the other hand, imprudent behaviour of private agents and fragmented interests among sovereign lenders may give rise to ad hoc arrangements and protracted debt workout negotiations (UNCTAD, 2015). Debt cancellation may involve partial or full reduction of debt either through the principal component and/or interest; debt restructuring, on the other hand, alters the terms of a debt, often in favour of a debtor, and could involve debt write-offs to reduce the principal and interest, or a change in the timing of debt repayments. It is common for creditors to offer only rescheduling of debt to resolve liquidity problems, but treating insolvency alone is not effective. Suspending debt service, as well as other measures taken during debt restructuring are only effective if the debtor country prudently utilizes the proceeds of the restructured debts and/or any additional flows it receives during the process.

At the present juncture, LDCs require more financing options at scale, and on conditions that are favourable. Because of their weak economies and high vulnerability to economic shocks and other crises, the most suitable external financing for LDCs, other than more expensive private financing options, should include an increase in ODA grants and concessional loans. There is therefore a need for more precise targets and predictable amount of financing on grant and concessional terms. An increase in such flows could reverse the unsustainable debt trends, balance the debt profiles between commercial and private debt stocks, and increase multilateral and bilateral share of debts offered on sustainable terms. A reformed international financial architecture could achieve some of these aims by facilitating the most vulnerable countries' access to liquidity and addressing their long-term financing needs, including making the financial architecture more responsive to their requirements in times of crises (United Nations, 2023c). The discussions that follow highlight some debt relief initiatives, and the scope for improving their impacts on LDCs.

1. International cooperation on debt relief

LDCs facing debt burdens require urgent injections of liquidity through various instruments, including official

Fulfilled pledges and predictability of grants and concessional loans could improve liquidity of debt-distressed LDCs

assistance in the form of grants and concessional loans. Difficulties in accessing international capital markets raises the cost of borrowing for LDCs, they often resort to syndicated loans with shorter maturities and borrowing from private creditors who offer no safeguards at times of debt distress. This is one of the reasons for the marked increase in their costs of debt service. Countries that are at risk of – or are already experiencing – debt distress will need to safeguard their fiscal space as a matter of urgency in order to prevent further erosion due to the ramifications of the polycrisis. For these countries, the international community should address not only immediate liquidity pressures, but also their structural insolvency and long-term debt sustainability issues (UNCTAD, 2020c).

The importance of international coordination of the debt relief efforts of official bilateral and multilateral creditors, commercial banks and other private lenders cannot be overemphasized. For many years, UNCTAD has been advocating for a multilateral framework for debt resolution – a process that would require coordination among official multilateral and bilateral creditors as well as private creditors (UNCTAD, 2015, 2020c, 2023a). Official creditors would be familiar with the complexity of achieving compatibility and coherence in debt treatment clauses among creditors when a country requests debt restructuring from its creditors. Although it is arguably easy for parties to agree debt restructuring terms when creditors share common views on debt, for example among Paris Club members, it takes longer to build consensus with other official bilateral and private creditors (commercial banks, bond holders and other private creditors) because of differences in approach, valuation of debt and commercial interests (Goldman, 2014; UNCTAD, 2015). The discussion in this section focuses on selected multilateral frameworks for debt relief and their relevance to the present debt situation of the LDCs.

a. United Nations initiatives for debt workout

The 2008–2009 global financial crisis was a setback for the MDRI launched by the IMF in 2006. As debt situations worsened, it became increasingly clear that there was need for an effective, coordinated international debt workout plan for debt distressed

Debt workout mechanisms, beyond providing liquidity support, should also address the structural vulnerabilities of LDCs

countries that depended not just on a limited number of creditors, but rather, on the entire spectrum of official multilateral and bilateral lenders, as well as private creditors. A multilateral approach to debt resolution is still needed to improve coordination among creditor and debtor countries through negotiations to prevent sovereign debt defaults. By facilitating and accelerating the process of debt resolution between countries and their creditors, such a framework would help maintain investor confidence during debt workouts. And by avoiding protracted negotiations over debts, it would directly improve confidence in the sovereign States involved. This is important for LDCs because these countries often suffer from negative perceptions by investors, even when their sovereign debts are low. Moreover, a multilateral framework could offer stability and fairness unlike bilateral arrangements with private and official creditors which may fail to guarantee sustainability for poor lenders in debt distress.

General Assembly resolution 69/319 on Basic Principles on Sovereign Debt Restructuring Processes adopted in September 2015⁵ specifically aimed at promoting accountability, transparency and cooperation between debtors and creditors in resolving debt situations. Among its principles is the need to safeguard the policy space of the debtor country to exercise its discretion in the design of its macroeconomic policy, including the restructuring of its sovereign debts, and crucially, that debt restructuring should be a last resort (United Nations, 2015). The resolution is hailed as a standard bearer on setting principles for treating protracted debt situations. Although the nine principles contained in the resolution are non-binding, they set the bar for debt resolution workout mechanisms that seek to address the needs of developing countries. Obviously, debt workouts should go beyond debt rescheduling and debt service suspension, as these do not resolve the debt crises of low-income countries. For some of the countries, a reduction in the present value of debt would have a significant impact and help bring debt to sustainable levels.

⁵ See <https://daccess-ods.un.org/tmp/7142791.15200043.html>.

The Least Developed Countries Report 2021 (UNCTAD, 2021) called for the setting up of a contingency financing facility to ease debt service for countries when specific factors affect their ability to service their debt, such as natural disasters, wars or geopolitical tensions, which have an adverse impact on their GDP or commodity exports, or any other factors that might increase their vulnerability to shocks. Depending on credit terms, the debt service of countries experiencing such unexpected events could, for example, be automatically suspended until such time as their interest repayments do not exceed their GDP growth rate and other income-indexed measures. The practicality of state-contingent debt instruments⁶ was tested during the COVID-19 pandemic and reviews of their usefulness abound. For instance, the instrument only becomes active when disaster or crisis strikes, resulting in huge losses to the economy. If the contingent event is global, lenders may also be exposed to the same risks, and therefore may not be inclined to offer relief (Cohen et al., 2020). In general, rescheduling of debt, including standstill provisions, does not solve debt crises other than postponing the inevitable, but reduction of the present value of debt goes a long way towards reducing debt.

2. Bilateral debt relief and South–South cooperation

Bilateral debt relief plays an important role in reducing the debt burdens of LDCs. During the period 2006–2021, LDCs received \$25.2 billion in ODA debt relief, most of it between 2006 and 2014 (figure 3.12). However, official bilateral flows related to debt relief have been falling, accounting for only \$1.6 billion during the period 2019–2021. The top five recipients were the Democratic Republic of the Congo (32 per cent), Myanmar (20 per cent), Liberia (7 per cent), Somalia (6 per cent) and Bangladesh (5 per cent). Beneficiaries during the period 2006–2021 were Togo (4 per cent), the United Republic of Tanzania (4 per cent), Zambia (4 per cent), and Guinea (3 per cent). During the period 2015–2020, debt forgiveness or reduction amounted to \$3.3 billion, and rescheduled debt was \$0.4 billion, but new external debt contracted by LDCs reached \$200.5 billion, eclipsing the additional \$167.4 billion

⁶ State-contingent debt instruments (SCDIs) are debt instruments that link a sovereign's debt service payments to its capacity to pay, depending on world variables or events. The contingencies have to be defined in advance so that when conditions are met, the country can avert a debt crisis.

debt accumulated during 2007–2014.⁷ More than half of the new external debt (62 per cent) was public and publicly guaranteed. The mismatch between debt relief received and the newly contracted debt shows that LDCs are facing not only large-scale financing challenges, but also debt management problems that keep their overall indebtedness at unsustainable levels. The drying up of aid and debt relief was particularly apparent in 2015–2021, when debt stocks and debt service costs escalated.

Looking ahead, there is the need for substantial liquidity support to LDCs in debt distress or at risk of distress. Developed countries also need to scale up disbursements of official flows, including ODA, in line with their commitments, as the financing gap also carries a cumulative negative impact on development in low-income countries. Some of the short-term loans accumulated by the LDCs, for example, arise from their need to bridge the gap between commitments and disbursements from official creditors, as well as higher future costs of postponed investments. South–South sharing of experiences on debt management issues, including assessing public and external finance needs, is critical for countries that are in debt distress or at risk of distress. The UNCTAD Sustainable Development Finance Assessment Framework, for instance, provides policymakers with tools for assessing whether their countries are on track to meeting existing external debt obligations without compromising their ability to achieve the Sustainable Development Goals.⁸

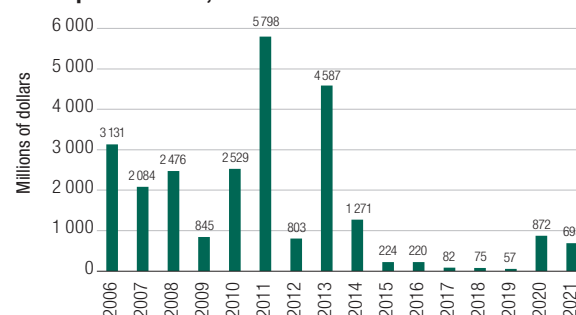
Debt relief provided by official creditors can be more effective if it involves a comprehensive reduction of debt stocks with corresponding cuts in debt service costs (UNCTAD, 2020c). Of course, the nature of LDC's debt problems varies, from short-term liquidity problems related to a shortfall in tax revenues due to economic shocks, to long-term insolvency linked to structural economic weaknesses. The effectiveness of bilateral debt relief in these instances depends on how aid flows assist the recipient country smoothen its fiscal revenue gap in the short-term, while also addressing its long-term structural limitations. However, with ODA already low, bilateral aid flows earmarked for debt relief should not be substitutes for other types of aid, as doing so would add to the unpredictability of aid flows and worsen the procyclical

⁷ UNCTAD secretariat calculations based on World Bank, *International Debt Statistics* database (accessed June 2023).

⁸ The framework has been applied to a number of countries, including Indonesia and Sri Lanka, under the Debt Management and Financial Analysis System (DMFAS) programme (Lockwood, 2022).

Figure 3.12

Official development assistance debt relief received by least developed countries, 2006–2021



Source: UNCTAD secretariat calculations, based on data from OECD *Creditor Reporting System* database (accessed April 2023).

impacts that increase insolvency risks of the recipient countries. Establishing the real capacity of LDCs to repay debt is therefore critical in resolving their debt crisis in the long-term, in addition to substantially reducing the present value of their debts stocks (Chuku et al., 2023; UNCTAD, 2021b).

Frequent situations of debt overhang and increased demand for emergency lending and debt restructuring simply confirm that the debt vulnerabilities of the LDCs have reached crisis level. Bilateral partners could increase aid flows to the stricken countries, and by providing debt relief, they could broadly help those countries deal with debt overhang and free up resources for more social spending. The latter was the focus of G7 debt relief considerations from as far back as its meeting in Toronto, Canada, in 1988, when partial debt forgiveness, longer maturities and low interest rates were highly recommended (Bjerkholt, 2004). In 1990 at its meeting in Houston, United States, the G7 called for more concessional rescheduling for the poorest countries, and for increasing the grant element of debt reduction from about 27 per cent to 67 per cent (Easterly, 2002). This was in recognition of the fact that debt rescheduling alone was inadequate to bring down debts unless additional steps were taken by the international community to decisively deal with the crisis. At the same time, beneficiaries of substantive debt reductions would also need to urgently implement structural reforms and channel new resources towards building productive capacities and improving their trade performance (Easterly, 2002; UNCTAD, 2020b).

The Group of Seven is currently aligned with the Group of 20 on debt issues, and in particular, the member States are committed to working closely with the Group of 20 and international organizations to, among others, “advance the work on multilateral development banks evolution; promote voluntary SDR channelling; secure resources for Poverty Reduction and Growth Trust and Resilience and

Sustainability Trust; address debt vulnerabilities” (European Council, 2023: paragraph 7). During the COVID-19 pandemic, the Group of 20 announced a Debt Service Suspension Initiative (DSSI) to assist low-income countries facing liquidity problems. The initiative waived debt service obligations for 73 eligible countries, of which 41 were LDCs. Of the \$5.4 billion debt service deferral extended by bilateral creditors in 2021, 21 LDCs that regularly report their data to the World Bank benefited from about \$2.1 billion in deferred debt service.⁹

a. Group of 20 Common Framework for Debt Treatments: Beyond the Debt Service Suspension Initiative

As the DSSI – launched during the pandemic – expired, the Group of 20 announced a new initiative in 2022 aimed at assisting countries facing protracted debt problems. The framework offers no debt write-off or cancellation, but it is envisaged that such measures may apply if a country meets certain IMF/World Bank criteria, and if all participating creditors collectively consider the case to be deserving of such treatment (Paris Club, 2021). The Common Framework may broaden the participation of creditors in addressing long-standing debt resolution constraints, since it is endorsed by the Paris Club and other major non-Paris Club members. However, there are still many official creditors who have not endorsed it, due to unresolved questions about burden-sharing by official bilateral creditors, the role of MDBs, and eligibility for debt treatment, which depends on the IMF/World Bank Debt Sustainability Analysis Framework for Low-Income Countries.

At present, the impact of the Common Framework on debt distressed countries is minimal, since countries have to apply on a case-by-case basis. Besides eligibility, the financial impact of the entire process is a major concern. For instance, despite the DSSI extending into 2021, the total PPG debt service for the LDCs rose from \$19.9 billion in 2020 to \$27.3 billion in 2021, as all LDCs experienced larger debt costs in 2021 compared to 2020, except for Angola, the Comoros, Djibouti, Liberia, Mozambique, and Sao Tome and Principe (figure 3.13). Deferred debt service through the DSSI varied as a share of total debt service actually paid by LDCs in 2021, ranging from \$0.4 million to \$835.8 million. In nominal terms, Angola benefited from the largest deferral in debt service among LDCs in 2021, while some other countries benefited from significant debt deferments as a share of the actual PPG debt service paid, such as Zambia (144 per cent), Djibouti (70 per cent),

Figure 3.13

Public and publicly guaranteed debt service of least developed countries, 2020 and 2021 (millions of dollars)

	2020	2021
Afghanistan	29	19
Angola	8 963	8 681
Bangladesh	2 014	2 772
Benin	211	727
Bhutan	47	116
Burkina Faso	136	143
Burundi	14	19
Cambodia	359	396
Central African Republic	5	7
Chad	111	150
Comoros	3	3
Democratic Republic of the Congo	256	348
Djibouti	53	43
Eritrea	22	22
Ethiopia	1 970	1 989
Gambia	27	31
Guinea	74	109
Guinea-Bissau	23	43
Haiti	10	15
Lao People's Democratic Republic	640	665
Lesotho	60	298
Liberia	24	18
Madagascar	104	129
Malawi	73	81
Mali	229	270
Mauritania	270	397
Mozambique	607	584
Myanmar	508	2 227
Nepal	256	263
Niger	173	192
Rwanda	113	647
Sao Tome and Principe	2	2
Senegal	1 576	1 442
Sierra Leone	51	55
Solomon Islands	6	6
Somalia	481	17
Sudan	144	1 621
United Republic of Tanzania	1 199	1 544
Timor-Leste	8	10
Togo	86	105
Uganda	312	590
Yemen	86	91
Zambia	569	241
LDCs*	19 903	27 328

Source: UNCTAD secretariat calculations based on World Bank, *International Debt Statistics* database (accessed May 2023).

Note: Data for Kiribati, South Sudan and Tuvalu are not available.

Mauritania (53 per cent), the Comoros (45 per cent), and Sao Tome and Principe (44 per cent) (table 3.1).

Other official creditors of developing countries, particularly those with systemic influence on the debt of the LDCs, could help resolve protracted debt situations and prevent further deterioration of LDCs' debt situation. More than half of all LDCs will need debt relief and support measures that go beyond preserving the interests of creditors and averting default. Debt restructuring, for example, should contribute to fostering economic growth and poverty reduction in the distressed countries, as was the case during the implementation of the MDRI in 2005 (World Bank, 2022). Potentially, implementation of debt standstill provisions under the Group of 20 Common Framework may allow multilateral banks to extend emergency lending and other assistance while the countries are negotiating debt restructuring. When requesting debt restructuring, countries at high risk or in debt distress require quicker debt workouts.

⁹ See <https://www.worldbank.org/en/programs/debt-statistics/dssi>.

Table 3.1
Debt service deferred under the Debt Service Suspension Initiative, 2021

	Debt service deferred through DSSI (million of dollars)	Deferred debt service as a per cent of PPG debt service in 2021
Afghanistan	4	23
Angola	836	9
Burkina Faso	16	11
Burundi	0	2
Chad	2	1
Comoros	1	45
Democratic Republic of the Congo	35	10
Djibouti	30	70
Ethiopia	76	4
Gambia	3	8
Guinea	36	33
Lesotho	2	1
Madagascar	3	3
Mali	28	10
Mauritania	212	53
Mozambique	154	26
Myanmar	76	3
Nepal	51	19
Niger	21	11
Sao Tome and Principe	1	44
Senegal	69	5
Sierra Leone	4	8
United Republic of Tanzania	101	7
Togo	20	19
Zambia	347	144

Source: UNCTAD secretariat calculations, based on World Bank, *International Debt Statistics* database (accessed May 2023).

This could be made possible by other bilateral lenders and private lenders committing to terms offered by the majority of the country's lenders, including the participants of the Group of 20 Common Framework (Cheng et al., 2018; United Nations, 2023c). In addition, wider reform of the international debt architecture is needed to address the shortcomings of the international financial system, and to brighten the prospects for transparent and coordinated debt workouts (UNCTAD, 2023b; United Nations, 2023c).

Debt distressed LDCs are likely to remain at risk unless debt relief efforts are ramped up and the international financial architecture begins to address core issues that have contributed to the debt crisis. Those issues include structural weaknesses of the countries, and elements of the polycrisis such as geopolitical tensions

that affect international trade (UNCTAD, 2023d). Implicitly, serial debt restructurings suggest the need for structural reforms, particularly for LDCs that experience deterioration in their trade and capital flows following any significant debt restructuring (Cheng et al., 2018; UNCTAD, 2023d). Treating insolvency problems is necessary but not sufficient, as the recurrence of the debt crisis in the LDCs has shown. The long-term effects of structural factors have not been adequately addressed by debt relief initiatives, and the international financial architecture has long ignored the structural weaknesses of the countries in lending and debt treatment decisions. It is therefore critical for developed-country partners to treat debt relief as additional to other official flows such as ODA, since substituting debt relief for other official flows tends to distort the impacts of ODA in recipient countries. As much as LDCs in distress need emergency lending, such debt would only have a positive impact on economic growth and resilience if the resources provided complement other debt relief efforts, rather than inflating lending. LDCs need a clear path out of unsustainable debt patterns through a series of lifelines such as grants, concessional loans and a debt treatment mechanism that is responsive, transparent and efficient in resolving unsustainable debt situations.

D. Addressing the debt crisis

LDCs at risk of debt distress require an immediate injection of liquidity to prevent the crisis from degenerating into a socioeconomic catastrophe in the poorest countries. Conditions dictate that more grants and concessional finance be mobilized to bring debt to sustainable levels and safeguard the fiscal space the countries desperately need to pursue their long-term goals. As global efforts intensify to achieve sustainable consumption and production (Goal 12), and accelerate climate action (Goal 13), LDCs have also set ambitious goals through their nationally determined contributions (NDCs) to meet climate commitments. However, given their diminished access to concessional financing and grants from multilateral and bilateral official sources, LDCs are resorting to syndicated loans, bonds and commercial credit. The result is the evidently unsustainable debt patterns that have disproportionately raised their debt service costs, and markedly increased the share of short-term loans in their debt portfolios.

Possible responses from multilateral and bilateral partners are discussed in section D.1 below. The proposals are neither exhaustive nor unique to the LDCs, but their implementation could address

some of the financing gaps in LDCs. In view of the structural nature of the debt issues, section D.2 reiterates the need for special investment vehicles in the implementation of the Doha Programme of Action.

1. Multilateral and bilateral response to the debt crisis

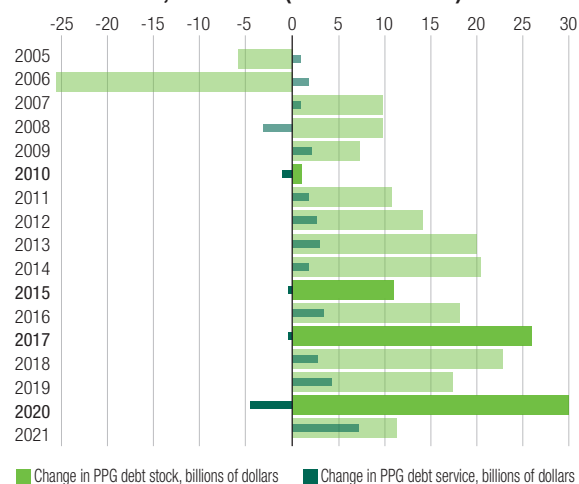
The structural nature of the debt crisis requires a rethink about the international financial architecture at the multilateral level to make it more responsive to the needs of developing countries. Among the proposals for revamping that architecture are the need to reform governance in the key players of the international financial system (i.e. the MDBs), and enhance coherence through a representative apex body (United Nations, 2023c). A development-focused approach, particularly through a multilateral framework for sovereign debt workout, could provide an effective, efficient and equitable mechanism for managing debt crises while safeguarding the development needs of vulnerable countries like the LDCs (UNCTAD, 2023b).

Economic shocks have deeper socioeconomic repercussions for the LDCs than for any other country groups, and their vulnerability is greater owing to their inability to mitigate the shocks with their own domestic resources. As the recovery to the COVID-19 pandemic gathered pace in developed and other developing countries, many LDCs were still reeling from the crisis (UNCTAD, 2021). Countries in distress or those facing a looming debt crisis need timely access to short-term external liquidity to enable them to navigate through the multiple external shocks. Lack of access to emergency financing is one of the reasons for unsustainable debt structures in LDCs, especially during periods of stochastic and systemic shocks. Although a debt service standstill may offer relief, accumulation of arrears could be counterproductive, and may dampen the impact of debt rescheduling. In addition to providing short-term liquidity to countries in distress or at risk of debt distress, the structural nature of debt in LDCs dictates that debt treatment should also contribute to addressing long-term structural imbalances by supporting their economic growth and resilience (United Nations, 2023c; UNCTAD, 2023b).

Unmet financing needs are accumulating in LDCs as their access to long-term financing diminishes, with the global financial system focusing on developed and emerging markets and on short-term and high interest rate debt instruments. In this environment, LDCs are paying 5 to 8 times more on new sovereign debt compared to developed countries' debt. The increase in LDCs' debt stocks reflects these inflated

Figure 3.14

Annual change in public and publicly guaranteed debt stock and debt service, 2005–2021 (billions of dollars)



Source: UNCTAD secretariat calculations based on World Bank, *International Debt Statistics* database (accessed May 2023).

debt service costs. Moreover, the impact of financing on LDCs' long-term development goals is either negative – because the cost of debt exceeds the social benefits – or subdued as a result of their increased vulnerability to debt distress (United Nations, 2023d). In 2011–2021, the average annual growth of LDC's PPG debt stocks exceeded \$15 billion in seven of those years, and was higher than \$10 billion in 2021 and 2015, following major shocks in both cases. The annual increase in debt service doubled in 2021 compared to 2019, and the trend was generally upwards before the pandemic (figure 3.14).

Addressing the liquidity crunch

Emergency lending on concessional and affordable terms can help the LDCs overcome liquidity constraints. The rollover risk of LDC sovereign debts can be reduced drastically by increasing debt maturities and softening terms to ease the debt pressure. This is particularly relevant for LDCs whose domestic financial position has deteriorated since the pandemic, with primary deficits widening as tax revenues have fallen short of government expenditure. An increase in multilateral sovereign lending should ideally be matched by an increase in other official flows, particularly ODA, and long-term financing for investments that can enhance growth and the capacity of the LDCs to structurally transform their economies. Multilateral creditors and other partners could assist the LDCs by converting maturing short-term loans into long-term loans on better terms.

Despite its limitations, the Group of 20 Common Framework has the potential to improve creditor

coordination and increase prospects for faster debt resolution. However, lessons from previous umbrella initiatives point to gaps in achieving comparability of treatment, eligibility of other developing countries, predictable time lines, and private sector participation and that of other stakeholders (UNCTAD, 2023b). For instance, a large share of LDC debts is owed to countries that are not members of the Paris Club. China (box 3.3), followed by India, Saudi Arabia, Kuwait, Libya, the Republic of Korea, and the Bolivarian Republic of Venezuela were owed 60 per cent of the PPG debts of LDCs in 2021, with China's share more than doubling in 2009–2021 (table 3.2). Cooperation with, and seeking comparable debt relief from, these countries, including maturity extensions, interest rate reductions and debt write-offs, could ease the economic hardships of the vulnerable LDCs. A wider multilateral approach is needed, especially one that ensures clarity and transparency in the lending and debt relief initiatives of the donors.

Table 3.2

Share of bilateral public and publicly guaranteed debt held by partner countries, 2009 and 2021 (percentage)

	2009	2021
China	17.7	40.7
Japan	15.0	15.4
Russian Federation	6.8	6.8
India	3.5	5.8
Saudi Arabia	5.4	4.8
France	6.0	4.3
Multiple lenders	3.2	3.1
Republic of Korea	1.1	3.0
Kuwait	5.5	2.5
Venezuela (Bolivarian Republic of)	0.6	1.6
United States of America	6.3	1.4
Libya	1.9	1.1
Italy	3.2	1.1

Source: UNCTAD secretariat calculations, based on World Bank, *International Debt Statistics* database (accessed May 2023).

Box 3.3 China, as a major creditor, is critical to debt resolution in the least developed countries: The case of Zambia

According to the World Bank's *International Debt Statistics*, China is a major bilateral creditor to LDCs. In 2021, it held \$68 billion, or 41 per cent, of the combined bilateral and commercial bank PPG debt owed by LDCs. In Zambia in 2021, for example, the PPG bilateral debt stock reached \$4.2 billion, 78 per cent of which was from China. China also held 22 per cent of the \$2.3 billion of Zambia's PPG commercial bank debt. In total, 58 per cent of Zambia's bilateral and commercial PPG debt was held by China.

On the margins of the Summit for a New Global Financing Pact in June 2023, Zambia announced that it had reached an agreement with China and other major creditors to restructure its external PPG debt amounting to \$6.3 billion, subject to further negotiations. The initial agreement with China and France, the co-chairs of its official creditors committee, sets in motion a process whereby the debtor and creditors define the parameters of the restricted debt. Zambia will seek to restructure at least \$8 billion of its large external debt stock of close to \$12.5 billion in PPG debt alone.

The restructuring will be guided by the Group of 20 Common Framework. Zambia's experience reflects many of the challenges that LDCs face in dealing with their diverse creditors. Reaching consensus with multiple creditor partners that have different views on debt treatment, and the role of commercial banks/development banks is very tricky. For example, the proposals being drawn up by Zambia cover only bilateral debts, although bondholders may also join the negotiations as their holdings continue to trade at distressed levels. For them, agreeing to a 40 per cent cut in the net present value of the sovereign bond would be ideal at the present market valuation of less than 50 per cent (Bloomberg, 2023). Important implications of the restructures revolve around the stock of debt owed to China. Some of the parameters that will matter include:

- A significant share of the debt owed to China will be treated as commercial debt, including debt owed to the Industrial and Commercial Bank of China. Only \$4.1 billion of debt owed to the Export-Import Bank of China is categorized as bilateral debt (*Reuters*, 2023).
- Commercial partners may push for shorter maturities at higher interest rates (Bloomberg.com, 2023). The negotiations should seek equal treatment from private lenders, in line with the Group of 20 Common Framework, as well as better terms. An ideal situation would be to lower interest rates to below 1 per cent, cap interest rates on new debt, and extend maturity on restructured debt to over 20 years.

The success of the Group of 20 Common Framework and other multilateral approaches to debt treatment will depend on fundamental changes to that framework. The presence of China and other systemically important lenders to the LDCs would be critical in such discussions.

While Chinese lending is often criticized for its complexity, confidentiality, and other strict terms (Gelpern et al., 2022), the case of Zambia shows that China is willing to take part in multilateral debt resolutions. This, and other cases where China is involved, will provide valuable lessons for multilateral debt resolution. In addition, it will provide important lessons for LDCs in managing their external debt, including in the design of contracts, management of risks and negotiations on debt restructurings.

Implementing measures that align with the structural characteristics of least developed countries' debts

Although the IMF provides emergency lending to LDCs through facilities such as the Rapid Credit Facility (RCF) which is open to all countries eligible for the Poverty Reduction Growth Trust (PRGT) fund, some conditionalities attached to the funds may be restrictive amidst the rising debt vulnerabilities of the

LDCs. The facilities are also notoriously underfunded as they rely on donor pledges to keep interest free loans flowing to the poorest countries. Early and deep restructuring of debt should be extended in a coordinated manner to all LDCs in debt distress or at high risk of debt distress.

A debt reduction initiative that has received renewed attention recently is the debt-for-nature swap (box 3.4).

Box 3.4 What are debt-for-nature swaps?

Debt-for-nature swaps may provide the much-needed financial resources to invest in some initiatives that could help mitigate the effects of climate change. They offer a promising mechanism for LDCs to address some environment-related challenges for limited types of projects. Under these arrangements, resources which normally would be spent to service debt may be provided to a country to support climate-friendly initiatives while alleviating its debt burden (Georgieva et al., 2022). Depending on their designs, such swaps can improve budgetary alignment with environment/climate objectives and foster green transformation. The swaps may also improve the impact of debt relief, provided the resulting resource reallocation does not reduce ODA and the recipient country's fiscal allocations to other development priorities. Specifically, debt-for-nature swap contracts do not unlock new resources; rather, they redirect debt obligations to a project that could have been covered by the creditor (Sheik, 2018; Chamon et al., 2022). The latter may prove challenging for countries in debt distress that also face primary deficits. One of the risks posed by debt-for-nature swaps is that it may simply involve the reallocation of resources from other environmental areas in the beneficiary country, and thus they may not provide any additional net benefit to environmental conservation. Indeed, the reallocation may result in a misalignment of priorities.

Moreover, debt-for-nature swaps may only provide short-term financing that is insufficient to address the long-term investments needed for a recipient country to adapt adequately to climate change. The interlinked nature of climate projects may also oblige the beneficiary government to channel additional resources for environmental purposes over and above the equivalent "forgiven" debt. This is usually the case for environmental projects spread over longer periods compared to the life of the forgiven loan. The context of the LDCs is challenging because their fiscal positions in 2019–2023 deteriorated as domestic debt exceeded revenue in 22 of 42 LDCs for which data were available. A total of 17 of the 22 were running primary deficits, implying that current government programmes cost more than could be covered by the tax revenues they were collecting (figure 3.11). Fifteen of these countries also had historical payments that were higher, as net interest payments absorbed a larger share of government expenditure. In the current environment, debt-for-nature swaps may only become relevant if the terms are not complex, and if the cost implications for beneficiary countries are minimized.

In 2003, the Government of Germany extended debt relief to Madagascar, whereby debt amounting to 23.3 million euros was cancelled in exchange for the Government of Madagascar's allocation of funding equivalent to 13.8 million euros in counterpart funds over a 20-year period through a proposed Madagascar Foundation for Protected Areas and Biodiversity. The Government made an initial capital contribution of 1.7 million euros, and a further 425,000 euros were to be paid in annual instalments up to 2023 (Moye and Paddock, 2003). The commitment was in euros, and under the agreement, the Government also committed to set up the Foundation. In this example, the debt-for-nature swap contributed not only to reducing Madagascar's debt and protecting the environment, but also strengthened the capacity of the country's institutions and ability to mobilize resources for the environment.

The following are a few more recent examples of debt-for-nature initiatives involving bilateral arrangements:

- France, along with the World Wide Fund for Nature (WWF) entered into a swap arrangement with Madagascar in exchange for \$20 million in conservation funds in 2008.
- France entered a swap agreement with Mozambique to pardon a 17.5 million euro debt in exchange for 2 million euros in conservation funds in 2015, 10 million euros in budget support, and 5.5 million euros for vocational training (Club of Mozambique, 2016).
- France, through its development agency (*Agence française de développement*), allocated 315 million euros in 2016 under the Debt Reduction-Development Contract (*Contrat de Désendettement et de Développement*, C2D) initiative. Under the initiative, amounts that are due as debt service are transferred to the country in the form of a grants to finance poverty reduction programs. LDCs eligible for C2Ds include the following LDCs that are also HIPCs: Burundi, the Democratic Republic of the Congo, Guinea, Liberia, Madagascar, Malawi, Mauritania, Mozambique, Myanmar, Rwanda, Sierra Leone, Somalia, the Sudan, Uganda and United Republic of Tanzania. The initiative is both a debt cancellation and a swap in the sense that the beneficiary countries are still obliged to repay the maturities on the uncanceled portion of its debt, which then is transferred in the form of grants to earmarked programs selected by mutual agreement with the partner countries (AFD, 2016)

This instrument may operate in the same manner as a simple bilateral debt swap, but with a conditionality attached relating to the environment or nature. Thus, the debtor country must commit to spend on a specific climate action the equivalent of the debt service due to the bilateral creditor, and in return the indebted country's debts are restructured or reduced accordingly. The limited availability of climate finance targeting investments in adaptation in the LDCs makes the initiatives attractive, especially if it can unlock climate finance for adaptation while also addressing the debt burden. However, examples of successfully completed debt-for-nature swap programmes show that the resources involved are small, and therefore not desirable for countries with large investment needs for adaptation or for countries that face imminent fiscal/liquidity risks, as the process of implementing the swaps is long, and sometimes costly for both bilateral partners to the swap (Hebbale and Urpelainen, 2023; Georgieva et al., 2022).

E. Conclusions

This chapter examined the debt vulnerabilities of LDCs in order to understand factors that led to their recurring debt crises and proposed policy recommendations that, if implemented, could contribute to achieving Sustainable Development Goal 17.4. LDCs are in a prolonged debt crisis, and while debt levels have increased among all country groups since the 2008–2009 global financial crisis, the aftermath of that crisis marked a critical phase for LDCs as debt trends reverted to pre-HIPC levels prior to the COVID-19 pandemic. The COVID-19 pandemic played a major role in worsening the debt situation of LDCs, particularly those suffering from chronic current account deficits, and widening domestic resource gaps.

It is evident that structural factors are at the centre of the high debt accumulation and recurring debt crises in LDCs. First, the buildup in the external debt is linked to their weak economies that are trapped in low growth patterns. Second, their undiversified economies are both a consequence and a cause of commodity dependence on primary exports that are continuously losing share in world trade. Third, a shift in the debt structure of LDCs has been underway since the end of the global financial crisis and subsequent changes to the ODA architecture. A substantive share of private credit with shorter maturities characterizes the debt structure of LDCs. However, the debt structure remains predominantly multilateral, although the decline in the share of multilateral debt has been quite drastic for some countries.

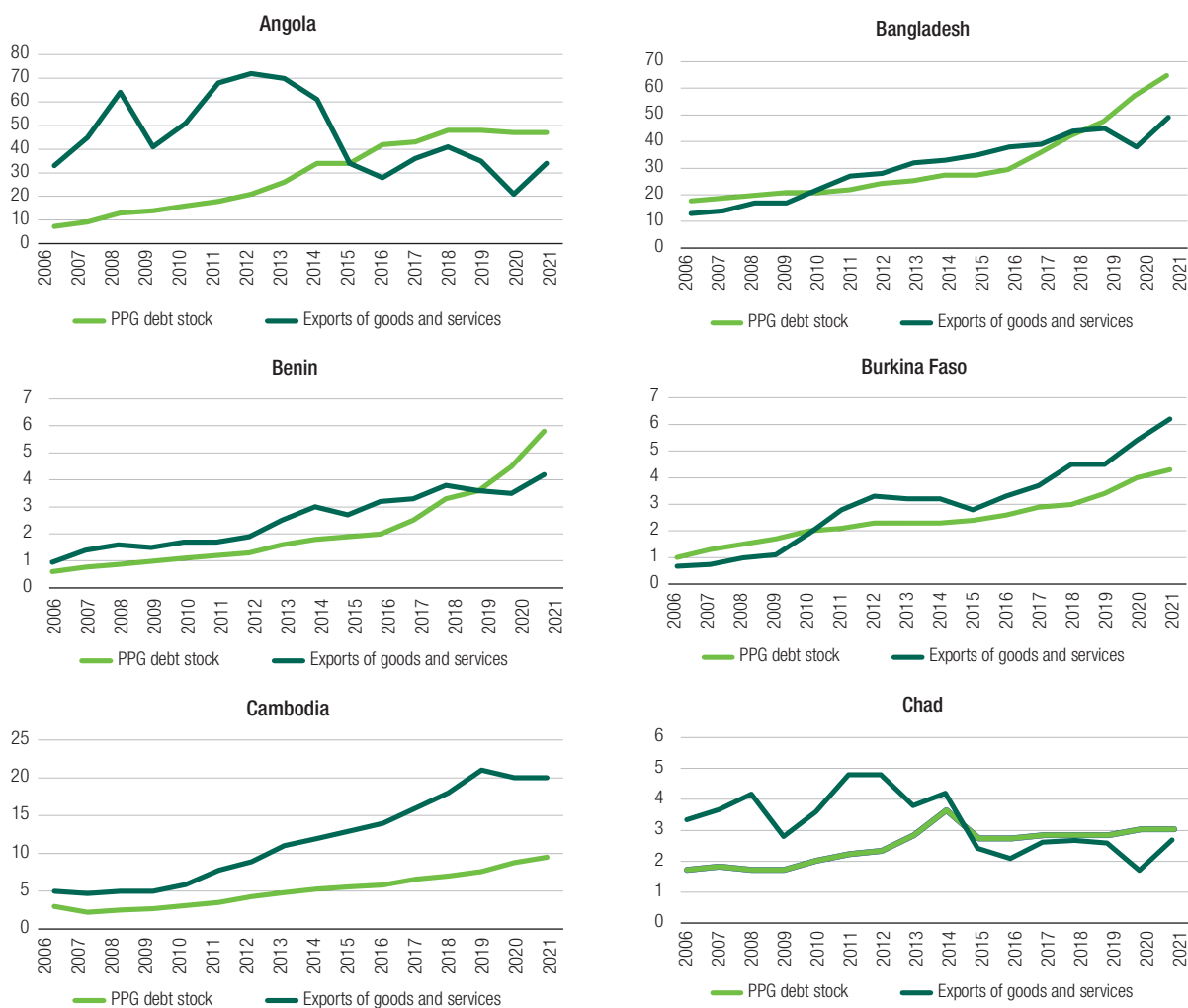
The debt crisis in the LDCs is developing at several levels and worsened by the increasing frequency of trade shocks and widening trade gaps. Export volatility exert pressure on government revenue and are a major source of balance of payments imbalances in commodity dependent economies. LDCs in debt distress and at risk of distress need a clear path out of unsustainable debt patterns through a series of lifelines, such as grants, concessional loans and a debt treatment mechanism that is responsive, transparent and efficient in resolving unsustainable debt situations. Debt and liquidity management in the LDCs should be responsive to the different circumstances of the countries — particularly those that are facing long-term, structural imbalances, and liquidity constraints. Left to the dictates of lenders, the conditionalities imposed can often erode LDCs' policy space and weaken government control over their monetary and fiscal policies. It is also critical for developed-country partners not to substitute debt relief for official development flows, including ODA. Similarly, emergency lending during crises should be sparingly used as a complement to debt relief efforts rather than as an opportunity to inflate debt stocks of the MDBs. In the present circumstances, there are a number of initiatives that could help alleviate the debt burden of LDCs. For instance, some LDCs could benefit from a temporary debt standstill arrangement to postpone payments during the transition period of debt restructuring. In addition, progress should be made in establishing debt workout mechanisms at the multilateral level to enable countries to resolve debt situations without recourse to legal processes that may not respond appropriately to sovereign financing requirements.

Addressing long-standing structural economic weaknesses could avert their procyclical debt vulnerabilities. However, there is also a need for a commensurate international response to the debt crisis by addressing systemic issues that affect the debt sustainability of the LDCs. Such a response should include changes to the international financing architecture and to conditionalities imposed by MDBs, as well as greater transparency in bilateral financing arrangements and debt treatment mechanisms. Granting all LDCs access to IDA loans and increasing international financing assistance mainly in the form of grants would ease the financing pressure and foster conditions for balancing debt portfolios between long-term and short-term debts. Moreover, different categories of creditors would help spread interest rate risks and dampen the effect of speculative investors, particularly in the prevailing global economic climate of high interest rates and inflationary pressures.

Annex

Figure A3.1

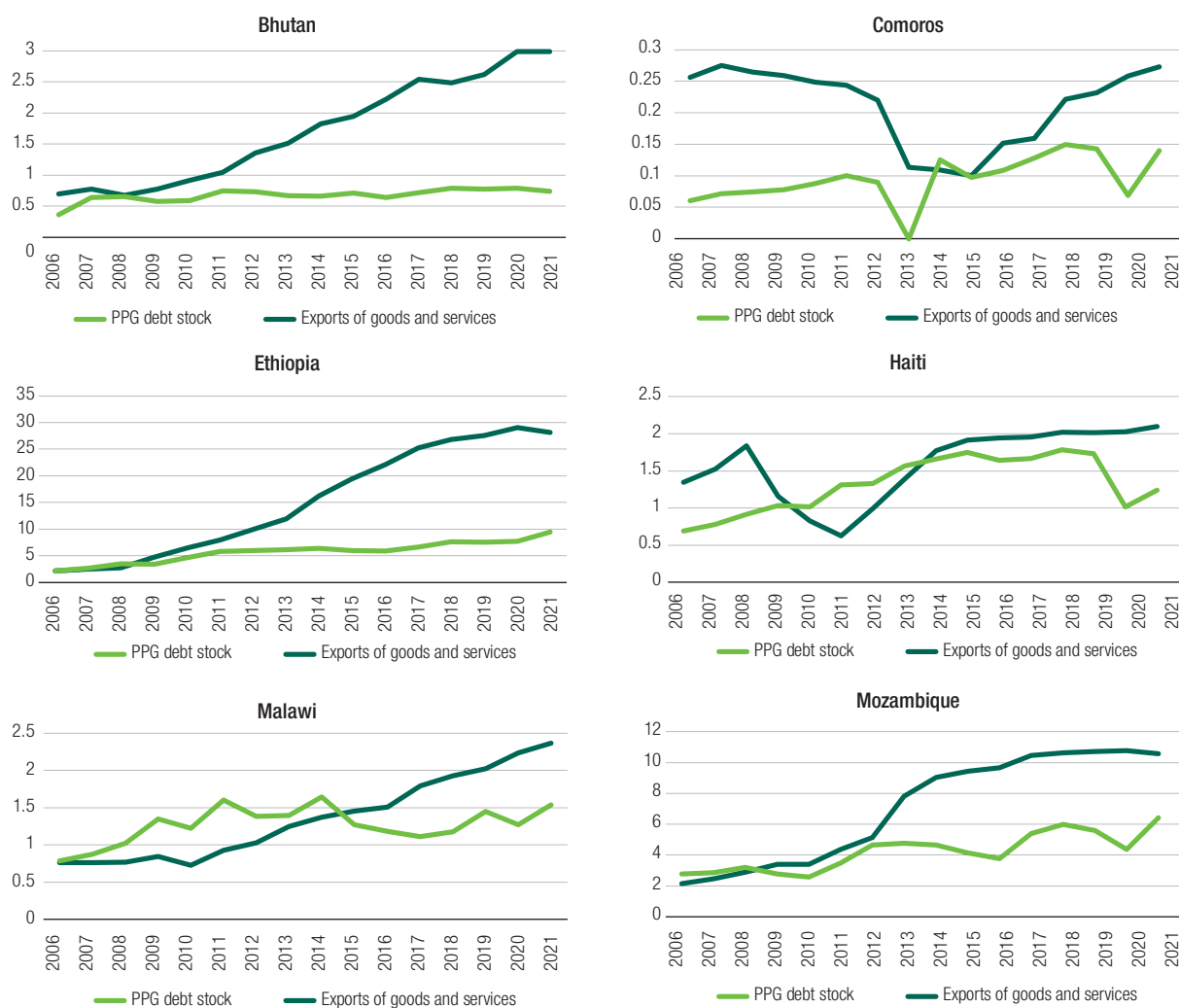
Public and publicly guaranteed debt stock and exports, selected countries, 2006–2021 (billions of dollars)



Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023).

Figure A3.2

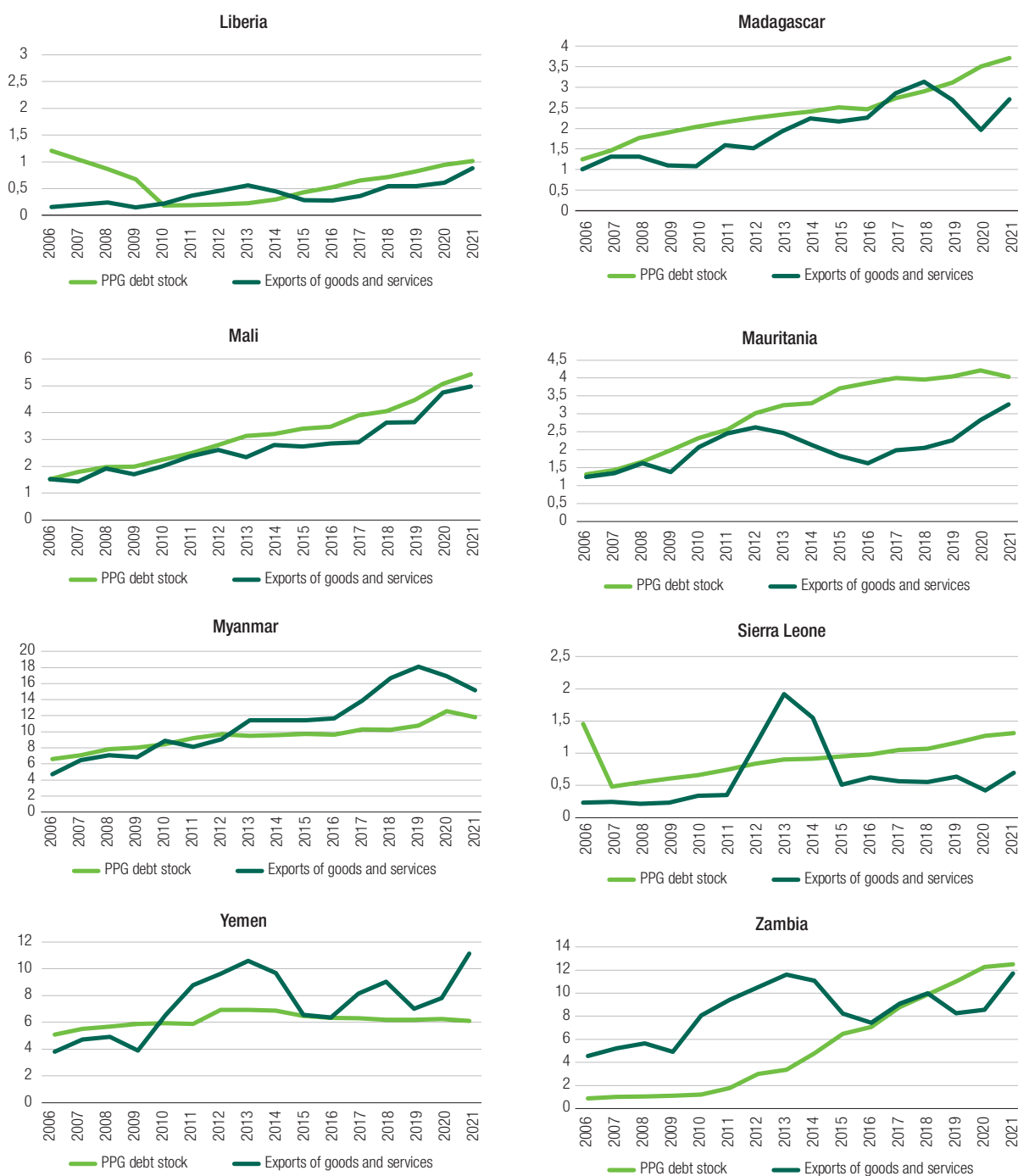
Public and publicly guaranteed debt stock and merchandise exports, selected countries, 2006–2021 (billions of dollars)



Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023).

Figure A3.3

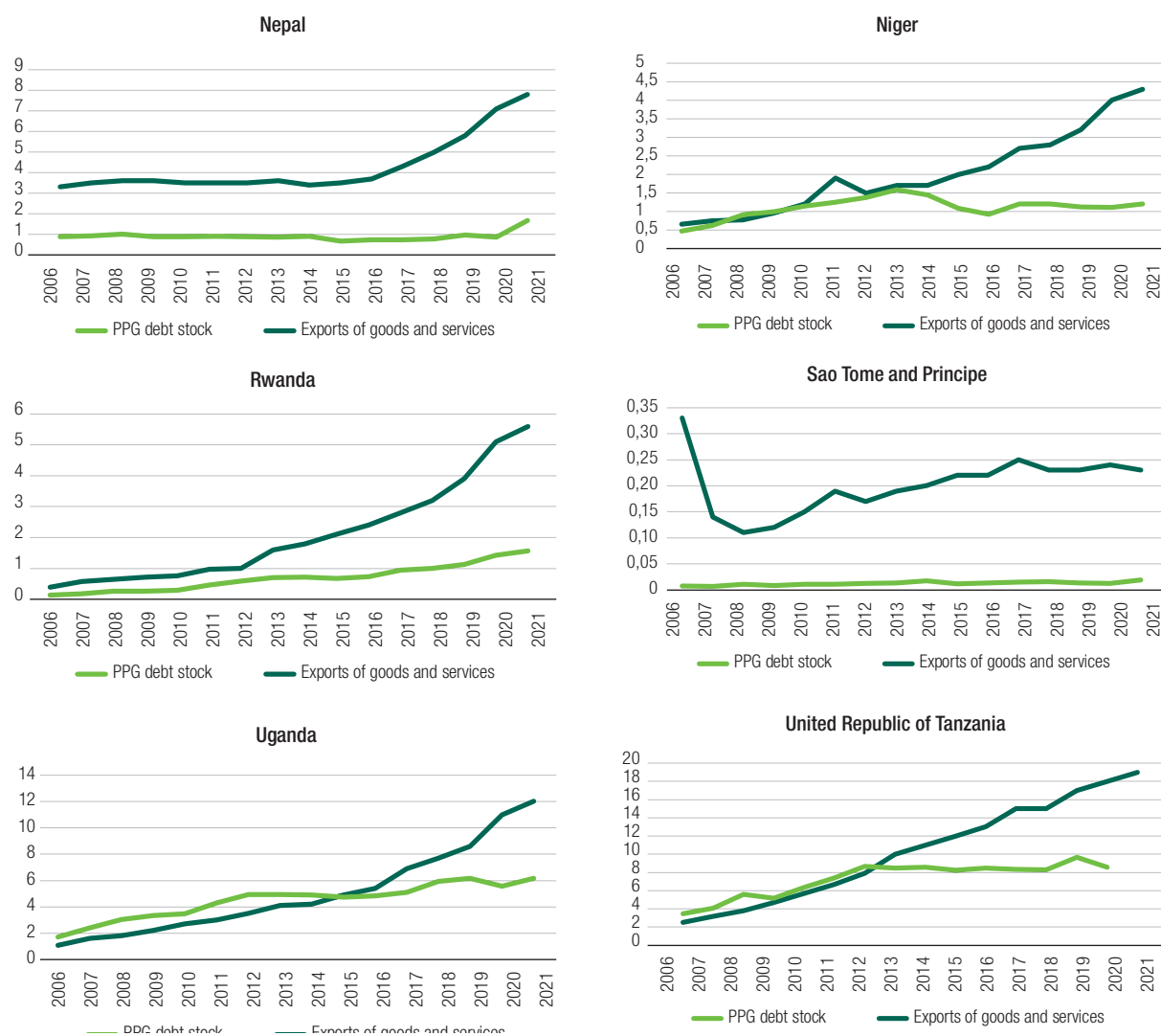
Public and publicly guaranteed debt stock and merchandise exports, selected countries, 2006–2021 (billions of dollars)



Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023).

Figure A3.4

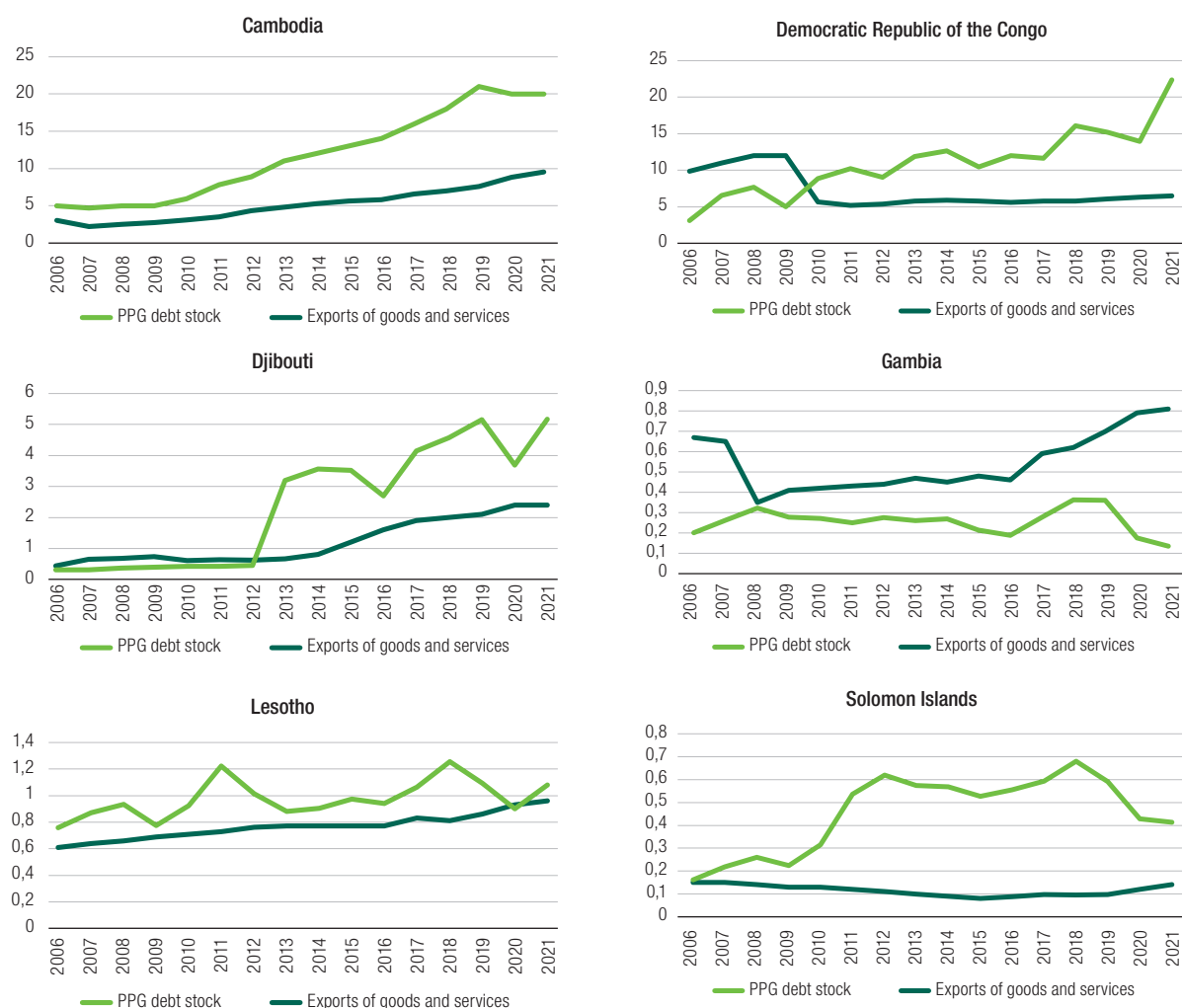
Public and publicly guaranteed debt stock and merchandise exports, selected countries, 2006–2021 (billions of dollars)



Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023).

Figure A3.5

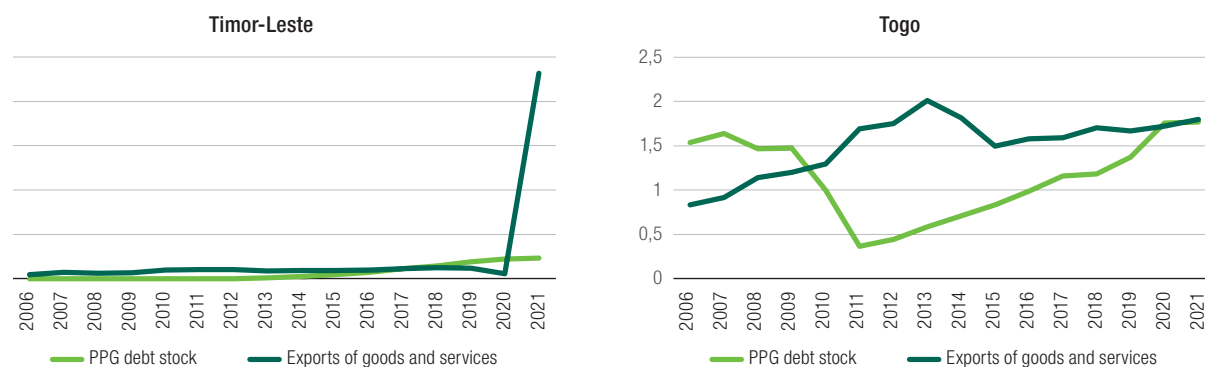
Public and publicly guaranteed debt stock and merchandise exports, selected countries, 2006–2021 (billions of dollars)



Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023)

Figure A3.6

Public and publicly guaranteed debt stock and merchandise exports, selected countries, 2006–2021 (billions of dollars)



Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023)

Table A3.1

Public and publicly guaranteed debt stock as a percentage of gross domestic product

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Afghanistan	13	20	19	17	13	11	10	10	10	10	11	10	11	10	10	13
Angola	14	14	14	20	19	17	17	20	24	39	84	62	62	69	88	69
Bangladesh	26	24	22	21	18	17	18	17	15	14	11	12	13	13	15	15
Benin	9	9	9	10	12	11	12	13	13	17	17	20	23	25	28	34
Bhutan	80	66	55	63	59	59	76	86	96	97	103	104	102	103	128	118
Burkina Faso	15	17	16	18	19	17	18	17	17	20	20	20	19	21	22	22
Burundi	97	94	77	22	19	16	18	16	15	13	15	15	16	18	20	20
Cambodia	41	26	25	26	27	27	31	32	31	31	29	30	28	28	34	35
Central African Republic	60	51	42	15	18	12	12	19	21	25	23	19	19	19	18	17
Chad	22	20	17	19	19	18	18	22	26	24	26	28	25	25	28	25
Comoros	37	35	29	29	27	24	22	10	10	10	15	15	19	19	21	21
Democratic Republic of the Congo	68	65	59	64	26	20	18	18	16	15	15	15	12	12	13	12
Djibouti	57	77	68	70	54	52	47	33	37	48	62	70	70	69	74	69
Eritrea	65	65	69	55	63	49										
Ethiopia	14	13	10	15	22	25	23	25	29	30	30	31	32	29	27	25
Gambia	63	51	23	28	27	31	31	34	37	35	31	39	37	39	43	40
Guinea	70	49	43	45	43	44	13	16	17	18	21	18	17	17	24	22
Guinea-Bissau	154	135	109	116	115	21	23	23	26	30	28	32	34	41	57	58
Haiti	18	16	18	10	7	5	7	9	12	13	14	13	12	14	14	10
Lao People's Democratic Republic	74	69	59	59	53	49	44	43	42	46	46	49	52	54	56	55
Lesotho	34	38	38	40	32	28	31	33	32	33	37	36	32	35	42	39
Liberia	108	75	50	38	9	8	7	7	9	13	15	19	21	25	31	29
Madagascar	20	17	17	20	20	19	19	19	19	22	21	21	21	22	27	26
Malawi	19	17	14	14	10	12	17	23	23	23	28	20	19	18	18	19
Mali	22	22	20	19	21	19	22	24	22	26	25	25	24	26	29	28
Mauritania	34	33	32	42	41	38	45	45	50	60	60	59	53	50	50	40
Mozambique	23	24	23	29	31	30	31	46	51	59	81	79	72	70	77	67
Myanmar	56	45	34	27	22	17	17	16	15	15	16	17	15	16	16	18
Nepal	36	34	28	28	22	16	16	16	15	15	15	15	15	17	21	21
Niger	14	13	11	13	15	22	16	17	16	20	22	24	22	25	29	29
Rwanda	12	14	13	13	12	14	14	20	21	24	27	31	34	38	50	50
Sao Tome and Principe	232	96	58	67	74	81	68	62	58	69	65	65	55	53	51	45
Senegal	14	14	14	18	20	20	24	24	25	30	32	40	48	52	57	52
Sierra Leone	77	22	22	25	26	25	22	18	18	23	27	28	26	29	31	32
Solomon Islands	24	21	18	16	14	11	9	8	7	6	6	7	6	6	8	9
Somalia								41	36	33	32	32	36	32	38	39
Sudan	27	22	21	24	20	19	25	25	21	19	15	12	49	51	62	45
Timor-Leste								1	2	3	4	7	9	9	10	6
Togo	65	62	44	44	29	9	12	14	15	20	16	18	17	19	23	21
Uganda	11	13	12	9	10	11	13	14	13	15	19	22	23	24	30	30
United Republic of Tanzania	13	15	13	16	18	19	20	22	23	26	26	27	27	28	28	28
Yemen	27	26	21	23	19	18	20	17	16	15	20	24	29			
Zambia	7	7	6	7	6	8	12	12	18	31	34	34	38	47	68	56
LDCs (average)	41	34	28	27	25	21	20	21	22	25	28	28	29	30	34	32

Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023).

Table A3.2

Tax revenue and claims on central government, 2011–2015 and 2016–2020 (percentage)

Country	Tax revenue (percentage of GDP)	Claims on central government (percentage of GDP)	Claims on central government as a percentage of of broad money, average annual growth rate	Tax revenue (percentage of GDP)	Claims on central government (percentage of GDP)	Claims on central government as per cent of broad money, average annual growth rate
	2011–2015			2016–2020		
Afghanistan	7.6	-5.9	-0.7	9.7	-7.5	-3.2
Angola	13.9	-3.1	1.5	9.7	11.1	14.3
Bangladesh	8.8	14.8	3.5	7.3	13.6	4.3
Benin		-2.3	0.5		0.6	1.7
Bhutan	14.1	2	0.3	14.2	3.4	0.3
Burkina Faso	13.6	-0.5	0.7	14.7	0.8	0.9
Burundi		8.9	9.4		25.1	17.4
Cambodia	12.5	-6.4	-2.8	17.1	-17.4	-4.4
Central African Republic	6.3	16.1	5.3	7.9	16.8	4.2
Chad		2.2	5.6		11.9	8.7
Comoros		0.9	-2.2		2.1	2.5
Democratic Republic of the Congo		2	13.4		2.6	5.4
Djibouti		1.6	0		0.8	0.4
Eritrea		99.9	5.3			
Ethiopia	8.9			7.2		
Gambia		20	13.2		29	8.7
Guinea		13.5	2.6		13.8	9
Guinea-Bissau		6.8	7.5	9.9	8.5	-2.7
Haiti		1.2	2.6		6.9	7.5
Kiribati	18.9			24.3		
Lao People's Democratic Republic						
Lesotho	34.9	-16.4	-4.1	28.9	-5.1	5.6
Liberia	12.2	6.5	-0.1		8.8	11.9
Madagascar	8.7	3.8	6.4	9.9	5.4	2.7
Malawi	14.9	7.2	4	12.7	8.9	26
Mali	13.1	-1	3	14.3	4.1	5.2
Mauritania		7.9	-1.1		6.9	-0.9
Mozambique	20.5	-0.4	3.2	22.5	5.2	2.2
Myanmar	5.8	13.3	-0.9	5.9	19.9	8
Nepal	13.1	8	0.6	17.8	7.4	2.1
Niger		-0.8	-0.9		2	2.8
Rwanda	13.1	-4.5	-2.4	14.4	-2.8	-1.9
Sao Tome and Principe		-3.1	-2.8		-1.6	1.6
Senegal	15.8	1.2	-0.4	16.2	5	4.8
Sierra Leone		8.2	8.9		17.2	17.7
Solomon Islands	25.9	-12.1	-8.8	23.5	-8.2	1
Somalia				0		
South Sudan		11.2	62.2		43.2	102.1
Sudan	6.9	10.8	15.5	7.4	11.7	28.7
Timor-Leste	95.2	-38.9	-9.4	20.8	-31	-9.6
Togo	17.2	3.9	-0.3	13.2	2.4	-0.3
Tuvalu						
Uganda	10.8	3.6	1.9	11.6	9.2	5
United Republic of Tanzania	10.6	3.8	5.5	11.6	3.4	0.5
Yemen		18.6	14.8			
Zambia	14.8	8.2	3.6	15.6	17.7	16.8
LDCs (average)	17.5	4.5	3.6	14.2	6.3	7.5

Source: UNCTAD secretariat calculations, based on UNCTADStat and World Bank, *International Debt Statistics* database (accessed March 2023).

References

- AFD (2016). C2D: A mechanism to relieve indebted countries. Available at <https://www.afd.fr/en/c2d-mechanism-relieve-indebted-countries> (accessed 15 September 2023).
- AfDB (2017). African Development Bank Social Bond Framework September. Available at www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/AfDB_Social_Bond_Framework.pdf (accessed 26 April 2023).
- AfDB (2022). Green and Social Bond Newsletter – Issue No.8 – November 2022 August. Available at www.afdb.org/en/documents/green-and-social-bond-newsletter-issue-ndeg8-november-2022. (accessed 26 April 2023).
- Ampofo GMK, Jinhua C, Bosah PC, Ayimadu ET and Senadzo P (2021). Nexus between total natural resource rents and public debt in resource-rich countries: A panel data analysis. *Resources Policy*. 74102276.
- Amstad M, Packer F and Shek J (2020). Does sovereign risk in local and foreign currency differ? *Journal of International Money and Finance*. 101(C); Elsevier.
- Battaglini M and Coate S (2008). A Dynamic Theory of Public Spending, Taxation, and Debt. *The American Economic Review*. 98(1):201–236, American Economic Association.
- Benin, Presidency (2022). Benin SDG Eurobonds: Impact Report on the July 2021 inaugural issue July. Available at <https://www.gouv.bj/actualite/1850/confirmation-correcte-allocation-projets-programmes-eligibles-500-millions-euros-leves-lors-eurobond-odd/> (accessed 8 May 2023).
- Berensmann K (2019). Why developing countries are facing a renewed debt crisis. The Current Column of 11 February 2019. Available at <https://www.idos-research.de/en/the-current-column/article/why-developing-countries-are-facing-a-renewed-debt-crisis-1/> (accessed 26 May 2023).
- Berensmann K, Dafe F and Volz U (2015). Developing local currency bond markets for long-term development financing in Sub-Saharan Africa. *Oxford Review of Economic Policy*. Financing for Development (Autumn and Winter 2015. 31(3/4):350–378.
- Bjerkholt O (2004). New approaches to debt relief and debt sustainability in LDCs. CDP Background Paper No.5 No. ST/ESA/2004/CDP/5. United Nations. New York. (accessed 8 May 2023).
- Bloomberg* (2023). Zambia's Deal With China and Others Clears Way to Revamp Bonds. 29 June.
- BOAD (2021). Annual Report 2021. Available at <https://www.boad.org/wp-content/uploads/2022/07/RA-2021-anglais.pdf> (accessed 27 April 2023).
- Calcagno A, Dullien S, Márquez-Velázquez A, Maystre N and Priewe J, eds. (2015). *Rethinking Development Strategies after the Financial Crisis: Making the Case for Policy Space*. Volume 1. United Nations. New York and Geneva.
- CDP (2023). The raw reality of the growing (external) debt crisis: A call to action. Background Paper No. 58. Committee for Development Policy. New York.
- Chamon M, Klok E, Thakoor V and Zettelmeyer J (2022). Debt-for-Climate Swaps: Analysis, Design, and Implementation. IMF Working Paper WP/22/162. IMF.
- Cheng G, Díaz-Cassou J and Erce A (2018). Official debt restructurings and development. *World Development*. 111181–195.
- Chuku C et al. (2023). Are We Heading for Another Debt Crisis in Low-Income Countries? Debt Vulnerabilities: Today vs the pre-HIPC Era. *IMF Working Papers*. 2023(079). International Monetary Fund.
- Club of Mozambique (2016). French Pardon of Mozambican Debt: 500,000 euros to fund Tourism and Energy studies. Available at <https://clubofmozambique.com/news/french-pardon-of-mozambican-debt-500000-euros-to-fund-tourism-and-energy-studies/> (accessed 15 September 2023).
- Cohen C et al. (2020). The Role of State-Contingent Debt Instruments in Sovereign Debt Restructurings. *IMF Staff Discussion Notes*. International Monetary Fund.
- Cornea-Madeira A (2017). The Explicit Formula for the Hodrick-Prescott Filter in a Finite Sample. *The Review of Economics and Statistics*. 99(2):314–318.
- Coulibaly BS, Gandhi D and Senbet LW (2019). Is sub-Saharan Africa facing another systemic sovereign debt crisis? Brookings India April. Available at <https://think-asia.org/handle/11540/9975> (accessed 16 April 2023).
- Delevic U (2020). Employment and State incentives in transition economies: Are subsidies for FDI ineffective? The case of Serbia. *Transnational Corporations*. 27(2):31–63.
- Easterly W (2002). How Did Heavily Indebted Poor Countries Become Heavily Indebted? Reviewing Two Decades of Debt Relief. *World Development*. 30(10):1677–1696.
- EBID (2021). Annual Report 2021. The ECOWAS Bank for Investment and Development. Available at https://www.bidc-ebid.com/en/wp-content/uploads/Annual_report_EBID_2021.pdf (accessed 27 April 2023).
- Eichengreen B and Luengnaruemitchai P (2004). Why Doesn't Asia Have Bigger Bond Markets? April. Available at <https://www.nber.org/papers/w10576>.
- Essers D, Blommestein H, Cassimon D and Ibarlucea Flores P (2014). Local currency bond market

- development in Sub-Saharan Africa: A stock-taking exercise and analysis of key drivers. Available at <https://ideas.repec.org/p/iob/wpaper/201408.html> (accessed 28 April 2023).
- European Council (2023). G7 Finance Ministers and Central Bank Governors' Statement. Available at <https://www.consilium.europa.eu/en/press/press-releases/2023/04/12/g7-finance-ministers-and-central-bank-governors-statement/> (accessed 8 May 2023).
- Fosu AK and Abass AF (2019). Domestic Credit and Export Diversification: Africa from a Global Perspective. *Journal of African Business*. 20(2):160–179, Routledge.
- Gelpert A, Horn S, Morris S, Parks B and Trebesch C (2022). How China Lends: A Rare Look into 100 Debt Contracts with Foreign Governments. *Economic Policy*. eiac054.
- Georgieva K, Chamon M and Thakoor V (2022). Swapping Debt for Climate or Nature Pledges Can Help Fund Resilience. Available at <https://www.imf.org/en/Blogs/Articles/2022/12/14/swapping-debt-for-climate-or-nature-pledges-can-help-fund-resilience> (accessed 25 April 2023).
- Gold S and Saldinger A (2023). IMF official: China agrees to “breakthrough” compromise on debt impasse. Available at <https://www.devex.com/news/sponsored/imf-official-china-agrees-to-breakthrough-compromise-on-debt-impasse-105338> (accessed 19 April 2023).
- Goldman M (2014). Necessity and Feasibility of a Standstill Rule for Sovereign Debt Workouts. Paper prepared for the First Session of the Debt Workout Mechanism Working Group. Available at https://unctad.org/en/PublicationsLibrary/gdsddf2014misc4_en.pdf?user=4818.
- Hebbale C and Urpelainen J (2023). Debt-for-adaptation swaps: A financial tool to help climate vulnerable nations. Available at <https://www.brookings.edu/articles/debt-for-adaptation-swaps-a-financial-tool-to-help-climate-vulnerable-nations/> (accessed 24 August 2023).
- IMF (2023a). List of Low Income Country (LIC) Debt Sustainability Assessments (DSAs) for Poverty Reduction Growth Trust (PRGT) – Eligible Countries as at February 28, 2023. Available at <https://www.imf.org/external/Pubs/ft/dsa/DSAlist.pdf> (accessed 19 April 2023).
- IMF (2023b). Global Sovereign Debt Roundtable Co-Chairs Press Statement. Available at <https://www.imf.org/en/News/Articles/2023/04/12/pr23117-global-sovereign-debt-roundtable-cochairs-press-stmt> (accessed 23 August 2023).
- de Jong RM and Sakarya N (2016). The Econometrics of the Hodrick-Prescott Filter. *The Review of Economics and Statistics*. 98(2):310–317, The MIT Press.
- Lockwood K (2022). Application of the UNCTAD Sustainable Development Finance Assessment (SDFA) Framework to Developing Countries: The Cases of Indonesia and Sri Lanka. Available at https://unctad.org/system/files/non-official-document/11_05_22_SDFA_Keith_Lockwood.pdf.
- Moye M and Paddock J-P (2003). Madagascar's Experience with Swapping Debt for the Environment: Debt-For-Nature Swaps And Heavily Indebted Poor Country (HIPC) Debt Relief. Background Paper for the Vth World Parks Conference Durban, South Africa. World Wide Fund for Nature.
- Mu Y, Phelps P and Stotsky JG (2013). Bond Markets in Africa January. Available at <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Bond-Markets-in-Africa-40239>.
- Mureithi C (2021). Why investors can't get enough of Africa's debt. Available at <https://qz.com/africa/1996978/why-investors-have-a-huge-appetite-for-african-eurobonds>.
- Mustapha S and Prizzon A (2015). Debt Sustainability and Debt Management in Developing Countries. Available at https://assets.publishing.service.gov.uk/media/57a0897eed915d622c00023f/EP5_PEAKS_Topic_Guide_Debt_Sustainability_and_Debt_Management_in_Developing_Countries.pdf.
- Obstfeld M and Zhou H (2023). Tracking the global dollar cycle. Available at <https://cepr.org/voxeu/columns/tracking-global-dollar-cycle> (accessed 23 June 2023).
- Panizza U (2008). Domestic and External Public Debt in Developing Countries March. Available at <https://papers.ssrn.com/abstract=1147669> (accessed 12 December 2022).
- Paris Club (2021). Common Framework for Debt Treatments beyond the DSSI. Available at https://clubdeparis.org/sites/default/files/annex_common_framework_for_debt_treatments_beyond_the_dssi.pdf.
- Reuters (2023). Zambia says Industrial & Commercial Bank of China, Bank of China debt “treated as commercial.” 29 June.
- Rwanda, Ministry of Finance and Economic Planning (2023). Rwanda raises US\$ 620 million through a 10-year Eurobond. Available at <https://www.minecofin.gov.rw/news-detail/rwanda-raises-us-620-million-through-a-10-year-eurobond> (accessed 24 May 2023).
- Sheikh PA (2018). Debt-for-Nature Initiatives and the Tropical Forest Conservation Act (TFCA): Status and Implementation. Congressional Report Service. Washington, D.C.
- Smith G (2023). Rwanda's debut Eurobond 2013– 2023. Available at <https://www.linkedin.com/pulse/rwandas-debut-eurobond-2013-2023-gregory-smith> (accessed 3 May 2023).
- The East African* (2023). Rwanda repays \$400m Eurobond despite pressure on its coffers. 3 May.

- UNCTAD (2000). *The Least Developed Countries Report 2000: Aid, Private Capital Flows and External Debt: The Challenge of Financing Development in the LDCs*. United Nations. New York and Geneva.
- UNCTAD (2014a). *Trade and Development Report 2014: Global Governance and Policy Space for Development*. United Nations. New York and Geneva.
- UNCTAD (2014b). *The Least Developed Countries Report 2014: Growth with Structural Transformation – A Post-2015 Development Agenda*. United Nations publication. Sales No. E.14.II.D.7. New York and Geneva.
- UNCTAD (2015). Development strategies in a globalized world: Multilateral processes for managing sovereign external debt. A Note to the Sixty-second Session of the Trade and Development Board. Available at https://unctad.org/meetings/en/SessionalDocuments/tdb62d7_en.pdf.
- UNCTAD (2019). *The Least Developed Countries Report 2019: The Present and Future of External Development Finance – Old Dependence, New Challenges*. United Nations publication. Sales No. E.20.II.D.2. Geneva.
- UNCTAD (2020a). *Trade and Development Report 2020: From Global Pandemic to Prosperity for All: Avoiding Another Lost Decade*. United Nations publication. Sales No. E.20.II.D.30 Geneva.
- UNCTAD (2020b). *The Least Developed Countries Report 2020: Productive Capacities for the New Decade*. United Nations publication. Sales No. E.21.II.D.2. New York and Geneva.
- UNCTAD (2020c). *Trade and Development Report Update: From the Great Lockdown to the Great Meltdown: Developing Country Debt in the Time of Covid-19*. Trade and Development Report.
- UNCTAD (2021a). *The Least Developed Countries Report 2021: The Least Developed Countries in the Post-COVID World: Learning from 50 Years of Experience*. United Nations publication. Sales No. E.21.II.D.4. New York and Geneva.
- UNCTAD (2022a). Financing for development to respond and recover in an era of interrelated and global crises. Note by the UNCTAD secretariat to the Trade and Development Board Intergovernmental Group of Experts on Financing for Development, Sixth session Geneva, 30 November–2 December 2022. Available at https://unctad.org/system/files/official-document/tdb_efd6d2_en.pdf.
- UNCTAD (2022b). *The Least Developed Countries Report 2022: The Low-Carbon Transition and its Daunting Implications for Structural Transformation*. United Nations publication. Sales No. E.22.II.D.40. Geneva.
- UNCTAD (2022c). SDG Pulse: Developing country external debt: A cascade of crises means more countries face debt distress. Available at <https://sdgpulse.unctad.org/debt-sustainability/> (accessed 26 May 2023).
- UNCTAD (2023a). *Trade and Development Report 2022: Development prospects in a fractured world: Global disorder and regional responses*. United Nations publication. Sales No. E.22.II.D.44 New York and Geneva.
- UNCTAD (2023b). Report of the Secretary General on External Debt Sustainability and Development. Seventy-eighth session of the General Assembly.
- UNCTAD (2023c). SDG Pulse: Escalating debt challenges are inhibiting achievement of the SDGs. Available at <https://sdgpulse.unctad.org/debt-sustainability/>.
- UNCTAD (2023d). *Trade and Development Report Update: Global Trends and Prospects* (April 2023). UNCTAD. Geneva.
- United Nations (2015). Basic Principles on Sovereign Debt Restructuring Processes. General Assembly Resolution 69/319 adopted on 10 September 2015. Available at <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/277/81/PDF/N1527781.pdf?OpenElement> (accessed 20 April 2023).
- United Nations (2023a). *World Economic Situation and Prospects 2023*. United Nations. New York.
- United Nations (2023b). *Reforms to the International Financial Architecture. Our Common Agenda No. 6*. United Nations. New York.
- United Nations (2023c). *Financing for Sustainable Development Report 2023: Financing Sustainable Transformations*. United Nations, Inter-agency Task Force on Financing for Development. New York.
- United Nations Global Crisis Response Group (2023). A world of debt: A growing burden to global prosperity. Available at https://news.un.org/pages/wp-content/uploads/2023/07/2023_07-A-WORLD-OF-DEBT-JULY_FINAL.pdf (accessed 23 August 2023).
- World Bank (2022). Resolving High Debt After The Pandemic: Lessons From Past Episodes Of Debt Relief. *Global Economic Prospects*. (accessed 24 August 2023).
- World Bank (2023). IDA Borrowing Countries: What is IDA? Available at <https://ida.worldbank.org/en/about/borrowing-countries> (accessed 13 September 2023).

An aerial photograph of a city, likely in a developing region, showing a dense network of buildings and streets. A large, bright green number '4' is superimposed over the center of the image. The overall color palette is dominated by various shades of green, from dark forest green to bright lime green.

4

The role of central banks in supporting
green structural transformation in the least
developed countries

CHAPTER 4

The role of central banks in supporting green structural transformation in the least developed countries

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A. Introduction

The financial system is increasingly in the spotlight as a crucial complementary player in global efforts to reduce carbon emissions by virtue of its role in financing both carbon-emitting activities and the decarbonization of economies. Concern is growing that global investment behaviour continues to significantly finance carbon-emitting production and its further expansion. Voluntary adherence by businesses to environmental, social and governance (ESG) principles and adoption of corporate social investment (CSI) are proving inadequate or inefficient catalysts and drivers of decarbonization.¹ Since the 26th Conference of the Parties (COP26) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2022, momentum is growing to make the alignment of global financial flows to net-zero commitments at the national level mandatory. Indeed, the timing and severity of the consequences of climate change depend increasingly on the rapidity and effectiveness of policies supporting countries' transitions to low-carbon economies. Crucially, COP27 estimated that a global transition will require investments of at least \$4–6 trillion per year, which signifies that delivering such funding will require a transformation of the financial system and its structures and processes.² That recognition is in line with Article 2.i.c of the 2015 Paris Agreement, which set out the goal of “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development” (hereafter referred to as financial alignment).

The Sustainable Development Goals and the Paris Agreement together represented the tipping point in 2015 of the sustainability movement. Since then, there has been growing interest in incorporating ESG considerations into investment decisions. The latest push by the UNFCCC to set the goal of climate neutrality, whereby net zero greenhouse gas (GHG) emissions are achieved “by balancing those emissions so they are equal (or less than) the emissions that

¹ Environmental, social and governance (ESG) investing is a strategy used by corporates and investors to convey to their consumers, stakeholders and employees how they manage related risks and opportunities. ESG focuses on accountability. Adherents typically employ ESG principles or standards to screen their investments. Corporate social investment (CSI) is a strategy that directs investment towards a company's social mission with the view to fostering sustainability and development, ranging from community development to caring for the environment. Such financial commitments are typically more than just charitable donations.

² See <https://unfccc.int/documents/624444>.

How the new role for central banks might evolve in LDCs is not yet well understood

get removed through the planet's natural absorption”, has added renewed impetus to financial alignment.³

This chapter focuses on the possible role of central banks of least developed countries (LDCs) in realizing a just transition in their countries through conventional climate central banking, given their dual priority goals of contributing towards a low-carbon transition and green structural transformation for sustainable development. How the new role for central banks might evolve in LDCs and what impact it will have on their structural transformation through the changes it induces in the allocative decisions of financial intermediaries, is not yet well understood. This is because there is very little literature focusing on developing economies, and in particular LDCs, where empirical research is especially constrained due to paucity of data. This chapter attempts to unpack some of the related issues to shed light on possible answers to these two fundamental questions.

B. Climate-related financial risk

1. Classification of climate-related risk

Globally, climate central banking represents largely uncharted territory for all central banks (UNEP, 2017). Effective climate central banking⁴ is dependent on the development of robust methodologies and collection of comprehensive data for evaluating the climate-related risks to which companies and investors are exposed. This includes models that enable a forward-looking assessment of climate-related risks, and their social and macroeconomic repercussions, which are indispensable for charting just transitions and resolving time-dependent trade-offs. Such methodologies are currently lacking (Campiglio et al., 2018; Kyriakopoulou et al., 2022). Peer learning

³ See <https://unfccc.int/blog/a-beginner-s-guide-to-climate-neutrality#:~:text=Climate%20neutrality%20refers%20to%20the,our%20emissions%20through%20climate%20action.>

⁴ This chapter uses the term climate central banking to capture the totality of measures taken by central banks to address climate change effects in the financial system, which the wider literature may alternatively refer to as green central banking, sustainable central banking or net-zero central banking.

and exchange of good practices is thus one of the favoured vehicles for developing climate central banking expertise and knowhow. This is being undertaken through, for example the Network of Central Banks and Supervisors for Greening the Financial System (NGFS).⁵ LDC members of the NGFS include Cambodia, Rwanda, Uganda, United Republic of Tanzania and the eight⁶ LDC affiliates of the Central Bank of West African States. However, in many countries, especially in the LDCs, the scarcity of skilled professionals in sustainable finance remains a major challenge. Membership of peer and learning networks is thus not indicative of the ability to implement climate central banking and, unsurprisingly, progress on climate central banking is proceeding at different speeds around the world.⁷ Moreover, globally, the financial architecture for climate central banking is still in the making, with specific disclosure, assessment and governance

tools under development or requiring refinement, including in terms of combating greenwashing.

The NGFS (see box 4.1) has undertaken work to deepen understanding of climate-related risk and emerging issues and draw on lessons learnt so far. It identifies two classes of climate-related risk: (i) physical risks of a temporal nature and (ii) transition risks (figure 4.1). Economies and productive actors are exposed to acute physical effects of climate change related to extreme weather events, such as violent storms, or chronic physical effects associated with gradual shifts in climate, such as extreme temperatures, that have knock-on negative effects on crop yields (BIS, 2021).⁸

Physical effects can have a lasting impact on a country's gross domestic product (GDP), because they can cause long-term loss of production and divert capital earmarked for investment in reconstruction and replacement. Physical risks are expected to rise as climate hazards increase in frequency and

Box 4.1 The Network of Central Banks and Supervisors for Greening the Financial System

The NGFS, established in 2017, is not the only network promoting climate central banking, but it has emerged as a prominent driver of the evolving policy landscape for climate central banking, leading the definition and promotion of best practices and analytical work on central banks' climate actions. While its membership is voluntary, its ambition is to promote the implementation of its frameworks globally. According to the NGFS website, as at the end of 2022, the membership of the NGFS covered all global systemically important banks and 80 per cent of internationally active insurance groups, and by June 2023, it had 127 members, spanning 85 countries.

Similar initiatives at the regional level have emerged. For example, the Climate and Financial Risk Center (CFRCenter) for Latin America and the Caribbean – the second most disaster-prone region globally after Asia and the Pacific – has been set up in collaboration with the Association of Central Banks of Latin America and the Caribbean (CEMLA), the Association of Supervisors of Banks of the Americas (ASBA) and the Latin American Association of Insurance Supervisors (ASSAL), together with the United Nations Environment Programme (UNEP). Like the NGFS, the CFRCenter aims to promote open discussion, build capacity, and share knowledge and experiences on identifying, assessing, disclosing and managing climate-related financial risks in Latin America and the Caribbean. It is the first regional hub initiative to coordinate regional central banks and supervisors.

Given the diversity of existing central bank operational frameworks, the NGFS membership recognizes that achieving optimal climate-related adjustments is necessarily context specific, and thus not amenable to prescriptive approaches. It also makes assessing different climate-related adjustments to monetary policy operations difficult (NGFS, 2021). The emergence of regional initiatives is indicative of the substantial variation in vulnerability of economies and ecosystems to climate change among and within regions. Overall, developing countries face greater physical risks, including more frequent climate change-related severe weather events. Therefore central banks and financial systems in those countries are potentially more exposed to climate-related risks and thus may have more at stake in climate central banking. Accordingly, they have a strong incentive to join the global adaptation effort.

⁵ <https://www.ngfs.net/en>.

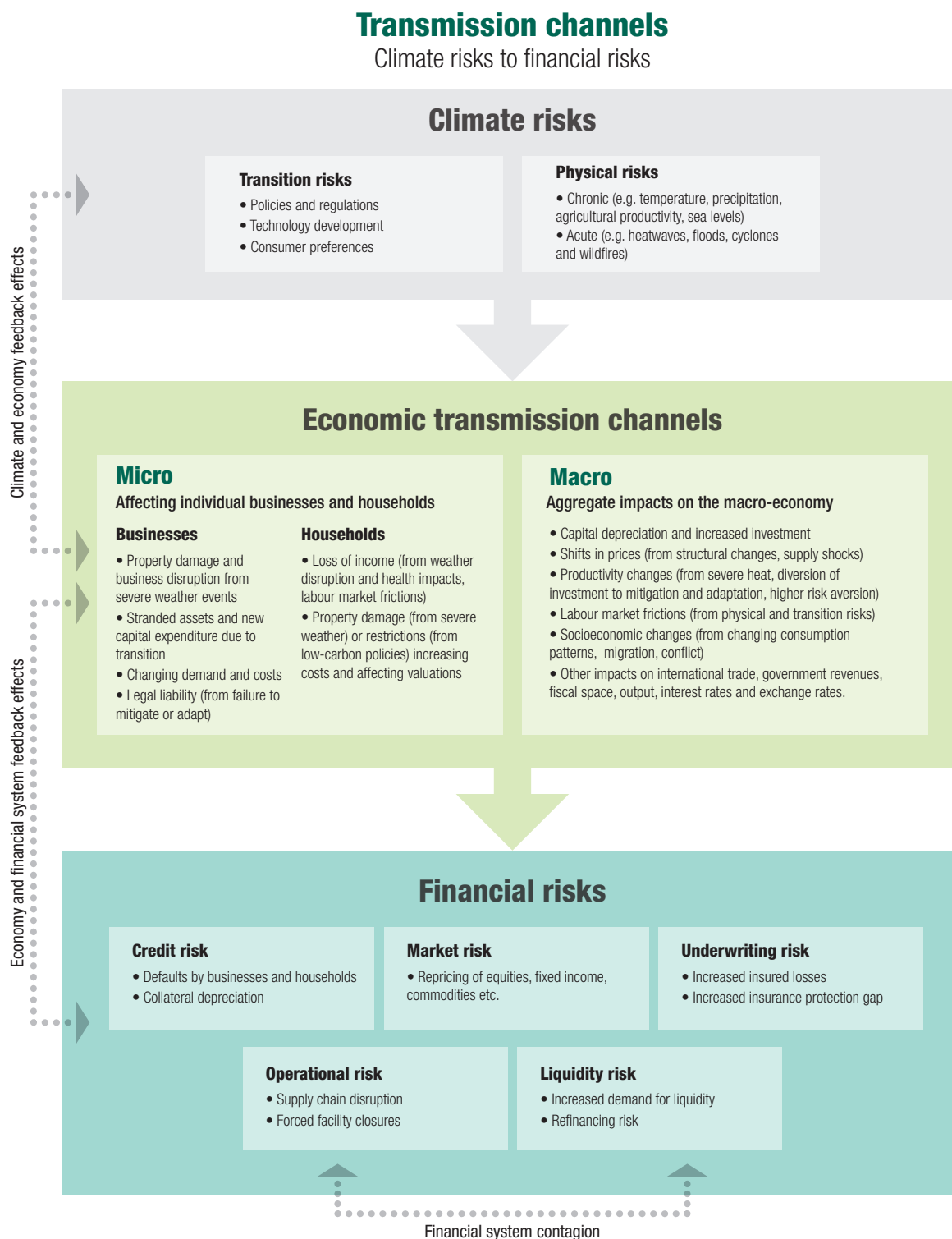
⁶ Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, the Niger, Senegal and Togo.

⁷ An NGFS survey of 40 central banks in 2020 found that only 10 per cent were applying the recommendations on disclosures by the Task Force on Climate-Related Financial Disclosures (TCFD) – underlining differences across central banks' rates of implementation – and that membership of bodies such as the NGFS does not necessarily signal implementation of climate central banking (NGFS, 2020a).

⁸ Acute physical risks are generally considered to consist of lethal heatwaves, floods, wildfires and storms (including hurricanes, cyclones and typhoons), as well as extreme precipitation. Chronic physical risks are generally considered to include rising sea levels, rising average temperatures and ocean acidification.

Figure 4.1

Taxonomy of climate-related risks to financial stability



Source: NGFS, 2022.

intensity (ECB, 2021). With the intensification of decarbonization, economies and productive actors face potential losses resulting from changes in policy, technology and behaviour in domestic and/or export markets. Such climate-related impacts will have

rebound effects on the financial system, with the greater likelihood of shocks that disrupt the financial system.

Physical risks are assumed to be transmitted to the financial system through both macroeconomic

LDCs are particularly vulnerable to climate-related physical effects

and microeconomic impacts, including impacts on businesses, households, governments and financial institutions.⁹ LDCs are particularly vulnerable to climate-related physical effects. Their economies are highly dependent on climate-vulnerable sectors, such as agriculture, forestry and fisheries. They also lack the financial capacity to recover quickly from climatic events. Climate change can thus lead to lower economic growth, higher unemployment and higher inflation. It can also lead to climate-induced capital outflows, which can increase the cost of borrowing both for the public and private sectors (Beirne et al., 2021; Kling et al., 2021), and cause exchange rate devaluations or depreciations.

Since financial sector intermediaries play a vital role in financing productive sectors, they are exposed to firms' transition risks via defaults on loans. They are similarly exposed through changes in firms' asset values stemming from physical losses from climate impacts or from technological innovations in response to climate change or environmental regulations. Transition effects can also be expected to originate from domestic actions in LDCs. For example, the introduction of mitigation policies, such as carbon taxation, could lead to inflation and a reduction in employment in carbon-intensive sectors, with significant distributional effects (UNCTAD, 2019a; 2022a). However, climate mitigation policies can also have some beneficial economic effects for those LDCs that export the kinds of metals and minerals necessary for green investments, even though there is a risk that they might at the same time enhance "green extractivism" (i.e. more intensive resource and labour exploitation).¹⁰

Physical and transition risks are sometimes referred to as horizontal risks, as they are present across the four core bank risks: credit risk, market risk, liquidity risk and operational risk (Kearns, 2021).

⁹ Beyond the financial sector, knock-on effects on credit intermediation, on which households and businesses rely to maintain normal operations, are predicted to have an adverse impact on economic activity, employment and growth in an economy.

¹⁰ For an analysis of green extractivism, see Voskoboynik and Andreucci, 2022, and UNCTAD, 2022a.

2. Approaches to financial alignment

a. Risk-based approach: safeguarding financial stability

It has become a generally accepted view that climate change matters for monetary policy, and that central banks are important actors in managing risks to the financial system. It is also generally acknowledged that central banks can ensure that the financial system supports efforts to meet the temperature goals of the Paris Agreement as well as efforts towards achieving a just global transition to a low-carbon economy. This has resulted in the emergence of a conventional approach to climate central banking based on central banks' unique position to enact financial policies and to supervise and enforce financial regulations. This approach departs from the standpoint of preserving systemic financial stability (i.e. the stability of banks, insurance firms and other financial actors) by de-risking financial systems, and thus generating positive economy-wide spillovers in the direction of a low-carbon transition.

In a number of economies, central banks already take defensive and reactive actions to incorporate climate-related risks into their risk frameworks aimed at protecting their own balance sheets and preserving their ability to deliver on price stability mandates. Such risk management may include measures to de-risk their own international foreign reserves that may be exposed to both physical and transition risks associated with climate change. Central banks may also expand and enhance their analytical toolkits to gain a better understanding of the impacts of climate change on the economy over the long term. In addition, they raise awareness of climate risks through communications with financial institutions, disclosing the carbon footprint of their own balance sheets and promoting disclosure of climate-related financial risks by other financial market players, including through active membership of networks such as the NGFS, the UNEP Finance Initiative (UNEP FI), the International Finance Corporation's Sustainable Banking and Finance Network (SBFN) and the Net-Zero Coalition under the auspices of the United Nations.¹¹

Some central banks have gone further, taking measures to proactively mitigate climate change and promote a low-carbon transition by attempting to nudge common investment behaviour in the direction of considering climate risks, and thereby influencing lending criteria and practices. Examples of such actions include promoting bank lending to green

¹¹ In March 2022, the United Nations Secretary-General established the High-Level Expert Group on the Net-Zero Emissions Commitments of Non-State Entities.

projects, as well as greening non-monetary policy portfolios, foreign reserve management, central bank financing and/or lending quotas, as well as greening the collateral framework for monetary policy operations. These greening measures are deployed through the use of a variety of climate central banking tools (German Development Institute, 2016; European Parliament, 2022).

b. Transition approach: realizing green structural transformation

Given that LDCs and (other developing countries) already suffer from the severe impacts of climate change and nature-related loss, LDCs' financial sectors primarily need to contribute to the green transition and climate adaptation within the overall context of achieving fundamental progress on structural transformation.

The green transition-based approach to financial alignment is characterized by a robust engagement with transforming productive activities (Heinrich-Böll-Stiftung et al., 2022; Kedward et al., 2022). It departs from the imperative of realizing green structural transformation (Gabor, 2022) by prioritizing instead the role of the developmental State in directing finance to desired green sectors for achieving the transformation of productive systems. Accordingly, it eschews the delegation of the pace and nature of green structural transformation to private finance, as advocated by the conventional approach, in favour of alignment of financial systems to climate goals. It sets an ambitious agenda centred on the coordination of quantitative and qualitative credit allocation policies with fiscal and green industrial policies. By encompassing sector-specific prices or quantities of credit, it has the potential to promote distinctive low-carbonization pathways. Crucially, given a global financial system that still mainly prioritizes short-term profits, it explicitly sets out to redirect credit flows towards green productive activities (Gabor, 2022). Traditionally, quantitative tools, such as credit ceilings and quotas, have been a feature of credit allocation policies that are aligned with industrial policy. Under climate central banking, Bangladesh, India and Japan, for example, have implemented credit allocation policies that ration the flow of credit to high-carbon activities as part of their financial alignment. According to a survey by a group of academics (Augoyard et al., 2021),¹² 42 per cent

LDCs' financial systems should contribute to climate adaptation within the context of a green structural transformation



of the 26 central banks and financial supervisors in the Asia-Pacific region have implemented such credit allocation policies.

An added advantage of the green transition-based approach is that it goes beyond a narrow focus on mitigation, extending financial alignment to also encompass adaptation. In the context of rising physical risks, it thus incorporates a more proactive and dynamic alignment of financial systems.

By drawing the link between financial risk and the transition of the real economy, the developmental approach tailors alignment of the financial system to country-specific scenarios (UNCTAD, 2023a). It also automatically operationalizes developmental central banks. This is very important, given the potentially wide-ranging trade-offs implied by climate action and available evidence from the literature (see, for example, Augoyard et al. 2021) that systems for monitoring and evaluating the results of financial institutions' sustainable finance measures generally do not track equity and development impact aspects of performance. Augoyard et al. (2021) found that the choices of measures relating to the achievement of climate and environmental objectives by surveyed institutions in the Asia-Pacific are influenced mainly by measures being implemented in other countries, or by an internal assessment determining the need

¹² Those surveyed included members, associate members and observers of the South-East Asian Central Banks (SEACEN) Research and Training Centre, and two other non-SEACEN-associated monetary and financial authorities from the region. Of SEACEN's 19 full members, 16 responded, and a total of 10 associate members, observers and others responded, equivalent to an 84 per cent response rate achieved out of a total of 35 institutions surveyed.

for such measures and the assessed capacity of financial institutions. They also found that the opinions of other stakeholders, recommendations stemming from academic research and national government requests have little, if any, influence on central banks' and supervisors' decisions on which measures to implement. Crucially, they noted that the component of performance monitored the least is equity, despite the fact that the concept of equity is important for achieving a just transition.

3. Elevated risk of an unjust transition in least developed countries

Central banks of LDCs are under pressure to simultaneously converge towards global best practices and develop climate-change-adapted technical capacities (human and capital). This dual pressure places them in a highly disadvantaged position for achieving a just transition. According to the NGFS, the lack of high-quality, granular and consistent data across jurisdictions remains a major challenge, globally, for addressing climate-related risks and opportunities. Mutually reinforcing and collaborative actions across a variety of ecosystem role players are needed to disincentivize greenwashing, encourage consistency and standardization, provide additional layers of transparency, and reduce the costs of regulatory compliance implied by climate central banking. Micro, small and medium-sized enterprises (MSMEs) in LDCs lag behind in their ability to respond to pressures from various stakeholders to prove their accountability and commitment through sustainability disclosures. They are also more likely to be excluded even from voluntary consultative mechanisms, leading to a self-selection bias in certification that hinders progress towards achieving low-carbonization. This raises the concern that, to encourage wider certification adoption, standard setters may relax certain certification-acquiring requirements. Additionally, national (and regional) sustainability standards, although increasingly devised to make international standards more applicable and adaptable to local markets, lack recognition in international markets (UNCTAD, 2023b). For central banks of LDCs — where ecosystems for climate central banking are the least mature – low capacities and resources are compounded by the increasingly short time frame suggested by scientific evidence to avert climate disaster. This implies that LDCs face a herculean task.

Globally, all countries aim to achieve a “just transition” which is understood to mean a strategy to ensure that the greening of economies generates positive economic, social and environmental impacts with a

fair distribution of the benefits for all (UNFCCC, 2020). It aligns with the SDG principle of leaving no one behind. It is not a controversial concept, but can entail very different challenges depending on a country's stage of development. Compared to other countries at more advanced stages of development, LDCs face a greater risk of an “unjust” transition because of the structural impediments that plague their economies, including greater informality, youth bulges and attendant high rates of unemployment, higher rates of poverty, distinct ecological and climate challenges resulting in the accelerated deterioration of livelihoods, increasingly harder access to development finance and limited institutional capacities. All these conditions make it harder for these countries to achieve a just transition, and exemplify the push-and-pull dynamic that is the hallmark of development policymaking and the political economy in LDCs. Climate policies will only intensify this dynamic.


Climate change poses unprecedented challenges to LDCs. This is exemplified by the fact that four LDCs (Malawi, Mozambique, the Niger and South Sudan) feature among the 10 most climate-affected countries in the Global Climate Risk Index 2021 (Eckstein et al., 2021). In the vast majority of LDCs, climate change is increasing the frequency and severity of droughts, storms, cyclones and other weather

LDCs face a higher risk of an unjust transition due to:

- Deteriorating livelihoods**


- Difficult access to development and climate finance**


- Limited institutional capacities**


- Harsher trade-offs from climate action**



events, affecting disproportionately the populations that live in coastal areas and/or rely on agriculture. It thereby also exacerbates food insecurity and water scarcity problems. To attenuate the adverse social and economic effects of climate change in LDCs, an unprecedented increase of investments in climate adaptation is necessary (UNCTAD, 2021a). It also necessitates coherence between climate change adaptation and disaster risk reduction.

Moreover, on the development front, and due to their limited progress with structural transformation (UNCTAD, 2020), a distinct feature of many LDCs is the high proportion of their populations that remain dependent on agriculture. This presents a systemic risk, as the impact of climate change broadens and intensifies over time. Achieving climate-aligned development in LDCs will thus require structural transformations that shift their production structures towards activities and sectors that contribute to energy and resource security, low-carbon agriculture, climate resilience, food security and lower inequalities (UNCTAD, 2021a; 2021b). Consequently, achieving a just transition in LDCs by implementing climate change policies is inconceivable without appropriate industrial policies implemented alongside, because labour markets and unemployment are likely to be the first and the worst affected by a low-carbon transition

For example, long-term energy transition goals need to be weighed against nearer term considerations such as energy affordability, coverage and security.¹³ In this respect, LDCs are already constrained in their ability to cushion their populations from the cost implications of an energy transition. Progressive social protection practices implemented in the wake of COVID-19 are being tested by a shrinking fiscal space related to global economic uncertainty and debt burdens. Consequently, decisions on climate policies in LDCs will require an assessment of the available fiscal space over the long term, based on an analysis of sovereign debt dynamics.

From an institutional perspective, for most LDCs identifying alternative socioeconomic development paths is complicated by the deep uncertainty surrounding the evolution of climate change, which needs to be modelled to support the development of appropriate climate policies. Modelling tends to be outside the normal range of activities of most national statistical offices in LDCs. Consequently, they lack the capacity to collect appropriate data and track environmental and social impacts. It may take several years until proper data are collected and appropriate

¹³ For a detailed discussion on energy issues in LDCs, see UNCTAD, 2017.

Achieving a just transition in LDCs is inconceivable without appropriate industrial policies implemented alongside

modelling approaches developed. Moreover, a just transition in commodity-dependent LDCs calls for mitigating the risks from stranded assets, and finding ways to increase banks' available capital to extend credit for greening the economy, the financing of which might otherwise dry up as a consequence of financial alignment (Fanizza and Cerami, 2023; Brav and Heaton, 2021).¹⁴ Some industry experts are pessimistic about the prospects of a global consensus in this area. Under such circumstances, the already inadequate institutional capacities in LDCs are doubly strained by the concurrent need to anticipate, assess and address the social risks of the transition to ensure no one is left behind.

While the responsibility for climate-aligned structural transformations and the design of climate financing mechanisms rests primarily with governments and public authorities at the domestic level in LDCs, there are also critical international dimensions to a just transition in LDCs. A prevalent structural feature of the global financial architecture is that financial intermediaries and private capital give priority to short-term profits. This contributes to shortages of long-term and patient capital funding with a high risk tolerance of the kind especially needed for development projects in structurally weak economies, such as the LDCs, and for their low-carbon transition (UNCTAD, 2019b). As emphasized by UNCTAD (2023a), it is patient capital funding that connects finance with long-term structural transformation and countercyclical support in times of crises. This chronic deficit of long-term and sustainable investment in economies that need it the most underpins the urgency of aligning international finance to global climate goals in LDCs.

In addition, the recent evolution of the ODA architecture and development finance landscape, framed as moving "from billions to trillions", has seen donors and multilateral organizations support the development of more tools that de-risk private sector financial investments, including green

¹⁴ See also <https://gsh.cib.natixis.com/our-center-of-expertise/articles/why-we-need-a-shaded-taxonomy-from-green-to-brown-and-in-between>, and <https://esgclarity.com/defining-brown-activities-more-challenging-than-defining-green/>.

Climate change has adverse effects on credit ratings of developing countries

investments (UNCTAD, 2019b). However, these tools can cause a deterioration in the financial position of host governments when the latter are asked to guarantee private investments and provide subsidies for green transition and green growth that can increase public debt (e.g. due to contingent liabilities). With regard to attracting investments in LDCs, the fundamentals for private sector investment remain unchanged; it can be difficult to realize a profit in the shorter term, regardless of whether or not a project is green. The reality of conditions in LDCs means that an overreliance on financial sector instruments or private sector engagement has a higher probability of unleashing unintended consequences, as argued by UNCTAD (2019b) and Emery (2023). It illustrates the need for coherence between policy efforts to reduce carbon emissions, on the one hand, and the world of finance and investment on the other (UNCTAD, 2019a). All the more so considering LDCs already face risks posed by multiple concurrent transitions (e.g. graduation from concessional windows or income groups) and limited capacity to leverage private investment for development.

The incorporation of climate-related physical risks into the credit models used by credit rating agencies and financial institutions as part of climate policy regulations, for instance, disproportionately affects climate vulnerable LDCs. This is because credit rating agencies¹⁵ are more likely to downgrade climate vulnerable LDCs, thus discouraging investments in their bonds, and making it more difficult for LDC governments and the private sector to invest in climate adaptation and cover climate-related losses. Emerging evidence suggests that, unlike in developed economies, vulnerability to climate change

has adverse effects on credit ratings of developing countries, including LDCs, and on the sovereign cost of capital for them (European Parliament, 2022; Cevik and Tovar Jalles, 2020).

Risk assessment is a feature of well-functioning capital markets, and credit rating agencies play an important role in modern financial markets. However, UNCTAD analysis suggests that their sovereign ratings are often based more on subjective assessments than on “fundamental” variables related to debt sustainability (UNCTAD, 2015). More recent post-pandemic research supports UNCTAD’s initial analysis, and points to an entrenched bias in credit ratings; for instance, a detailed analysis of ratings for African countries revealed evidence of likely significant misestimations of risk by the world’s leading credit rating agencies (UNDP, 2023; DESA, 2022). Crucially, this may mean that imbalances in the international financial system cause LDCs to bear the brunt of the costs of the global low-carbon transition.

In a world of interdependent energy, labour and financial markets, a just transition in poorer countries is made more difficult by the lack of effective global mechanisms to deal with negative transnational impacts created by the implementation of transition policies in other countries. Of particular importance are the potential effects from the implementation of climate policies by trade partners (UNCTAD, 2022a). This can be detrimental not only to employment in directly affected sectors, but also to the labour force and entrepreneurs in other sectors connected through supply chain networks. There can also be adverse effects on government revenues, and therefore on the public debt of LDCs and, consequently, on their scope to undertake needed investments in public services, including the productive infrastructure required to facilitate structural transformation and sustainable development (encompassing climate change mitigation and adaptation).

The contribution of LDCs to the reduction of global emissions is governed by the UNFCCC’s principle of common but differentiated responsibilities and respective capabilities (United Nations, 1992: 4). This principle has significant implications for climate mitigation strategies in LDCs, and raises related issues of equity in global emissions reductions. The persistently large development deficits of LDCs could imply higher emissions necessitated by unequivocally desirable development progress (UNCTAD, 2022a). Therefore, it will be important for climate mitigation actions to be designed in ways that pay specific attention to how emission reduction actions could affect development and human progress (UNCTAD, 2022a).

¹⁵ They can also hinder the effective implementation of initiatives intended to relieve a country’s debt distress. For example, countries contemplating availing themselves of the Group of 20’s Debt Service Suspension Initiative (DSSI) launched in the wake of the COVID-19 pandemic, were wary that a suspension or deferment of debt payments to the private sector would be classified as restructuring and default under credit rating agencies’ criteria, and thus further hamper their access to development finance and worsen their debt positions. See https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/PB_131_final.pdf and <https://www.uea.ac.uk/climate/evaluating-sovereign-risk>.

A key problem with central banks acting on climate change is that their choice of measures and instruments inevitably entail wide-ranging policy trade-offs and distributional effects. The trade-offs from climate policy actions are by no means exclusive to LDCs. However, they are amplified by these countries' structural impediments, which also means that the attendant redistributive impacts of financial alignment are potentially harsher and larger in LDCs. Consequently, the potential role of financial alignment in promoting sustainability in the financial system and “greening” the economy is more contentious in LDCs, and will need to be complemented by other measures. Thus, financial alignment, as defined by the conventional approach, is likely to be insufficient, in and of itself, for supporting pathways towards climate adapted structural transformation. This is partly because the low levels of financial development in LDCs may limit the transmission of climate policies through monetary policy, but also because implementation of the Basel Framework regulations has revealed that regulating and supervising banks in developing countries can be prohibitively costly, and that credit ratings for financial institutions have been inaccurate (World Bank, 2020). An additional complication is that, for many developing countries and LDCs, monetary policy primarily serves as a tool for currency stabilization, such that financial alignment must also consider the implications for exchange rate policies (AfDB et al., 2021).

C. Conflicts and controversies around central banks' climate actions

1. Central bank mandates: Do they matter?

Overall, there remains no consensus on the extent to which climate change (or other environmental risks) should be incorporated into existing operational frameworks, or whether central banks should even play a supportive or promotional role in scaling up green finance (Cossin and Bourqui, 2020; Dikau and Volz, 2021; Goodhart and Lastra, 2023; Jordan, 2022; Krogstrup, 2022; Schnabel, 2023). For example, among European central banks, a general consensus has developed that they (and other supervisory bodies) cannot ignore climate change. However, the Federal Reserve (the central bank of the United States of America) takes the view that doing so could lead to its overstepping its wider economic mandate to promote “maximum employment, stable prices,

Redistributive impacts of financial alignment are potentially harsher and larger in LDCs

and moderate long-term interest rates” (*Financial Times*, 2023; European Parliament, 2022).¹⁶

As custodians of monetary policy, central banks are entrusted with a mandate by parliament or by law, and this can differ across jurisdictions, as they are influenced by domestic considerations. Central bank mandates have tended to evolve not only with changes in economic theory, but also in response to the impact of seismic global macroeconomic developments on domestic economies.

Technically, to use direct instruments for climate central banking, central banks would need some form of a sustainability mandate. According to a recent study, out of the 135 central banks covered by the IMF Central Bank Legislation Database, only 12 per cent had explicit sustainability mandates (Dikau and Volz, 2021). A far larger number (40 per cent) were mandated to support government policy priorities, which mostly included sustainability goals. Accordingly, to the extent that governments' policy objectives include climate change mitigation or adaptation, a broad interpretation of their mandates could be used to justify their taking action to align their policies to the Paris Agreement without a change of mandate.

However, advocacy on climate risks by central banks that do not have a formal mandate on environmental sustainability could be seen as a bid to gain more power by taking on additional responsibilities, especially in contexts of weak public control over private financial dynamics (Boneva et al., 2022; Baer et al., 2021; Husted et al., 2020). Moreover, considering that climate risk is a subset of the wider nature-related risk and biodiversity loss landscape, it could be argued that this is not part of the conventional business of central banks, nor is it within their competence. This raises related concerns that the entry of central banks into climate central banking potentially opens the door to a perpetual drift in central bank mandates.¹⁷

¹⁶ See also <https://www.reuters.com/business/finance/central-banks-walk-tightrope-juggling-mandates-mike-dolan-2023-03-15/>.

¹⁷ It is notable that the NGFS has expanded its focus beyond climate risk to take into account nature-related risk and biodiversity loss.

Central bank measures to proactively mitigate climate change and promote low-carbon transition require coordination with Government

The degree of central bank independence varies considerably across countries. Nevertheless, a theoretical and empirical convergence on granting them policy independence is discernible over time. Thus, over the period 1972–2012, 72 per cent of reforms were in favour of central bank independence and only 14.7 per cent were for decreasing their independence (Garriga, 2016). The trend towards central bank independence was generally premised on the notion that those banks had a well-defined objective of *price stability*, based on the theoretical and empirical understanding that low and stable inflation is a necessary precondition for growth or development to take place. A recent study also points to the increased focus on the goal of price stability across the world since the 1980s. Especially in developed countries, central banks have, to varying degrees, been given formal responsibility for price stability (micro-prudential regulation) and financial stability (macroprudential regulation). Several regions, such as South and East Asia, West Asia and North Africa, appear to be lagging behind in the reform process (Romelli, 2022).

It is notable that reforms that increase the level of central bank independence have tended to follow periods of high inflation rates. For example, in the early 1990s, the widespread adoption of central bank independence, and, with it, the practice of inflation targeting, was precipitated by the oil shock in the 1970s. Scholars point to historical evidence (including the recent history of the global financial crisis) to suggest that systemic banking crises and currency or sovereign debt crises are not generally associated with reforms that increase the level of central bank independence. Rather, the increased independence is largely due to external inducements, regional convergence and status quo bias. Scholars also note important variations in the level of central bank independence, depending on countries' level of development and external pressures (such as obtaining an IMF loan) for triggering reforms in favour of central bank independence, as well as precise, narrowly defined central bank mandates in developing economies (Akhtar Aziz, 2013; Dall'Orto Mas et al., 2020; Draghi, 2018; Romelli, 2022).

Central bank independence continues to be considered a virtue, but its desirability and relevance has increasingly been called into question since the 2008–2009 global financial crisis and the COVID-19 pandemic, both of which necessitated exceptional coordination between fiscal and monetary authorities. This challenged the narrow view of central bank independence, and increasingly, its relevance for development (Wachtel and Blejer, 2020; Goodhart and Lastra, 2023; UNCTAD, 2019a; Aklin et al., 2021).

Historically, central banks coordinated with ministries of finance and other government agencies to proactively steer credit and support major structural change of the type required by the climate crisis, thereby complementing proactive fiscal and industrial policy regimes (Kedward et al., 2022). Such coordination, still present in many LDCs (see annex to this chapter), is virtually absent in most developed economies, many of which have adopted frameworks of central bank independence (Kedward et al., 2022). The absence of such coordination poses a particular challenge for central banks with narrowly defined mandates that focus on price stability, if they were to take measures to proactively help mitigate climate change and promote low-carbon transition. Such measures implemented in isolation (i.e. in accordance with their independence, and thus not acting in coordination with their governments) could be considered controversial.¹⁸ This area of climate central banking carries the highest probability of unleashing complex trade-offs and distributional impacts, decisions for which typically fall outside the purview of central bankers. It is, in particular, an area where the legitimacy of climate central banking attracts increasing debate.

One further complication for central banks is that the function of supervising and enforcing financial regulations requires a financial stability mandate.¹⁹ Not all central banks necessarily have this mandate, even in developed countries, which limits their access to the tools needed for them to play a more fundamental role in setting the direction of trends and behaviours for the financial sector and its associated players. Consequently, in the more common scenario of functions that are distributed across several authorities that oversee monetary policy and financial sector regulation in an economy, safeguarding financial stability often necessitates the cooperation of central banks, financial market supervisory authorities

¹⁸ For a more detailed explanation on some of the pros and cons of climate central banking see (UNCTAD, 2019a; Şimandan and Păun, 2021; Boneva et al., 2022, 2021).

¹⁹ See World Bank (2020) for an explanation of banking regulation and supervision.

and governments, although their roles tend to vary by country.

2. Central bank mandates in the least developed countries

Looking specifically at the case of the 46 LDCs, most of their central banks address multiple objectives, including price stability, financial stability and currency stability, as their main monetary policy targets (figure 4.2). In addition, their central banks are often required to support economic development, directly or indirectly. They also typically maintain tighter links with governments, and manage public debt in their discharge of monetary policy (see the annex to this chapter).

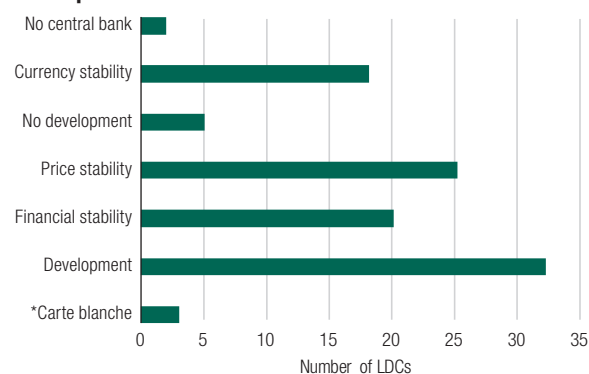
UNCTAD's analysis (see the annex to this chapter) of LDCs' central bank mandates suggests that promoting development is an explicit or implicit mandate in 32 (or 70 per cent) of them (figure 4.2).²⁰ Five LDCs (Haiti, Lesotho, Malawi, the United Republic of Tanzania and Zambia) where the central banks do not have a development mandate underwent (in some cases several) IMF-sponsored structural adjustment programmes. Development mandates are most often subordinate to a central bank's primary objective in 16 LDCs, and 20 LDCs' central banks have financial stability as a co-objective, though this objective is subordinate to that of price or currency stability in 10 of them.

Apart from the case of Djibouti, no LDC central bank appears to have an explicit mandate for sustainability, although two of them (in Ethiopia and Nepal) have mandates that refer to sustainable development and three of them (in Bangladesh, the Lao People's Democratic Republic, and Sao Tome and Principe) have mandates that appear to allow them to exercise discretion. This cluster of six central banks thus appears to have the possibility to implement climate central banking within their existing mandates. However, it could also be argued that all central banks of LDCs endowed with a development mandate could infer from that mandate that they can provide some form of support for sustainability, especially if the mandate specifies supporting or being in accord with government policies. Of those central banks, 15 have both a development and financial sustainability mandate, and, presumably, could be less wary about venturing into climate central banking without an explicit legal sustainability mandate.

²⁰ Countries served by the Central Bank of West African States are accounted for individually in the analysis.

Figure 4.2

Principal monetary policy targets of central banks in least developed countries



Source: UNCTAD secretariat.

* Note: The legal texts of the central banks of Bangladesh, the Lao People's Democratic Republic, and Sao Tome and Principe effectively give them freedom to implement monetary policy as they deem necessary or appropriate.

D. How central banks in least developed countries can select and use climate tools

1. Monetary policy and prudential regulation in least developed countries

Financial systems in LDCs are typically bank-based, and foreign banks tend to have a significant presence.²¹ Access to credit is fragmented, and differs between countries and borrowers. In several countries, very poor households and small enterprises often rely on informal money lenders, including microfinance institutions, for their liquidity needs. These sources of finance typically charge high interest rates and use predatory practices. Microcredit initiatives are not particularly noted for achieving significant transformative changes.²²

In LDCs with more developed banking systems, access to credit for relatively large companies might be easier, as long as they do not have a very high proportion of non-performing loans. Credit availability for these companies is important for structural transformation, since it can affect their ability to undertake productive investments and expand. Indeed, credit availability and the success of industrial policies are often interlinked. As far as broader financial services are concerned, among

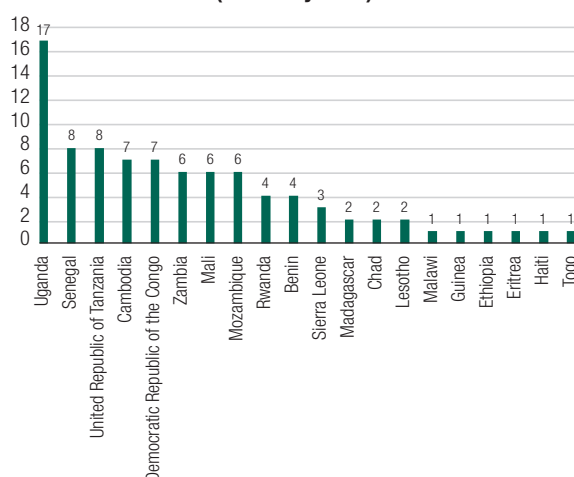
²¹ Apart from Ethiopia, LDCs grant licences to foreign entities to provide financial services and become part of the domestic financial sector as long as they satisfy specific regulatory requirements.

²² For a review of some empirical evidence on microfinance that covers several developing countries, see J-PAL, 2018.

interesting developments in recent years is the popularity of mobile phone payment systems across several LDCs. The providers of such systems are typically non-bank institutions that are not subject to regulation, which poses risks to financial stability (Oduor and Kebba, 2019).

UNCTAD's analysis of five providers of private credit active in LDCs finds that private credit flows range from supporting projects to boosting financial inclusion, as in Zambia, short-term loans for groups and individuals in Benin, a copper mine in Eritrea, a heavy fuel oil power plant in Senegal and digital communications infrastructure in the United Republic of Tanzania (figure 4.3).²³ Private credit also flows to small and medium-sized enterprises (SMEs), but the proportion of flows to foreign/foreign-owned projects, such as independent power producers, impact investors and joint ventures with State-owned companies, is

Figure 4.3
Selected private credit projects in least developed countries 2004–2023 (as of May 2023)



Source: Websites of OIKO Credit, Triple Jump, Emerging Africa Infrastructure Fund, Vantage Capital and ElectriFi.

Note: Due to the opaque manner in which information is provided by private credit funds, the number of projects is likely not exhaustive. It is also not possible to determine if lines of credit are from blended sources. Inclusion of a project implies that private credit provision is significant in project activities.

²³ Due to the opaque manner of information provision by private credit funds, the analysis offers merely a snapshot, and does not claim to be either comprehensive or to take into account the fact that credit may be blended. Information on the total amount of the funding extended is not always available. Some of the private credit consists of lending to microfinance providers. Moody's classifies private credit, which is one of the fastest-growing segments in global lending, as non-bank lending to mostly private-equity-owned, middle-market companies that are not publicly traded or issued. (See https://www.moody.com/web/en/us/private-credit.html?cid=F499DD7EF4D17482&gclid=EAlaIQobChMI9ICF6sjygAMVBpeDBx3OwQIXEAAyBCAAEgLYm_D_BwE.)

far from insignificant. It is not immediately obvious if the totality of private credit is captured by prudential regulation in LDCs. According to Moody's, private credit and equity funds are globally subject to minimal regulatory scrutiny, or generally escape it altogether.

Another distinct characteristic of domestic financial institutions in LDCs is that they typically hold a significant proportion of the national sovereign debt. This creates strong links between the financial system and the government. State-owned banks have also traditionally played an important role in LDCs' financial systems. However, many of them have been privatized in recent decades, as part of IMF and World Bank structural adjustment programmes (UNCTAD, 2019a).

The COVID-19 pandemic created pressures on the financial systems of many LDCs (see section G), as evidenced by an increase in non-performing loans of households and firms, with negative impacts on the liquidity and solvency positions of their financial institutions. In many of these countries, government and central bank interventions were necessary to stabilize domestic financial systems. Nevertheless, their ability to undertake such countercyclical macroeconomic and financial interventions during the pandemic was significantly restricted by their limited policy space and the shallowness of their financial systems (UNCTAD, 2021b). This means that a significant proportion of domestic firms lacked access to formal financial support measures.

Monetary policy implementation in LDCs faces several challenges in practice. For example, the rise of private and public debt in recent years has created pressure on their central banks to keep interest rates low, so that interest payments by households, firms and governments would be manageable. However, when debt is denominated in a foreign currency, low interest rates can result in currency devaluations that create debt repayment difficulties (Christensen and Schanz, 2018). They also create inflationary pressures that can undermine price stability objectives.

As far as financial regulation is concerned, many LDCs rely on microprudential frameworks (i.e. focusing on the exposure of the financial system to individual institutions' risks). The use of macroprudential approaches (which focus on the importance of building buffers for protecting banks from systemic risks) is less common (Christensen and Upper, 2017). It is notable in that context that LDCs, although not members of the Basel Committee on Banking Supervision, often have an incentive to implement Basel-related regulations, because it signals to foreign investors that their domestic financial systems are stable (Oduor and Kebba, 2019).

Apart from capital and reserve requirements, financial regulators in LDCs often use credit controls²⁴ that set ceilings and minimum targets for the expansion of credit to specific sectors and activities. These controls are also used for supporting countries' development and industrial policy targets, in addition to supporting monetary policy and financial policy targets. This departs from the practice of central banks and financial regulators in developed countries, where fiscal and monetary authorities typically do not coordinate actions.

Given the conflicts and controversies posed by climate central banking, the institutional environment for coordination of fiscal, monetary and financial policies that characterizes many LDCs is thus likely to be more appropriate for addressing the climate crisis. This is especially so because, across all economies, climate mitigation and adaptation require even more policy synergy than traditional economic policy targets (IPCC, 2015). For example, decarbonization in specific sectors can be achieved more rapidly if green subsidies and regulatory interventions are combined with more favourable financing conditions for firms and sectors that need to reduce their environmental footprint.²⁵ However, a significant challenge is that, in some cases, specific tools may need to be used to achieve more than one target; for example, credit controls might need to be used to achieve both development and financial stability targets. This means that a careful design of such policy tools is necessary to ensure that multiple targets can be achieved and trade-offs minimized.

a. Intersections between central bank mandates and climate tools in least developed countries

Central banks in LDCs can use their mandates as a guideline to identify which climate tools (annex 1) they can potentially use. Figure 4.4 shows the link between mandates and climate tools. Central banks need to consider developing climate-adjusted analytical frameworks if they target macroeconomic variables such as inflation, employment and the exchange rate, because all these variables can be affected by the physical and transitional effects of climate change. Given that all central banks in LDCs target at least one macroeconomic variable, they need to consider development of climate-adjusted analytical frameworks as an option.

The next question is whether financial stability is included in their mission. If it is, they will need to

²⁴ For a historical account of the use of credit controls by developed countries, see Bezemer et al., 2023.

²⁵ For the importance of policy coordination for achieving climate targets, see also Dikau and Ryan-Collins, 2017.

Policy tools should be designed in a way that ensures that multiple targets can be achieved and trade-offs minimized

consider using climate risk exposure tools to protect the financial institutions of the country from their exposure to risks. However, an additional issue is to what extent the central bank uses a macroprudential approach to financial stability, and, if so, whether the kind of approach it uses is weak or strong. The key feature of a macroprudential approach is its emphasis on how the financial system as a whole works and the systemic risks that are created at the macro level. In the weak version, the feedback effects of the financial system on the macroeconomy are not explicitly considered in practice. In the strong version, on the other hand, those feedback effects are deemed to be particularly important (Dafermos, 2021; Dafermos and Nikolaidi, 2022).

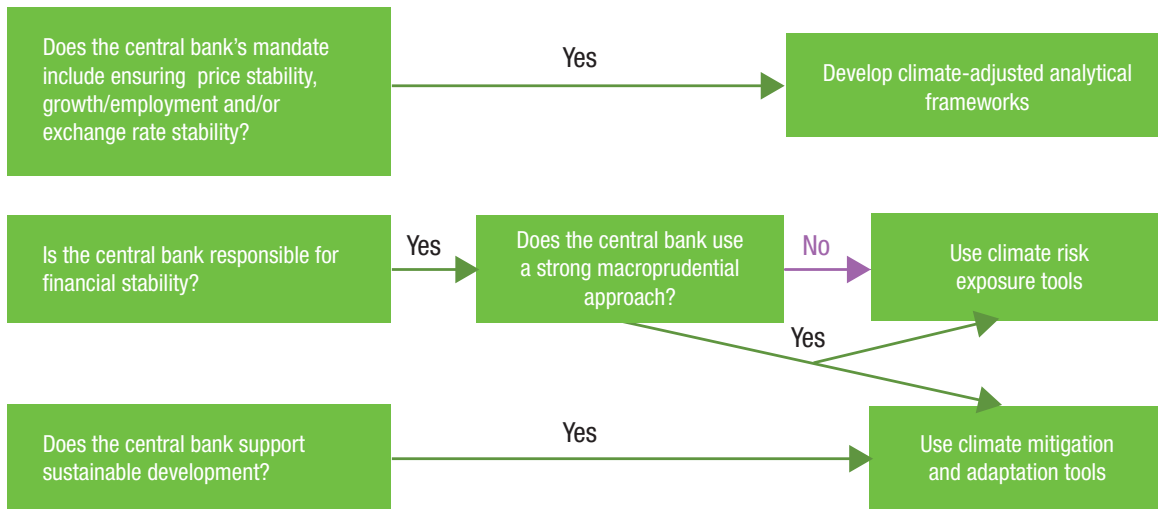
A strong macroprudential approach requires the use of climate mitigation and adaptation tools (figure 4.4), as illustrated by two examples. First, if banks in an LDC provide enough finance for climate adaptation, the companies and households will be better protected from climate-related events, and will be less likely to default on their debt. Hence, the financial system as a whole will be less exposed to physical risks. Second, the provision of more finance for decarbonization projects through the use of the bank's climate mitigation tools could make domestic industries less vulnerable to climate policies implemented in other countries. As a result of this, the domestic financial system would become less exposed to physical risks associated with a green transition. Overall, if climate mitigation and adaptation tools are used in an effective way, they can improve the climate resilience of the financial system.

The use of climate mitigation and adaptation tools is also recommended where a central bank in an LDC has an explicit target to support sustainable development, since these tools can contribute to achieving that target.

More broadly, it should be emphasized that the use of mandates for identifying potential climate tools need not be a static exercise. Governments can consider modifying the mandates of their central banks to make them support climate-aligned development.

Figure 4.4

Central bank mandates and climate tools



Source: UNCTAD secretariat.

b. Transmission channels, target consistency and potential side effects

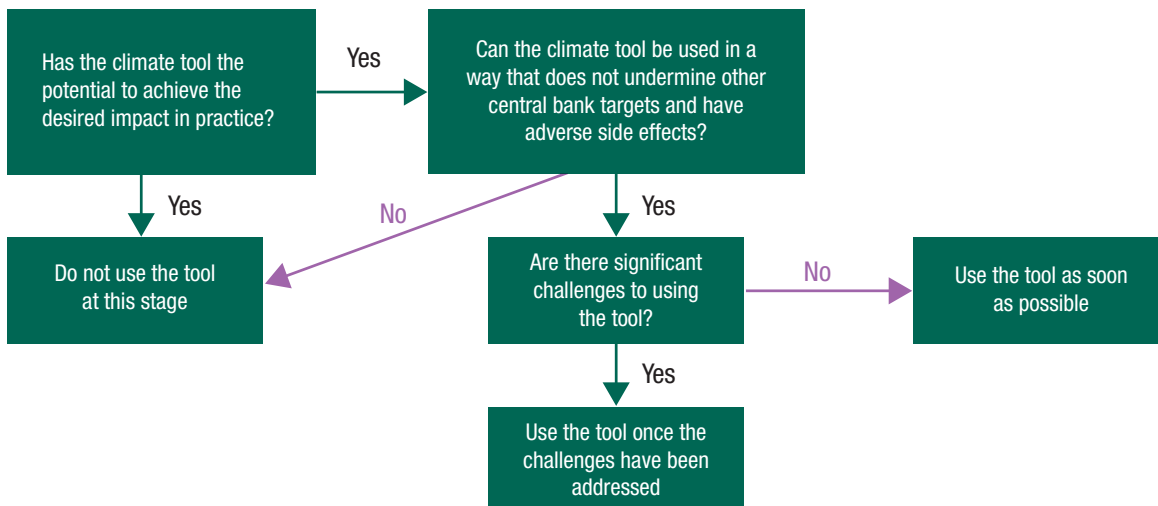
The existence of a specific mandate is a necessary, but not sufficient, condition for using certain types of climate central banking tools. Once potential climate policy tools have been identified, central banks need to examine a range of other issues before they decide which tools to use (figure 4.5). An important question is to what extent a specific climate tool has the potential to achieve the desired impact in practice. For example, in an economy in which formal credit constitutes only a small proportion of the total credit given to households and firms, the introduction of green credit controls may not have a significant impact on emissions, and therefore there is little point

in using such a tool. In other words, the central bank authorities should not use a tool which they believe does not fit the structure of the economy, at least at this stage.

If the tool has the potential to achieve the desired impact, the next question is whether its use might undermine other targets, especially primary ones. For instance, at a specific point in time a central bank might aim at a certain increase in the provision of credit to support economic growth and achieve a specific inflation target. However, the introduction of climate criteria in credit controls and refinancing operations might reduce credit to carbon-intensive sectors. Therefore, the central bank needs to evaluate to what extent the increase in green credit

Figure 4.5

Assessing a central bank's climate policy tool



Source: UNCTAD secretariat.

will counterbalance the reduced credit in order for the total credit to remain the same.

It is also important for a central bank to take into account to what extent the reduction in the credit provided to carbon-intensive sectors might undermine development targets and cause adverse distributional effects, for example because many poor people might be working in carbon-intensive industries. In such cases, a central bank's isolated use of climate mitigation tools is not recommended. Such tools can be used only if they are accompanied by other fiscal, industrial and social policies that ensure that the target of reducing emissions will not undermine social and development targets. If coordination with other policies is not possible, the use of the tool should be postponed until a coordination mechanism has been put in place.

Another case in which some side effects might arise is the establishment of minimum targets for the provision of credit to specific sectors or activities that are important from a climate perspective. Although an increase in credit availability might be beneficial for achieving green objectives, an overreliance on credit could lead to over-indebtedness of companies and possible defaults, thereby undermining central banks' financial stability objectives.

Challenges related to the so-called Tinbergen rule should also be considered (Dikau and Volz, 2021). According to this rule, there is a risk that banks could have too many targets and too few tools. Such a risk applies to climate mitigation and climate adaptation tools. The best way to address it would be for the tools to be designed in a way that does not undermine the more traditional targets (as pointed out in the example above about credit controls and refinancing operations). If this is not possible, some trade-offs might arise.

2. Classification of recommended climate central banking tools

A distinction is made between three types of tools that central banks in LDCs could potentially use: (i) climate-adjusted analytical tools; (ii) climate risk exposure tools; and (iii) climate mitigation and adaptation tools. *Climate-adjusted analytical frameworks* enhance central banks' understanding of the way the macroeconomy can be affected by climate change, and its implications for the conduct of monetary policy. *Climate risk exposure tools* aim at reducing the exposure of financial institutions to climate-related financial risks. *Climate mitigation and adaptation tools* aim to contribute to the reduction

The central banks of LDCs need to pay explicit attention to the macroeconomic implications of the structural features of the global financial architecture

of GHG emissions and help with the financing of climate adaptation investment. Examples of tools for each of these categories are described below. The applicability of these tools will vary with the central bank's mandate and extent of access to monetary policy tools.

(i) Climate-adjusted analytical tools

Climate-adjusted macroeconomic projections: Such projections take explicit account of the impact of the physical and transition effects of climate change on both the demand- and the supply-side of the macroeconomy, paying attention both to domestic and global channels. For example, climate change can have a significant impact on inflation.²⁶ The central banks in LDCs also need to pay explicit attention to the macroeconomic implications of the structural features of the global financial architecture described in section B. For instance, they should consider the possibility that the costs of borrowing might increase for their economies as a result of the incorporation of physical risks into the evaluations of credit rating agencies.

However, the development of modelling tools that can be used for conducting such projections is a challenging task due to the unique features of climate change (see NGFS, 2019; Battiston et al., 2021). In LDCs, proper modelling tools are unlikely to be available in the near term, and the necessary data are typically missing (UNCTAD, 2023c). Instead, climate-adjusted macroeconomic projections could be of a qualitative nature: monetary authorities could identify the key channels through which key variables can be affected under different climate scenarios and analyse the implications of these channels for macroeconomic and financial stability.

²⁶ Schnabel (2022) distinguishes "climateflation" and "fossilflation". Climateflation refers to the increase in prices that can be caused by the adverse effects of droughts, floods, hurricanes and other climate-related events on the supply of goods and services (see also Beirne et al., 2021)). Fossilflation is a type of inflation that can result from increases in the prices of oil, gas and coal due to carbon pricing policies domestically or abroad. In climate-adjusted macroeconomic projections, such climate effects need to be explicitly analysed.

Monetary authorities might need to update their conceptual understanding of the transmission mechanisms of monetary policy

Climate-adjusted frameworks of monetary policy

transmission: Climate change can affect several transmission channels of monetary policy. First, the impacts of climate change can affect the ability of central banks to control inflation through changes in the policy interest rates (see NGFS, 2020b). For example, climate-related events might cause banks to be less willing to provide credit to the economy. In that case, a reduction in the interest rate might be insufficient to stimulate the economy if inflation is below target. In addition, as the recent food and energy crises have illustrated, an increase in inflation that stems from factors largely beyond the control of central banks can render the interest rate an ineffective tool for achieving inflation targets. Second, climate change impacts can affect the ability of central banks to control exchange rates through changes in interest rates and the use of foreign currency reserves: international investors might be unresponsive to monetary policy interventions when an economy is hit by climate-related shocks. Therefore, monetary authorities might need to update their conceptual understanding of the transmission mechanisms of monetary policy. If such an update leads to conclusions that call into question the effectiveness of existing tools, the ways of using those tools would need to be revised.

(ii) Climate risk exposure tools

Climate stress testing: Climate stress testing exercises allow central banks and financial supervisors to evaluate the exposure of the financial system to transition risks and physical risks under different potential climate pathways. Climate pathways will capture different assumptions about global decarbonization efforts in the coming decades. Following the NGFS (2022), the scenarios that are typically considered in climate stress testing exercises are (a) a *hot house world* scenario in which climate policies remain unambitious; (b) a *disorderly transition* scenario in which climate policies become ambitious after 2030, causing an abrupt transition to a low-carbon economy that is characterized by significant financial losses; and (c) an *orderly transition* scenario whereby the transition starts early (immediately), and thus facilitates a smooth and

steady transition. Climate stress testing exercises have been conducted by several central banks and financial supervisors recently, including by the Bank of England, Banque de France/ACPR, the central bank of the Kingdom of the Netherlands (DNB) and the European Central Bank (ECB) (Vermeulen et al., 2018; Alogoskoufis et al., 2018; Baudino and Svoronos, 2021; Bank of England, 2021; ECB, 2022; Banque de France/ACPR, 2021).

Running climate stress testing exercises requires sufficiently granular data about the regional and sectoral decomposition of bank credit, as well as innovative modelling approaches. A significant challenge for central banks and financial supervisors in LDCs is that they do not typically collect such data. Moreover, they might not have either the capacity or the human resources necessary for running climate stress testing exercises.

Climate risk financial disclosures: Central banks and financial supervisors can ask financial institutions to report their exposure to transition and physical risks. In the absence of detailed data about such exposure, financial institutions can use the loans to carbon-intensive sectors and to climate vulnerable regions (relative to total loans) as proxies for their exposure to transition risks and physical risks, respectively. However, an analysis of climate-related financial risks without the use of scenarios could be misleading

Climate-risk-adjusted capital and reserve requirements:

From a microprudential perspective, the exposure of banks to climate-related financial risks needs to be reflected in their capital and reserve requirements. For example, banks may have provided loans to households and non-financial corporations that risk debt default because they might be suffering financially due to an increase in carbon taxes or because of climate-related events that damage their assets. In such a scenario, the banks need to hold higher capital against those loans to be able to cope with solvency pressures. They might also need to increase their reserves to deal with liquidity pressures linked with climate risks.

(iii) Climate mitigation and adaptation tools

Green differentiated capital and reserve requirements:²⁷

According to this tool, requirements for different types of loans are differentiated on the basis of the climate footprint and greenness of their underlying activities. Green differentiated capital requirements can take

²⁷ Throughout the discussion, the term “green” is used to capture climate mitigation only; it does not include climate adaptation.

the form of green-supporting and dirty-penalizing factors (Dafermos and Nikolaidi, 2021; 2022). In the case of green-supporting factors, the capital requirements for loans that are used to finance green activities decline as an incentive for the provision of such loans. In the case of dirty-penalizing factors, the capital requirements on dirty loans (i.e. those that support high carbon-emitting activities) increase to make it more costly for banks to provide such loans. Reserve requirements can be adjusted based on the greenness/dirtiness of the total assets of banks (Campiglio, 2016; UNEP, 2017).

Climate adaptation capital and reserve requirements:

The idea behind this tool is to incentivize the provision of loans that support climate adaptation projects, such as investments in wind-resilient buildings, the use of drought-resilient seeds, climate-induced firm relocation, or the development of digital business models that reduce the reliance on physical climate-vulnerable assets. Banks would therefore need to hold less capital against loans that are linked with such climate adaptation projects. Moreover, their reserve requirement ratio could be inversely linked to the proportion of climate adaptation loans in total loans that they have provided.

Green and climate adaptation refinancing operations:

Through refinancing operations, central banks provide liquidity to commercial banks. The idea behind green refinancing operations is to make the interest rate on central bank loans a function of the greenness/dirtiness of the balance sheet of commercial banks:²⁸ the higher the proportion of green loans to total loans and the lower the proportion of dirty loans, the lower would be the interest rate at which a commercial bank could get a loan from the central bank. This would incentivize banks to decarbonize their assets. Banks could also pass on the change in the central bank interest rate to the interest rates that they charge their borrowers, affecting thereby the demand for green and dirty loans. Similarly, climate adaptation refinancing operations would imply a lower interest rate for commercial banks that provide more loans that support climate adaptation projects.

Green finance and climate adaptation financial supervision:

Through financial supervision, banks could be instructed to demonstrate engagement with green finance. For example, they could be required to (i) submit climate transition plans explaining how they intend to make their operations and lending practices

²⁸ See van 't Klooster and van Tilburg (2020) for a proposal on how the Targeted Longer-Term Refinancing Operations (TLTROs) of the ECB could become green.

Bangladesh is the only LDC that has engaged in climate central banking

climate-aligned (Dikau et al., 2022); (ii) report on the progress made in supporting climate mitigation and adaptation; and (iii) create separate units that deal with climate-related issues.

Green finance and climate adaptation credit controls:

Broadly speaking, credit controls refer to policies that directly affect the quantity or the price of credit (Bezemer et al., 2023). Such policies have been used extensively in LDCs. In the case of green credit controls, central banks or financial supervisors could instruct banks to provide a minimum amount of lending to specific green activities (perhaps at a subsidized interest rate) or place a ceiling on the amount of lending provided to certain carbon-intensive activities. In the case of climate adaptation credit controls, banks could be instructed to provide a specific amount of lending to households or companies that engage in climate adaptation investments.

Green finance and climate adaptation in central bank portfolios:

Central banks could use their own portfolios to support climate mitigation and adaptation efforts (see NGFS, 2020b). For instance, they could create a revolving scheme from their own funds to directly support climate-related projects. In principle, this could be extended to monetary policy portfolios; however, central banks in LDCs do not typically conduct corporate quantitative easing programmes due to the very limited role of corporate bond markets in these countries.

E. Country case studies

1. Overview of case study countries

Having analysed the key issues about central banking and climate change, this section illustrates the potential use of climate tools by central banks in three LDCs: Bangladesh, Zambia and Madagascar. These countries, are useful examples because they differ significantly in terms of GDP per capita – with Bangladesh being the richest country and Madagascar the poorest – and in domestic contexts for climate central banking (table 4.1). Bangladesh was also selected because it is the only LDC that has engaged in climate central banking.

Table 4.1

Key economic and natural disasters statistics, Bangladesh, Zambia and Madagascar

	Bangladesh	Zambia	Madagascar
GDP per capita ^a (current dollars, 2022)	2 688	1 488	505
Export structure by products ^b , 2021	Manufactured goods (94%), other (6%)	Ores and metals (73%), manufactured goods (11%), all food items (8%), other (8%)	All food items (41%), ores and metals (32%), manufactured goods (21%), other (6%)
Top five export partners ^b , 2021	United States, Germany, United Kingdom, Spain, Poland	China, Switzerland, Liechtenstein, Namibia, Democratic Republic of the Congo, Singapore	France, United States, China, Japan, Canada
Personal remittances ^a (percentage of GDP), 2022	4.67	0.82	4.80
Gini ^a , latest available year	32.4	57.1	42.6
Manufacturing, value added ^a (percentage of GDP), 2022 for Bangladesh, Zambia, 2021 Madagascar	21.76	8.08	9.50
Domestic credit to private sector ^a (percentage of GDP), 2022 for Bangladesh, Madagascar, 2021 Zambia	38.96	11.33	19.11
Annual deaths from natural disasters per 100 000 people, ^c 1990–2022 average for Bangladesh, Zambia, 1991–2022 average for Madagascar	4.29	0.03	0.46
Number of people affected by natural disasters per 100 000 ^c , 1990–2022 average for Bangladesh, Zambia 1991–2022 average for Madagascar	4 663	5 578	2 176
Total annual economic damages from natural disasters ^c (percentage of GDP), 1990–2022 average for Bangladesh, Zambia, 1991–2022 average for Madagascar	0.92	0.03	0.57

Sources:^a World Bank, *World Development Indicators* (<https://databank.worldbank.org/source/world-development-indicators>, accessed July 2023), ^b UNCTADstat, ^c Our World in Data (<https://ourworldindata.org/>, accessed January 2023).

Note: Natural disasters refer to all geophysical, meteorological and climate events including earthquakes, volcanic activity, landslides, drought, wildfires, storms, and flooding. The latest available years for the Gini index are 2016 for Bangladesh, 2015 for Zambia and 2012 for Madagascar. For Zambia and Madagascar, data are missing for several years between 1990 and 2002.

a. Bangladesh

Economic environment and climate change

Bangladesh has achieved substantial labour productivity growth, with a rising share of manufacturing in output and employment on the back of increased specialization in manufactures for export. The country is one of the top LDC exporters of ready-made garments, a sector that has contributed significantly to the country's industrialization, and remains the main driver of export growth. More recently, services are gaining in importance. In addition, large flows of remittances have strengthened Bangladesh's external position. This positive economic performance has been accompanied by a decline in poverty, but the COVID-19 pandemic and the war in Ukraine have interrupted the country's long period of robust economic growth, deepening existing

vulnerabilities. In the wake of the pandemic, in 2022 Bangladesh experienced stagnating job growth, rising inequality and a slowing down in the rate of poverty reduction. In 2023, negative effects from the war in Ukraine have led to a considerable widening of Bangladesh's current account deficit, depreciation of its currency, the Bangladeshi taka, and a decline in foreign exchange reserves, all of which are hampering recovery from the pandemic, with revenues remaining low and financial sector vulnerabilities high (IMF, 2023; UNCTAD, 2019b).

In 2021, Bangladesh was recommended for graduation from the LDC category with the expectation that the country would graduate in 2026.²⁹ There are

²⁹ See <https://www.un.org/ldcportal/content/bangladesh-graduation-status>.

four lingering sources of vulnerability that will continue to shape the country's trajectory towards graduation and beyond: (i) a reliance on LDC-specific preferential market access for low-skill garment exports; (ii) insufficient export diversification; (iii) dependence on migrant remittances for capital accumulation; and (iv) vulnerability to climate change (UNCTAD, 2022c).

Industrial policy has been at the core of economic policymaking since the 1980s, when the Government of Bangladesh developed its first industrial plan. Industrial policy tools used by Bangladesh include subsidies, discounted interest rates, import tariffs, tax rebates for research and development, public procurement rules and targeted public investment (Roy, 2017; UNCTAD, 2022c). However, Bangladesh's industrialization, like that of other Asian LDCs, is of a shallow form (UNCTAD, 2020). In particular, an overreliance on the ready-made garment sector renders the economy particularly vulnerable to external shocks.

Bangladesh is vulnerable to both disasters and climate change, and ranked the seventh extreme disaster risk-prone country in the world in the Global Climate Risk Index 2021. Its economic performance is highly susceptible to the growing severity and frequency of climate-related events, such as riverine floods, flash floods, storm surges and cyclones, due to the country's high proportion of low-lying inhabited coastland areas, and the population's continued reliance on climate-sensitive sectors, such as agriculture and fisheries (UNCTAD, 2022c). Women in Bangladesh are disproportionately affected by the loss of natural resources due to the prevalent practice of men moving out of coastal areas in search of livelihoods (Chowdhury et al., 2022).

Given its high vulnerability to climate change, Bangladesh has a long history of engaging in adaptation, and has produced a number of action plans: the National Adaptation Programme of Action (NAPA), first published in 2005 (updated in 2009), the National Adaptation Plan of Bangladesh (2023–2050) released in 2022, and the Bangladesh Climate Change Strategy and Action Plan released in 2009 and updated in 2022 (Bangladesh, Ministry of Environment, Forest and Climate Change, 2022). Bangladesh also has the ambition to achieve a substantial reduction in its emissions, in line with its nationally determined contributions (NDC). Mitigation plans include a focus on supporting renewable energy projects, improving the efficiency of existing power plants, reducing deforestation, enhancing the use of solar energy in agriculture and improving waste management (Government of the People's Republic of Bangladesh, 2022).

Bangladesh is considered among the global leaders in climate central banking

Financial system and use of climate tools by Bangladesh Bank

The broad vision of Bangladesh Bank is to maintain price and financial stability, and to support inclusive economic growth, employment creation and poverty reduction. Bangladesh Bank also has as an explicit target to support socially responsible and environmentally sustainable development initiatives. This suggests that it is in a position to consider all the climate central banking tools discussed in section D.

The financial system of Bangladesh is predominantly bank-based; the presence of non-bank financial institutions (NBFIs) is relatively limited (Habib, 2019).³⁰ Among NBFIs, microfinance institutions have a long history dating back to the 1970s (Mia et al., 2019). By 2013, the significant expansion of microcredit in Bangladesh meant at least 60 per cent of rural households had received microcredit at least once in their lifetime (Osmani, 2016). According to Bangladesh Bank (2022),³¹ there are 61 banks in the scheduled bank category (State-owned commercial banks, specialized banks, several types of private commercial banks and foreign commercial banks), of which 34 are NBFIs – mostly private domestic or joint-venture initiatives. The bond market in Bangladesh remains underdeveloped. A traditional weakness of the Bangladesh financial system is the high proportion of non-performing loans, particularly high in specialized banks and State-owned commercial banks. While Bangladesh has taken steps to adopt some elements of Basel III that could address financial stability issues, it applies numerous exceptions (Habib, 2019; IMF, 2023).

Bangladesh is considered among the global leaders in climate central banking, having gained global

³⁰ Bangladesh Bank classifies the financial system into (i) the formal financial sector, which comprises all regulated institutions, such as banks, NBFIs and micro finance institutions; (ii) the semi-formal financial sector, which comprises institutions that are regulated but do not fall under the jurisdiction of the Bangladesh Bank and; (iii) the informal financial sector, which comprises private financial intermediaries that are completely unregulated (see <https://www.bb.org.bd/en/index.php/financialactivity/index>).

³¹ <https://www.bb.org.bd/en/index.php/financialactivity/bankfi>.

Special attention should be given to types of microcredit that could result in maladaptation

recognition for being an early promoter of climate finance (Khairunnessa et al., 2021; Bose et al., 2021; IFC, 2018). In 2011 it issued the Environmental Risk Management (ERM) Guidelines for Banks and Financial Institutions (updated in 2017), which are a form of green financial supervision. The banks were instructed to support climate mitigation in several phases. They were asked to, inter alia, (i) establish a separate green banking unit, (ii) create supervisory committees to monitor progress on the support of green activities and allocate budgets for green finance, (iii) formulate sector-specific green financial policies, and (iv) publish reports on green activities using standardized formats.

Bangladesh Bank has also used green credit controls. Since 2016, it has set a 5 per cent minimum target of direct green finance in the total funded loan disbursements/investments of financial institutions.³² Green finance refers to loans for projects involving renewable energy, energy efficiency, alternative energy, liquid waste management and solid waste management (Bangladesh Bank, 2022). In addition, banks have been instructed to establish a climate risk fund, and allocate at least 10 per cent of their corporate social responsibility budget to that fund. The Bank of Bangladesh has also taken measures to green its own portfolio: it has established a 2 billion Bangladeshi taka revolving refinancing scheme from its own funds to support projects on solar energy, biogas and an effluent treatment plant (Khairunnessa et al., 2021).³³

Options for the future

Bangladesh exemplifies how central bank climate action can support industrial policy objectives. By directing credit to specific activities that support climate mitigation and assessing banks based on the financing they provide to green initiatives, Bangladesh Bank supports the industrial policy targets of the Government towards a green transition. For example, it is a high priority for the ready-made garment sector to reduce its environmental footprint. This is important not only because of national environmental targets, but also because, in order to maintain a high

share in global export markets, that sector needs to satisfy global environmental standards (Rab and Hoque, 2017). By offering better financing conditions to ready-made garment companies that improve resource efficiency, adopt energy and chemical waste management policies and other environmental initiatives, the banking sector can support the country's low-carbon transition.

However, the limitations of green finance initiatives need to be explicitly considered. Over-indebtedness and higher default rates for companies that engage in green activities are some potential side effects of green credit controls. For 2023, the private sector's stock of credit as a proportion of GDP is estimated to be close to 45 per cent, up from 39 per cent in 2022 (table 4.1). Therefore, Bangladesh Bank needs to carefully consider how climate mitigation tools could be designed in a way that does not further increase private sector indebtedness and the potential for defaults. An additional significant challenge to the promotion of green finance is that the perceived credit risk of green loans is typically high. This discourages the banking sector from providing more green finance.

So far, most climate initiatives of Bangladesh Bank have targeted climate mitigation, with climate adaptation relatively neglected. Given that Bangladesh is highly vulnerable to climate change impacts, more emphasis could be placed on the development and use of central bank tools for climate adaptation. This could include the specific incorporation of climate adaptation into financial supervision reporting, and the use of explicit climate adaptation targets in credit controls. The development benefits of climate adaptation tools will be enhanced if more support is given to dual-use adaptation investments (Khan et al., 2020). The sustainable finance taxonomy that is currently under development (Bangladesh Bank, 2022) is expected to strengthen the effectiveness of both climate mitigation and climate adaptation tools.

Special attention should also be given to the fact that poor people in several climate vulnerable rural areas in Bangladesh, whose livelihoods have been disrupted by climate-related events, borrow from informal moneylenders, often at usurious interest rates. This type of microcredit could result in maladaptation, whereby over-indebtedness undermines the ability of vulnerable populations to respond effectively to climate change (Jordan, 2021).

Bangladesh Bank could also more explicitly consider incorporating climate risk transmission channels into its analytical frameworks, which would improve the conceptual understanding of the macrofinancial effects of transition and physical risks, as well as

³² In 2020, it also set a 5 per cent green finance target for total funded term loan disbursements/investments.

³³ For a chronological summary of the green finance initiatives of Bangladesh Bank, see Bangladesh Bank, 2022.

its macroeconomic projections. For instance, given that four of the top five export partners of Bangladesh are in Europe (see table 4.1), Bangladesh Bank needs to understand how the country's exports – and hence, macroeconomic and financial stability – could be affected by the implementation of the European Union's Green Deal policies. Of particular importance for Bangladesh Bank is to also improve its understanding of how the transmission mechanisms of macroeconomic and financial policies can be affected by climate events. Accordingly, the Bank could set as a medium-term target the running of some climate stress testing exercises that would analyse in a more integrated way the risks related to both global and domestic climate-related developments.

b. Zambia

Economic environment and climate change

Zambia is a resource-based economy, with a copper mining industry dating back to the 1920s. In 2021, ores and metals accounted for 73 per cent of the country's total exports (table 4.1). Zambia's copper mining accounts for more than 2 per cent of global copper production, and the performance of its copper mining industry has a considerable impact on overall trends in Zambia's GDP, foreign direct investment, exports and government revenues. Zambia's financial position is thus highly susceptible to fluctuations in global market prices and demand for copper. The COVID-19 pandemic led to a sharp fall in the price of copper, precipitating the country's default on its external debt in November 2020 (UNCTAD, 2022b; AfDB, 2021a). In August 2022, the IMF approved a loan of \$1.3 billion to the country under a 38-month arrangement that obliges Zambia to implement austerity measures and several fiscal policy and institutional reforms (IMF, 2022).

The country has achieved socioeconomic progress and met the criteria for graduation from LDC status for the first time in 2021.³⁴ However, vulnerabilities persist in terms of structural transformation. For instance, manufacturing value added as percentage of GDP witnessed sharp declines between 2004 and 2013, and after a brief recovery, resumed a declining trend in 2017 (UNCTAD, 2022b). Zambia's manufacturing sector is characterized by limited diversification, low levels of investment and the prevalence of outdated technologies (Zambia, Ministry of Commerce, Trade and Industry, 2018). Priority sectors in Zambia's industrial policy are processed foods, textiles and garments, engineering

³⁴ <https://www.un.org/ldcportal/content/zambia-graduation-status>.

The growing demand for copper poses environmental and social risks for Zambia

products, wood and wood products, leather and leather products, mineral processing and products, pharmaceuticals, and the blue economy. At the core of the industrial policy is the provision of low-cost financing, which is expected to be provided mainly by the private sector and the Development Bank of Zambia (Government of Zambia, 2018).

Zambia has the potential to benefit from the growing global demand for renewable energy technologies, since copper plays a key role in the development of renewable energy systems and is an essential material component of electric vehicles. However, the growing demand for copper also poses environmental and social risks, and Zambia could suffer from the vagaries of green extractivism (UNCTAD, 2022a).

Zambia's 2016 NDC³⁵ (with commitments updated in 2022) stated that climate variability and change had become a major threat to sustainable development in the country, and that its commitments were contingent on external financial support. Indeed, Zambia has experienced increased frequency and severity of drought and flooding, with adverse consequences for food and water security. The effects of climate change on agriculture, transport infrastructure and electricity generation (predominantly hydro power) constitute a particular challenge for the Zambian economy (UNCTAD, 2022b; Hunter et al., 2020; Tembo et al., 2020).

Financial system and the role of the Bank of Zambia

The rise of non-performing loans in the wake of the COVID-19 pandemic places the domestic financial system under considerable pressure. Non-performing loans continue to be highest in the agricultural, forestry, fisheries and hunting sectors. Foreign banks dominate the banking sector, with the proportion of assets of their subsidiaries in total assets of the banking sector higher than 70 per cent during the period 2018–2020 (Bank of Zambia, 2020a). Local private banks and those partially owned by the Government, account for the remainder of assets. Microfinance institutions (the majority of which were established in the early 2000s) constitute the formal non-bank financial sector (Bank of Zambia, 2020a). However, their lending remains limited, and is

³⁵ <https://unfccc.int/documents/498042>.

The Bank of Zambia is one of three main regulators of the financial system

directed mainly to rural agricultural households. The collapse of several microfinance institutions in the past has contributed to the underdevelopment of the microfinance sector (Agri-ProFocus Zambia, 2014).

The Bank of Zambia is one of three main regulators of the financial system. It is responsible for the regulation and supervision of banks and other financial service institutions, while the Securities and Exchange Commission (SEC) and the Pensions and Insurance Authorities (PIA) are responsible for supervising and regulating the capital markets and the pension/insurance industry, respectively.³⁶ The Bank of Zambia is now in the process of strengthening its microprudential and macroprudential supervision. For example, it is currently undertaking macroprudential stress tests, for which it aims to use supervisory technologies (SupTechs). It also intends to develop a microprudential stress testing framework. In addition, it is customizing the Basel III liquidity requirements, and plans to establish and operationalize a Financial Stability Committee (Bank of Zambia, 2020b). Strengthening the financial supervisory capacity of the Bank is part of the recent agreement of the country's authorities with the IMF. In the context of this agreement, steps have also been taken to make the Bank of Zambia operationally independent (IMF, 2022).

The primary objective of the Bank of Zambia is the achievement and maintenance of price and financial stability with the aim of supporting sustainable development. To achieve this objective, the Bank uses several monetary and financial policy tools. These include reserve requirements, credit controls, lending facilities, open market operations and prudential guidelines. Moreover, by selling and buying foreign exchange reserves, the Bank aims to keep the exchange rate at levels that help maintain stability.³⁷ In April 2020, the Bank of Zambia introduced the Targeted Medium-Term Refinancing Facility (TMTRF) aimed mainly at supporting the liquidity of the financial sector during the COVID-19 crisis, and encouraging lending to non-financial corporations and households. The facility has specifically targeted the agricultural,

manufacturing, energy and tourism sectors (Bank of Zambia, 2020a).

Possibilities for the Bank of Zambia to use climate tools

The Bank of Zambia's mandate refers explicitly to the maintenance of price and financial stability. In line with the decision map presented in figure 4.4, the Bank could consider developing climate-adjusted analytical frameworks and using climate risk exposures tools. For example, it could start by developing forward-looking macroeconomic projections that capture the macrofinancial risks and opportunities that arise from the global transition to low-carbon technologies, with a special emphasis on the increasing demand for copper (see table 4.1). The monetary authorities of Zambia need to pay particular attention to climate-related developments in Zambia that have the potential to create both opportunities (e.g. higher demand for copper) and risks (e.g. green extractivism). The Bank could also incorporate climate change in stress testing exercises.

The use of climate mitigation and adaptation tools might be more controversial and less straightforward, given the Bank of Zambia's narrowly defined legal mandate. The Bank aims to support sustainable development, but only through the maintenance of price and financial stability, and not directly. The recent agreement with the IMF to make the Bank of Zambia operationally independent³⁸ may complicate eventual attempts by the Bank to directly support climate mitigation and adaptation targets.

Should the Government at some point decide to make climate-aligned development an explicit target³⁹ of the Bank of Zambia, there are several tools at the Bank's disposal that would allow it to do so. Given Zambia's high vulnerability to climate change and very low contribution to global cumulative emissions, it would be desirable for such tools to be adjusted in order to focus primarily on climate adaptation. For instance, through the use of credit allocation policies, specific minimum targets could be set prioritizing the provision of credit to climate adaptation projects. In this context, the TMTRF could be used to encourage the provision of credit to companies and households that can use it to further national adaptation plans, or reserve requirements could be lowered for

³⁸ See <https://www.imf.org/en/News/Articles/2021/12/06/pr21359-zambia-imf-staff-reaches-staff-level-agreement-on-ecf>.

³⁹ It is notable that as part of its vision and mission, the Bank aims "To be a dynamic and credible central bank that contributes to the economic development of Zambia" and "To achieve and maintain price and financial system stability to foster sustainable economic development".

³⁶ See <https://www.boz.zm/financial-sector-development.htm>.

³⁷ See <https://www.boz.zm/monetary-policy-instruments.htm>.

those banks that increase their financing of climate adaptation investment. In order for these tools to be effective, special emphasis should be placed on the development of Zambian context-specific criteria for the classification of climate adaptation activities.

c. Madagascar

Economic environment and climate change

The economy of Madagascar is largely agrarian. Agriculture and fisheries play a prominent role in the economy, whereas the contribution of manufacturing is less than 10 per cent of GDP (see table 4.1). Despite considerable natural resources, the country has one of the world's highest poverty rates,⁴⁰ which have been exacerbated by the impacts of the COVID-19 pandemic and the inflationary effects of the war in Ukraine. Madagascar is among six LDCs that posted an overall decline in total wealth per capita during the period 1995–2014, raising serious sustainability concerns (UNCTAD, 2021b; AfDB, 2021b). The manufacturing, mining and services sectors were the worst affected by the COVID-19 pandemic, leading to negative economic growth and a deterioration in the fiscal deficit, reversing the trend of improved economic performance since 2015 (AfDB, 2021a; 2022). Economic progress is hampered by low structural transformation, high vulnerability to external shocks (including multiple climatic and trade shocks) that contribute to a history of sharp growth contractions, the lack of employment opportunities, and a decline in the productivity of private enterprises in recent years.

Madagascar has an extensive coastline, which makes its coastal zones particularly vulnerable to climate change. Climate change is also affecting the country's exceptional biodiversity. The agricultural sector has historically borne the brunt of cyclones and droughts, with adverse impacts on soil fertility, water resources and economic and social infrastructure. It is expected that global warming will intensify cyclones, increase rainfall in most parts of the country and worsen coastal erosion (Madagascar, Presidency, 2015). The capital city is particularly exposed to flooding, and suffers from a shortage of water supply, as well as poor sewerage and drainage infrastructure (Global Center on Adaptation, 2022).

Madagascar formulated its National Climate Change Policy in 2010, which aims to increase its resilience to climate change (World Bank et al., 2021). According

⁴⁰ Estimated at above 80 per cent (see <https://www.imf.org/en/Publications/CR/Issues/2023/03/21/Republic-of-Madagascar-2022-Article-IV-Consultation-Third-Review-Under-The-Extended-Credit-531196>).

Prior to 2014, active use of monetary policy in Madagascar was absent

to Madagascar's intended nationally determined contribution (INDC),⁴¹ climate mitigation efforts will focus, among other things, on renewable energy, rural electrification and the implementation of climate-smart agriculture, including the reduction of forest timber extraction and production of biogas from waste water. Adaptation plans also target improved management of water resources, restoration of natural habitats and the use of resilient agriculture integrated models. Climate adaptation efforts are giving particular emphasis to the development of early warning systems for cyclones, droughts, floods and other climate-related events (World Bank et al., 2021).

Financial system and the role of the Central Bank of Madagascar

The Malagasy financial system primarily consists of banks and microfinance institutions, with a limited number of pension funds and insurance companies. The vast majority of banks are subsidiaries of foreign banks (IMF, 2016; 2020). Crucially, a large proportion of the population has no access to financial services.⁴² Lending by microfinance institutions that service poor households is restricted by the existence of low credit ceilings (IMF, 2016). In 2020, the private credit-to-GDP ratio was very low, at about 16 per cent (see table 4.1).

Prior to 2014, there was no active use of monetary policy, but in recent years the Central Bank of Madagascar (BFM)⁴³ has gradually assumed an important role in the management of bank liquidity (IMF, 2020). The BFM's mandate is to ensure the internal and external stability of the currency.⁴⁴ The ultimate aim of monetary policy is to control the inflation rate. The BFM uses three key tools for this purpose: it maintains an interest rate corridor system, with an upper limit for the interest rate on marginal lending facilities and a lower limit for the interest rate on deposit facilities; it operates mandatory reserve requirements for financial intermediaries to prevent excessive credit expansion; and its interventions in the money market encompass refinancing operations and

⁴¹ <https://unfccc.int/NDCREG>.

⁴² See <https://www.findevgateway.org/country/financial-inclusion-in-madagascar>.

⁴³ Banky Foiben'i Madagasikara.

⁴⁴ See <https://www.banky-foibe.mg/politique-monnaire-2>.

liquidity withdrawals. The IMF has recommended the introduction of a regulatory framework for repurchase operations (repos) that would enhance longer term interbank lending, along with the development of a bond market (IMF, 2020).

Can the central bank use climate tools?

Based on its mission to maintain price stability and exchange rate stability, the BFM needs to have an integrated understanding of how the external macroeconomic environment is shifting because of climate change. Since the country is very susceptible to external factors, the BFM needs to develop a climate-adjusted analytical framework that will allow it to understand (i) how global climate policies will affect its main export partners (see table 4.1), (ii) how the economy of Madagascar will be affected by climate events, and (iii) how climate change might impair the effectiveness of the BFM's monetary policy tools. Regarding the latter, global and national climate-related supply shocks might, for instance, create inflationary pressures that could reduce the effectiveness of the interest rate corridor system.

However, since financial supervision by the BFM is weak at present (IMF, 2020), any use of climate risk exposure tools might be premature. Should financial supervision and regulation be strengthened in the future, the BFM could consider running some climate stress tests to evaluate the vulnerability of the Malagasy financial system to transition and physical risks. Should the Government decide to identify sustainable development as a primary or secondary mandate of the BFM, the use of some climate adaptation tools could be contemplated. For example, the BFM could link reserve requirements with the proportion of climate adaptation loans in the total loans of banks and microfinance institutions. In addition, some minimum credit targets could be set for the provision of climate adaptation loans in order to further national goals on climate adaptation.

2. Policy lessons from country case studies

The following key policy lessons may be drawn from the country case studies:

- The central banks of LDCs should contemplate the use of central banking climate mitigation and adaptation tools only if the following conditions are met: (i) sustainable development or a strong macroprudential approach are part of their mandates; and (ii) their financial systems are sufficiently developed and used by a sufficiently large proportion of the population and the non-financial corporate sector. Both these

conditions hold in the case of Bangladesh, but not in the case of Madagascar.

- Conditions (i) and (ii) are necessary, but not sufficient for justifying the use of climate central banking tools. For example, climate tools cannot be successful without the prior development of specific green and adaptation criteria/taxonomies. Climate tools can also have adverse effects, if, for example, they lead to over-indebtedness and defaults. Such side effects of climate central banking tools need to be seriously considered before central banks can consider introducing climate initiatives.
- If climate tools are introduced by LDCs' central banks, it is essential for them to be aligned with national targets of industrial and fiscal policy. For example, if the Bank of Zambia decides to use climate tools, it needs to first make sure that the financial system will continue to support the priority sectors that have been identified by the national industrial policy. Moreover, if there are explicit green targets in a country's industrial policy, any climate-related adjustments of monetary and financial tools should support those targets.

Climate central banking should align with industrial policy to foster green structural transformation



- Central banks in LDCs, regardless of their mandate, need to develop analytical frameworks that allow them to identify how exposed their financial systems and macroeconomies are to risks that might stem from the implementation of climate policies in other countries (especially their export partners), and from climate-related physical events. This is important information that should also be shared with government authorities for the planning and management of green structural transformation and the low-carbon transition.

- Central banks in LDCs will require assistance from the international community to acquire the necessary technical and financial resources to deploy climate central banking tools. Even in the case of Bangladesh, which is among global leaders in the application of such tools, the apparent mitigation bias in its use of the tools points to deficiencies in institutional capacity in the face of already evident and increasing damage from climate change in the country. Accordingly, one way in which multilateral development banks could make a meaningful contribution to climate central banking in LDCs is to prioritize a focus on the development of domestic financial systems that operate in a transparent manner to ensure that necessary ecosystem gaps are plugged as quickly as possible, and that data/information becomes readily available for monitoring financial alignment targets and the use of related tools.

G. Conclusions

There is an ongoing global debate on how the financial system can be reformed to contribute to the transition to a low-carbon economy. The conventional view takes a static, risk-based approach to aligning financial flows to net-zero commitments. This chapter argues that a green transition-oriented approach to financial alignment in LDCs has the highest probability of fostering green structural transformation and developmental progress in these countries.

The chapter has focused on the role that central banks in LDCs could play in fostering the alignment of their domestic financial systems with global goals for climate action. It identifies three types of climate central banking tools and a two-step process based on the understanding that one size does not fit all when it comes to climate central banking. It serves to guide central banks through the process of determining under what conditions central banks in LDCs should contemplate engaging in climate central banking, and how they may select specific tools through which to implement climate-related mandates. The importance of the “one-size-does-not-fit-all” approach is unambiguously illustrated by the three country case studies. It is also evident that, even in cases where central bank mandates in LDCs do not allow a direct engagement with climate central

It is a necessity for central banks of LDCs to use climate-adjusted analytical frameworks

banking tools, the need for those banks to use climate-adjusted analytical frameworks is no longer a matter of choice but one of a necessity. This is because of the growing importance of physical and transition effects in the new climate-related macroeconomic environment of LDCs. For example, the Bank of Zambia might not yet be able to use central banking tools for achieving climate targets. However, it would benefit from the development of climate-adjusted analytical frameworks and the use of some climate risk exposure tools. Similarly in the case of Madagascar’s central bank, the development of climate-adjusted analytical frameworks would be beneficial, given the high climate-induced risks that the country is facing, even though the use of climate central banking tools would be premature because of the low level of financial sector development in that country.

Addressing climate challenges in LDCs requires fundamental structural transformations driven by governments. Central banks can only play a supportive role in this process, and that role requires them to transition from a technocratic to a developmental role. A key and unavoidable requirement for the adoption of central banking tools for climate mitigation and adaptation is thus the coordination of central banks with fiscal and regulatory authorities. This is of particular importance for maximizing the beneficial effects of those tools for climate-aligned development, and financial stability generally, but more so in LDCs, which must concurrently target low-carbon transition and structural transformation in a manner that is synergistic and transformative.

More fundamentally, the conditions for averting an unjust transition in LDCs will not be achieved through the alignment of domestic financial systems alone. Such an alignment should be undertaken as part of a broader reform of the international financial architecture, which will require important complementary and concerted actions at the international level.

Annex

Annex table A4.1

Development mandates of central banks in least developed countries

LDC REGIONAL GROUP: African LDCs and Haiti			
Country	Central Bank	Legal Development Mandate	Text
Angola	Banco Nacional de Angola	Yes, subordinate	The National Bank of Angola, as the central and issuing bank, ensures the preservation of the value of the national currency and participates in the definition of monetary, financial, and foreign exchange policies. Without prejudice to the provision of the above objective, it is the responsibility of the National Bank of Angola to execute, monitor, and control monetary, foreign exchange, and credit policies, manage the payment system, and administer the circulating medium within the scope of the country's economic policy.
Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo	Central Bank of West African States	Yes	The prime purpose of the Central Bank's monetary policy shall be to ensure price stability. The Monetary Policy Committee shall set the inflation target. This purpose notwithstanding, the Central Bank shall provide support for the economic policies of the West African Economic and Monetary Union (WAEMU), to ensure sound and sustainable growth.
Burundi	Banque de la République du Burundi	Yes, subordinate	The main objective of the central bank is to ensure price stability. Without prejudice to the preceding objective, the central bank contributes to the stability of the financial system. While prioritizing the aforementioned two objectives, the central bank also contributes to the implementation of economic policies conducive to macroeconomic stability and the harmonious development of the country.
Central African Republic, Chad	Banque des États de l'Afrique Centrale, BEAC	Yes, subordinate	The mandate of the Central Bank of Central African States (BEAC) is to ensure the stability of the currency. Without prejudice to this objective, the BEAC supports the general economic policies formulated by the member states of the monetary union.
Comoros	Banque Centrale des Comores	Yes, subordinate	The Bank is the sole monetary authority of the Comoros. The Bank guarantees the stability of the currency of the Comoros. Without prejudice to this objective, it supports the economic policy of the Comoros. The Bank defines and implements the monetary policy of the Comoros. It holds and manages the gold reserves and the foreign exchange reserves of the Comoros. These gold reserves and these reserves are recorded as assets on its balance sheet.
Democratic Republic of the Congo	Banque Centrale du Congo	Yes, subordinate	The Bank is tasked with defining and implementing the monetary policy of the country, the main objective of which is to ensure the stability of the general level of prices. It is independent in the achievement of this objective. To this end, the Bank, through its Board, whether in the person of the Governor or any other member of its decision-making bodies, must not take any action that could compromise this independence. Without prejudice to the main objective of stability of the general level of prices, the Bank supports the general economic policy of the Government
Djibouti	Banque Centrale de Djibouti	Yes	The central bank's general mission is to ensure the stability of the national currency and the smooth functioning of the banking and financial system. Other contributions: The central bank lends its support to the implementation of the state's economic policy. In this context, it can propose to the government any measure that is likely to have a positive impact on the economic and social development of the country.
Eritrea	Bank of Eritrea	Yes	The principal objective of the Bank shall be to manage money and credit in the Eritrean economy, subject to the provisions of this Proclamation, with the purpose of safeguarding the value of the national currency. More specifically: (1) the Bank shall: (a) pursue stability in prices in Eritrea (b) maintain sound exchange rate policy to promote a healthy balance of payments and a sustainable foreign exchange reserve position; and (c) foster economic growth, employment and overall development in the country; (2) the Bank shall promote the establishment of payment systems to facilitate the execution of domestic and foreign payment transactions; and (3) the Bank shall promote a sound financial system in the country in accordance with the nation's financial laws and prudential guidelines.
Ethiopia	National Bank of Ethiopia	Yes	Maintain price and exchange rate stability, foster sound financial system and contribute for the rapid and sustainable economic development of Ethiopia

LDC REGIONAL GROUP: African LDCs and Haiti			
Country	Central Bank	Legal Development Mandate	Text
Gambia	Central Bank of the Gambia	Yes, subordinate	(1) The primary objects of the Bank are to (a) Achieve and maintain domestic price stability; (b) Promote and maintain the stability of the currency of the Gambia (c) Direct and regulate the financial, insurance, banking and currency system, in the interest of the economic development of the Gambia; and (d) Encourage and promote economic development and the efficient utilization of the resources of the Gambia through the effective and efficient operation of a financial system. (2) Without prejudice to sub-section (1), the Bank shall: (a) Support the general economic policy of the Government; and (b) Promote economic growth and the effective and efficient operation of a financial system in the Gambia.
Guinea	La Banque Centrale de la République de Guinée	Yes, subordinate	The main objective of the Central Bank is to ensure price stability. The inflation target is defined by the Monetary Policy Committee. Without prejudice to this objective, the Central Bank lends its support to the general economic policy of the Government of Guinea with a view to healthy and sustainable economic growth.
Haiti	Banque de la République d'Haïti	No	The legislation in force assigns four fundamental roles to the BRH, which can be stated as follows: defend the internal and external value of the national currency; ensure the efficiency, development and integrity of the payments system; ensuring the stability of the financial system; act as the state's banker, cashier and fiscal agent.
Lesotho	Banka e Kholo ea Lesotho	No	The objective of the Bank is to achieve and maintain price stability. 6. The functions of the Bank shall be: (a) to foster the liquidity, solvency and proper functioning of a stable market-based financial system; (b) to issue, manage and redeem the currency of Lesotho; (c) to formulate, adopt and execute the monetary policy of Lesotho; (d) to formulate, adopt and execute the foreign exchange policy of Lesotho; (e) to license or register and supervise institutions pursuant to the Financial Institutions Act 1999, the Money Lenders Act 1989, the Building Finance Institutions Act 1976, and the Insurance Act 1976; (f) to own, hold and manage its official international reserves; (g) to act as banker and adviser to, and as fiscal agent of, the Government of Lesotho; (h) to promote the efficient operation of the payments system; (i) to promote the safe and sound development of the financial system; and (j) to monitor and regulate the capital market.
Liberia	Central Bank of Liberia	Yes	The principal objective of the Central Bank shall be to achieve and maintain price stability in the Liberian economy. To this end, it shall devise and pursue policies designed to: a. preserve the purchasing power of the national currency; b. promote internal and external equilibrium in the national economy; c. encourage the mobilization of domestic and foreign savings and their efficient allocation for productive economic activities; d. facilitate the emergence of financial and capital markets that are capable of responding to the needs of the national economy; and e. foster monetary, credit and financial conditions conducive to orderly, balanced and sustained economic growth and development.
Madagascar	Banky Foiben'i Madagasikara	Yes, subordinate	The primary objective of the Central Bank is to ensure internal and external stability of the currency. Without prejudice to this primary objective, the Central Bank contributes to the financial stability and the soundness of the financial system of Madagascar.

LDC REGIONAL GROUP: **African LDCs and Haiti**

Country	Central Bank	Legal Development Mandate	Text
Malawi	Reserve Bank of Malawi	No	(1) The primary objectives of the Bank shall be to maintain price and financial stability. (2) In case of conflict between price and financial stability, the price stability objective shall take precedence. Website: The bank shall complement general economic development in Malawi. Vision: To be a central bank of excellence that promotes macroeconomic stability for sustainable economic development in Malawi
Mauritania	Banque Centrale de Mauritanie	Yes, subordinate	The main objective of the Central Bank is to maintain price stability. Without prejudice to the objective of price stability, the Central Bank pursues the stability of the financial system and contributes to the implementation of the general economic policies defined by the Government.
Mozambique	Banco de Moçambique	Yes	1. The main objective of the Bank shall be to preserve the value of the national currency. 2. In light of said currency preservation, the Bank shall also undertake the following: a) promote the conduct of sound monetary policy; b) guide credit policy with a view to promoting the economic and social growth and development of the country; c) manage foreign assets so as to maintain an adequate volume of means of payment necessary for international trade d) discipline banking activity; 3. In the pursuit of the objectives set out in paragraphs 1 and 2 of this Article, the Bank shall observe Government policies.
Rwanda	National Bank of Rwanda	Yes	The general mission of NBR is to ensure price stability and sound financial system. In particular, NBR has the following responsibilities: 1. to define and implement the monetary policy; 2. to organise, supervise and coordinate the foreign exchange market 3. to supervise and regulate the activities of financial institutions notably banks, micro finance institutions, non-deposit taking lending institutions, finance-lease institutions, insurance institutions, social security institutions, pension funds/schemes institutions, discount houses and other financial services providers that are not supervised by any other institution under specific laws; 4. to supervise and regulate payment systems; 5. to conduct a financial stability assessment for sustaining economic growth and development; 6. to formulate and implement policies to promote the establishment of regulations and the supervision of efficient and effective clearing and settlement payment systems; 7. to issue and manage currency; 8. to hold and manage official foreign exchange reserves; 9. to act as State Cashier; 10. to collect, compile, disseminate monetary and related financial statistics on a timely basis; 11. to follow up and promote the soundness of financial institutions and their compliance with governing laws including Law on preventing and opinion of NBR on the status of currency, access on credit and the economy in general is particularly sought in the event the Government needs to take monetary or financial measure.
Sierra Leone	Bank of Sierra Leone	Yes	The objective of the Bank shall be to (a) issue and manage the currency of Sierra Leone (b) achieve and maintain price stability (c) contribute to fostering and maintaining a stable financial system; and (d) support the general economic policy of the Government.
Somalia	Bankiga Dhexe Ee Soomaaliya	Yes, subordinate	1. The primary objective of the Bank shall be to achieve and to maintain domestic price stability. 2. The other objective of the Bank, which shall be subordinated to the primary objective of the Bank, shall be to foster and maintain a stable and competitive market-based financial system. 3. Without prejudice to these two objectives, the Bank shall support the general economic policies of the Government.

LDC REGIONAL GROUP: African LDCs and Haiti			
Country	Central Bank	Legal Development Mandate	Text
South Sudan	Bank of South Sudan	Yes, subordinate	<p>(1) The primary objective of the Bank shall be to maintain monetary and domestic price stability.</p> <p>(2) The other objectives of the Bank, which shall be subordinated to the primary objective of the Bank, shall be to foster the liquidity, solvency and effective functioning of a stable market based financial system, and to promote a safe, sound and efficient national payment system which aims to maintain the stability of the financial system as a whole.</p> <p>(3) Without prejudice to its primary objectives, the Bank shall support the general economic policies of the Government, and promote sustainable economic growth</p>
Sudan	Bank of Sudan	Yes	<p>The Bank shall have the following objects, to:</p> <p>(a) issue currency of the types thereof, organize, control and supervise the same;</p> <p>(b) lay down monetary and financing policies and implement the same, in such a way, as may achieve the national objectives of the national macro economy, in consultation with the minister;</p> <p>(c) organize banking business, monitor and supervise, strive to promote and develop and raise the efficiency thereof, in such way, as may achieve the balanced economic and social development;</p> <p>(d) strive to achieve economic stability and the stability of the par value of the Sudanese Pound;</p> <p>(e) act, in its capacity as the Government banker, as an advisor and agent thereof, in the monetary and financial affairs;</p> <p>(f) abide, in the discharge thereby, of the duties, achievement of the objects, exercise of the powers thereof, by the ordinance of Islamic Sharia, in Islamic banking system, and conventional banking customs, in the conventional banking system.</p>
Uganda	Bank of Uganda	Yes	<p>(1) The functions of the bank shall be to formulate and implement monetary policy directed to economic objectives of achieving and maintaining economic stability.</p> <p>(2) Without prejudice to the generality of subsection (1), the bank shall:</p> <p>(a) maintain monetary stability;</p> <p>(b) maintain an external assets reserve;</p> <p>(c) issue currency notes and coins;</p> <p>(d) be the banker to the Government;</p> <p>(e) act as financial adviser to the Government and manager of public debt;</p> <p>(f) advise the Government on monetary policy as is provided under section 32(3);</p> <p>(g) where appropriate, act as agent in financial matters for the Government;</p> <p>(h) be the banker to financial institutions;</p> <p>(i) be the clearinghouse for cheques and other financial instruments for financial institutions;</p> <p>(j) supervise, regulate, control and discipline all financial institutions and pension funds institutions;</p> <p>(k) where appropriate, participate in the economic growth and development programmes.</p>
United Republic of Tanzania	Benki Kuu Ya Tanzania	No	<p>1) The principal functions of the Bank shall be to exercise the functions of a central bank and, without prejudice to the generality of the foregoing, to formulate, implement and be responsible for monetary policy, including exchange rate policy, to issue currency, to regulate and supervise banks and financial institutions including mortgage financing, development financing, lease financing, licencing and revocation of licences and to deal, hold and manage gold and foreign exchange reserves of the United Republic of Tanzania.</p> <p>(2) The Bank shall compile, analyse, and publish the monetary, financial, balance of payments statistics and other statistics covering various sectors of the national economy.</p> <p>(3) In the pursuit of its objectives and performance of its tasks, the Bank shall be autonomous and accountable as provided for under this Act.</p>
Zambia	Bank of Zambia	No	<p>(1) Subject to the Constitution, the additional function of the Bank is to formulate and implement monetary and supervisory policies, directed at achieving and maintaining price stability and financial stability.</p> <p>(2) Where it is considered that there is a conflict between price stability and financial stability referred to under subsection (1), price stability shall take precedence.</p>

LDC REGIONAL GROUP: Asian LDCs

Country	Central Bank	Legal Development Mandate	Text
Afghanistan	Da Afghanistan Bank	Yes, subordinate	<p>The primary objective of Da Afghanistan Bank shall be to achieve and to maintain domestic price stability.</p> <p>The other objectives of Da Afghanistan Bank, which shall be subordinated to the primary objective of Da Afghanistan Bank, shall be to foster the liquidity, solvency and effective functioning of a stable market based financial system, and to promote a safe, sound and efficient national payment system.</p> <p>Without prejudice to its primary objectives, Da Afghanistan Bank shall support the general economic policies of the State, and promote sustainable economic growth.</p>
Bangladesh	Bangladesh Bank	Yes	<p>Whereas, it is necessary to establish a central bank in Bangladesh to manage the monetary and credit system of Bangladesh with a view to stabilizing domestic monetary value and maintaining a competitive external par value of the Bangladesh Taka towards fostering growth and development of country's productive resources in the best national interest</p> <p><i>NOTE:</i> vision on website mentions supporting rapid broad based inclusive economic growth, employment generation and poverty eradication</p>
Bhutan	Royal Monetary Authority of Bhutan	Yes, subordinate	<p>The primary objective of the Authority shall be to formulate 7. and implement monetary policy with a view to achieving and maintaining price stability. 8. Without prejudice to the primary objective, the secondary objectives of the Authority shall be to formulate and apply financial regulations and prudential a) guidelines to ensure the stability and integrity of the financial system, as empowered by this Act or by any other Act; promote an efficient financial system comparable to b) international best practices; promote, supervise and, if necessary, operate national c) and international payment and settlement system including electronic transfer of funds by financial institutions, other entities and individuals; promote sound practices and good governance in the d) financial services industry to protect it against systemic risk; and e) Subject to the above, promote macro-economic stability and economic growth in Bhutan.</p> <p>Reinforcing stable and inclusive economic growth.</p>
Cambodia	National Bank of Cambodia	Yes	<p>The mission of the National Bank of Cambodia is to determine and direct the monetary policy aimed at maintaining price stability in order to facilitate economic development within the framework of Cambodia's economic and financial policy</p>
Lao People's Democratic Republic	Bank of the Lao People's Democratic Republic	Yes	<p>The Bank of the Lao People's Democratic Republic serves as the secretariat for the Government in monetary management stably, financial institution supervision soundly, and payment system development efficiently in order to support the national socio-economic development.</p> <p>The Bank of the Lao PDR implements duties as follows:</p> <ol style="list-style-type: none"> 1. to prepare draft of policy, strategy to propose for Government consideration; 2. to apply the policy and strategy into action plan and project of the Bank of the Lao PDR for implementation; 3. to prepare draft of new and amended law, presidential decree and governmental decree proposing for Government consideration; 4. to disseminate law and regulation relating to financial and banking to public; 5. to implement monetary policy by using appropriate monetary policy tool in each period circumstance; 6. to manage foreign exchange in compliance with law and regulation; 7. to maintain and manage foreign currency reserve; 8. to supervise and inspect operation of financial institution 7; 9. to supervise and inspect payment's instrument, mechanism and system for safety manner; 10. to open its own account and Government account in foreign central Bank, international financial institution and foreign financial institution; 11. to accept open account to the Government, financial institution and international organization; 12. to distribute, sale, buy and settle the Government bond and bond guaranteed by the Government as defined in the relevant regulation; 13. to provide the opinion for the Government on the foreign currency borrowing from domestic or foreign country; 14. to reconcile and analyze information on economic, financial, monetary and performance of financial institution in the domestic and abroad; 15. to represent for the Government in international financial organization, cooperate and sign agreement regarding to finance and monetary with foreign country and international financial organization base on Government assignment; 16. to form, amend, supervise and develop accounting system of the Bank of the Lao PDR and financial institution; 17. to coordinate and cooperate with other sectors concerned both domestic and abroad in order to ensure its harmonious performance; 18. to report on its performance and relevant outstanding economic issue to the Government regularly; 19. to perform other duties provided by law and regulation.

LDC REGIONAL GROUP: Asian LDCs			
Country	Central Bank	Legal Development Mandate	Text
Myanmar	Central Bank of Myanmar	Yes, subordinate	The main aim of the Central Bank shall be to achieve and maintain the domestic price stability. 6. The Central Bank shall, in accordance with its main aim, endeavor to attain the following objectives: (a) to achieve monetary stability; (b) to achieve financial system stability; (c) to develop efficient payments and settlement system, (d) to support the general economic policy of the Government conducive to the sustained economic development.
Nepal	Nepal Rastra Bank	Yes	To formulate necessary monetary and foreign exchange policies in order to maintain the stability of price and balance of payment for economic stability and sustainable development of economy, and manage it;
Yemen	Central Bank of Yemen	Yes	Monetary Policy: The Central Bank uses all monetary policy tools to control inflation, stabilizes exchange rates of the national currency and create the right climate for investment and growth.

Source: Central bank websites and government gazettes.

LDC REGIONAL GROUP: Island LDCs			
Country	Central Bank	Legal Development Mandate	Text
Kiribati	-	-	No central bank
Sao Tome and Principe	Banco Central de São Tomé e Príncipe	Yes	Mandate: As the central bank of Sao Tome and Principe, it is the bank's special responsibility, in accordance with the general orientation of the government, to formulate and execute in the areas of monetary, credit, interest, and exchange policies, the most appropriate policies, as well as to promote the monitoring of results. Website: The strategic objective of monetary policy is to maintain price stability, with a view to achieving macroeconomic balance and consequently promoting sustainable economic growth.
Solomon Islands	Central Bank of Solomon Islands	Yes, subordinate	(1) The primary objective of the Central Bank shall be to achieve and to maintain domestic price stability. (2) An additional objective of the Central Bank, which shall be subordinated to the primary objective, shall be to foster and to maintain a stable financial system. (3) Without prejudice to attainment of these two objectives, the Central Bank shall support the general economic policies of the Government.
Timor-Leste	Banco Central de Timor-Leste	Yes, subordinate	The Bank's main purpose is to achieve and maintain internal price stability. In addition to the above, the Bank shall foster and maintain a stable and competitive system based on free market principles. Without prejudice to the previous articles, the Bank shall support the Government's general economic policies.
Tuvalu	-	-	No central bank

References

- AfDB (2021a). *African Economic Outlook 2021: From Debt Resolution to Growth – The Road Ahead for Africa*. African Development Bank. Abidjan, Côte d'Ivoire.
- AfDB (2021b). Madagascar: Country strategy paper 2022–2026. Abidjan, Côte d'Ivoire.
- AfDB (2022). *African Economic Outlook 2022: Supporting Climate Resilience and a Just Transition in Africa*. Abidjan, Côte d'Ivoire.
- AfDB, Global Center on Adaptation and UNEP Finance Initiative (2021). Climate risk regulation in Africa's financial sector and related private sector initiatives. Abidjan, Côte d'Ivoire.
- Agri-ProFocus Zambia (2014). A market study on micro finance services in Zambia. Lusaka.
- Akhtar Aziz Z (2013). The central bank financial stability mandate and governance challenges. *SEACEN Financial Stability Journal*. 11–35.
- Aklin M, Kern A and Negre M (2021). Does central bank independence increase inequality? Policy Research Working Paper No. 9522. World Bank. Washington, D.C.
- Alogoskoufis S et al. (2018). ECB economy-wide climate stress test: Methodology and results. ECB Occasional Paper No. 281. European Central Bank. Frankfurt, Germany.
- Andreoni A, Creamer K, Mazzucato M and Steyn G (2022). How can South Africa advance a new energy paradigm? A mission-oriented approach to megaprojects. *Oxford Review of Economic Policy*. 38(2):237–259.
- Augoyard S, Fenton A, Durrani A and Volz U (2021). Assessing the effectiveness and impact of central bank and supervisory policies in greening the financial system across the Asia-Pacific. Paper prepared for the International Conference on Statistics for Sustainable Finance, co-organized with the Banque de France and the Deutsche Bundesbank, 14–15 September 2021, Paris. Bank for International Settlements. Basel, Switzerland. Available at https://www.bis.org/ifc/publ/ifcb56_06.pdf.
- Baer M, Campiglio E and Deyris J (2021). It takes two to dance: Institutional dynamics and climate-related financial policies. *Ecological Economics*. 190(4): 107210
- Bangladesh Bank (2020). Sustainable finance policy for banks and financial institutions. Sustainable Finance Department. Dhaka.
- Bangladesh Bank (2022). Quarterly review report on sustainable finance of banks & financial institutions, July–September, 2022. Sustainable Finance Department. Dhaka.
- Bangladesh, Ministry of Environment, Forest and Climate Change (2022). Climate Change initiatives of Bangladesh: Achieving climate resilience. Ministry of Environment, Forest and Climate Change. Dhaka.
- Bank of England (2021). Options for greening the Bank of England's Corporate Bond Purchase Scheme. Bank of England Discussion Paper. London.
- Bank of Zambia (2020a). Annual Report 2020. Lusaka.
- Bank of Zambia (2020b). Strategic Plan 2020–2023: Building an inclusive and resilient financial sector. Lusaka.
- Banque de France/ACPR (2021). A first assessment of financial risks stemming from climate change: The main results of the 2020 climate pilot exercise. No. 122–2021. Banque de France/L'Autorité de contrôle prudentiel et de résolution. Paris.
- Battiston S, Dafermos Y and Monasterolo I (2021). Climate risks and financial stability. *Journal of Financial Stability*. 54.
- Baudino P and Svoronos JP (2021). Stress-testing banks for climate change – a comparison of practices. *FSI Insights*. 34.
- Beirne J, Renzhi N and Volz U (2021). Feeling the heat: Climate risks and the cost of sovereign borrowing. *International Review of Economics & Finance*. 76: 920–936.
- Bezemer D, Ryan-Collins J, Van Lerven F and Zhang L (2023). Credit policy and the 'debt shift' in advanced economies. *Socio-Economic Review*. 21(1): 437–478.
- BIS (2021). Climate-related risk drivers and their transmission channels. Basel Committee on Banking Supervision. Basel, Switzerland.
- 285/November 2021. European Central Bank. Frankfurt.
- Boneva L, Ferrucci G and Mongelli FP (2022). Climate change and central banks: What role for monetary policy? *Climate Policy*. 22(6): 770–787.
- Bose S, Khan HZ and Monem RM (2021). Does green banking performance pay off? Evidence from a unique regulatory setting in Bangladesh. *Corporate Governance: An International Review*. 29(2):162–187.
- Brav A and Heaton JB (2021). Brown assets for the prudent investor. *Harvard Business Review Online*. Available at SSRN: <https://ssrn.com/abstract=3895887>.
- Campiglio E (2016). Beyond carbon pricing: The role of banking and monetary policy in financing the transition to a low-carbon economy. *Ecological Economics*. 121: 220–230.
- Campiglio E, Dafermos Y, Monnin P, Ryan-Collins J, Schotten G and Tanaka M (2018). Climate change challenges for central banks and financial regulators. *Nature Climate Change*. 8(6): 462–468.

- Cevik S and Tovar Jalles J (2020). Feeling the heat: Climate shocks and credit ratings. IMF Working Paper No. WP/20/286. IMF, Washington, D.C.
- Chowdhury M A, Hasan MK and Islam SLU (2022). Climate change adaptation in Bangladesh: Current practices, challenges and the way forward. *The Journal of Climate Change and Health*. 6.
- Christensen BV and Schanz JF (2018). Central banks and debt: Emerging risks to the effectiveness of monetary policy in Africa? BIS papers No. 99. Bank for International Settlements, Basel Committee on Banking Supervision. Basel, Switzerland.
- Christensen BV and Upper C (2017). Building resilience to global risks: Challenges for African central banks. BIS papers No. 93. Bank for International Settlements, Committee on Banking Supervision. Basel, Switzerland.
- Cossin D and Bourqui E (2020). 3 key challenges to central bank governance – and how they are reshaping the global economy. International Institute for Management Development (IMD). Lausanne, Switzerland.
- Dafermos Y (2021). Climate change, central banking and financial supervision: Beyond the risk exposure approach. SOAS Department of Economics Working Paper No. 243. University of London, SOAS. London.
- Dafermos Y and Nikolaidi M (2021). How can green differentiated capital requirements affect climate risks? A dynamic macrofinancial analysis. *Journal of Financial Stability*. 54(c).
- Dafermos Y and Nikolaidi M (2022). Greening capital requirements. The INSPIRE Sustainable Central Banking Toolbox. Policy paper 08. University of London, SOAS. London.
- Dall'Orto Mas R, Vonessen B, Fehlker C and Arnold K (2020). The case for central bank independence: A review of key issues in the international debate. Occasional Paper No. 248. European Central Bank. Frankfurt, Germany.
- DESA (2022). Credit rating agencies and sovereign debt: Four proposals to support achievement of the SDGs. DESA Policy Brief No. 131. Department of Economic and Social Affairs. New York.
- Dikau S, Robins N, Smoleńska A, van 't Klooster J and Volz U (2022). Net zero transition plans: A supervisory playbook for prudential authorities. Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science. London.
- Dikau S and Ryan-Collins J (2017). Green central banking in emerging market and developing country economies. New Economics Foundation. London.
- Dikau S and Volz U (2021). Central bank mandates, sustainability objectives and the promotion of green finance. *Ecological Economics*. 184, 107022.
- Draghi M (2018). Central bank independence. First Lamfalussy lecture. National Bank of Belgium. Brussels.
- Dunz N, Emambakhsh T, Hennig T, Kaijser M, Kouratzoglou C and Salleo C (2021). ECB's Economy-Wide Climate Stress Test. ECB Occasional Paper, No. 2021/281. European Central Bank. Frankfurt. *SSRN Electronic Journal*. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3929178.
- ECB (2021). Financial Stability Review. Frankfurt, Germany.
- ECB (2022). 2022 climate risk stress test. Frankfurt, Germany.
- Eckstein D, Künzel V and Schäfer L (2021). Global Climate Risk Index 2021. Germanwatch. Bonn, Germany.
- Emery T (2023). Solar can't scale in the dark: Why lessons about subsidies and transparency from IFC's Scaling Solar Zambia can reignite progress toward deploying clean energy. Energy for Growth Hub. Available at <https://energyforgrowth.org/article/solar-cant-scale-in-the-dark-why-lessons-about-subsidies-and-transparency-from-ifcs-scaling-solar-zambia-can-reignite-progress-toward-deploying-clean-energy/>.
- European Parliament (2022). Green central banking. Briefing. European Union. Brussels.
- Fanizza D and Cerami L (2023). A market for brown assets to make finance green. *IMF Working Papers* 2023(011). International Monetary Fund. Washington, D.C.
- Financial Times* (2023). How do the Federal Reserve and ECB differ on tackling climate change? 13 January.
- Gabor D (2022). Green central banking. In: Heinrich-Böll-Stiftung, ZOE, Institute for Future-Fit Economies, and Finanzwende Recherche, eds. *Publication series Economic + Social Issues*. Berlin: 39–45.
- Garriga AC (2016). Central bank independence in the world: A new data set. *International Interactions*. 42(5): 849–868.
- German Development Institute (d.i.e) (2016). Green finance: Actors, challenges and policy recommendations. Briefing paper No. 23/2016. Bonn, Germany.
- Global Center on Adaptation (2022). *State and Trends in Adaptation Report 2022: Adaptation at the Core of a Prosperous Africa in an Uncertain and Warming World*. Rotterdam, Kingdom of the Netherlands.
- Goodhart C and Lastra R (2023). The changing and growing roles of independent central banks now do require a reconsideration of their mandate. *Accounting, Economics, and Law: A Convivium*. De Gruyter. Available at <https://doi.org/10.1515/ael-2022-0097>.
- Habib SMA (2019). Financial sector in Bangladesh: Recent trends and benchmarking for the Government. CPD Working Paper No. 128. Center for Policy Dialogue. Dhaka

- Heinrich-Böll-Stiftung, ZOE, Institute for Future-Fit Economies and Finanzwende Recherche, eds. (2022). Making the great turnaround work: Economic policy for a green and just transition. *Publication Series Economic + Social Issues*. 27. Berlin.
- Hunter R, Crespo O, Coldrey K, Cronin K and New M (2020). Research highlights: Climate change and future crop suitability in Zambia. University of Cape Town. Cape Town, South Africa.
- Husted L, Rogers J and Sun B (2020). Monetary policy uncertainty. *Journal of Monetary Economics*. 115: 20–36.
- IFC (2018). Raising \$23 trillion: Greening banks and capital markets for growth. G20 Input Paper on Emerging Markets. International Finance Corporation. Washington, D.C.
- IMF (2016). Republic of Madagascar financial system stability assessment. IMF Country Report No. 16/377. Washington, D.C.
- IMF (2020). Republic of Madagascar: Selected issues. IMF Country Report No. 20/61. Washington, D.C.
- IMF (2022). Zambia: Request for an arrangement under the Extended Credit Facility. Press release; staff report; staff supplement; staff statement; and statement by the Executive Director for Zambia. IMF Country Report No. 22/292. Washington, D.C.
- IMF (2023). Bangladesh: Request for an arrangement under the Extended Fund Facility, request for arrangement Under the Extended Credit Facility, and request for an arrangement under the Resilience and Sustainability Facility. IMF Country Report No. 23/66. Washington, D.C.
- IPCC (2015). *Climate Change 2014: Synthesis Report*. Geneva.
- Jordan JC (2021). Climate shocks and adaptation strategies in coastal Bangladesh: Does microcredit have a part to play? *Climate and Development*. 13(5): 454–466. Taylor & Francis. Abingdon, United Kingdom.
- Jordan TJ (2022). Current challenges to central banks' independence. Annual O. John Olcay Lecture on Ethics and Economics at the Peterson Institute for International Economics, Washington, D.C., 11 October 2022. Swiss National Bank. Berne.
- J-PAL (2018). Microcredit: Impacts and limitations. Abdul Latif Jameel Poverty Action Lab. Available at <https://www.povertyactionlab.org/policy-insight/microcredit-impacts-and-promising-innovations> (accessed 24 May 2023).
- Kearns J (2021). Evolving bank and systemic risk. Speech to the 34th Australasian Finance and Banking Conference, online. 16 December 2021. Reserve Bank of Australia. Available at <https://www.rba.gov.au/speeches/2021/sp-so-2021-12-16.html>.
- Kedward K, Gabor D and Ryan-Collins J (2022). Aligning finance with the green transition: From a risk-based to an allocative green credit policy regime. No. WP 2022/11. UCL Institute for Innovation and Public Purpose. London.
- Khairunnessa F, Vazquez-Brust DA and Yakovleva N (2021). A Review of the recent developments of green banking in Bangladesh. *Sustainability*. 13(4):1904.
- Khan M, Watkins M, Aminuzzaman S, Khair S and Khan MZK (2020). Climate change investment in Bangladesh: Leveraging dual-use characteristics as an anti-corruption tool. Working Paper No. 033. SOAS, University of London, and Transparency International. London and Dhaka.
- Kling G, Volz U, Murinde V and Ayas S (2021). The impact of climate vulnerability on firms' cost of capital and access to finance. *World Development*. 137: 105131.
- Krogstrup S (2022). Perspectives on central bank mandates, instruments and policy trade-offs. Speech to National Bank of Belgium Policy Seminar on Perspectives on Central Bank Mandates, Instruments and Policy Trade-Offs, 31 March 2022. Bank for International Settlements. Basel, Switzerland. Available at <https://www.bis.org/review/r220426g.pdf>.
- Kyriakopoulou D, Antonakaki T, Bekiari M, Kartapani A and Rapti E (2022). Central banks and climate-related disclosures: Applying the TCFD's recommendations. Inspire No. 03. London School of Economics. London.
- Madagascar, Presidency (2015). Madagascar's intended nationally determined contribution. Available at <https://thevcf.org/wp-content/uploads/2020/10/Madagascar-INDC-Eng-1.pdf>.
- Mia MA, Lee H-A, Chandran V, Rasiah R and Rahman MM (2019). History of microfinance in Bangladesh: A life cycle theory approach. *Business History*. 61: 703–733.
- NGFS (2019). Macroeconomic and financial stability: Implications of climate change. NGFS secretariat. Paris.
- NGFS (2020a). Progress report on the implementation of sustainable and responsible investment practices in central banks' portfolio management. NGFS Technical document. NGFS secretariat. Paris.
- NGFS (2020b). Climate change and monetary policy: Initial takeaways. NGFS secretariat. Paris.
- NGFS (2022). NGFS climate scenarios for central banks and supervisors. (September). NGFS secretariat. Paris.
- Oduor J and Kebba J (2019). Financial sector regulation and governance in Africa. In: Makina D, ed. *Extending Financial Inclusion in Africa*. Academic Press, an imprint of Elsevier. London.
- Osmani SR (2016). Models of microcredit delivery and social norm. *The Bangladesh Development Studies*. 39(3–4): 1–40. Bangladesh Institute of Development Studies. Dhaka.

- Rab NB and Hoque R (2017). Is 'greening' the key to sustain in global market for Bangladeshi readymade garments industry? *International Journal of Business and Management*. 12(3):135.
- Romelli D (2022). The political economy of reforms in central bank design: Evidence from a new dataset. *Economic Policy*. 37(112): 641–688.
- Roy S (2017). Industrial policy 2016 of Bangladesh: An assessment from the green perspective. *Bangladesh Journal of Public Administration*. 25(2): 44–55.
- Schnabel I (2022). A new age of energy inflation: Climateflation, fossilflation and greenflation. Remarks at the Panel on Monetary Policy and Climate Change at the ECB and its Watchers XXII Conference in Frankfurt am Main, 17 March 2022. Available at https://www.ecb.europa.eu/press/key/date/2022/html/ecb.sp220317_2~dbb3582f0a.en.html.
- Schnabel I (2023). Monetary policy tightening and the green transition. Speech at the International Symposium on Central Bank Independence, Sveriges Riksbank, Stockholm, 10 January 2023. Available at <https://www.ecb.europa.eu/press/key/date/2023/html/ecb.sp230110~21c89bef1b.en.html>.
- Şimandan R and Păun C (2021). The costs and trade-offs of green central banking: A framework for analysis. *Energies*. 14(16): 51–68.
- Tembo B, Sihubwa S, Masilokwa I and Nyambe-Mubanga M (2020). Economic implication of climate change in Zambia. SA-TIED Working Paper No. 137. Southern Africa-Towards Inclusive Economic Development. Available at <https://sa-tied-archive.wider.unu.edu/sites/default/files/pdf/SA-TIED-WP-137.pdf>.
- UNCTAD (2015). Credit rating agencies: Junk status? Policy Brief No. 39. Geneva.
- UNCTAD (2017). *The Least Developed Countries Report 2017: Transformational Energy Access*. (United Nations publication. Sales No. E.17.II.D.6. New York and Geneva).
- UNCTAD (2019a). *Trade and Development Report 2019: Financing a Global Green New Deal*. (United Nations publication. Sales No. E.19.II.D.15. New York and Geneva).
- UNCTAD (2019b). *The Least Developed Countries Report 2019: The Present and Future of External Development Finance – Old Dependence, New Challenges*. (United Nations publication. Sales No. E.20.II.D.2. New York and Geneva).
- UNCTAD (2020). *The Least Developed Countries Report 2020: Productive Capacities for the New Decade*. (United Nations publication. Sales No. E.21.II.D.2. New York and Geneva).
- UNCTAD (2021a). *Trade and Development Report 2021. From Recovery to Resilience: The Development Dimension*. (United Nations publication. Sales No. E.22.II.D.1. New York and Geneva).
- UNCTAD (2021b). *The Least Developed Countries Report 2021: The Least Developed Countries in the Post-COVID World – Learning from 50 Years of Experience*. (United Nations publication. Sales No. E.21.II.D.4. New York and Geneva).
- UNCTAD (2021c). *A European Union Carbon Border Adjustment Mechanism: Implications for Developing Countries*. Geneva.
- UNCTAD (2022a). *The Least Developed Countries Report 2022: The Low Carbon Transition and Its Daunting Implications for Structural Transformation*. (United Nations publication Sales No. E.22.II.D.40. New York and Geneva).
- UNCTAD (2022b). National productive capacities gap assessment: Zambia. Geneva.
- UNCTAD (2022c). Vulnerability profile of Bangladesh. Geneva.
- UNCTAD (2023a). *Trade and Development Report 2022: Development Prospects in a Fractured World – Global Disorder and Regional Responses*. (United Nations publication. Sales No. E.22.II.D.44. New York and Geneva).
- UNCTAD (2023b). Understanding voluntary sustainability standards: A strengths, weaknesses, opportunities, and threats analysis. Geneva.
- UNCTAD (2023c). Key priorities in charting decarbonization pathways in least developed countries. Geneva.
- UNDP (2023). Reducing the cost of finance for Africa: The role of sovereign credit ratings. Regional Bureau for Africa. New York.
- UNEP (2017). On the role of central banks in enhancing green finance. Inquiry Working Paper 17/01. Nairobi.
- UNFCCC (2020). Just transition of the workforce, and the creation of decent work and quality jobs. Technical paper. Bonn, Germany.
- United Nations (1992). United Nations Framework Convention on Climate Change. FCC/INFORMAL/84/Rev.1. New York.
- van 't Klooster J and van Tilburg R (2020). Targeting a sustainable recovery with green TLTROs. Positive Money Europe and Sustainable Finance Lab. Available at <https://www.positivemoney.eu/wp-content/uploads/2020/09/Green-TLTROs.pdf>.
- Vermeulen R, Schets E, Lohuis M, Kölbl B, Jansen D-J and Heeringa W (2018). An energy transition risk stress test for the financial system of the Netherlands. *Occasional Studies*. 16(7). De Nederlandsche Bank N.V. Amsterdam, Kingdom of the Netherlands.
- Voskoboynik DM and Andreucci D (2022). Greening extractivism: Environmental discourses and resource governance in the 'Lithium Triangle.' *Environment and Planning E: Nature and Space*. 5(2): 787–809.
- Wachtel P and Blejer MI (2020). A fresh look at central bank independence. *Cato Journal*. 40(1): 105–132.

World Bank (2020). Bank Regulation and Supervision a Decade after the Global Financial Crisis. Global Financial Development Report. Washington, D.C.

World Bank, Cooperation in International Waters in Africa, International Water Management Institute and National Drought Mitigation Center (2021).

Drought resilience profiles: Madagascar. Briefing. Washington, D.C.

Zambia, Ministry of Commerce, Trade and industry (2018). National industrial policy, March. Available at <https://www.zda.org.zm/wp-content/uploads/2020/09/National-Industrial-Policy.pdf>.



5

Advancing reform of development finance
for the least developed countries

CHAPTER 5

Advancing reform of development finance for the least developed countries

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A. Moving from crisis to reform

The least developed countries (LDCs) today face a number of interlocked challenges. Climate change, the COVID-19 pandemic, and the war in Ukraine continue to have negative economic and social impacts across the world. However, the fallout from these crises is not equal between and within countries. By definition, LDCs are particularly vulnerable to external economic and climate-related shocks. Therefore, it is not surprising that the ongoing multiple crises have hit the LDCs disproportionately hard, wiping out years of development progress and leaving them in dire need of finance to rebuild and relaunch their efforts towards meeting the Sustainable Development Goals.

As the preceding chapters of this report show, a leading challenge facing LDCs is their lack of the fiscal space needed to ensure the continuity and adequate reach of social safety nets, enable investment in human capital and infrastructure to promote structural transformation, and shoulder the rising costs of climate change. There are several reasons for their lack of fiscal space.

For one, many LDCs are in a protracted debt crisis. In the aftermath of the 2008–2009 global financial crisis, debt in LDCs reached levels not seen since before the implementation of the Highly Indebted Poor Countries (HIPC) Initiative in the 1990s. The widening gap between debt stocks and export revenues, chronic current account deficits and weak domestic currencies have fuelled the risk of debt distress. Debt service costs have also risen to unsustainable levels, exceeding government expenditure on health care and education in an increasing number of LDCs (UNCTAD, 2023), and further constricting their fiscal space.

The COVID-19 pandemic was a main driver of rising spending needs due to increased health-related spending, as well as higher costs of maintaining social safety nets and supporting businesses during the global economic slowdown. The lack of fiscal space during that period of crisis limited the LDCs' ability to mount policy responses similar to those in developed countries. It also meant that they fell further behind in terms of economic growth, poverty reduction and – critically – development of productive capacities.

Costs for climate change adaptation as well as for loss and damage are on the rise. While the LDCs contribute only marginally to global greenhouse gas emissions (both past and present), they are among the most vulnerable countries to the impacts of climate change. Failure to undertake necessary investments

Multiple crises have hit the LDCs disproportionately hard, wiping out years of development progress

in adaptation can have severe socioeconomic consequences. For instance, if urgent investments in adaptation are not undertaken, climate change could reduce gross domestic product (GDP) by 2050 by as much as 6.8 per cent in Burkina Faso, 7.2 per cent in Mauritania, 10.5 per cent in Chad, 10.7 per cent in Mali and 11.9 per cent in the Niger, and push millions into poverty (World Bank, 2022).¹ As the examples cited in this report show, climate-related loss and damage costs present an enormous challenge for LDCs, and with the world off track in efforts to reach the objectives of the Paris Agreement, these costs will only increase in the future.

The increase in revenues required to cover rising costs and expenditure needs has not materialized, because the underlying and preceding fiscal and financing shortfalls have been compounded by the discretionary fiscal spending in response to the COVID-19 pandemic. As a result, many LDCs are facing a vicious cycle of crises and debt, even as their fiscal space is rapidly shrinking.

Existing mechanisms and sources of finance are inadequate to meet the needs of the LDCs to finance their sustainable development. Recent changes in the international aid architecture, pledges to increase public financing for development and/or to respond to climate change, plans to tackle the present external debt crisis, initiatives to raise global levels of liquidity, negotiations to reorient multilateral financial institutions, efforts to woo private investors into LDCs, and other initiatives or proposals have been woefully inadequate in meeting the challenge of financing for the development of these countries. These initiatives have not gone far enough, or not been fully implemented; neither have they addressed the root causes of systemic problems, or adequately considered the specificities of LDCs, as shown extensively in the previous chapters of this report.

Comprehensive reforms in the international financial architecture, coupled with increased commitments and innovative approaches, are necessary to meet the financial needs for sustainable development of the LDCs, and help build their resilience in the face of

¹ These projections are likely underestimates, since not all potential impact channels of climate change are included in the analysis.

global challenges. Debt distress is not solely a financial issue; it is also an acute development dilemma for LDCs. Added to this, climate change poses existential threats to vulnerable populations in these countries. The role of multilateralism in tackling the financial, fiscal and climate-related challenges facing LDCs and in ensuring their greater participation in global governance of these matters is clear. Multilateralism implies international cooperation in finding solutions to transnational problems. Concrete actions need to be taken urgently for LDCs to be able to overcome the interlocked challenges they face.

The following sections outline some priority actions that should be undertaken by LDC governments, along with development partners, international financial institutions and the international community at large, if these countries are to escape from their current development impasse.

B. Strengthening aid effectiveness for the least developed countries

The three key dimensions of finance for development in the LDCs are quantity, quality and access. In other words, finance needs to be available at the required scale, delivered through appropriate instruments, and underpinned by an international financial architecture that is adapted to the specific needs of these countries.

The gap between the commitment of 0.15–0.2 per cent of gross national income (GNI) of member countries of the Development Assistance Committee (DAC) – specified in the Sustainable Development Goal target 17.2 and in the Doha Programme

for Action – and actual disbursements of official development assistance (ODA) to LDCs was in the range of \$35 billion–\$63 billion in 2021 alone. It is important that ODA flows to LDCs be increased, as a first step, to the upper levels committed by developed countries by 2025.

Moreover, the increase should be exclusively in the form of grants to allow the LDCs to rebuild their fiscal space. Beyond the quantitative increase, crucially, the international development community should seek to simplify access modalities and lower the transaction costs of ODA by reducing associated administrative burdens, harmonizing processes and using recipients countries' own administrative systems and structures, rather than establishing parallel systems dedicated to ODA delivery and management. Given the growing complexity of the international aid architecture, ODA would have a greater impact if it adhered to the five principles for smart aid: ownership, alignment, harmonization, managing for results and mutual accountability. In this sense, *The Least Developed Countries Report 2019* made the broader case for an Aid Effectiveness Agenda 2.0, which updated these principles to the realities of the new aid architecture and remains more pertinent than ever (UNCTAD, 2019).

C. Climate finance

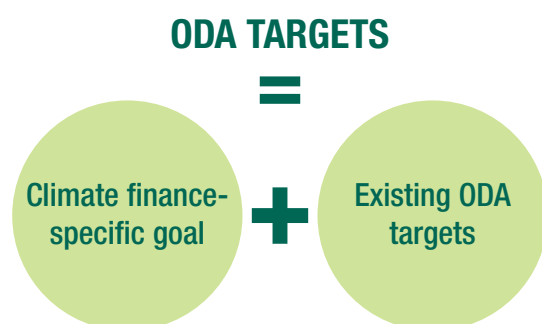
There is also a need to enhance the quantity, quality and delivery modes of climate finance for LDCs. Even the most optimistic estimates of climate finance flows to the LDCs show that they are insufficient, not only to meet their growing needs for investments in adaptation, but also to cover the costs of loss and damage from catastrophic weather events. Therefore, the international community should consider complementing the existing ODA target with a specific target for climate finance for LDCs. Developed countries need to commit to a substantial increase in the overall volume of climate finance flows to LDCs, including providing a larger proportion of grants to avoid creating – or exacerbating – a debt trap. Such flows should also focus more on adaptation to climate change, which is a priority for LDCs.

Moreover, greater levels of transparency are needed in reforms and commitments, possibly by moving towards a unified accounting framework for climate finance. Reforms should also include focusing on climate finance flows that are channelled through dedicated climate funds, such as the Green Climate Fund. Since there would be no doubt that funds disbursed by designated climate finance vehicles are indeed climate finance, double counting

Closing the gap between ODA targets and disbursements should take the form of grants



A climate finance-specific goal should complement ODA targets for LDCs



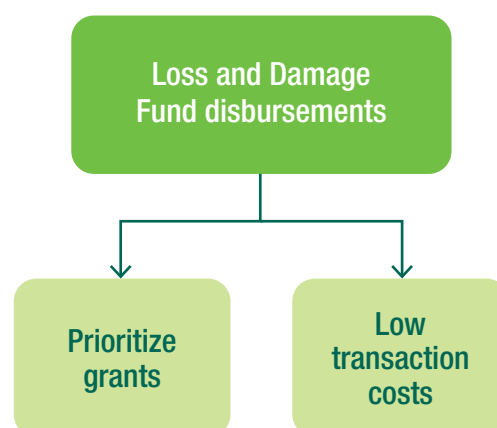
between development finance and climate finance would be avoided. Given the close interlinkages between climate and development, climate change considerations need to be included in development planning and in the programming of ODA. However, accounting of development finance and climate finance should be separated.

“Green” fiscal reforms could unlock financing for climate and other development areas. This would involve redirecting some financing away from subsidies given to activities that generate greenhouse gases in donor countries, and channelling it to finance development and climate resilience in LDCs. These reforms would thereby serve a double purpose of supporting both the environment and development. Political will is key to unlocking this large source of new liquidity.

The international climate finance architecture is complex and fragmented, which constitutes a roadblock for countries with limited institutional capacities, including the LDCs. Thus, priority should be given to simplifying and accelerating access to available funds – both existing climate funds and those provided through newly established climate finance vehicles, such as the Loss and Damage Fund (LDF).

LDCs, being among the countries most vulnerable to climate change, should receive priority access to financing for climate-related loss and damage. Small island developing States (SIDS) should also receive priority financing for similar reasons. The international community should ensure that the LDF becomes operational rapidly, with first disbursements made in 2024.

Loss and Damage Fund disbursements should prioritize grants and involve low transaction costs



In considering climate-related loss and damage, the new LDF could play a pivotal role for LDCs if certain conditions are met. The following conditions would enhance the Fund's impact:

- An adequate volume of additional funds, commensurate with actual loss and damage, should be made available. If existing funds are simply diverted to the LDF, the latter will not have the desired impact. In this regard, developed countries need to guarantee a minimum floor for annual inflows to the LDF, and underpin it with a credible and robust resource mobilization strategy.
- Efforts should be made for rapid operationalization of the LDF, so that it can start disbursing funds quickly, including setting a target for releasing the first disbursements in 2024.
- Access to the LDF should be direct and simple, and transaction costs kept low.
- Access to the LDF should not result in higher debt burdens. Therefore, the funds should take the form of grants (rather than loans) to cover costs of loss and damage caused by the impacts of climate change.
- In the likely scenario that claims exceed available resources, decisions on the allocation of funds should be based on economic and climate-related vulnerabilities. This would enhance the impact of the fund for LDCs that

face multidimensional vulnerabilities but lack fiscal space.

- The LDF should cover both extreme weather events as well as slow onset loss and damage (e.g. from rising sea levels, saltwater intrusion and land degradation), as both can impose significant costs on affected countries. There could be separate funding windows for these two types of loss and damage to reflect differences in financing and processing requirements (emergency funding vs. project funding).
- Additional costs, such as fees or insurance premiums, should be avoided. Designing the fund like an insurance scheme would limit access by the most vulnerable countries, including LDCs.

If these conditions are met, the LDF has the potential to significantly boost the resilience of LDCs as they strive to achieve the Sustainable Development Goals while being the most vulnerable to the impacts of climate change.

D. Reforming the international financial architecture

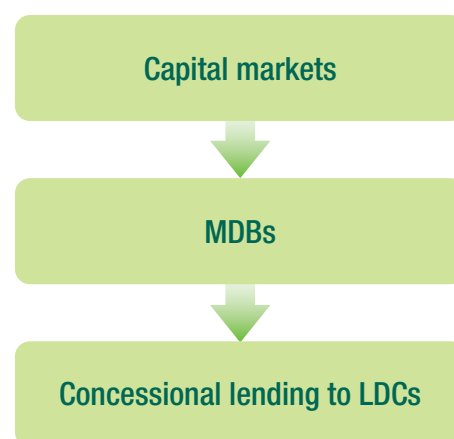
Improvements in financing for development for LDCs should be part of broader reforms of the international financial architecture. In this context, recent proposals by the United Nations for an ambitious programme of reforms need to be implemented. And due consideration should be given to UNCTAD's call for the adoption of an "even-handed" approach between debtors and creditors, including paying greater attention to the role played by institutions and policies in creditor countries in triggering international financial crises.

In view of the key role of multilateral development banks (MDBs) as providers of concessional finance to LDCs, a large increase in funding through these institutions needs to be part of any meaningful reform of the development finance system. In order to provide more concessional liquidity, MDBs themselves need to borrow more on the capital market. In this regard, the implementation of the recommendations of the Group of 20 Independent Review of MDBs' Capital Adequacy Frameworks (CAF) could help to unlock substantial additional resources that could be made available to LDCs on highly concessional terms.² The 15 MDBs included in the Group of

² Such channelling of funds from international capital markets to LDC development financing would not jeopardize the AAA ratings of MDBs.

20 independent review held \$1.2 trillion of callable capital, corresponding to 91 per cent of their subscribed capital in 2020 (Independent Expert Panel convened by the G20, 2022).³ Including callable capital in the risk framework of MDBs would enable them to increase their lending on highly concessional terms by hundreds of billions of dollars. For instance, it was estimated that the World Bank and the five largest regional development banks could jointly expand lending by as much as \$750 billion while maintaining their AAA rating based on callable capital (Humphrey, 2020). LDCs and other developing countries that face higher borrowing costs on capital markets would benefit from such an expansion, particularly given the further tightening of global financing conditions (United Nations, 2023). Moreover, developed countries will need to ensure that the 21st replenishment of the International Development Association (IDA21) is ambitious and commensurate with the growing needs of LDCs.

Multilateral development banks could tap capital markets to boost concessional lending to LDCs



Special drawing rights (SDRs) of the International Monetary Fund (IMF) are a source of liquidity that can and should be unlocked. The general allocation of SDRs in the wake of the COVID-19 pandemic in 2021 has shown that these instruments can quickly boost

³ Moreover, the 20 MDBs rated by Fitch jointly have close to \$2 trillion of callable capital (<https://www.fitchratings.com/research/sovereigns/understanding-callable-capital-28-11-2022>).

global liquidity in a period of crisis. However, as SDRs are distributed according to a country's quota of shares at the IMF, liquidity does not flow to where it is needed the most. As mentioned in chapter 1, the LDCs jointly received just over 2 per cent of the \$650 billion worth of SDRs in the 2021 general allocation. Reform of the rules for the distribution of SDRs is needed so that these instruments can be used to help respond to the pressing financial needs of the LDCs. Accordingly, due consideration should be given to economic and climate-change vulnerabilities in their distribution. Another, practical way of unlocking liquidity for development finance is by "rechannelling" the SDRs allocated to developed countries. In other words, developed countries that do not need their entire SDR allocation could transfer some to the IMF or to other entities that are allowed to hold them so that they can be used to increase highly concessionary lending to countries in need. In practice this is often already done through the Poverty Reduction and Growth Trust (PRGT) or the Resilience and Sustainability Trust (RST) at the IMF. As at June 2023, the PRGT provided loans at zero interest rates (IMF, 2023), and it is recommended to extend zero interest rates to at least July 2025. In this context, during the Summit for a New Global Financial Pact in Paris in June 2023, the IMF announced that the objective of rechannelling \$100 billion in SDRs had been achieved. This is good news, but LDCs need more than a one-off measure; they need a regular, continuous flow of rechannelled SDRs, as their financing needs for meeting the Sustainable Development Goals and climate change costs are long-term in nature. MDBs could be another important avenue for leveraging rechannelled SDRs.

Finally, to build resilience, it is crucial that reforms of the international financial architecture are not only recognizant of the LDCs, but also support their needs in practice. Current power imbalances mean that LDCs face disproportionate costs of the global low-carbon transition. The incorporation of physical risks into the credit models used by credit rating agencies and financial institutions can lead to downgrades of LDCs, thereby reducing their access to finance. This makes it even more difficult for LDC governments and private sectors of climate vulnerable countries to raise finance to invest in climate adaptation and to cover climate-related losses.

Moreover, potential impacts of international standards and guidelines on access to finance by LDCs need to be considered. Ongoing reforms in global financial markets include the global push to implement uniform climate standards in the financial sector. These are at odds with the principle of common but differentiated responsibilities, which is a cornerstone of the global

It is crucial that reforms of the international financial architecture support the needs and priorities of LDCs

climate regime, and should therefore be revised. Such a revision should ensure that incorporating physical risks into the credit models used by credit rating agencies and financial institutions will not lead to downgrading LDCs, which would further reduce their access to finance.

E. Debt management

LDCs need a clear path out of their unsustainable debt patterns through a series of lifelines, such as grants, concessional loans and a debt treatment mechanism that is responsive, transparent and efficient in resolving unsustainable debt situations. It is therefore critical that developed-country partners do not substitute debt relief for official development flows, including ODA. Similarly, emergency lending during crises should be sparingly used as a complement to debt relief efforts, rather than treated as an opportunity to inflate debt stocks of the MDBs.

The Debt Service Suspension Initiative of the Group of 20 brought temporary relief to developing countries, including LDCs, but did not address the root cause of the debt crisis. Similarly, the Group of 20 Common Framework for Debt Treatments in its current state is not fit for purpose (chapter 3). Combining these two types of mechanism is a necessary but not sufficient condition for a comprehensive debt workout system, which should involve debt repayments being put on hold once debtors enter negotiations on debt resolution.

Moreover, the long-standing call by UNCTAD and other institutions for the implementation of a comprehensive debt workout system that could help broker negotiations between creditors and debtors should be given greater attention as a matter of priority. At present, such negotiations are characterized by stark power imbalances, in particular in the case of LDCs. Coordination should involve all key players, including private creditors and relevant non-DAC bilateral creditors, such as China. Indeed, China has become a major lender to LDCs, and has extended substantial rescue liquidity to developing countries in debt distress, including LDCs, on a bilateral basis (Horn et al., 2023).

Disaster clauses in loan agreements that allow a pause in debt repayments for countries experiencing natural disasters could help prevent climate-related extreme weather events from triggering debt crises. In this regard, the announcement made by the World Bank in June 2023 to introduce such clauses in its loan agreements with the most vulnerable countries is a step in the right direction.⁴ However, these clauses will only apply to new loans, and thus do not address the existing unsustainable debt burdens of many LDCs. Furthermore, in order to be effective, disaster clauses are needed not only in World Bank loans, but also in those of all creditors, including bilateral and private creditors, as well as all MDBs. In addition, the World Bank and other MDBs will need to evaluate options to retroactively include disaster clauses in existing loan agreements with LDCs.

The World Bank has also announced that it will allow countries the flexibility to redirect a portion of their lending portfolios for emergency response (“rapid response option”). While flexibility is what LDCs need, reshuffling an existing financing envelope would force governments facing disaster to choose between short-term relief and longer term investments in sustainable development. LDC governments and citizens already often face such difficult trade-offs. What is needed in times of disaster is a quick, real expansion of fiscal space to match immediate and additional costs. In other words, natural disasters should trigger debt write-offs commensurate with the incurred losses and damages, in addition to a pause in debt repayments. Proposals made in the Bridgetown Initiative with regard to the new Loss and Damage Fund include an automatic grant release in cases where an external agency assesses that a climate event caused loss and damage equivalent to 5 per cent or more of GDP.⁵ Such a mechanism could be backstopped by an arrangement to write off the debt of affected countries in cases of large disasters where available funds are insufficient to cover the full amount of a grant.

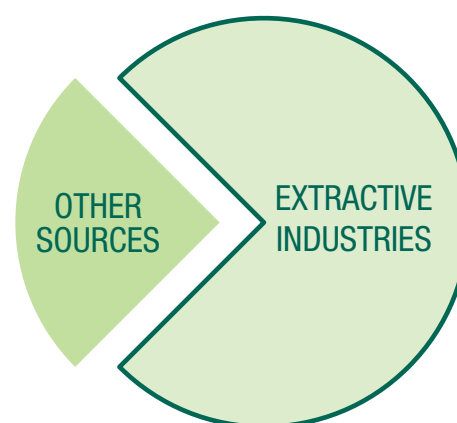
F. Improving domestic resource mobilization to build resilience

LDCs need to strengthen domestic resource mobilization by broadening their tax base, reviewing tax exemptions and other fiscal incentives, avoiding race-to-the-bottom tax competition, reducing tax

evasion and aggressive tax avoidance as well as other illicit financial flows, improving their tax administration and enhancing tax compliance. International tax cooperation could also help boost domestic revenues (United Nations, 2023b). Furthermore, developing their financial sector could help countries promote domestic retention of resources.

Improved management of natural resources through transparent and accountable governance frameworks, and ensuring that extractive industries contribute a fair share to public revenue through taxes, levies and royalties could help increase domestic revenues significantly. Resource-rich LDCs should carefully negotiate contracts with mining businesses, strengthen governance and review existing tax and other fiscal incentives with a view to maximizing revenues from their extractive industries. In particular, LDCs with reserves of minerals critical for the global energy transition need to ensure that extraction of those reserves contributes to sustainable development by securing a fair share of revenue and profits, and promoting domestic value addition in the production value chain of these minerals.

Extractive industries remain a major source of fiscal revenue and value addition in LDCs



The above-mentioned measures to improve domestic resource mobilization will certainly strengthen the ability of LDCs to negotiate for better financing costs (lower interest rates) and tenures (more longer term debt) that reduce the more short-term, emergency financing cycles. To safeguard growth and progress towards meeting the Sustainable Development Goals, the policy focus should be redirected

⁴ See https://www.worldbank.org/en/news/factsheet/2023/06/22/comprehensive-toolkit-to-support-countries-after-natural-disasters?intcid=ecr_hp_headerY_en_ext.

⁵ <https://geopolitique.eu/en/articles/breaking-the-deadlock-on-climate-the-bridgetown-initiative/>.

towards implementing climate-proofing structural transformation agendas.

Some LDCs could also foster domestic financial deepening to augment domestic resources and attract savings from their diaspora. Financial deepening could enable the mobilization and use of diaspora savings, for example through diaspora bonds, foreign-currency-denominated deposits and syndicated loans using remittances as collateral.

Development partners need to scale up capacity-building in LDCs in critical areas such as tax administration (including resource taxation), and strive to improve international tax cooperation to strengthen international tax norms, combat illicit financial flows and facilitate revenue collection in LDCs.

G. Climate central banking

The central banks of LDCs need to consider the use of central banking climate mitigation and adaptation tools provided that sustainable development and a strong macroprudential approach are part of their mandates, and only if their financial systems are suitably developed and used by a sufficiently large proportion of the population and the non-financial corporate sector. If these institutions introduce climate central banking tools, it is essential for them to be aligned with the industrial and fiscal policy targets of their respective countries. If the central bank of an LDC decides to use such tools, it needs to ensure that the financial system will continue to support the priority sectors that have been identified in national industrial policy. The central banks should never be viewed as “fixers” of the climate crisis and as substitutes for interventions that need to be made by their Governments, public authorities and

international organizations. They can only play a supportive role in the fight against climate change, and they should always act in coordination with their Governments and other public authorities.

LDCs’ central banks need to develop analytical frameworks that allow them to identify the extent of exposure of their financial system and macroeconomies to risks that might stem from the implementation of climate policies in other countries (especially their export partners) and from climate-related physical events. The international community is called upon to step up assistance in this regard.

H. South–South and regional initiatives

Diversification in the architecture of official financial flows to LDCs has been accompanied by the emergence of other developing countries as important sources of official external finance. Some of these other countries have proved to be important sources of long-term finance, in some cases providing funding for infrastructure projects. LDCs need to further exploit the potential of these sources of finance while making sure that they do not become additional sources of over-indebtedness. Developing-country partners can also serve as intermediaries for long-term investments.

In addition, South–South cooperation could assist LDCs in mobilizing and managing development finance by adopting concerted strategies at regional and subregional levels to bolster access to development finance, including developing common negotiating positions to raise funding and renegotiate debt.

References

- Horn S, Parks BC, Reinhart CM and Trebesch C (2023). China as an international lender of last resort. Policy Research Working Paper 10380. World Bank. Washington, D.C.
- Humphrey C (2020). All hands on deck: How to scale up multilateral financing to face the Covid-19 crisis. Overseas Development Institute. London.
- IMF (2023). Poverty Reduction and Growth Trust – Review of interest rate structure – Postponement. International Monetary Fund (IMF). Washington, D.C.
- Independent Expert Panel convened by the G20 (2022). Boosting MDBs’ investing capacity: An Independent Review of Multilateral Development Banks’ Capital Adequacy Frameworks.
- UNCTAD (2019). *The Least Developed Countries Report 2019: The Present and Future of External Development Finance – Old Dependence, New Challenges*. United Nations publication. Sales No. E.20.II.D.2. Geneva.
- UNCTAD (2023). *Trade and Development Report Update: Global Trends and Prospects* (April 2023). United Nations Conference on Trade and Development (UNCTAD). Geneva.
- United Nations (2023). *Reforms to the International Financial Architecture. Our Common Agenda No. 6*. United Nations. New York.
- World Bank (2022). Country Climate and Development Report: G5 [Group of Five for the] Sahel Region. World Bank. Washington, D.C.



The Least Developed Countries Report 2023 reminds us that the concept of ‘leaving no one behind’ should not be just a slogan; it should be the guiding principle for every financial institution, policymaker and global leader. Accordingly, it should ensure that these countries are not just participants, but pivotal players in the global conversation around climate and development finance.

Rebeca Grynspan, Secretary-General of UNCTAD

The Least Developed Countries Report 2023 offers invaluable insights into the fiscal plight of least developed countries, emphasizing that immediate action is paramount. Without essential reforms in global finance and a committed drive towards green transitions, and crucial emphasis on debt cancellation, our collective aspiration for sustainable development remains out of reach. Addressing the debt burden is not just a matter of economic prudence but a moral imperative to ensure that these countries can genuinely pave the path towards a brighter, more sustainable future.

Lazarus McCarthy Chakwera, President of Malawi

The least developed countries, although contributing the least to the climate crisis, suffer the most from the impacts of climate change. Therefore, these countries urgently need enhanced access to finance that corresponds to their needs and priorities, including covering the rising costs of climate-related loss and damage. *The Least Developed Countries Report 2023* rightly highlights the fact that the current climate finance regime is underfunded, complex and fragmented. Moreover, the resources it provides to the least developed countries are at a level far below their requirements. These countries need significantly scaled up financial resources, with a focus on grants to minimize the debt burden, an increasing share of support for implementing adaptation actions and simplified access conditions. The report’s proposal to establish a target for climate finance specific for the least developed countries deserves serious consideration.

Madeleine Diouf Sarr, Chair of the LDC Group at the United Nations Framework Convention on Climate Change, and Head of the Climate Change Division in the Ministry of Environment and Sustainable Development of Senegal

In the face of the severity of the threat from climate change in Bangladesh, Bangladesh Bank has adopted a proactive stance to climate central banking. Since 2011, the Bank has made significant headway in its ambition to promote a domestic financial system that is environmentally responsible, but many challenges remain in this respect. By shining a light on the specific pitfalls that least developed countries face in implementing climate central banking, *The Least Developed Countries Report 2023* clears the path for effective collaboration and mutual learning among least developed country peers to generate innovative approaches to a just transition. At the international level, I have every expectation that Bangladesh Banks’ strategic engagement on matters of global financial alignment will similarly benefit.

Abdur Rouf Talukder, Governor of Bangladesh Bank

Today, the least developed countries lack the fiscal space needed to ensure the continuity and adequate reach of their social safety nets, enable investment in human capital and infrastructure, and shoulder the rising costs of climate change. Multiple global crises have created a situation where pathways towards the achievement of the Sustainable Development Goals are blocked by interlocking challenges that urgently require lasting solutions.

Existing mechanisms and sources of finance are inadequate to meet the needs of the least developed countries to finance their sustainable development and help build their resilience in the context of today’s many global challenges. Therefore, comprehensive reforms in the international financial architecture, coupled with increased commitments and innovative approaches, as outlined in *The Least Developed Countries Report 2023*, are necessary.

This report argues that improvements are needed in each of the three key dimensions of finance for development in the least developed countries: quantity, quality and access. In other words, funds need to be available at the required scale, delivered through appropriate instruments, and be underpinned by an international financial architecture that is adapted to the least developed countries’ specific needs.

In terms of climate finance, the new Loss and Damage Fund could play a pivotal role in helping least developed countries cope with the negative consequences of climate change, but only if adequate additional funds are made available, primarily in the form of grants, transaction costs and lead times are kept at a minimum and disbursements start quickly.

The report also examines if and how central banks in the least developed countries should use climate mitigation and adaptation tools, depending on the state of development of their financial systems. And it highlights the importance of aligning those tools with national targets of industrial and fiscal policy.

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